



REPUBLIC OF THE PHILIPPINES
Department of Budget and Management
Climate Change Commission
Department of the Interior and Local Government

JOINT MEMORANDUM CIRCULAR No. 2014-01
August 7, 2014

FOR : ALL PROVINCIAL GOVERNORS, CITY AND MUNICIPAL MAYORS, PRESIDING OFFICERS AND MEMBERS OF THE SANGGUNIANs, LOCAL DISASTER RISK REDUCTION AND MANAGEMENT COUNCILS, LOCAL FINANCE COMMITTEES, AND ALL OTHERS CONCERNED

SUBJECT : TAGGING/TRACKING CLIMATE CHANGE EXPENDITURES IN THE LOCAL BUDGET

1.0 RATIONALE

Global climate change, a key development issue for the present and the future, has severe consequences, with the majority of human and economic impacts occurring in developing countries. The Philippines, due to its current and future exposure to climate-related risks, compounded by rapid degradation of the environment and unsustainable development practices, is highly vulnerable to existing and future climate change-related risks.

Envisioning a climate resilient Philippines, the government aims to build the adaptive capacities of women and men in their communities, increase the resilience of vulnerable sectors and natural ecosystems to climate change, and optimize mitigation opportunities towards gender-responsive and rights-based sustainable development.

Implementing climate change activities supports sustainable development goals. Adaptation measures will result to a country more resilient to climate impacts by helping achieve development objectives set by the Philippine Development Plans and the Millennium Development Goals. Small-scale sustainable and climate resilient farming and forest management proves potential in creating jobs. Similarly, climate change mitigation activities, which often call for the use of new clean technologies, will drive innovation and promote economic growth. Low-carbon measures that increase renewable energy generation and improve energy efficiency also decrease local pollution.

Legal Framework

The main goal of the Philippine Climate Change Act (CCA) of 2009 (Republic Act 9729) is to mainstream climate change in various phases of policy formulation, development plans, poverty reduction strategies and other development tools and techniques by all units of government. Section 14 of the Act recognizes that LGUs are at the frontline for climate change action requiring them to formulate and implement local climate change action plan (LCCAP) for their respective areas, consistent with the national, regional, and provincial frameworks on climate change.

Complementing the CCA, the Philippine Disaster Risk Reduction and Management Act of 2010 (Republic Act 10121) Section 2 (g) provides that disaster risk reduction and climate change needs be mainstreamed in development processes while Sec 12 (c) 6 requires LGUs to formulate and implement a comprehensive and integrated Local Disaster Risk Reduction Management Plan in accordance with the national, regional and provincial framework, and policies on disaster risk reduction.

The DBM issued Local Budget Memorandum No. 68 which asks LGUs to submit, together with the General Annual Budget, their respective Local Disaster Risk Reduction Management Plans (LDRRMP) and Local Climate Change Action Plans (LCCAP) and encourages LGUs to identify, tag and prioritize their respective programs, activities and projects (PAPs) for climate change and to tag and track all climate change expenditures to help ensure transparency and increase effectiveness of climate change expenditures. This JMC, which provides the referenced Guidelines to LGUs, is consistent with National Budget Memorandum 119 aimed at tagging and tracking climate change expenditures in the national budget. It complements parallel efforts by the Government to better track and account for build back better initiative following Typhoon Yolanda.

2.0 PURPOSE

To identify, tag and prioritize climate change programs, activities and projects (PAPs) by all departments and offices of local government units (LGUs);

To take stock of climate change programs, activities and projects and to track and report climate change expenditures of LGUs; and

To clarify and spell out responsibilities among local government units, the Department of Budget and Management (DBM), Climate Change Commission (CCC), and Department of the Interior and Local Government (DILG) relative to the tagging of climate change expenditures in the Annual Investment Program of LGUs.

3.0 DEFINITION OF TERMS

1. Climate Change – a change in climate that can be identified by changes in the mean and/or variability of its properties and that persists for an extended period typically, attributed directly or indirectly to human activity that alters the composition of the global atmosphere and is in addition to natural climate variability observed over comparable time periods.¹

¹ As defined in the United National Framework Convention on Climate Change (UNFCCC)

2. Climate Change Adaptation – adjustments in human and natural systems in response to actual or expected climate signals or their impacts, that moderate harm or exploit beneficial opportunities.
3. Climate Change Mitigation – activities that are aimed at reducing greenhouse gas emissions (GHG), directly or indirectly, by avoiding or capturing GHG before they are emitted to the atmosphere or sequestering those already in the atmosphere by enhancing “sinks” such as forests.
4. Vulnerability – the degree to which geo-physical, biological and socio-economic systems are susceptible to, unable to cope with the adverse impacts of climate change.
5. Resilience – the ability of social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning and capacity for self-organization and to adapt to stress and change.
6. Risk – the concept combines the magnitude of the impact (a specific change in a system caused by its exposure to climate change) with the probability of its occurrence (IPCC 4th Assessment Report, Working Group II, Appendix I)
7. Preparatory activities - shall include but not limited to, vulnerability and impact assessment studies, climate change and variability researches, climate modeling, capacity building, policies, other related activities.
8. P/A/Ps - refers to programs/activities/projects of the department or office as presented in the respective AIPs.

4.0 GUIDELINES

- 4.1 In minimizing the risks associated with climate change, LGUs are encouraged to intensify efforts in the implementation of programs, activities and projects (PAPs) to improve the resilience of their localities. LGUs are encouraged to increase their budgetary allocations for basic services and facilities responsive to climate change to improve the adaptive capacity of their communities and reduce the adverse impacts of climate change, chargeable to local funds. All climate change related strategies and investments of the LGUs in the Annual Investment Program shall be identified as follows:

4.1.1 Adaptation responses

4.1.1.1 Measures that address the drivers of vulnerability. Vulnerability is the degree to which people or systems are susceptible to the adverse effects of climate change but are unable to cope with them. It depends both on the exposure to the climate hazard and the sensitivity and coping capacity of the people and systems. Vulnerability can be decreased by reduced exposure (e.g. shifting population or assets to less risky areas through zoning regulations) or by increasing coping capacity (e.g. well targeted poverty reduction, income and livelihood diversification, health programs and dissemination of climate risk information).

