

**SUMMARY ACCOMPLISHMENT REPORT:
CABINET CLUSTER ON CLIMATE CHANGE ADAPTATION,
MITIGATION AND DISASTER RISK REDUCTION (CCAM-DRR)
JULY 2017- MAY 2018**

1. INTRODUCTION

The Philippines' capacity to cope with the impacts of natural hazards was again challenged towards the latter half of 2017 and early 2018. The country had to deal with a number of climate-related and seismic events which again took a toll on the Filipinos' adaptive capability. However, these events also showcased our people's resilience and the Government's resolve to decisively deal with the negative impacts of natural hazards. During this period, twenty one (21) tropical cyclones¹ entered the Philippine area of responsibility, affecting around 3,267,744 persons with 242 persons dead, 224 missing and 105 injured. The Agriculture Sector sustained losses of approximately PhP 4.953 billion while infrastructure losses reached PhP 2.072 billion.

Meanwhile, Ormoc City which experienced a devastating flood in 1991, literally experienced seismic shock when it was hit with a devastating earthquake in August of last year, affecting 4,130 families. Three (3) persons died and 493 were injured in this event. The estimated damage to infrastructure and agriculture was estimated at PhP 220.2 M, including 3,639 damaged houses. Albay, which is the epitome of adaptive capacity to climate-related events was also challenged by the eruption of Mayon Volcano. This affected 61 barangays comprising 23,705 families or 90,742 persons. Agriculture sustained losses estimated at PhP 166 million.

However, it was not all bad news as the country experienced gains on the development side, primarily advancement in the generation and use of cleaner energy and an opportunity to modernize a sizeable portion of our transport sector. A debacle in the form of an impending environmental disaster in Boracay was an opportunity to rethink the country's management approach for areas like small fragile islands with limited carrying capacity. This reporting period will also showcase the Government's approach to handling conventional problems in environmental law enforcement, hopefully creating opportunities for improvement in succeeding years.

The Government's Climate Change Adaptation, Mitigation and Disaster Risk Reduction (CCAM-DRR) Cabinet Cluster was at the forefront of all these, being the designated mechanism to tackle environmental management and the additional challenges to the country from climate change, on top of the conventional disaster risks posed by natural hazards. The CCAM-DRR Cluster's accomplishments for the second half of 2017 and the first half of 2018 are discussed below, generally tackling the nexus among these four concerns.

¹ Emong, Fabian, Gorio, Huaning, Isang, Jolina, Kiko, Lanie, Maring, Nando, Odette, Paolo, Quedan, Ramil, Salome, Tino, Urduja, Vinta, Agaton, Basyang and Domeng

2. CCAM-DRR CLUSTER ACCOMPLISHMENTS FOR 2017-2018

The CCAM-DRR Cluster's accomplishments can be generally classified as responding to the following objectives:

- Prepare communities to respond to hazards and climate change;
- Support communities to recover from effects of hazards and climate change;
- Protect and conserve natural resources to increase resiliency of ecosystems; and
- Pursue a low carbon future.

2.1 Preparing Communities to Respond to Hazards and Climate Change

For Objective No.1, significant changes in key indicators were noted, indicative of, hopefully, an irreversible positive trend: only 740,945 families were affected in 2017-2018 compared to 1,307, 242 in 2016-2017 or a decrease of 43%. The damages to the infrastructure and agriculture sectors dropped by a dramatic 79% from PhP 33.442 billion to PhP 7.026 billion.

Qualitative gains were also noted, especially in averting disastrous situations through the timely evacuation of affected people such as in the Mt. Mayon eruption. Early warnings by the designated agencies were also key to these gains. These agencies' warning capacities have been enhanced by increasing their monitoring capacity. For example, the 15 Doppler radar stations out of the target 20 and 3 x-band radars enhanced forecasts, with low track forecast errors being incurred.

