CLIMATE CHANGE

EXPENDITURE TAGGING

FOR LOCAL GOVERNMENT

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About this manual

This manual explains the procedures for climate change expenditure tagging in local government. It is intended for the use of officials and technical staff of local governments.

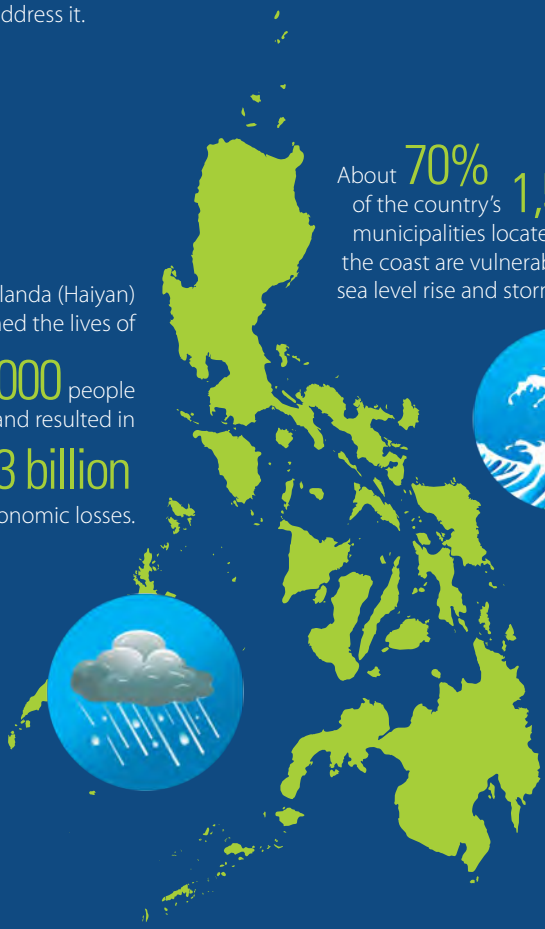
Meet Kokoy

Meet "Kokoy" the frog. With scientific name Sanguirana Igorota, Kokoy's species is unique in the Philippines, found within the Cordilleras' mountain forests.

Kokoy helps highlight key messages and important points throughout the manual. Thanks to the Climate Change Commission, creator of Kokoy, for allowing the use of the mascot in this publication.

The Philippines is vulnerable to the impact of climate change.

The Philippines is one of the countries that are most vulnerable to the impact of climate change. We will continue to face its serious impact. We must act now to address it.



About 70% of the country's 1,500 municipalities located along the coast are vulnerable to sea level rise and storm surge.

Typhoon Yolanda (Haiyan) in 2013 claimed the lives of more than 6,000 people and resulted in US$13 billion in economic losses.

Sources:

Alliance Development Works. (2012).

Kreft, S. et al. (2015). Global Climate Risk Index 2015.

PAGASA. (2015). Retrieved from pagasa.dost.gov.ph.

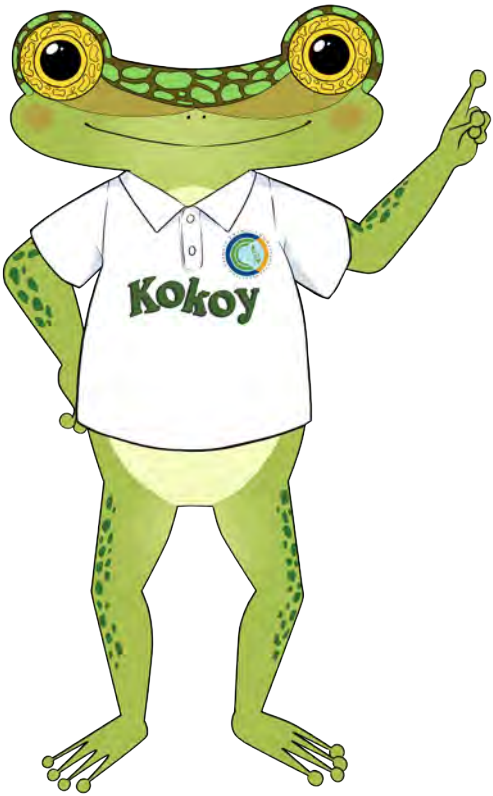
World Bank. (2013). Getting a Grip on Climate Change in the Philippines: Extended Technical Report.