4.1.1.2 Measures that directly confront climate change impacts. These types of expenditures are those that directly address the

impacts or potential impacts of climate change variability such as infrastructures that incorporate climate change risks in its design or implemented to minimize impacts from climate change risks.

4.1.1.3 Measures that build resilience to current and future climate risks. Building resilience means increasing the capacity of the social or ecological system to reach or maintain an acceptable level of functioning or structuring while undergoing changes. Expenditures on this category shall include but not limited to reducing land degradation, reforestation programs, upgrading of existing roads to climate resilient design standards, climate resilient crop varieties or farming techniques, effective early warning systems and other investments specifically designed to respond to projected climate changes and variability.

4.1.2 Mitigation responses

4.1.2.1 Measures to reduce greenhouse gases (GHG) emissions such as but not limited to improved energy efficiency, renewable energy, reforestation/ improved forest management, and improved transport systems.

4.2 To tag climate change expenditures in the Annual Investment Program, the following shall be undertaken:

4.2.1 Identify P/A/Ps with climate change adaptation and mitigation expenditures;

4.2.2 Identify the components of the P/A/Ps that are adaptation or mitigation responses using the Climate Change Typologies (Annex A);

4.2.3 Specify the amount of climate change component/s consistent with Items 4.2.1 and 4.2.2.

4.3 Local government units who do not have any P/A/Ps that can be tagged as climate change adaptation/mitigation can enter '*No identified climate change related expenditures*' under the column on CC Typology Code.

5.0 ROLES AND RESPONSIBILITIES

5.1 Provinces, cities and municipalities shall:

- 5.1.1 Ensure that climate change is integrated in the budget call issued by the Local Chief Executive;
- 5.1.2 Identify climate change expenditures in their Annual Investment Programs (AIPs) using the Climate Change Expenditure Typologies (Annex A);
- 5.1.3 Tag identified climate expenditures in their Annual Investment Programs using the revised AIP Form (Annex B);
- 5.1.4 Accomplish and submit to DILG and DBM the list of tagged climate change P/A/Ps during the annual submission of budget proposals;
- 5.1.5 Ensure the integration of climate change PAPs in the LGU budget proposals of departments during the technical budget hearings of the Local Finance Committee (LFC) and the LCE; and
- 5.1.6 For PAPs that do not qualify under the Climate Change Typologies listed in Annex A, request CCC to create a new typology

5.2 Department of Budget and Management (DBM) shall:

- 5.2.1 Include in the Local Budget Memorandum the tagging of climate change expenditures in the AIP and changes and developments in related policies;
- 5.2.2 Provide the CC expenditure tagged AIPs of provinces and highly urbanized cities to the CCC; and
- 5.2.3 Include the CCET and the revised AIP Form in the updating of the Budget Operations Manual for LGUs.

5.3 Climate Change Commission (CCC) shall:

- 5.3.1 Assess and ensure the quality of the climate tagging of the AIP against the climate change expenditure typology listed in Annex A;
- 5.3.2 Review and approve LGU requests for new climate typologies; and
- 5.3.3 Consolidate and review CC tagged AIPs submitted by LGUs and monitor developments in coordination with oversight agencies and stakeholders.

5.4 Department of the Interior and Local Government (DILG) shall:

- 5.4.1 Provide continuous capacity building programs for LGUs to institutionalize and sustain CCET in LGU Annual Investment Programming and budget planning processes, in partnership with DBM and CCC;

- 5.4.2 Provide the CC expenditure tagged AIPs of cities and municipalities to the CCC;
- 5.4.3 Assist CCC in monitoring compliance by LGUs; and
- 5.4.4 Provide a help desk to provide LGUs with information and support related to CCET.

6.0 For immediate compliance on a pilot basis for FY 2015. The CCET will be implemented by all LGUs in FY2016. Provinces, cities and municipalities are encouraged to participate in the pilot.

FLORENCIO B. ABAD

Secretary

Department of Budget and Management



MARY ANN LUCILLE L. SERING

Secretary

Climate Change Commission

MANUEL A. ROXAS II

Secretary

Department of the Interior and Local Government



DILG-OSEC OUTGOING 14-04232

CY _____ Annual Investment Program (AIP)
By Program/Project/Activity by Sector
As of _____

Province/City/Municipality/Barangay: _____

AIP Reference Code (1)	Program/Project/Activity Description (2)	Implementing Office/ Department (3)	Schedule of Implementation		Expected Outputs (6)	Funding Source (7)	AMOUNT (in thousand pesos)				AMOUNT of Climate Change PPAs (in Thousand Pesos)		CC Typology Code (14)
			Start Date (4)	Completion Date (5)			Personal Services (PS) (8)	Maintenance and Other Operating Expenses (MOOE) (9)	Capital Outlay (CO) (10)	Total (11) 8+9+10	Climate Change Adaptation (12)	Climate Change Mitigation (13)	
General Services (1000)													
Social Services (3000)													
Economic Services (8000)													
Other Services (9000)													

Prepared by:

Planning Officer

Date: _____

Budget Officer

Date: _____

Attested by

Local Chief Executive

Date: _____

Instructions:

Column 1	Indicate the reference code for the sector/sub-sector as per UBOM in order to facilitate consolidation of requirements
Column 2	Describe briefly the program/project/activity to be implemented and accomplished by the LGU (i.e. infrastructure projects, programs or activities).
Column 3	Identify the office/department that will implement the program/project/activity.
Column 4 & 5	Specify the targeted starting and completion date.
Column 6	Describe the output or results in quantified terms. In particular, for PPAs that are climate tagged, specify the outputs for adaptation or mitigation (e.g. 3 kilometers of climate proofed concrete road, 200 cavans of climate change ready rice variety of seeds distributed, 10 hectares of reforested area planted).
Column 7	Indicate the funding source of the program/project/activity. Specify if: <ul style="list-style-type: none"> • Local Disaster Risk Reduction and Management Fund • Development Fund (20% of IRA) • General Fund • Grant/loan from outside sourcing • Financial assistance/Aid from national government • Financial assistance from other LGUs
Column 8, 9 & 10	Indicate the estimated amount of the program/project/activity broken down into PS, MOOE and CO:
Column 11	Add up Columns 8, 9 and 10.

