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Ensuring Ecological Integrity, Clean and Healthy Environment

ECOLOGICAL INTEGRITY AND SOCIOECONOMIC RESILIENCE OF RESOURCE-DEPENDENT COMMUNITIES IMPROVED

Biodiversity and ecosystem services sustained

- Intensify protection, conservation, and rehabilitation of natural resources
- Scale up adoption of innovative technologies for enforcement and monitoring of wildlife and habitat integrity

Environmental quality improved

- Strengthen enforcement, regulation, and monitoring of environmental compliance and management interventions
- Adopt and implement innovative pollution abatement solutions

Resilience of communities and their livelihood increased

- Strengthen national and local capacities for climate and disaster risk reduction and management
- Expand sustainable livelihood and economic opportunities for resource-dependent and vulnerable communities

Cross-cutting Strategies

- Review, codify, and streamline existing ENR policies, rules, and regulations to improve compliance, address conflicting provisions, and promote transparency and accountability
- Upscale natural capital accounting including valuation of ecosystem services in national and local planning and programming
- Streamline green and climate finance in the financial sector through the formulation of a sustainable finance framework and roadmap that will support and accelerate the development of a green and sustainable economy
- Accelerate implementation of sustainable consumption and production

Objectives/Results	SDG Tier 1 Indicators	Indicator	Baseline		Annual Plan Targets						End of Plan Target[b]	Means of Verification	Responsible Agency[c]	Reporting Entity[d]	Assumptions and Risks
			Year[a]	Value	2017	2018	2019	2020	2021	2022					
Societal Goal															
A healthy and resilient Philippines															
Intermediate Goal															
Building a high-trust society, transforming towards equity and resiliency, and increasing growth potential															
Chapter Outcome 1															
Ecological integrity and socioeconomic resilience of resource-dependent communities improved															
Subchapter Outcome 1.1															
Biodiversity and ecosystem services sustained	15.1.1 (Forest area as a proportion of total land area)	Forest Cover increased (Million ha, cumulative)[e]	2015	7.01	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Land Cover Map	DENR	NAMRIA	No redefinition of forest Deforestation will be controlled
Aggregate Outputs															
		Area of denuded and degraded forestlands/ Protected Areas (PAs) decreased (M ha, cumulative)[f]	2016	7.6	7.39	7.25	7.23	7.18	7.089	7.04	7.04	Progress report	DENR	DENR-FMB, DENR-BMB	**Risk:** Occurrence of extreme events (e.g., typhoons, droughts) Accomplishment of the foreign special projects and other partners and sectors will be accounted
		Area planted with mangroves increased (ha)[g]	2016	18,730	329	329	329	329	329	329	1,974	Progress report	DA	DA-BFAR	**Risk:** Occurrence of extreme events (e.g., typhoons, droughts) Strong support from the stakeholders
		Area of forestland under effective management increased (M ha, cumulative)[h]	2016	8.2	8.4	8.54	8.56	8.61	8.7	8.75	8.75	Progress report	DENR	DENR-FMB	Increased protection in the area. **Risk:** Occurrence of extreme events (e.g., typhoons, droughts)
		Production and protection forests delineated increased (km)	2010	-	N/A[i]	13,593	13,721	4,142	4,142	42,654	167,877	Progress report	DENR	DENR-FMB, DENR-BMB	No overlapping and conflicting claims
	15.1.2 (Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type)	Area of terrestrial protected areas (including inland wetlands and caves) under National Integrated Protected Areas System (NIPAS) effectively managed increased (in ha, cumulative)[j]										Protected Area (PA) monitoring and assessment reports	DENR	DENR-BMB	Functional Protected Area Management Board (PAMB) with strong support from LGUs
		Poor	2016	5,402	5,402	5,402	5,402	5,402	4,546	0	0				
		Fair	2016	319,995	319,995	319,995	319,995	157,360	1,465	5,402	5,402				
		Good	2016	1,258,782	14	1,258,782	1,258,782	1,394,981	325,269	319,995	319,995				
		Excellent	2016	72,174	72,174	72,174	72,174	98,609	1,325,073	1,330,956	1,330,956				

[a] Actual data as of 2016 or earlier. May not necessarily be year-end values.

[b] May either be the cumulative or incremental target value at the end of the Plan period.

[c] Agency accountable for delivering the outputs/outcome.

[d] Lead agency responsible for reporting progress on indicator targets.

[e] No numerical targets provided. The value of the indicator is targetted to increase until the end of Plan.

[f] Annual targets from 2017-2021 were revised to reflect the budget cuts on the Enhanced National Greening Program (ENGP).