Local government at the frontline

Local officials can make a big difference in climate change mitigation and adaptation. Effective climate action is possible when LGUs are involved in developing and implementing local solutions that respond to local conditions.

The social, economic and environmental impact of climate change are felt by local governments. LGUs are investing in climate-responsive measures, and in preparing communities to adapt and mitigate the effects of climate change.

The Climate Change Act of 2009 (Republic Act 9729) as amended by RA 10174 identifies local government units as frontline agencies in formulating, planning and implementing climate change actions in their communities. The law requires all LGUs to prepare a local climate change action plan or LCCAP. The plan should be integrated in their local development plans, and should be consistent with the National Framework Strategy on Climate Change and the National Climate Change Action Plan.



Climate Investment Programming

Climate investment programming is the systematic identification and prioritization of climate programs, projects and activities, and matching these with financial resources, to be implemented within a specified time frame (adapted from DILG-NEDA-DBM-DOF JMC 1 Series 2007).

Climate change expenditure tagging

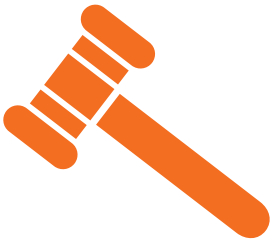
Climate expenditure tagging (CCET) is the process of prioritizing and assigning codes to climate change programs, projects and activities. This is done during the preparation of the annual investment program.

CCET helps local government units:

1. Identify, prioritize, and tag climate change programs, projects, and activities (PPAs)

2. Take stock of climate change PPAs, track and report climate change expenditures

Policies that support CCET



Joint Memorandum Circular 2014-01 issued August 2014 by DBM, CCC and DILG encourages LGUs to track their climate expenditures in their Annual Investment Programs. Joint Memorandum Circular 2015-01 introduces the revised guidelines for tagging and tracking climate change expenditures in the local budget. *See Annex A (pages 25-30)*

Local Budget Memorandum No. 70 issued June 2015 by the DBM requires LGUs to prepare their Annual Investment Program using the revised AIP form. The form includes three columns for Climate Change Expenditure Tagging.

Roles of Local Governments in climate tagging

Source: DBM-CCC-DILG JMC 2015-01

Provinces, cities and municipalities

- Ensure that climate change is integrated in the budget call issued by the local chief executive.
- Identify climate change expenditures in the annual investment programs using the climate change expenditure typologies as guide.
- Tag identified climate expenditures in the annual investment programs using the revised AIP form.
- Accomplish and submit to DILG and DBM the list of tagged climate change PAPs during the annual submission of budget proposals.
- Submit an electronic copy of the tagged AIP form and accomplished QAR to the CCC at lguhelpdesk@climate.gov.ph.
- Ensure the integration of climate change PAPs in the LGU budget proposals of the departments during the technical budget hearings of the local finance committee and the local chief executive.
- For PAPs that do not qualify under the climate chnage typologies, request CCC through the CCET help desk to create a new typology.

Roles of Agencies in climate tagging

Department of Budget and Management

- Include in the Local Budget Memorandum the tagging of climate change expenditures in the AIP and changes and developments in related policies; and
- Include the CCET and the revised AIP Form in the updating of the Budget Operations Manual for LGUs

Climate Change Commission

- Assess and ensure the quality of the climate tagging of the AIP against the climate change expenditure typology listed in Annex A and duly accomplished QAR Form
- Provide a held desk to provide LGUs with information and support related to CCET
- Review and approve LGU requests for new climate typologies; and streamline the typologies when necessary
- Review and consolidate CC tagged AIPs submitted by LGUs and monitor developments in coordination with oversight agencies and stakeholders

Department of the Interior and Local Government

- 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
- Monitor compliance by LGUs

Climate tagging toolkit and guide

We will be looking at 5 important documents:

1. Climate Change Typologies for Local Government
2. Annual Investment Program Form
3. Climate Change Expenditure Tagging Analysis Tool
4. Annual Investment Program Brief on Climate Change
5. Quality Review and Assurance (QAR) form

Climate Change Typologies for Local Government

This a list of climate change activities derived from the National Climate Change Action Plan. It has two kinds of activities: **adaptation** and **mitigation**. They are grouped according to the strategic priorities of the National Climate Change Action Plan.