Early Warning and Hazard Mapping

Three (3) Flood Forecasting and Warning Systems consisting of a Flood Forecasting and Warning Center and Hydro-Meteorological Monitoring Facilities were established in three (3) major river basins, namely: Jalaur, Tagum-Libuganon and Cagayan de Oro, contributing to the over-all national capacity to avert/ minimize flood-related disasters by providing effective flood forecasting and warning.

For earthquakes, 4 Seismic Stations operationalized in Guihulngan (Negros Oriental), Cadiz (Negros Occidental), Dinagat Island, and Marawi City (Lanao del Sur) brought the total to 98 stations all over the Philippines. These contributed to improving accuracy and timely provision of earthquake information. Four (4) Sea-Level Stations in Basco (Batanes), Lawaan (Eastern Samar), Kalamansig (Sultan Kudarat) and Dumaguete City (Negros Oriental) were installed to improve the country's tsunami early warning system, bringing the total to 18 stations.

Through its Unified Mapping Program (UMP) and using the Interferometric Synthetic Aperture Radar (IFSAR) technique to produce large-area elevation data sets suitable for extremely large regions, the

national government was able to provide reliable and accurate geospatial information needed for better planning and decision making. This program updates the 1:50,000 topographic map series of the entire country using high resolution satellite imagery. The government, through its various programs was able to identify areas susceptible to various geologic hazards. To date, flood hazard maps of the 257 priority river basins have been produced using the Light Detection and Ranging (LIDAR), a remote sensing technology that uses pulsating layer maps to acquire elevation data. Under the National Geohazard Assessment and Mapping Program, digitized geohazard map sheets at 1:10,000 scale were disseminated to 42,029 barangays to enable them to prepare for landslides and flooding.

Inundation maps for sea level rise scenarios of 0.5m, 1m, 2m, 3m and 4.5 meters were produced for Sarangani and Surigao del Sur, showing the vulnerability of their coastal low-lying areas. This was made possible through the "Mapping and Assessment of Low-lying Areas Vulnerable to Sea Level Rise Project". Moreover, 228 line maps covering Surigao del Sur were also produced using IFSAR through the "Unified Mapping Program", which aims to provide a nationwide 1:10,000 set of topographic and orthoimage base maps for an accurate, up-to-date and standard reference information.

Strengthening Infrastructure

a. Critical Infrastructure Retrofitting

Critical infrastructures like bridges are being retrofitted to be more resistant to earthquakes. The following have been achieved, to date:

- Retrofitting works were undertaken for Guadalupe Bridge in Makati and Lambingan Bridge in Sta. Ana, Manila. The total Project cost for Guadalupe bridge and Lambingan Bridge is P4.29B. Detailed Engineering design for these projects is going on to replace the outer bridges and substructure including foundation of inner bridge of Guadalupe and improvement of Lambingan Bridge.

b. Flood Mitigation

Flood Prevention and Solid Wastes Management

The national government is assisting the local government units in managing their solid wastes which contribute to serious flooding in various areas, particularly Metro Manila. Waste diversion rate is at 52% in NCR and 62% outside NCR through reuse, recycling, composting and other resource recovery activities.

To date, 258 open and controlled dump sites are under rehabilitation and closure of 425 open and controlled dump sites are without safe closure plan. One hundred thirty nine (139) sanitary

landfills and 10,052 Materials Recovery Facilities nationwide are already operational.

c. ***Developing Earthquake Resiliency for the Greater Metro Manila Area***

With the looming threat of a major earthquake in the Greater Metro Manila Area because of the movement of the West Valley Fault, the Government has started preparations to minimize, if not totally prevent, casualties and damages.

To ensure adequate water supply in the wake of this major earthquake, the following projects are being undertaken to strengthen critical water facilities: Angat Dam and Dike strengthening, La Mesa and Balara Treatment Plants retrofitting, and Umiray-Angat Trans basin Tunnel rehabilitation. Efforts also include the repair of main water lines and rehabilitation of pipe bridges in Montalban and Nagtahan, among others. Procurement of Mobile Water Treatment Plants by the LGUs is also being facilitated.