<p>Column 12</p>	<p>For Climate Change Adaptation (CCA) PPAs, indicate the estimated amount. CCA PPAs are responses to actual or expected climate signals or their impacts that moderate harm or exploit beneficial opportunities (see JMC for guidelines and Climate Change Typologies for examples of PPAs).</p> <ul style="list-style-type: none"> • The entire cost is included for PPAs, if the Project Profile explicitly includes a direct adaptation response as a primary goal/objective. • If direct adaptation response is not a primary PPA goal/objective, only the cost of the specific components of the PPAs that match those listed in the Climate Change Expenditure Typology (Annex A) are included. For instance the primary objective of farm to market roads is to provide transportation services. Since adaptation response is not the primary objective, only the components related to the adaptation response would be included.
<p>Column 13</p>	<p>For Climate Change Mitigation (CCM) PAs, indicate the estimated amount. CCM PAs are activities that are aimed at reducing greenhouse gas emissions (GHG), directly or indirectly, by avoiding or capturing GHG before they are emitted to the atmosphere or sequestering those already in the atmosphere by enhancing "sinks" such as forests. (see JMC for guidelines and Climate Change Typologies for examples of PAs)</p> <ul style="list-style-type: none"> • The entire cost is included for PPAs, if the Project Profile explicitly includes a direct mitigation response as a primary PPA goal/objective. • If direct mitigation response is not a primary PPA goal/objective, only the cost of the specific components of the PPAs that match those listed in the Climate Change Expenditure Typology (Annex A) are included.
<p>Column 14</p>	<p>Indicate the CC Typology Code of the PPA as indicated in Annex A.</p> <ul style="list-style-type: none"> • When a PPA qualifies under multiple CC typologies, use the code that accounts for the largest share of expenditures.

Annex A: Climate Change Typologies (LGUs)

1-FS / 2-WS / 3-EES / 4-HS / 5-CSIS / 6-SE / 7-KCD / 8-Finance / 9-Cross Cutting

Strategic Priority 1 – Food Security			
1 – Agriculture			
Code	1 Policy Development and Governance	Code	1 Policy Development and Governance
A111-01	Enact/Implement ordinances that regulate commodity shifting and agricultural land conversion*	M140-01	Enact/Implement ordinances to reduce the emissions of GHGs, or absorption of GHGs in the agricultural sector
A111-03	Design and implement climate change risk transfer and social protection mechanisms for agriculture and fisheries (e.g. crop insurance)*		
2 Research, Development and Extension		2 Research, Development and Extension	
A112-04	Develop climate-resilient crop varieties and animal/fishery breeds, production systems and technologies*	M112-01	Develop, test and introduce practices or techniques that reduce GHG emissions in crop production systems, animal husbandry systems, forest management systems and aquaculture management systems
A112-06	Develop, test and introduce practices or techniques more resilient to climate change and climate variability in farming*	M112-02	Develop, test and introduce practices or techniques to sequester CO2 in agriculture, fishing and forestry
A112-08	Research on new threats to agriculture, fishing, and forestry from climate change and climate variability	M140-05	Sector studies, surveys, assessments on energy and water use efficiency in agriculture
A112-10	Produce and distribute climate resilient rice varieties		
A112-12	Introduce organic farming methods/advocacy & production of bio-organic fertilizer such as bio-N and vermicast		
A112-13	Develop and promote soil and cultural practices that improve soil carbon storage		
3 Knowledge Sharing and Capacity Building		3 Knowledge Sharing and Capacity Building	
A112-11	Awareness raising of risks from climate change risks or/and benefits of adaptation*	M140-04	Establish or strengthen institutions, information systems and capacity building on energy and water use efficiency in agriculture sector
A113-01	Establish climate information systems and database for agriculture and fisheries sectors*		
A113-04	Establish a resource network on climate change agriculture*		
A113-06	Popularize farmers' field school/climate field schools to demonstrate best adaptation practices*		
A113-07	Conduct of non-farm entrepreneurial courses		
A114-03	Conduct Slope Agriculture Land Technology (SALT) training for farmers		
A113-08	Improve the adaptive capacity of farmers and fisherfolk through the provision of relevant technologies and information		
4 Service Delivery		4 Service Delivery	
A112-05	Establish early warning systems for agriculture*	M115-01	Integrated organic and inorganic nutrient management
A115-02	Introduce or expand soil management practices that control soil erosion, nutrient loss and improve the water regime in the soil profile (e.g. contour farming)	M115-02	Switch to soil management techniques that reduce GHG emissions or increase carbon sequestration
A115-03	Introduce or expand use of crops or crop mix more suited to climate change and climate variability	M115-03	Intensify or expand farm production using techniques that reduce GHG emissions or increase carbon sequestration
A115-04	Reduce vulnerability of crop storage facilities and irrigation systems to climate change and climate variability*	M122-01	Increase carbon sequestration
A115-05	Switch to less water intensive crops	M122-03	Increase sequestration capacity and reduce release of GHG in fodder production and management
A122-01	Change management practices or techniques to reduce vulnerability to climate change and climate variability in animal health service, pasture management, fodder production and storage practices	M122-04	Manure management and methane capture in animal husbandry
A260-04	Construct water impounding dams, rainwater harvesting facilities for irrigation, and water storage systems to manage changes in the water cycle due to climate change and climate variability	M260-01	Change forage systems to reduce ruminant methane emissions
A111-05	Develop innovative financing mechanisms to provide seed capital for the implementation of CCA among farmers and fisherfolks organization*	M260-02	Introduce or expand water pumping for irrigation using renewable energy sources
A260-01	Repair and rehabilitate communal irrigation systems (w/ CC lens)*	M114-01	Replace existing water pumps with more energy efficient pumps
A330-02	Implement agricultural and fisheries waste	M114-02	Establish of communal school gardens, and other community gardens for local consumption
			Promote and distribute seeds to households for backyard gardens