Use the typologies to identify climate-responsive programs, projects and activities.

Strategic Priority 1 - Food Security			
1 - Agriculture and Livestock			
Code	1- Policy Development and Governance	Code	1- Policy Development and Governance
A111-01	Incorporate climate change and climate variability considerations in policies and institutions	M111-01	Enact/implement ordinances and policies to reduce the emissions of greenhouse gases (GHGs), or absorption of GHGs in the agricultural sector.
A111-02	Regulate commodify shifting and agricultural land conversion*	M111-03	Monitor carbon sequestration
A111-03	Design and implement climate change risk transfer and social protection mechanisms in agriculture and fisheries*		
A111-04	Incorporate risks from climate change and climate variability in irrigation/water management planning		
Code	2 - Research, Development and Extension	Code	2 - Research, Development and Extension
A111-02	Conduct agricultural vulnerability and risk assessments, impact assessments and simulation models on major crops and	M112-01	Develop, test and introduce practices or techniques that reduce GHG emissions and practices or techniques to sequester carbon dioxide (CO_2) in crop production systems, animal husbandry systems, forest

See Annex B (pages 31-46) for the full list

Annual Investment Program Form

Use the Revised Annual Investment Program form to enter information. The form has 14 columns.

Annex 8
AIP Form and Instructions

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

Province/City/Municipality: _____

☐ No Climate Change Expenditure (Please tick the box if your LGU does not have any climate change expenditure)

			Schedule of Implementation				AMOUNT (In Thousand pesos)				AMOUNT of Climate Change expenditure (In Thousand Pesos)		
AIP Reference Code (1)	Program/Project/Activity Description (2)	Implementing Office/ Department (3)	Start Date (4)	Completion Date (5)	Expected Outputs (6)	Funding Source (7)	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)	CC Typology Code (14)
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: _____

1

See Annex C (page 47) for the full and actual form

Instructions for Filling out the AIP Form

- **Column 1.** Enter the reference code for the sector or sub-sector based on the Updated Budget Operations Manual.
- **Column 2.** Enter a description of the PPA to be implemented by the LGU, for example: farm-to-market road.
- **Column 3.** Enter the office or department that will implement the PPA.
- **Column 4 & 5.** Enter the target start and completion dates.
- **Column 6.** Enter the output or result, in quantity. For PPAs that are climate-tagged, enter the output for adaptation and mitigation. For example, 3 kms. of climate-resilient concrete road, 200 cavans of climate-resilient rice variety of seeds, 10 hectares of reforested areas.
- **Column 7.** Enter the funding source using the instructions in Annex B of the DBM-CCC-DILG Joint Memorandum Circular 2015-01. Don't leave the column blank.
- **Column 8, 9 & 10.** Indicate the estimated amount of the PPAs broken down as follows: personnel services; maintenance and other operating expenses; and capital outlay.
- **Column 11.** Add up Columns 8, 9 & 10.
- **Column 12 & 13.** For each PPA that you tagged as a climate change adaptation or climate change mitigation measure, enter the corresponding amount. Don't leave the column blank. PPAs with missing amounts can lead to erroneous analysis of results: PPAs will still be included in the PPA count, but total amounts for climate change adaptation and climate change mitigation will appear smaller than the actual programmed investments.
- **Column 14.** Enter the climate change typology code.

If your LGU does not have any PPA that can be tagged as either climate change adaptation or climate change mitigation, tick the box 'No climate change expenditure'.

Do's

- Do use the revised Annual Investment Program form prescribed under DBM-CC-DILG JMC No. 2015-01 in preparing your Annual Investment Program (AIP). This is necessary for data analysis and consolidation of results.