[g] The targets will be accomplished through the implementation of BFAR's Aquasilviculture Program. Annual target areas were based on the result of field validation (i.e., if these areas can be planted with mangroves).

[h] Annual targets for 2018-2022 were revised consistent with decreased targets in area of denuded/degraded forestlands to be rehabilitated/reforested as these areas are subjected to management interventions.

[i] Activity was only funded in 2018, hence the 2017 "N/A" target and "0" baseline value. Annual and EOP targets were also revised due to the removal of Certificate of Ancestral Domain Title (CADT) areas from the total areas to be delineated.

[j] Indicator statement, baseline value, and annual targets were revised given that the separate indicators for priority inland wetlands and caves were abolished and subsumed under this indicator to avoid double counting.

Objectives/Results	SDG Tier 1 Indicators	Indicator	Baseline		Annual Plan Targets						End of Plan Target[b]	Means of Verification	Responsible Agency[c]	Reporting Entity[d]	Assumptions and Risks
			Year[a]	Value	2017	2018	2019	2020	2021	2022					
	5.a.1p1 (Number of agricultural and residential land free patents issued to women and men)	Number of free patents issued increased [k]	2016	57,822	48,197	53,803	57,000	62,000	67,000	72,000	360,000	Survey and public land records	DENR	DENR–LMB	There will be stronger LGU support in addition to an integrated land information, mapping, and projection system **Risk:** Comprehensive Land Use Plan (CLUPs) may not be updated
	5.a.1p2 (Number of holders of emancipation patents and certificates of land ownership, certificate of ancestral land titles (CALTs), certificate of ancestral domain titles (CADTs) by sex, stewardship)	Number of issued Certificate of Ancestral Domain Title (CADTs) increased [l]	2016	208	12	12	12	12	12	12	72	CADT	NCIP	NCIP	There is continued support from concerned stakeholders
		Number of Ancestral Domain Sustainable Development and Protection Plan (ADSDPP) formulated	2016	150	4	6	6	6	6	6	34	ADSDPP	NCIP	NCIP	There is continued support from concerned stakeholders
		Number of groundwater critical areas with management plan and monitoring wells established	2016	4	2	2	2	2	2	2	12	Groundwater Mgmt. plan/report and MOA with LGUs concerned	NWRB	NWRB	There is strong support from LGUs concerned Procurement process is timely and responsive.
		Number of Major River Basins (RB) with Comprehensive Water Assessment increased [m]	2016	2	1	1	1	1	2	2	8	Assessment report	NWRB	NWRB	

[k] Baseline and targets were revised to reflect change in scope to include agricultural free patents.

[l] Annual targets for 2018-2022 were increased given the recent accomplishments on the issuance of CADTs.

[m] Annual targets for 2021-2022 were increased taking into account recent accomplishments.

Objectives/Results	SDG Tier 1 Indicators	Indicator	Baseline Year[a]	Baseline Value	2017	2018	2019	2020	2021	2022	End of Plan Target[b]	Means of Verification	Responsible Agency[c]	Reporting Entity[d]	Assumptions and Risks
		Percentage of Declared *Minahang Bayan* increased	2016	10	22	48	62	76	90	100	100	Provincial/City Mining Regulatory Board (P/CMRB) resolution declaring *Minahang Bayan*	DENR	DENR-MGB	Approval of the Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) 7076 and Streamlining of Requirements and Processes Minahang Bayan acceptance to LGUs and Independent Component Cities (ICC)
		Percentage of surface metallic mines compliant with the safety and health, environmental, and social development and management programs for the mineral resources development	2016	100	100	100	100	100	100	100	100	Monitoring and audit report	DENR	DENR-MGB	Compliance of mining companies
		Percentage of interim rehabilitation measures monitored and implemented in the remaining abandoned mine (i.e., Palawan Quicksilver) increased (%, cumulative)													
		Palawan Quicksilver (Phase I)	2016	58.33	85	95	100	100	100	100	100	Accomplishment report and monitoring report	DENR	DENR-MGB	Cooperation of concerned Agency/LGUs and Availability of funds
		Palawan Quicksilver (Phase II)	2016	0	N/A	N/A	32.5	52.5	72.5	92.5	92.5				
Subchapter Outcome 1.1 (Cont.)															
		Quality of coastal and marine habitats under NIPAS marine protected areas (MPAs) and other priority coastal and marine conservation areas improved (cumulative)[n]										Assessment report	DENR	DENR-BMB	Coastal Resource Assessment is completed Illegal activities and pollution is controlled **Risk:** Occurrence of extreme events (e.g., typhoons)
		Percentage of hard coral cover (HCC) in MPAs (in number of MPAs):													
		No available baseline data	2018	2	N/A	N/A	0	0	0	0	0				
		0% to 22% hard coral cover (Poor)	2018	12	N/A	N/A	14	14	9	6	6				
		>22% to 33% hard coral cover (Fair)	2018	11	N/A	N/A	11	11	10	12	12				
		>33% to 44% hard coral cover (Good)	2018	4	N/A	N/A	4	4	10	10	10				
		>44% hard coral cover (Excellent)	2018	7	N/A	N/A	7	7	7	8	8				
		Percentage of seagrass cover in MPAs (in number of MPAs):													
		No available baseline data	2018	11	N/A	N/A	0	0	0	0	0				
		0% to 25% seagrass cover (Poor)	2018	11	N/A	N/A	22	22	17	15	15				
		26% to 50% seagrass cover (Fair)	2018	10	N/A	N/A	10	10	12	11	11				
		51% to 75% seagrass cover (Good)	2018	3	N/A	N/A	3	3	5	7	7				
		76% to 100% seagrass cover (Excellent)	2018	1	N/A	N/A	1	1	2	3	3				