CC – Climate Change
GHG – Greenhouse Gases

CV – Climate Variability

*Activities under the NCCAP

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A114-01	recycling and composting*		
A114-02	Construct crop storage facilities that consider climate change and variability		
A114-03	Promote Agro forestry such as cacao/coffee/rubber production and seedling distribution		
A114-04	Establish Integrated Pests Management		
	Establish farmers' field school/climate field schools		
2 Livestock			
Code	2 Research, Development and Extension	Code	2 Research, Development and Extension
A121-01	Conduct of studies and simulation models on the impacts of climate change on major livestock based on the VA and climate change scenarios*		
A121-02	Develop climate resilient livestock production system and technologies		
	4 Service Delivery		4 Service Delivery
A122-01	Change management practices or techniques to reduce vulnerability to CC&CV in animal health service, pasture management, fodder production and storage practices	M122-01	Increase sequestration capacity in fodder production and management
		M122-02	Reduce release of GHGs in fodder production and management
		M122-03	Manure management and methane capture in animal husbandry
		M122-04	Change forage systems to reduce ruminant methane emissions
		M140-02	Development and implementation of sustainable land and water management that address land degradation and agro ecological conditions

3 Fisheries			
Code	1 Policy and Governance	Code	1 Policy and Governance
A131-01	Formulate/Implement ordinances on protection of mangroves and reversion of abandoned fishponds back to mangroves*	M140-01	Introduce ordinances to reduce the emissions of GHGs, or absorption of GHGs in the fishery sector
A131-03	Harmonize climate change adaptation plans in local resource management and local fisheries development*	M122-05	Develop ordinances to reduce municipal fishing boats/improve fuel efficiency of municipal fishing boats
	2 Research, Development and Extension		
A132-01	Conduct vulnerability and risk assessments for fisheries*		
A132-02	Conduct researches on best practices in fisheries and coastal climate change adaptation, technologies and tools*		
A132-03	Develop and/or update climate change R&D agenda for fisheries sectors*		
A132-04	Establish early warning systems for fisheries*		
A132-05	Conduct policy study on climate change risk transfer and social protection mechanisms for agriculture and fisheries*		
A122-02	Promote fish farming and aquaculture practices or techniques to reduce vulnerability to CC&CV (i.e. due to changes in water quality or variation in fishing season).		
	3 Knowledge Sharing and Capacity Building		
A133-01	Establish a resource network on climate change and fisheries*		
A133-03	Establish climate information systems and database for fisheries sector*		
A122-02	Change fish farming and aquaculture practices or techniques to reduce vulnerability to CC&CV		

Strategic Priority 2: Water Sufficiency			
	(21) Water, Sanitation and Flood Protection (Adaptation)		(21) Water, Sanitation and Flood Protection (Mitigation)
A Code	Policy Development and Governance	M Code	
A205-01	Incorporate risks from climate change and climate variability in water, sanitation and flood protection planning	M205-01	Sector reform to improve water use efficiency (e.g. water pricing)
A201-04	Develop ordinances, policies and guidelines for water conservation, allocation, recycling and reuse*		
A230-01	Develop and implement guidelines for rain water collection, such small water impoundments, retarding basins, mini dams to address water shortage and flooding*		
A205-02	Establish or strengthen water regulatory institutions and policies as instruments for adaption to climate change and climate variability		
A201-06	Develop and implement a comprehensive ground water management program that includes vulnerability assessment*		
A206-01	Review financing, tariffs, and system of incentives to reflect the full cost of providing safe water*		
A201-09	Develop public financing mechanism for water supply infrastructures rehabilitation and development*		
	Research, Development and Extension		
A202-01	Conduct ground water resource vulnerability and recharge areas assessment in water stressed cities*	M205-02	Administration, sector studies, surveys, assessments, information systems and capacity building for energy and water use efficiency in water, sanitation and flood protection, and solid waste management
A202-02	Define areas not suitable for large water infrastructure development and settlements based on vulnerability assessment*		
A203-07	Conduct water resource supply and demand analysis under various hydrologic conditions and climate scenarios*		
A250-02	Identify alternative water sources and demand management especially for urbanized areas that rely on reservoirs and are prone to recurrent and severe drought events*		
A270-02	Incorporate water cycles change from climate change and climate variability into trans-boundary water basin planning		
A250-03	Study and adopt centralized wastewater treatment systems to improve quality in highly urbanized and densely populated areas		
	Knowledge Sharing and Capacity Building		
A203-03	Training for community-based water associations to managed water supply infrastructures	M715-02	Train managers or workers to improve water or energy efficiency in business operations
A203-04	Conduct Integrated Water Resource Management and climate change adaptation and disaster risk reduction training for vulnerable communities*		
A203-06	Develop gendered and accessible knowledge products and IEC materials that include local and Indigenous knowledge on water resources management, climate change impacts on water resources and adaptation best practices*		
A210-03	Develop and network government database on water resources and users*		
	Service Delivery		Service Delivery

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1-FS / 2-WS / 3-EES / 4-HS / 5-CSIS / 6-SE / 7-KCD / 8-Finance / 9-Cross Cutting