- Do prepare your AIP using Microsoft Excel. The program allows you to use the CCET Analysis Tool, which automatically generates charts and analyses of the LGU's climate programs.
- Do double check the typology codes. Putting in extra characters or omitting a single character in the code can misrepresent the nature of your LGU's climate programs.
- Do fill out the Expected Outputs (column 6) of the AIP form by specifying the outputs for climate change adaptation and climate change mitigation for PPAs that are climate-tagged. Examples of output for tagged items are: 3 kilometers of climate resilient concrete road, 200 cavans of seeds of climate-ready rice distributed, 10 hectares of reforested area planted.

Dont's

- Don't submit your AIP in Microsoft Word, PDF or other formats. This will invalidate your submission for inclusion in the national consolidation of climate programs.
- Don't use multiple tags for the same PPA. The CCET analysis will treat multiple tags separate and distinct typologies.
- Don't leave the column for Funding Source (column 7) in the AIP form blank. Identify the sources of funds according to the instructions in Annex 2 of the JMC.
- Don't leave the CCA and CCM amount (columns 12 or 13) blank when you tag a PPA. PPAs with missing amounts can affect analysis of results. PPAs will still be included in the PPA count, but amounts will appear smaller than actual programmed investments.
- Don't include office/department sub-totals when using the CCET analysis tool. This will generate bloated total amounts that may affect analysis.
- Don't overtag. Include only PPAs or components of PPAs that have objectives that improve the resilience of people and communities to climate change or mitigate climate change. Refer to DBM-CCC-DILG JMC 2015-01 for definition and examples of PPAs on CCA and CCM.

Climate Change Expenditure Tagging Analysis Tool

The Climate Change Expenditure Tagging Analysis Tool is an Excel-based spreadsheet that automatically generates charts and data tabulation about your LGU's climate change programs, projects and activities.

Copy and paste entries from the CCE-tagged AIP form/s (from AIP Reference Code to CC Typology Code columns) to the Data Bank worksheet, EXCLUDING rows for sub-total and total values to generate the charts and analysis.

AIP CCET Data Bank

Lookup formula (auto-generated only when required data fields in "LGU SumDataSheet" are filled-out)							Implementation Schedule	
Region	Province	Income Class	LGU among or within the 17 highly vulnerable provinces?	AIP Reference Code	P/A/P Description	Implementing Office	Start Date	Completion Date
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					
Select_a_Region	0	#N/A	#N/A					

See Annex D (pages 48-56) for the full and actual form

How to identify climate change expenditures

1

Based on the DBM-CCC-DILG JMC, the local government determines whether the objectives and outcomes of their programs or projects are climate change adaptation or mitigation measures. Local government is required to undertake climate tagging under Joint Memorandum Circular 2015-01 of the Department of Budget and Management, the Climate Change Commission, and the Department of the Interior and Local Government.

Climate change expenditures can be either **adaptation** or **mitigation** measures.

Climate change adaptation comprises responses or measures that:

- address drivers of vulnerability (e.g., crop insurance)
- directly confront climate change impact (e.g., relocation of flood-prone communities to safer areas)
- build resilience to current and future climate risks (e.g., construct housing using climate resilient design standards)

Climate change mitigation comprises responses or measures that:

- Reduce greenhouse gas (GHG) emissions (e.g., bike lanes, energy efficient structures)
- Increase GHG sequestration (e.g., reforestation)
- Protect carbon sinks (e.g., Bantay Gubat, Bantay Bakawan)

2. If at least one objective is an adaptation or mitigation measure, local government considers the entire program or project budget as a climate change expenditure. If only specific components are adaptation or mitigation measures, local government considers only the budgets for those specific components as climate change expenditures.

3. Local government tags its climate change expenditures using a standardized climate change typology. Local government also submits to the Climate Change Commission a quality review and assurance (QAR) form, which the Commission uses to review their tagging.