To ensure mobility during said event, critical infrastructure must be serviceable. Assessment of bridges on the alternative (parallel) roads to SLEX is, therefore, being undertaken for this purpose. McArthur Highway, as alternate route for NLEX, is also being assessed and prepared.

Efforts have been started to come up with an ordering agreement to ensure availability of emergency family food packs (FFP) and production of locally made and cost efficient, ready to eat (RTE) food packs.

The development of New Clark City as an alternative government center for service continuity to the public is also on going. Likewise, respective national agency's Public Service Continuity plan is being developed for continued government service operation.

Providing Funding Support for Climate Change Adaptation

Through the People's Survival Fund established under Republic Act 10174 promulgated on August 16, 2012, financing is provided for adaptation projects to increase resiliency of communities and ecosystems. At least one (1) Billion pesos is allocated annually to support local government units and accredited local/community organizations to implement these projects.

For 2017-2018, a total of PhP 72M was granted to the Local Governments of San Francisco, Cebu and Gerona, Tarlac for the implementation of ecological farming and acquisition and management of climate information.

About P96M worth of fishery livelihood and projects were granted to LGUs of Laguindingan, Misamis Oriental (P30M), Palompon Leyte (P18M), Claveria, Cagayan (P18M) and LGU Cortes, Surigao Del Sur (P30M) under the Malinis at Masaganang Karagatan Program (MMK). The MMK program aims to promote sustainable management of fisheries and aquatic resources.

Future Activities

To improve the accuracy and timely provision of earthquake information, the Government will install an additional six (6) Seismic Stations in Laak, Compostela Valley; Tandag City, Surigao del Sur; Alabat Island, Quezon, General Nakar, Quezon; Pakil, Laguna and Talim Island in Rizal. This will bring the total number of stations to 104 in 2019. A total of 115 stations is targeted to be established until 2022.

For climate monitoring, four (4) dopplers will be additionally installed in Bohol, Masbate, Agno and Laoang; and six (6) stationary X-band radars in Talacogon, Agusan; Panabo, Davao; Kabacan, Cotabato; Kabankalan, Negros; Cauayan, Isabela; and Roxas, Capiz.

Ten (10) Flood Forecasting and Warning Systems (FFWS) will also be established in 10 major river basins, namely: Abulog, Abra, Ilog-Hilabangan, Panay, Agusan, Davao, Buayan-Malungon, Mindanao, Agus and Tagoloan, Misamis Oriental.

To improve tsunami early warning, the Government will establish 1 Sea-level Station in Kulasi, Antique bringing the total to 19 stations.

To mitigate flood damage and protect lives and properties from natural disasters, the Government will undertake the following:

- Complete the Flood Control Master Plan/ Feasibility Study for the 18 Major River Basins. As of to-date, 11 river basins are with masterplans, while the masterplans of remaining 7 river basins will be completed in 2019.
- Rehabilitate/ Strengthen 509 Bridges along the primary roads in the identified vulnerable areas.
- Construct 54,752.52 lm slope protection works along the primary roads in the identified vulnerable areas.

2.2 Supporting Communities to Recover from the Effects of Hazards and Climate Change

For the 2nd Objective, a total of 3.3M calamity-stricken households were assisted to enable them to recover quickly. The Government released PhP 77.75 B to the affected families for this purpose.

Relief Assistance

Food and non-food items worth P 536M were provided to affected families of typhoons, floods, fires, and earthquake in Cagayan Valley, Samar, Cagayan de Oro and Metro Manila and the Mayon Volcanic eruption in Bicol.