A240-03	Incorporate climate change and climate variability in design standards for flood control and drainage systems	M210-01	Reduce or capture methane emission from ventilated improved pit latrines.
A240-04	Incorporate climate change and climate variability of water supply infrastructure/ Rehabilitate water infrastructure with climate lens (use of climate projections and other relevant climate data)* Expand the establishment of alternative micro-water purification systems especially to areas that cannot be reached by safe water supply*	M220-01	Reduce energy intensity of existing water supply systems (e.g. replacing pumps)
A210-07	Monitor impact of climate change and climate variability as part of water resource management	M240-01	Reduce per capita water consumption using demand-side interventions (e.g. household water, shower, toilet, and dishwasher).
A240-06	Incorporate changes in design of sanitation systems, wastewater treatment and disposal system in response to extreme weather and flood events arising from climate change and climate variability	M250-01	Re-establish mangroves and floodplains with carbon sequestration properties
A210-04	Mangrove reforestation/rehabilitation of wetlands as protection against floods	M220-02	Reduce GHG emission (methane and nitrous oxide) from wastewater
A240-01	Treatment of wastewater for conservation/re-use purposes to respond to declines in water availability due to climate change and climate variability	M250-02	Reduce energy consumption during wastewater treatment (e.g. from activated sludge to up flow anaerobic sludge)
A250-01	Implement/install water harvesting technologies* (e.g. water impounding systems)		
A220-03	River rechanneling/ Dredging/declogging/ de-silting/cleanup of waterways/rivers/canals/creeks and drainage		
A430-05	Embankment of flood prone rivers; Protection dykes		
A430-06	Slope protection Coastal protection wall embankment /Seawall /Construction of retaining wall; riprap/Vegetation control along roadsides		
A440-08	Construction of Flood Control Structure		

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Strategic Priority 3 – Ecological and Environmental Stability			
	(31) Forestry and Biodiversity (Adaptation)		(31) Forestry and Biodiversity (Mitigation)
FY 2015	Policy Development and Governance	FY 2015	
A311-02	Design and implement payments for environmental services and other innovative conservation financing mechanisms to support ecosystem-based adaptation and mitigation*	M311-01	LGU support to REDD+ implementation*
A320-02	Integrated ecosystem management approaches for watersheds and wetlands to reduce vulnerability to climate change and climate variability	M311-02	Establish a system of monitoring, reporting and verification of REDD+ related policies and processes*
A260-03	Establish zoning guidelines for different ecosystems based on the vulnerability and risk assessment results*	M311-03	Establish "polluters pay principle" for pollution management*
A201-03	Develop guidelines for Implementing Integrated Water Resources Management and climate change adaptation at the local, watershed and river basin level*	M311-04	Formulate and implement ordinances/policies that prevent pollution (e.g. slash and burn farming)
A311-03	Formulate ordinances/policies to reduce the human-related impacts to coral reefs to help lessen the reefs' vulnerability to climate change		
	Research, Development and Extension		
A206-02	Study, design and implement financing mechanisms for IWRM and climate change adaptation implementation in critical watersheds and river basins*		
	Knowledge Sharing and Capacity Building		
A340-05	Establish management information system for different ecosystems that link various data sources*		
A340-06	Document and disseminate best practices, including climate change responsive indigenous practices*		
	Service Delivery		Service Delivery
A312-01	Delineation/rehabilitation/reforestation of watershed areas	M312-02	Re-forestation and afforestation that increases vegetative cover or sequesters carbon; (e.g. Mangrove re-forestation/rehabilitation/rehabilitation);
A312-02	Conserve and protect existing watershed and protected areas	M312-03	Sustainable peat land/ wetland/forest management and protection
A207-07	Improve physical system performance of river basins	M312-04	Avoided deforestation/Bantay Gubat Program/ Establishment of ENRO-PMRB (Provincial Mining and Regulatory Board)/ PNP Checkpoints
A312-03	Identify financing options for rehabilitation activities	M312-05	Management and Protection of Tree Parks/Provincial Forests and Nursery
A312-04	Identify and delineate ecological management zones*	M311-03	Prepare for carbon markets or implement carbon finance market transactions
A312-05	Delineate "ridge-to-reef" ecosystem-based management zones for the ecotowns through multi stakeholder process*	M312-02	Implement the National REDD Plus-Strategy*/LGU support
A320-01	Update status of Protected Areas and Key Biodiversity Areas from results of vulnerability and risk assessment*	M312-06	Oplan Sagip Kalikasan/Urban greening program; landscaping and other beautification projects;
A331-04	Design PES scheme and pilot test identified ecotowns*	A312-12	Community-based Forest Management/Social Forestry
A312-10	Seedling production; management of mangrove nursery		
A312-11	Agro-forestry to diversify farmers' incomes and provide alternatives livelihood during extreme weather events (i.e. drought)		
A312-13	Integrated tree planting along riverbanks/ River Bank Rehabilitation / that reduce the risk of flooding		
A320-03	Establishment of genebank for plant genetic resources		
A320-04	Establishment of database network on wildlife, genetic biodiversity and biosafety		
A320-05	Artificial Coral Reef Propagation		
A320-06	Sea Grass Protection/Sea Cow/ Marine Turtle Conservation		
A320-07	Estuary Protection		
	Small Mining and Solid Waste		Mining and Solid Waste
A330-01	Incorporate change in design of solid waste management systems in response to extreme weather and flood events arising from CC&CV.	M330-01	Rehabilitate abandoned mines*
		M330-02	Identify and implement a moratorium of mining operations in protected areas pending vulnerability and risk assessment and economic valuation studies*
			Close solid waste management sites in environmentally