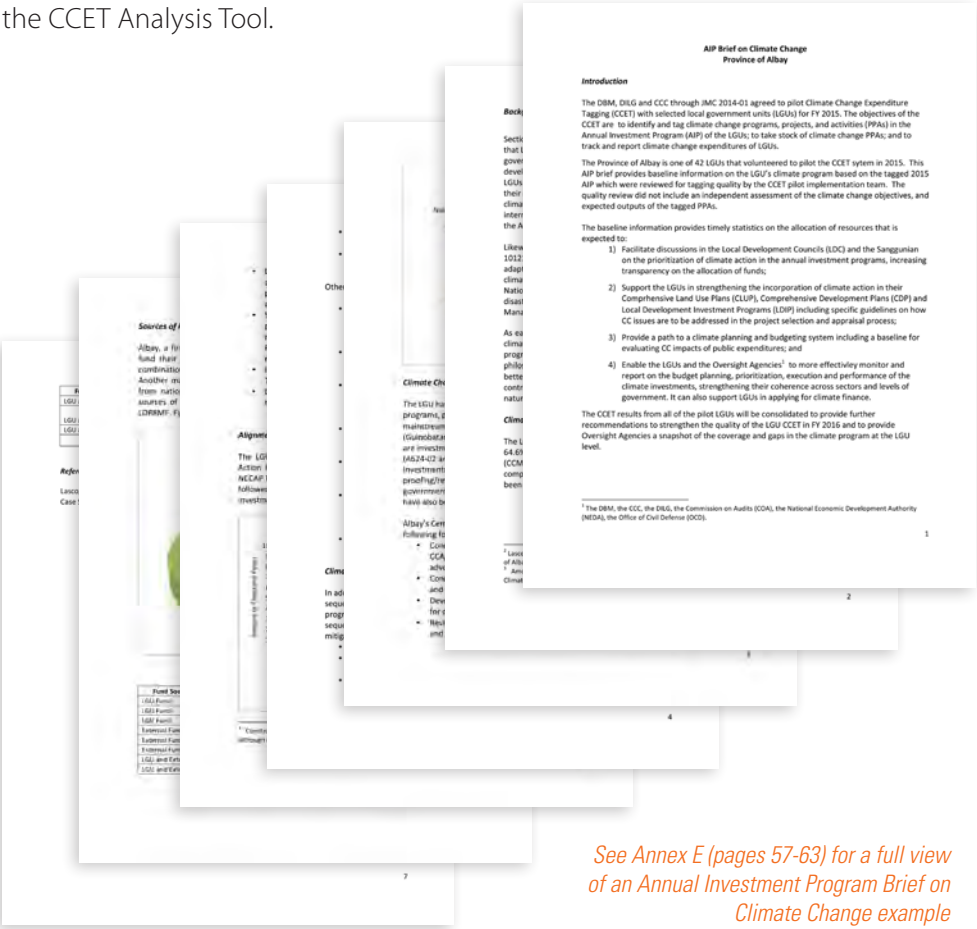
Important

- Double-check your typology codes. Putting in extra characters or omitting a single character in the code may result in your climate change programs not being counted.

- Don't tag lump sum amounts and office and department budgets. Tagging them will inflate your climate change expenditures, and will affect the analysis. The only exception is the budget for offices whose primary purpose is to address climate change risks through adaptation or mitigation. An example is the local climate change office. In such cases, tag the entire budget of the office.

Annual Investment Program Brief on Climate Change

The brief is a snapshot of the LGU's climate investments. The information in the AIP brief are taken from tables and charts generated by the CCET Analysis Tool.



AIP Brief on Climate Change
Province of Albay

Introduction

The DBM, DILG and CCC through JMC 2014-01 agreed to pilot Climate Change Expenditure Tagging (CCET) with selected local government units (LGUs) for FY 2015. The objectives of the CCET are to identify and tag climate change programs, projects, and activities (PPAs) in the Annual Investment Program (AIP) of the LGUs; to take stock of climate change PPAs; and to track and report climate change expenditures of LGUs.

The Province of Albay is one of 42 LGUs that volunteered to pilot the CCET sytem in 2015. This AIP brief provides baseline information on the LGU's climate program based on the tagged 2015 AIP which were reviewed for tagging quality by the CCET pilot implementation team. The quality review did not include an independent assessment of the climate change objectives, and expected outputs of the tagged PPAs.