Financial Assistance

Cash for work is temporary employment which involves engaging disaster affected families in the restoration of damaged shelter and community facilities in exchange for cash. Around 275,098 households in regions I, II, IV-A, IV-B, VIII, XI, CAR, CARAGA and ARMM affected by typhoons "Lawin" and "Nina" were provided assistance through this mode amounting to P387.2M. A total of 339,490 families whose houses were partially or totally damaged as a result of the calamities were able to access P3.26 B under the Emergency Shelter Cash Assistance Program. More than P1B worth of financial assistance was provided to 210,443 households by the 5k Presidential Financial Assistance Program.

The Survival and Recovery (SURE) Assistance Program provided P80.1M worth of loans to 6,345 smallholder farmers and fisherfolks in 11 provinces in Regions 5, 7, 8, 9, 12, 13 and ARMM. The SURE Assistance Program is a quick-response, post-disaster support facility for calamity-affected small farmers and fisherfolks and their households, providing emergency loans of P5,000 to not more than P25,000 per borrower, interest - free, through partner-financial institutions and/or lending conduits.

Livelihood Assistance

PhP 925.7M worth of loans under the Production Loan Easy Access (PLEA) Program were given to a total of 12,996 smallholder farmers and fisherfolks from 35 provinces from all Regions (except Region 5 and 11). The PLEA facility is a special credit program that provides non-collateral loans to marginalized small farmers and fisherfolks. It must be noted that this program registered 100% repayment rate from the Cordillera vegetable farmers and borrowers in Surigao del Norte.

Under the Sustainable Livelihood Program, a total of 134,923 households were provided livelihood support amounting to P14.172B. The SLP is a community-based capacity building program that aims to improve the socio-economic conditions of poor Filipinos. It facilitates opportunities for development and management of resources viable for micro-enterprises and employment generation. A total of 102 Sustainable Livelihood Program (SLP) Associations were accredited as Civil Service Organization Beneficiaries.

One hundred sixty one (161) Agrarian Reform Beneficiary Organizations (ARBOs) covering 12,644 beneficiaries were provided farm equipment support.

Fifteen (15) Solar Pump Irrigation Systems installed in 15 pilot sites in Regions I and II, benefiting 15 ARBOs.

About 1.459M of fingerlings of tilapia, common and bighead carp, milkfish, mudfish, ayungin and fresh water shells were dispersed in rivers, lakes, reservoirs and, marshes located in different areas of the country.

Insurance Protection

The Philippine Crop Insurance Corporation (PCIC) provided 1.805M smallholder farmers and fisherfolks P 57.15B worth of insurance protection and gave 207,729 smallholder farmers and fisherfolks a total of P1.6B in indemnities/claims. The PCIC provides insurance protection to farmers against losses from natural calamities, plant diseases and pest infestation for rice, corn and high value crops.

Other Support Services

Other forms of assistance were provided to poor families enable them to cope with the impact of calamities and hazards. Eighty (80) waterless municipalities, 171 waterless barangays, and 8 resettlement sites were provided with potable water supply.

To ensure that communities have reliable infrastructure that could withstand the potential negative impacts of natural hazards, Government prioritized the immediate repair of damaged critical infrastructure.

For example, after Typhoons Karen, Lawin and Nina and the Surigao earthquake, immediate repair and rehabilitation of classrooms in the affected areas were undertaken, costing PhP 700M. Damaged facilities and airport of Surigao were rehabilitated, costing PhP 123.4M. The health centers destroyed by Typhoon Lawin in Region 1 were also rehabilitated with a budget of P8M. The University of Eastern Philippines in Northern Samar was repaired and rehabilitated, costing PhP 82 M.

Future Activities

The government will increase the approved regional minimum daily wage rate for prospective recipients under the Cash for Work Program from 75% to 100%.

Capacities of local risk transfer agencies will be enhanced to expand the coverage to more insurance beneficiaries and support more farmers in their livelihood projects.

The PCIC will continue to provide insurance coverage to farmers and fisherfolks, targeting 2 million beneficiaries in 2018, a 32% increase in the number of beneficiaries from (1.52 million) in 2017.