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				critical areas
			M330-03	Compost landfill
			M330-04	Upgrade existing landfills to capture methane for energy generation or gas flaring for CO2 generation
			M330-05	Monitor illegal mining activities that emit greenhouse gasses
			M330-06	Formulation of Solid Waste Management Plan
			M330-08	Waste reduction and diversion program/Intensify waste segregation at source, discard recovery, composting and recycling*
			M330-09	Construction of Materials Composting and Recovery Facility (MRCF) Building; Buyback Center; Purchase of MCRF equipment
			M330-10	Conduct Waste Amount & Composition Study (WACS)
			M330-11	Construction of Septic Vault
			M330-12	Fabrication of molders for plastics
			M330-13	

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Strategic Priority 4 – Human Security			
(41) Health (Adaptation)		(41) Health (Mitigation)	
Code	1 Policy Development and Governance	Code	Policy Development and Governance
A411-01	Develop guidelines on treatment of climate related health issues in newly exposed areas due to climate change and climate variability		
A414-01	Include climate related diseases in basic benefits of insurance policies		
A411-02	Develop policy requiring integration of climate change and disaster risk reduction concepts and approaches in medical and allied health training courses*		
A411-03	Develop and implement monitoring health infrastructure damage and rehabilitation plan*		
A411-05	Develop and implement post disaster epidemic outbreak management and disease surveillance system (ex. Water-borne diseases and other health risks due to climate change*		
A440-02	Development of proving and taxing policies supporting implementation of adaptation measures		
A411-06	Planning for Climate Change Adaptation for health sector		
A840-01	Include climate related diseases under the basic benefit packages of health insurance policies		
A840-02	Expand insurance eligibility to populations vulnerable to climate related diseases		
2 Research, Development and Extension			
A413-01	Assess changes in risk, exposure or sensitivity to climate change and climate variability related diseases for vulnerable groups		
A440-01	Assess impact of climate change and climate variability on livelihoods and poverty with focus on vulnerable groups		
A411-07	Vulnerability and risk assessment for government infrastructure (e.g. hospitals, health centers, and barangay health units)		
A411-08	Risk Assessment for barangays		
3 Knowledge Sharing and Capacity Building			
A412-02	Training and education of health personnel on treatment, monitoring and surveillance of climate change and climate variability related health issues*		
A412-05	Training for health emergency preparedness and response*		
A413-04	Strengthen health management information management		
A413-02	Incorporate climate related health risks into clinical practice guidelines, and curricula for continuous medical education		
Service Delivery			
A412-01	Develop and introduce health surveillance and rapid response system that reduces the health impacts of climate change and climate variability (e.g. heat-watch)*	M412-01	Interventions that reduce air pollution (e.g. Anti-smoke belching campaign)
A413-07	Implement program for community health emergency preparedness and response*		
A440-04	Development of social protection strategies to respond to climate change and climate variability		
A440-06	Develop food safety measures that take account of new conditions caused by climate change		

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(42) Human Settlements (Adaptation)		(42) Human Settlements (Mitigation)	
A Code	Policy Development and Governance	M Code	Policy Development and Governance
A420-01	Develop and implement plan to secure and manage conflict-affected resettlements*	MS22-01	Develop policies that encourage passive cooling and lighting designs
A522-02	Incorporate vulnerability to climate change and climate variability in housing design standards	MS22-02	Develop integrated transport and land use plans
A420-10	Regulate settlements in areas vulnerable to CC&CV		
A420-11	Localization of Project NOAH		
A522-04	Meteorological hazard Identification and Emergency Response Planning		
A Code	Research, Development and Extension	M Code	Research, Development and Extension
A430-01	Risk Mapping/Identify, map and profile highly disaster prone areas and communities*		
A420-01	Conduct a study on population carrying capacity of areas and CC adaptive capacity of various communities*		
A430-03	Identify most CC vulnerable sectors and population*		
Knowledge Sharing and Capacity Building			
A423-01	Develop and implement knowledge management on climate change and disaster risks for local government units and communities*	MS22-03	Promote energy efficient housing
A423-02	Increase local capacity for forecasting, early warning and disaster risk communication*		
A42-42	Identify indigenous early warning systems on disasters for potential replication in other areas*		
A42-43	Conduct training of trainers to respond to the needs of communities for climate change adaptation*		
A440-11	Advocacy on climate change adaptation		
Service Delivery		Service Delivery	
A420-02	Identify and implement gender-responsive sustainable livelihood and social protection programs for resettled and vulnerable poor families*	MS22-01	Install new heating and cooling systems using renewable energy
A413-08	Develop and implement post-disaster resettlement and counselling of displaced families and communities*	MS22-02	Retrofit heating and cooling systems in existing housing units using renewable energy
A430-02	Develop and implement a settlement adaptation and resettlement plan in consultation with affected communities, private sector, and civil society organization		
A420-07	Construct new low-cost housing, relocation, and other mass dwellings to climate resilient design standards		
A420-08	Reconstruction of housing projects damaged by calamities (Building Back Better)		
A430-04	Relocating disaster prone communities and commercial centers to safer areas		
A430-07	Disaster and Climate Risk Monitoring System		
A430-08	Install Early Warning Systems		
A440-08	Construction of climate resilient elementary and secondary school buildings (safe from climate hazards; considers climate risks)		
A440-09	Climate proofing/retrofitting or relocating of government infrastructure (i.e. schools and government hospitals, health centers, rural health units, teen centers)		
A440-10	Relocation of schools and government hospitals, health centers, rural health units, from climate hazards		
A440-13	Demolition of illegal structures occupied by informal settlers in high risk areas/ Relocation of informal settlers		
A440-14	Demolition of structures encroaching sidewalks		