The baseline information provides timely statistics on the allocation of resources that is expected to:

1) Facilitate discussions in the Local Development Councils (LDC) and the Sanggunian on the prioritization of climate action in the annual investment programs, increasing transparency on the allocation of funds;
2) Support the LGUs in strengthening the incorporation of climate action in their Comprehensive Land Use Plans (CLUP), Comprehensive Development Plans (CDP) and Local Development Investment Programs (LDIP) including specific guidelines on how CC issues are to be addressed in the project selection and appraisal process;
3) Provide a path to a climate planning and budgeting system including a baseline for evaluating CC impacts of public expenditures; and
4) Enable the LGUs and the Oversight Agencies[1] to more effectivley monitor and report on the budget planning, prioritization, execution and performance of the climate investments, strengthening their coherence across sectors and levels of government. It can also support LGUs in applying for climate finance.

The CCET results from all of the pilot LGUs will be consolidated to provide further recommendations to strengthen the quality of the LGU CCET in FY 2016 and to provide Oversight Agencies a snapshot of the coverage and gaps in the climate program at the LGU level.

[1] The DBM, the CCC, the DILG, the Commission on Audits (COA), the National Economic Development Authority (NEDA), the Office of Civil Defense (OCD).

1

See Annex E (pages 57-63) for a full view of an Annual Investment Program Brief on Climate Change example

The Annual Investment Program Brief shows the following information:

- Percentage of climate change adaptation and climate change mitigation investments in relation to total investments
- Amount of climate change adaptation and climate change mitigation investments
- Total number of climate change adaptation and climate change mitigation PPAs
- Alignment of LGU investments with the National Climate Change Action Plan
- Sources of funds

The information in the brief can be used for various purposes:

- In prioritizing the climate actions in the Annual Investment Program, local development councils and local legislative councils (Sanggunian) can use the brief as input in their planning and discussions
- In monitoring and evaluating climate investments
- In reporting about climate investments
- In applying for climate finance

Quality Review and Assurance

Quality Review and Assurance or QAR is a process of checking the basis for tagging PPAs in the Annual Investment Program. It identifies the climate risks addressed by PPAs, and the scientific or factual basis for pursuing the PPAs (for example, a map showing the areas prone to landslides during heavy rains). Finally, QAR shows in LGU plans.

Use the QAR to ensure the quality of climate-tagged PPAs in your Annual Investment Program. Submit both the QAR form and the Annual Investment Program to the Climate Change Commission, email lguhelpdesk@climate.gov.ph.

						Alignment of PPA with LGU Plans					
Program/ Project/ Activity (PPA) Description (1)	CC Typology Used (2)	Main Objective (3)	CC Objectives (4)	Climate Risks being addressed? (5)	Climate information used? (6)	PDPFP/CLUP (7)	CDP (8)	LCCAP (9)	LDRRMP (10)	LDIP (11)	Not identified in Plans (12)
Construction of rainwater harvesting facility for irrigation	A114-05	Improved farm productivity	Provide irrigation water during the dry season	Drought	Drought statistics			X			
Flood Control Program	A224-01		Ensure efficiency and effectiveness of flood control management	Floods, storm surges	Climate projections, flood susceptibility maps	X	X			X	
Awareness raising programs on climate change and climate variability	A713-01		Improved community awareness and knowledge on CC	All types of climate risks	Observe and Projected Annual Mean Temperature		X	X			
Reforestation Program	M314-01	Increased forest cover	Increased carbon sequestration potential			X	X	X		X	

See Annex F (pages 64-66) for the full and actual form

Acronyms

- AIP – Annual Investment Program
- CCA - climate change adaptation
- CCC – Climate Change Commission
- CCET – Climate Change Expenditure Tagging
- CCM - climate change mitigation
- CO – Capital Outlays
- DBM – Department of Budget and Management
- DILG – Department of the Interior and Local Government
- JMC – Joint Memorandum Circular
- LCCAP - local climate change action plan
- LCE – local chief executive
- LFC – Local Finance Committee
- LGU – local government unit
- MOOE – Maintenance and Other Operating Expenses
- NCCAP - National Climate Change Action Plan
- NFSCC - National Framework Strategy on Climate Change
- PDF – portable document format
- PPA – programs, projects, activities
- PS – Personnel Services
- QAR – Quality Review and Assurance