The Agricultural Credit Policy Council (ACPC) will organize Loan Facilitation Teams in every province to guide farmers and allow fishermen to comply with the requirements and help them easily avail loans. Financial literacy training for farmers and fishermen's groups will be conducted.

3. Protecting and Conserving Environment and Natural Resources to Increase Resiliency of Ecosystems

Forest Enhancement

A main goal of the Government is to restore and rehabilitate our forests while supporting forest dependent communities. Through the “Enhanced National Greening Program” (E-NGP), opportunities are provided for communities to develop social enterprises; produce sustainable livelihood and optimize benefits. It also encourages local government units and organizes upland communities to develop forest plantations including forest parks. The NGP helps enhance vegetation in protected areas, ancestral domains, civil & military reservations, urban greening areas, inactive and abandoned mine sites & other areas suitable for planting trees. As a result of NGP interventions, from July 2017 to May 2018, the areas of denuded forest lands decreased by 2.4% based from the 2017 target of 7.42 M hectares.

Mine Area(s) Rehabilitation

Various rehabilitation and remediation measures have been implemented by the government through the DENR-MGB since 2001. Presently, the implementation of Environmental Maintenance Plans for the Bagacay Mine (Hinabangan, Samar), Palawan Quicksilver Mines, Inc. (Palawan), and Romblon Marble Mining (Romblon) is on-going.

Enhanced Environmental Law Enforcement

Forest Protection

To complement the reforestation efforts, the Government also intensified forest law enforcement. Under the government’s anti-illegal logging campaign, 1,432,582.78 board feet of forest products were confiscated.

Protection of Inland Freshwaters

Laguna de Bay is expected to be a showcase of the Government’s efforts to sustainably use its inland water resources. This requires observing the delicate state of the water body and its carrying capacity for resource development and use. For this purpose, 90 aqua structures covering 652.4 hectares were demolished while another 668.05 hectares of aqua structures are scheduled for destruction to comply with the 9,200 ha lake’s carrying capacity for fishpens and fishcages.

The illegal deep wells of Pepsi Cola Bottling Co. in Las Piñas were shut down. The company was slapped with more than PhP 11M as penalty for extracting deep well water without permit.

Also, two construction companies were shut down for their illegal dumping of waste materials and garbage in a shoreline area in Taguig City.

Biodiversity Conservation

Under the Anti-illegal wildlife trafficking campaign, 784 live animals and 4 dead specimens were confiscated with a market value of PhP51.0 Million. Also, sixteen (16) violators were convicted against wildlife crime.

Securing Mineral Resources

Under the Government's Anti- Illegal Mining Campaign, a total of 89 Cease and Desist Orders (CDOs) were issued against illegal mining operations and 51 cases or charges were filed with the concerned Provincial/City Prosecutor's Office.

Recently, the Anti-illegal Mining Task Force raided six illegal small scale mining (SSM) areas (five in Baguio and one in Surigao del Norte). Around 18 portals were blasted in the five SSM areas within the Philippine Military Academy grounds in Baguio which have been operating for the past 10-12 years to ensure non-resurgence of these mining operations and to send message that the DENR is serious in its campaign against illegal mining.

Protecting Water Quality and Fragile Island Ecosystems

Ensuring that our water resources pass the quality standards set by law is an enforcement action demonstrated in the temporary closure and rehabilitation of Boracay Island pursuant to Proclamation No. 475 issued on April 26, 2018. The Boracay situation is an epitome of multiple environmental law violations, threatening the sustainability of the island.

To address this, the following have been accomplished so far, after the manifestation of political will to address the flagrant violation of environmental laws and restore the island's capacity to sustain carefully balanced development endeavours:

- Clearing of illegal structures and 435 structures will be removed in Barangay Manoc-Manoc, bulabog and Yapak;
- Completion of the rehabilitation/evacuation areas with ready wate and power facilities and 2-day food packs and other assistance;
- Road widening in Bolabog circumferential road and diversion road at Sitio Bolabog;
- Cutting of illegal pipes along White/Long Beach after the conduct of ground penetrating radar survey; and
- Completion of subsidence hazard mapping of 40 sinkholes in the island.