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Strategic Priority 5- Climate Smart Industries and Services			
(51) Trade, Industries and Tourism (Adaptation)		(51) Trade, Industries and Tourism (Mitigation)	
FY 2015	Policy Development and Governance	FY 2015	Policy Development and Governance
A201-05	Integrate in the National Building Code a requirement for all water-intensive facilities to have water recovery system*	M511-02	Marketing/ trade policies that reduce energy consumption per unit of product
A511-01	Develop a nationally acceptable operational definition of "green jobs"*	M511-03	Introduce a system of incentives to encourage the use of climate-smart technologies and practices
A511-02	Create an enabling policy for the development and implementation of climate-smart industries and services*	M511-04	Integrate monitoring of existing and new-climate smart industries and services within existing business registration system*
A541-02	Develop tourism plans, policies and strategies to promote green tourism*	M551-02	Implement a system of collection, analysis and reporting of baseline and new data on green jobs and employment*
A830-01	Introduce regulations and programs to support climate resilient investments	M511-06	Develop ordinances and policies on the use of reusable bags and containers*
A420-12	Develop green building ordinance/ rating scheme, specifications and criteria*		
Research, Development and Extension		Research, Development and Extension	
A542-01	Establish the carrying capacity of tourism areas*	M512-02	Baseline data on GHG emissions from industry and other sources
A542-02	Aquasilviculture Demo Farm to rehabilitate mangroves and address climate change and provide livelihood	M512-03	Forge partnerships with industry, academe, and research organizations on R&D of climate-smart technologies and products in the locality
A542-03	Demo Farm on Integrated Farming on Brackish Water		
Knowledge Sharing and Capacity Building		Knowledge Sharing and Capacity Building	
A513-01	Promote public-private partnership to increase investments in the development of climate-smart technologies, products and services*	M513-01	Trainings on environmental compliance monitoring
A513-02	Assist SMEs in developing capacity for eco-efficient production*	M513-02	Develop and implement training program on GHG emissions inventory and carbon footprint*
A541-03	Festivals and events which advocate the protection and preservation of nature	M513-03	Review and develop integrated lookit packages and identify training providers/ knowledge partners
Service Delivery		Service Delivery	
A515-01	Marketing and trade support for changing agricultural product mix in response to climate change and climate variability	M515-01	Marketing and trade support for products that reduce GHG emissions per unit of output
A515-02	Support new income generating opportunities utilizing natural resource better adapted to climate change and climate variability	M515-02	Marketing and trade support to substitute agricultural products that use inputs with lower GHG emission
A516-01	Support industries that are better adapted to climate change and climate variability (e.g. Tiger-grass production)	M515-03	Marketing and trade support for agricultural products that use integrated organic and inorganic nutrient management
A516-02	Retrofit assets and capital to protect against climate change and climate variability	M515-04	Rehabilitate/reforest degraded tourism areas
A516-03	Incorporate new climate change and climate variability resilient design standards		
(52) Information Technology and Communication (Adaptation)		(52) Information Technology and Telecommunication (Mitigation)	
A Code	Service Delivery	M Code	Service Delivery
A720-01	Develop emergency response systems for use during extreme weather events	M720-01	Improve energy efficiency in information technology
A731-01	Development of telecommunications infrastructure for use as part of an emergency response system during extreme weather events	M731-01	Improve energy efficiency in telecommunications information technologies.

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Strategic Priority 6: Sustainable Energy			
(61) General Energy (Adaptation)		(61) General Energy (Mitigation)	
Code	Policy Development and Governance	Code	Policy Development and Governance
A611-04	Develop a local renewable energy program*	M613-03	Develop/implement ordinances and policies to improve energy efficiency – in buildings, agriculture, industry and city/municipal services
A611-01	Mandatory implementation of AO110 and AO126 directing the institutionalization of Government Energy Management Program*		(e.g. public building maintenance program to improve energy efficiency; use of more energy efficient street lighting such as LED).
A613-01	Design and implement system of incentives for renewable energy for host communities and local government units that can be used for sustainable livelihood programs and climate change adaptation measures*	M613-13	Develop a certification system/incentives for voluntary adoption of energy efficiency labelling, green building rating, and ISO 50001 certification
Research and Development and Extension			
A611-03	Conduct sustainable and renewable energy resource assessments (e.g. hydro, geothermal, biomass, wind, ocean and solar)*	M613-12	Conduct study on energy efficiency and conservation to determine the energy use reduction potential and identify appropriate interventions and policies to encourage and sustain EE&C adoption*
Knowledge Sharing and Capacity Building			
A611-06	Conduct capacity building of community-based renewable energy organizations/cooperatives on system maintenance, energy efficiency and conservation, organizational development, tariff setting and management systems*	M613-07	Strengthen capacity of Institutions to plan for low-carbon growth and environmentally sustainable energy supply
Service Delivery			
A6110-01	Wind energy using improved design of turbines to withstand higher wind speeds as a result of extreme weather events	M613-10	Development of renewable energy(i.e. Establishment of Solar Panels/Installation of Wind Mill/Bio-Gas)
A6110-02	Solar energy using Improved design of solar panels to withstand higher intensity storms resulting from climate change and climate variability	M613-11	Clean Cities Initiatives or those that promote/increase utilization of alternative/clean fuels for transport sector (tricycle, Jeepney, bus, private and government vehicles)
A6110-03	Secure access to water for crops used as bioenergy source	M6110-01	Construct or rehabilitate energy generation capacity from renewable sources other than hydropower including demonstration and pilots
		M6110-02	Strengthen regulatory and institutional framework to support expansion of renewable energy production and use
		M6110-05	Develop RE project-based and service contracts-based portfolios to encourage potential investors in identified sites
		M6110-06	Conduct survey of RE potential in off-grid areas
		M6110-07	Conduct capacity building of community-based RE organizations on RE system maintenance, EE&C organizational development, tariff setting and management systems
		M6110-08	Design and implement system of incentives for RE host communities and LGUs that can be used for sustainable livelihood programs and CCA measures
		M6110-09	Green charcoal briquetting facility