Annexes

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

JOINT MEMORANDUM CIRCULAR No. 2015-01
Date: July 23, 2015

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 : **REVISED GUIDELINES FOR TAGGING/TRACKING CLIMATE CHANGE EXPENDITURES IN THE LOCAL BUDGET (AMENDING JMC 2014-01, DATED AUGUST 7, 2014)**

The Philippines is considered as one of the most vulnerable countries to climate change. Impacts range from extreme weather events (such as Yolanda and Ondoy), sea level rise, increase in average temperature, drastic changes in rainfall patterns, and drought that can severely affect the country's food security, water sufficiency, human settlements, among others.

Anchored on the Climate Change Act (CCA) of 2009 and the National Climate Change Action Plan (NCCAP), the Climate Change Expenditure Tagging (CCET) supports mainstreaming of climate change adaptation and mitigation into the planning process of local government units (LGU), and provides the starting point from which to measure progress in the implementation of climate change initiatives.

Building on the lessons learned from the national and pilot implementation of the Tagging/Tracking Climate Change Expenditures in the Local Budget for FY 2015, the previously issued Joint Memorandum Circular (JMC) 2014-01 issued by the Department of Budget Management (DBM), Climate Change Commission (CCC), and the Department of the Interior and Local Government (DILG) is hereby amended. Amendments to the previously issued JMC 2014-01 include the following:

- Submission by the local government unit (LGU) of electronic copy of their climate change (CC) expenditure tagged Annual Investment Program (AIP) directly to the CCC, in addition to their submission to the DBM and DILG during the budget preparation process;
- Transferring the responsibility of operating the CCET helpdesk from the DILG to the CCC;

- Streamlining the CC typologies by simplifying, consolidating, and eliminating redundant typologies to be consistent with the national typologies; and
- Introduction of the Quality Review and Assurance (QAR) tool to ensure the quality of the climate change expenditure data.

1.0 LEGAL BASES

1.1 The Philippine Climate Change Act of 2009 (Republic Act 9729) seeks 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 the frontline agencies in the formulation, planning, and implementation of Local Climate Change Action Plans (LCCAP) in their respective areas, consistent with the provisions of the Local Government Code, the Framework, and the National Climate Change Action Plan.

1.2 The Philippine Disaster Risk Reduction and Management Act of 2010 (Republic Act 10121) Section 2 (g) provides that disaster risk reduction and climate change need 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 (LDRRMP) in accordance with the national, regional, and provincial framework and policies on disaster risk reduction.

1.3 The DBM issued Local Budget Memorandum (LBM) No. 68 which asks LGUs to submit, together with the General Annual Budget, their respective Local Disaster Risk Reduction Management Plans and Local Climate Change Action Plans and encourages LGUs to identify, prioritize, and tag their respective P/A/Ps for climate change and to tag and track all climate change expenditures to help ensure transparency and increase effectiveness of climate change expenditures.

1.4 The amended JMC to guide the LGUs, is consistent with the issued JMC 2015-01 issued by DBM-CCC for national government agencies.

2.0 PURPOSE

2.1 To identify, prioritize, and tag climate change programs, activities, and projects (P/A/Ps) by all departments and offices of LGUs;

2.2 To take stock of climate change P/A/Ps and to track and report climate change expenditures of LGUs; and

2.3 To clarify and spell out responsibilities among LGUs, DBM, CCC, and DILG relative to the tagging of climate change expenditures in the Annual Investment Program of LGUs.

3.0 DEFINITION OF TERMS

3.1. 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 (United National Framework Convention on Climate Change).

3.2. Climate Change Adaptation – a response can be classified as adaptation if it intends to reduce the vulnerability of humans or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience.

3.3. Climate Finance- resources that have been allocated or may be utilized towards the climate change adaptation and mitigation requirements of the country and its vulnerable communities.

3.4. Climate Information - includes baseline observed data, climate trends, variability and higher order statistics, extremes, inter-annual variability, and inter-decadal variability, for both the past and projected future climate. It also includes associated information to interpret and use these data.

3.5. Climate Change Mitigation - response aimed at reducing greenhouse gas (GHG) emissions, 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.