To support the affected families and workers in the island, the Government provided the following:

- Provided Php 39M financing to Aklan farmers and fisherfolks cooperative thru PLEA Program;
- Released grant in the amount of Php19,845,00 to 1,323 families through Micro-Enterprise Assistance Grants (MAG) and Employment Support Grant (ESG);
- Assisted 1,744 individuals under the Tulong Panghanap Buhay Para Sa Ating Displaced/Disadvantaged Workers (TUPAD); and
- Allotted Php 9.7M for trainings/alternative livelihood or employment to affected residents, workers and other stakeholders.

Coastal and Marine Resources Conservation

Establishment & networking of Marine Protected Areas

Protecting the country's coastal and marine resources on which majority of coastal communities depend for livelihood and physical protection against coastal hazards, is seen by Government as a critical strategy to enable adaptation and build resilience to the adverse impacts of climate change.

The current Government response strategy is the establishment and networking of Marine Protected Areas (MPAs). MPAs are "sea areas" dedicated to the protection and maintenance of biodiversity and natural resources and associated cultural resources.

Marine Protected Area Networks (MPANs), on the other hand, are a collection of individual MPAs or reserves operating cooperatively and synergistically, at various spatial scales, and with a range of protection levels that are designed to meet objectives that a single reserve cannot achieve. MPANs are established to effectively contribute to achieving multiple objectives of sustainable fisheries, biodiversity conservation and climate resilience under the general framework of sustainable development, equitably providing benefits to local communities and contributing to national, regional and global economies.

A network of 19 Marine Protected Areas (MPA) has been established to date.

Coastal and Marine Area(s) Zonation

Municipal waters are delineated to protect the rights of coastal communities, especially in the preferential use of the municipal waters, or accessing coastal and marine resources.

To date, coastal waters of 13 municipalities have been delineated/certified, showing the boundary lines of the municipality where the sea at low-tide and the general coastline, including offshore islands & 15 kilometers from such coastlines, interface.

Coastal Habitat Assessment

Coastal habitats are assessed for purposes of developing an appropriate, logical and effective management strategy based on the accurate and updated assessments of their extent and condition, as well as, the threats and pressures affecting their state and health.

To date, 80,121.75 hectares of coastal habitats have been assessed/mapped for potential livelihood opportunities for the communities.

Marine Protected Area Establishment/Philippine Rise

To ensure that future generations will enjoy the wealth of the country's marine resources, the Government declared an area within the Philippine Rise (approx. 352, 000 hectares) as Marine Resources Reserve. Proclamation No. 489 issued last May 15, 2018: a) established a Strict Protection Zone (SPZ) of approximately 49,684 hectares, to be closed to all human activities except scientific studies and/or ceremonial or religious use by the ICCs/IPs; and b) established a Special Fisheries Management Area (SFMA) to allow sustained and regulated fishing.

An Integrated Management Plan of the Philippine Rise is being formulated to consolidate, and harmonize all government efforts and resources for the physical security of the same in order to exercise and cement Philippines sovereign rights and manage sustainably the resources thereof. For maintaining physical presence and surveilling the areas, a vessel, including various facilities, in the amount of Php 4.05 B was procured.

The President has signed Republic Act 11038 on 22 June 2018 or the Expanded National Integrated Protected Areas System Act of 2018, which will ensure effective management and declaration of other protected areas in the country. The E-NIPAS law has added 94 additional legislated protected areas all over the Philippines and ensure better conservation and protection measures of out protected areas.