[n] Baseline and targets were revised to reflect the change in metric used to monitor the status of coral reefs (from live coral cover to hard coral cover) in legislated NIPAS-MPAs and other priority coastal and marine conservation areas (i.e., Verde Island Passage and Philippine Rise Marine Resource Reserve) following new DENR-BMB issuances. The scope of monitoring also expanded to cover seagrass beds.

Objectives/Results	SDG Tier 1 Indicators	Indicator	Baseline		Annual Plan Targets						End of Plan Target[b]	Means of Verification	Responsible Agency[c]	Reporting Entity[d]	Assumptions and Risks
			Year[a]	Value	2017	2018	2019	2020	2021	2022					
Aggregate Outputs															
	14.5.1 (Coverage of protected areas in relation to marine areas)	Coverage of protected areas in relation to marine areas (%)[o]	2016	0.64	Increasing	0.76	Maintained	Maintained	Maintained	Maintained	Maintained	Accomplishment report	DENR	DENR-BMB	No changes in policy
		Area of MPAs under NIPAS effectively managed increased (ha)[p]										Progress report	DENR	DENR-BMB	Functional PAMBs with strong support from LGUs
		Poor	2016	0	0	0	0	0	0	0	0				
		Fair	2016	1,439,448	1,439,448	1,439,448	1,439,448	856,207	537,034	0	0				
		Good	2016	1,270,775	1,270,775	1,270,775	1,270,775	1,854,016	902,414	1,439,448	1,439,448				
		Excellent	2016	16,491	16,491	16,491	16,491	16,491	1,287,266	1,287,266	1,287,266				
		Number of coastal municipalities and cities with delineated municipal waters increased (annual)	2016	293	80	80	80	80	80	80	480	Progress report	NAMRIA	NAMRIA	Territorial conflict among neighboring LGUs is minimized
		Number of Community Fish Landing Centers (CFLC) established (cumulative)[q]	2016	132	343	525	662	713	725	Maintained	Maintained	BFAR CFLC reports and NAPC reports on fisherfolk associations	DA	DA-BFAR	Suitable lands are available within the LGUs concerned for establishment of the fish landing centers\n\nThere is strong support from concerned LGUs
		Percentage of new and existing CFLC operationalized[r]	2016	0	15	40	59	80	95	100	100	BFAR CFLC reports and NAPC reports on fisherfolk associations	DA	DA-BFAR	Peace and order are ensured in the locality\n\nFisherfolk and traders support the CFLC operationalization

[o] The value of the indicator includes both National Integrated Protected Areas System (NIPAS) and the Philippine Rise Marine Resource Reserve. The universe/total area of marine waters is 220,644,600 hectares.

[p] Indicator statement, baseline, and targets were revised to focus on the 34 legislated NIPAS-MPAs. The baseline and target values reflect the recalibrated and updated figures from Geographic Information System (GIS) mapping conducted by the DENR-BMB.

[q] The indicator statement was revised to monitor the cumulative value over the years instead of incremental changes. Annual targets were revised to reflect the adjusted and extended implementation period for the establishment of CFLCs.

[r] Vis-à-vis the actual number of CFLCs established in the previous year. Annual targets are updated to ensure consistency with the cumulative targets for establishing CFLCs.