(63) Transportation (Adaptation)		(62) Transportation (Mitigation)	
Code	Policy Development and Governance	Code	Policy Development and Governance
A621-01	Incorporate risks from CC&CV in transportation planning	M621-07	Formulate ordinances/programs to implement the provisions of the Philippine Clean Air Act
A621-02	Assess economic, environmental or social impact of climate change and climate variability on transportation	M621-03	Develop ordinances/policies to encourage shift from higher carbon to lower carbon transport modes in the transport sector (i.e. pedestrianization, bicycle lanes)
		M623-04	Improve vehicle emission standards
		M623-05	Improve fuel efficiency standards
		M623-06	Strengthen vehicle inspection systems on emissions and fuel efficiency
Research, Development and Extension			Research, Development and Extension
		M622-04	Research and development in low-carbon or non-fossil fuel transport technologies
		M625-03	Research and development of lower-carbon modes of urban transport

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	Knowledge Sharing and Capacity Building		Knowledge Sharing and Capacity Building
		M621-02	Capacity building related to energy efficiency in the transport sector
	Service Delivery		
A623-02	Investments specifically responding to new climate resilient criteria	M623-03	Substitution of high carbon by lower carbon or non-fossil fuel thereby reducing carbon intensity per kilometre travelled
A623-03	Protection of transport infrastructure against extreme weather events (especially floods and storms) becoming more frequent and violent due to climate change and climate variability		
A623-04	Establishment of emergency services designed to cope with climate change and climate variability related emergencies in the transport sector		
(64) Other Transportation (Adaptation)		(62) Other Transportation (Mitigation)	
A Code	Provincial/City/Municipal/ Farm-to-Market Roads/Bridges	M Code	Provincial/City/Municipal/ Farm-to-Market Roads /Bridges
A624-01	Adopt design standards that take account of climate change and climate variability-impacts	M624-01	Investment in roads to improve traffic flow and reduce GHG emissions per unit transported
A624-02	Construct new roads and bridges to climate resilient design standards	M625-01	Urban traffic management to reduce GHG emissions per unit transported
A624-03	Upgrade existing roads and bridges to climate resilient design standards		
A624-04	Enhance road maintenance to respond to climate change and climate variability		
Ports and Waterways		Ports and Waterways	
A626-02	Construct/Upgrade ports to climate resilient design standards	M626-02	Improve waterways and port facilities to reduce the carbon intensity per unit transported
A626-04	Enhanced waterway maintenance to respond to climate change and climate variability		
A626-05	Setup new waterways or change existing waterways in response to climate change and climate variability		

Strategic Priority 7: Knowledge and Capacity Development			
(71) Education (Adaptation)		(71) Education (Mitigation)	
A Code	Policy Development and Governance	M Code	Policy Development and Governance
A711-02	Review of curricula to take account of climate aspects in basic education, vocational training and other forms of follow-up training and education	M711-01	Development of curricula or programs focused on reducing GHG emissions, energy and water consumption
A711-03	Review and revise, as necessary, current textbooks, modules and exemplars for pre-elementary, elementary, high school and alternative learning system for climate change content and gender-sensitivity*		
A Code	Knowledge Sharing and Capacity Development	M Code	
A711-01	Capacity building to address vulnerability to climate change and climate variability		
A712-01	Awareness raising programs on climate change and climate variability		
A712-02	Training for pre-elementary, elementary, high school on integrating climate change in curriculum*		
A712-03	Climate Change 101 (for private sector and civil society)		
A712-04	Support to international campaigns that promote climate change adaptation and mitigation (e.g. Earth month)		
Code	Service Delivery		Service Delivery
A713-01	Development of climate change adaptation focused curricula/ or programs for elementary and high school*	M713-01	Development of curricula or programs focused on reducing GHG emissions, energy consumption or water consumption for elementary and high school

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Strategic Priority 8 - Finance			
(81) Finance (Adaptation)		(81) Finance (Mitigation)	
A Code	Policy Development and Governance	M Code	Policy Development and Governance
A850-03	Regulate or provide incentives in housing finance to encourage upgrading of existing real estate that reduces vulnerability to climate change and climate variability	M830-01	Introduce ordinances/policies/financial instruments to support GHG reducing activities
A860-01	Develop and introduce weather or climate indexed Insurance programs (e.g. crop insurance)	M850-01	Develop ordinances or provide incentives in housing finance to support energy saving designs and standards
Knowledge Sharing and Capacity Development			
A711-04	Carbon financing capacity building		
M330-06	Strengthen institution in developing policies to mobilize carbon finance		
A Code	Service Delivery	M Code	Service Delivery
A870-01	Ease access to finance targeting adaptation to climate change and climate variability by microfinance institutions	M870-01	Provide lines of credit for investments in reduction of GHG emissions and/or absorption of GHGs
A890-01	Introduce green bonds or other securities specifically targeted at adaptation to climate change and climate variability	M870-03	Support to access carbon markets
		M880-01	Credit lines for investments in reduction of GHG emissions and/or absorption of GHGs
		M890-01	Introduce green bonds or other securities specifically targeted at reducing GHG emission or sequestering GHGs

9 - Cross-Cutting Priorities			
A Code	Policy Development and Governance	M Code	Policy Development and Governance
A900-01	Formulation/Mainstreaming of climate change in policies, codes, ordinances, plans (CLUP, CDP, ELA) and Institutions	M900-01	Formulation of codes/ordinances/policies to reduce GHG emissions or absorb GHG
A900-02	Conduct of CBMS with DRRM/CCA	M140-03	Monitor carbon sequestration
A900-03	Creation of offices with a mandate for climate change adaptation and mitigation		
A900-04	Development of legislation on CCA		
A900-05	Develop local memoranda that promote awareness on CCA		
A Code	Research, Development and Extension		
A902-01	Greenhouse gas accounting and inventory		
A902-02	Conduct vulnerability and risk assessment studies and generate maps* (including agricultural; ecosystem VRA; VRA for government infrastructure (e.g. hospitals, health centers, and barangay health units)		
Knowledge Sharing and Capacity Building			
A903-01	Training on vulnerability and risk assessments*		
A114-01	Develop formal and non-formal training programs on CCA and DRR*		