Addressing Air Pollution

Seventeen percent (17%) of ambient air pollution in Metro Manila is estimated to come from the public utility jeepneys. Over-all, 65% of carbon emissions are generated by the transportation sector. Specifically, the transport sector accounts for 34% of energy-related greenhouse gas (GHG) emissions. It was estimated that the health costs of a degrading air quality took up 1.5% of the country's Gross Domestic Product in 2009. It is, therefore, important to address air pollution frontally to reduce vulnerability of affected population and increase their over-all resilience to the chronic impacts of natural phenomena like climate change.

To improve environmental quality and address air pollution, the government fully subscribes to the use of cleaner fuels such as those compliant with Euro 4 standards. The Euro emission standards seek to limit the vehicle's toxic gases (approximately 50% less carbon monoxide emissions from Euro 4) to attain cleaner, breathable air.

Under the Public Utility Vehicle Modernization Program, 220,000 jeepneys (70,000 in Metro Manila) that are 15 years old and above will be replaced with more efficient jeeps, mini-buses, or buses (or those with Euro 4 compliant engines). This program is expected to cause a 43% reduction in the 4.9 million tons of carbon dioxide currently emitted annually to 2.8 million tons.

The government has embarked on a Green, Green, Green Program with Php2.5B earmarked in 2018 for open space development and promotion of green infrastructures. To date, 100 project proposals submitted by cities are now being processed.

Future Activities

The sustainable management of the country's environment and natural resources will relentlessly be pursued by the government.

Enforcement of environment and natural resources laws will be intensified using state of the art technology, especially in monitoring illegal activities.

Rehabilitation of degraded ecosystems will be vigorously undertaken. For 2019, 138.285M seedlings will be produced and to be planted in 143,187 hectares under the National Greening Program. Forest protection will be enhanced as well.

With the warning to mining companies to shape up, the Government will be coming out with the proposed policy reinventing the mining. This will aim to spread the benefits for the people without compromising the environment and natural resources of the country.

The health and sanitation of Boracay Island will be ensured by monitoring water quality, conducting Ground Penetrating Radar Survey and excavation of buried pipes in selected portions of the beach. Solid waste management will be continually monitored. The Island will also be decongested through: Forestland and Wetland Recovery, with issuances of Notices of Violation to occupants/structures for eventual demolition and family relocation); enforcement of the 25+5 meters easement requirement and clearing of illegal structures. Road widening with the clearing of structures will also be pursued.

4. Pursuing a Low Carbon Future

The development and optimal use of the country's renewable energy resources is central to the Philippines' sustainable energy agenda. Renewable energy is an essential part of the country's low emissions development strategy and is vital to addressing the challenges of climate change, energy security, and access to energy.

On the other hand, the country promotes the judicious conservation and efficient utilization of energy resources through adoption of the cost-effective options toward the efficient use of energy to minimize environmental impact.

Building resilient and sustainable communities require the promotion of renewable energy resources and efficient energy consumption.

In 2017, the country had installed around 7,079 megawatts (MW) of renewable energy. Thus, 33.8% or 19.51 million tonnes of oil equivalent (MTOE) of the total primary energy supply of the country come from renewable energy.

In addition, around 1,293 MW deferred generation capacity was generated from Energy Efficiency and Conservation Programs which is equivalent to 5.8 million tons of carbon dioxide (CO₂) avoidance.

As of March 2018, the Department of Energy was able to award 227 Renewable Energy Service/Operating Contracts (RES/OCs) with a total additional capacity of 9,840.93 megawatts (MW).

Also, as part of the country's support to the recovery of Marawi, the Department turned over 131 solar powered lamps to Task Force Bangon Marawi and 131 solar powered streetlights to Lanao del Sur Electric Cooperative (LASURECO).

Future Activities

The targets under the Philippine Energy Plan from 2019 to 2040 include:

- a. Increase RE installed capacity to at least 20,000 MW;
- b. Ensure secured and stable supply of energy through technology responsive energy sector; and
- c. Measurable reduction in energy intensity and consumption per year versus business as usual.