Objectives/Results	SDG Tier 1 Indicators	Indicator	Baseline		Annual Plan Targets						End of Plan Target[b]	Means of Verification	Responsible Agency[c]	Reporting Entity[d]	Assumptions and Risks
			Year[a]	Value	2017	2018	2019	2020	2021	2022					
Subchapter Outcome 1.2															
Environmental quality improved	6.3.2.p1 (Proportion of monitored bodies of water with good ambient water quality)	Percentage of priority water bodies within water quality guidelines increased (e.g., biochemical oxygen demand (BOD), dissolved oxygen (DO), potential of hydrogen (pH), temperature, phosphorus (P), total suspended solids (TSS), and fecal coliform)[s, t]										Regular water quality monitoring report	LLDA	DENR-EMB and LLDA	Need to treat water to be suitable for drinking

Sufficient resources (human power, functional monitoring instruments and equipment, and other logistics).

Strong support of LGUs, water districts/private sector, and concerned government agencies (e.g., DILG) in the implementation of measures to improve water quality (e.g., wastewater treatment facilities, sanitation and sewerage facilities). |
		Public Water Supply (%)	2016	0	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing				
		Food Production (%)	2016	20	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing				
		Recreational (%)	2016	87	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing				
	11.6.2.p1 (Percentage of highly urbanized and other major urban centers within ambient air quality guidelines value increased)	Percentage of highly urbanized and other major urban centers within ambient air quality guideline value (i.e., Particulate Matter (PM10) and PM2.5) increased (%)[s, u]	2016	55	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Accomplishment report, air quality status report	DENR	DENR-EMB	Functional Air Quality Monitoring Stations; Regulated sources of Air pollution

Strong support of LGUs, industries/private sector, and concerned government agencies (e.g., DTI) in the adoption of cleaner and environment-friendly technologies |
| | | Solid waste diversion rate increased (%) | 2015 | Metro Manila: 48; Outside MM: 46 | 55 | 60 | 65 | 70 | 75 | 80 | 80 | Accomplishment report | MMDA/DILG, DENR-EMB | MMDA/DILG, DENR-EMB | Availability of funds and strong support from LGUs |
| | | Percentage of healthcare waste managed (%) | 2016 | 66 | N/A | N/A | N/A | 100 | 100 | 100 | 100 | Report on healthcare waste transported and treated/disposed | DENR | DENR-EMB | Continued operation of the Online Hazardous Waste Management System |

[s] No numerical targets provided. The value of the indicator is targeted to increase until the end of plan.

[t] The baseline values were adjusted based on the revised parameters for each water use/classification. The total number of priority water bodies are as follows: (i) 6 for public water supply; (ii) 10 for food production; (iii) 15 for recreation.

[u] The baseline value was revised from 47 to 55 percent to reflect verified air quality data. The total number of highly urbanized and other major urban centers is 38.

Objectives/Results	SDG Tier 1 Indicators	Indicator	Baseline		Annual Plan Targets						End of Plan Target[b]	Means of Verification	Responsible Agency[c]	Reporting Entity[d]	Assumptions and Risks
			Year[a]	Value	2017	2018	2019	2020	2021	2022					
Aggregate Outputs															
		Number of public utility vehicles that converted to cleaner fuels increased													
		Combustion engines compliant with EURO IV emission standards or better (e.g., EURO V, EURO VI) (cumulative) [v]	2016	0	N/A	N/A	N/A	66,200	162,950	195,200	195,200	Semi-Annual Monitoring Report	DOTr	LTFRB	Strong support of Public Utility Buses (PUB) franchises
		Electric/Hybrid	2016	10	25	85	178	196	215	237	261	Semi-Annual Monitoring Report	DOTr	LTFRB	Strong support of PUB franchises
		Area assessed and mapped for soil fertility status and soil fertility management increased (ha)	2016	1,000,000	450,000	450,000	450,000	450,000	450,000	450,000	2,700,000	Soil fertility analysis and mapping report	DA	DA-BSWM	Strong support from LGUs Funds are available
		Area of land degradation hotspots decreased (ha, cumulative)	2016	2,300,000	2,250,000	2,200,000	2,150,000	2,100,000	2,050,000	2,000,000	2,000,000	Accomplishment Report	DA	DA-BSWM	Strong support from LGUs Funds are available
		Number of eco-labeled products increased[w]	2016	68	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Progress Report	DTI	PCEPSDI	Strong support from business or industries
		Total energy savings in government offices increased (in PHP million)	2015	113.69	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Certificates of energy savings	DOE	DOE-EUMB	Active participation of government offices

[v] Changed from compressed natural gas (CNG), since the lone supply-infrastructure of facility of CNG has stopped supplying/selling CNG. Moreover, the Natural Gas Vehicle Program for Public Transport ended last year with no plan for extension.

[w] The baseline and 2017 accomplishments were corrected given some inconsistencies in the methodology of counting the total number of eco-labeled products. The annual targets were revised to specify that the plan is to "increase" the number of eco-labeled products.

Objectives/Results	SDG Tier 1 Indicators	Indicator	Baseline Year[a]	Baseline Value	Annual Plan Targets 2017	2018	2019	2020	2021	2022	End of Plan Target[b]	Means of Verification	Responsible Agency[c]	Reporting Entity[d]	Assumptions and Risks
Subchapter Outcome 1.3															
Resilience of communities and their livelihood increased		Resilience index improved[x]													
Aggregate Outputs															
		Employment from biodiversity-friendly enterprises and other sustainable resource-based industries increased													
		From NIPAS-PAs and ecotourism sites (cumulative)[y]	2016	1,484	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	10% increase from the baseline	Accomplishment/ monitoring report	DENR	DTI, DOT, DENR-BMB, DENR-FMB	There is strong support from concerned stakeholders.
		From reforestation and non-timber/agroforestry enterprises (i.e., NGP, Community-Based Forest Management (CBFM)) (cumulative)[z]	2016	114,584	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Monitoring report	DENR	DENR-FMB	**Risk:** Occurrence of extreme events (e.g., typhoons)
	1.5.4, 11.b.2, and 13.1.3 (Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies)	Percentage of LGUs with climate and disaster risk-informed plans increased (%)[aa]													
		CLUPs	2016	34	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Progress report	DHSUD	DHSUD	Availability of resources at the LGU level
		Comprehensive Development Plans (CDP) [ab]	2016	0	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Progress report	DILG	DILG	Availability of resources at the LGU level
		Local Disaster Risk Reduction and Management Plans (LDRRMP) [ac]	2016	0	Increasing	Increasing	Increasing	100	100	100	100	Progress report	OCD-NDRRMC	OCD-NDRRMC	Availability of resources at the LGU level
		Local Climate Change Action Plan (LCCAP) [ad]	2016	0	Increasing	Increasing	Increasing	74	75	100	100	Progress report	CCC	CCC	Availability of resources at the LGU level

[x] Resilience index to be developed.

[y] The exact figures for the baseline and EOP targets were provided.

[z] The baseline was changed from 3.29 million to 114,584 due to database cleaning.

[aa] No numerical targets provided. The rate of increase of the value of the indicator is targeted to increase until the end of plan. Plans reviewed by responsible agencies.

[ab] Based on the revisited baseline provided by DILG due to lack of tools to mainstream CC/DRR and review CC/DRR-enhanced CDP from 2017-2019. Reporting of CC/DRRM-enhanced CDPs began in 2020.

[ac] Based on the revisited baseline provided by OCD brought about by change in methodology. From "Increasing", 2020 to 2022 targets were revised to 100 percent. Reporting of reviewed LDRRMPs began in 2018.

[ad] The baseline value was adjusted as the actual review and reporting of risk-informed LCCAPs commenced in 2018. From "Increasing", 2020-2022 targets were replaced with numerical values.

Objectives/Results	SDG Tier 1 Indicators	Indicator	Baseline		Annual Plan Targets						End of Plan Target[b]	Means of Verification	Responsible Agency[c]	Reporting Entity[d]	Assumptions and Risks
			Year[a]	Value	2017	2018	2019	2020	2021	2022					
		Number of LGUs with operating early warning systems (EWS) in place increased	2016	1,180	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Progress report	DILG, PAGASA, PHIVOLCS	DILG, PAGASA, PHIVOLCS	Availability of resources at the LGU level
		Number of LGUs with fully-functional Disaster Risk Reduction and Management (DRRM) operations centers increased[ae]										Progress report	DILG	DILG	Availability of resources at the LGU level
		Permanent	2016	775	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing				
		Temporary	2016	810	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing				
		Greenhouse Gas (GHG) emissions per sector reduced (million MT CO2e)[af]												CCC	Implementation of low carbon strategies/clean/environment friendly technologies
		Energy	2010	55.31	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Monitoring, reporting, and verification; and National Communication	DOE		
		Industrial Processes and Product Use (IPPU)	2010	11.88	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing		DENR		
		Agriculture	2010	23.6	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing		PSA/DA		
		Forestry	2010	-37	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing		DENR		
		Waste	2010	13.8	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing		DENR		
		Transport	2010	24.19	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing		DOTr/DOE		

[ae] No numerical targets provided. The value of the indicator is targeted to increase until the end of plan.

[af] The baseline values were adjusted to reflect the newly submitted reports from agencies based on the methodology from the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories. No numerical targets provided. The rate of increase of the value of the indicator is targeted to decrease until the end of plan.