3.6. Climate-Related Risks- are risks variables in the climate/weather system that affect human life adversely. This relates to extreme values of the climate or weather variables: high wind speed (storm), high river water staged (flood), low water stages (drought). This also includes slow onset changes in temperature and precipitation leading to drought.

3.7. P/A/Ps - refers to programs/activities/projects of the LGU department or office as presented in the respective AIPs.

3.8. Preparatory activities - are climate change-related activities which shall include but not be limited to vulnerability and impact assessment studies, climate change and variability researches, climate modeling, capacity building, and policy formulation.

3.9. 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.

3.10. 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).

3.11. Vulnerability - the degree to which geophysical, biological and socio-economic systems are susceptible to, and unable to cope with adverse impacts of climate change.

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 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 directly address the impacts or potential impacts of climate change variability such as construction of infrastructures that incorporate climate change risks in the design or P/A/Ps 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 in this category shall include but are not limited to reducing land degradation, reforestation programs, upgrading of existing roads to climate resilient design standards, utilization of climate resilient crop varieties or farming techniques, installation of 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 gas emissions such as but not limited to improved energy efficiency, use of renewable energy, improved forest management, and improved transport systems.

4.1.2.2 Measures to protect and enhance greenhouse gas sinks and reservoirs such as but not limited to Bantay Gubat, Bantay Bakawan, and reforestation.

4.2 LGUs shall tag P/A/Ps in their Annual Investment Programs in accordance with those listed in the Climate Change Expenditure Typology (Annex A). LGUs will be guided by the QAR (Annex C) in the evaluation and finalization of the P/A/Ps that were tagged.

4.3 LGUs shall estimate and record the climate change expenditures for each tagged P/A/P in the Annual Investment Program as follows:

4.3.1 Include the entire cost of the P/A/P as CC expenditure if the Program/Project Profile indicates that the primary goal/objective of the P/A/P is to provide a direct adaptation or mitigation response.

4.3.2 If climate change adaptation or mitigation is not a primary P/A/P goal/objective, include only the cost of the specific components of the P/A/P that match those listed in Annex A.

4.4 LGUs that do not have any P/A/Ps that can be tagged as climate change adaptation/mitigation can tick the '*No climate change expenditure*' in the AIP Form.

5.0 ROLES AND RESPONSIBILITES

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 (LCE);

5.1.2 Identify climate change expenditures in their Annual Investment Programs using the Climate Change Expenditure Typologies as guide;

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 Submit an electronic copy of the tagged AIP using the AIP Form and accomplished QAR (Annex C) to the CCC at lguhelpdesk@climate.gov.ph;

5.1.6 Ensure the integration of climate change P/A/Ps in the LGU budget proposals of departments during the technical budget hearings of the Local Finance Committee (LFC) and the LCE; and

5.1.7 For P/A/Ps that do not qualify under the Climate Change Typologies listed in Annex A, request CCC to create a new typology through the CCET help desk.

5.2 Department of Budget and Management 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; and

5.2.2 Include the CCET and the revised AIP Form in the updating of the Budget Operations Manual for LGUs.

5.3 Climate Change Commission 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 and duly accomplished QAR Form;

5.3.2 Provide a help desk to provide LGUs with information and support related to CCET;

5.3.3 Review and approve LGU requests for new climate typologies; and streamline the typologies when necessary; and

5.3.4 Review and consolidate 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 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; and

5.4.2 Monitor compliance by LGUs.

6.0 For immediate compliance by all LGUs starting FY2016.

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 15-02250

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Annex A: Climate Change Typologies (LGUs)

Strategic Priority 1 - Food Security			
1 - Agriculture and Livestock			
Code	1 - Policy Development and Governance	Code	1 - Policy Development and Governance
A111-01	Incorporate climate change and climate variability considerations in policies and institutions	M111-01	Enact/Implement ordinances and policies to reduce the emissions of greenhouse gases (GHGs), or absorption of GHGs in the agricultural sector
A111-02	Regulate commodity shifting and agricultural land conversion*	M111-03	Monitor carbon sequestration
A111-03	Design and implement climate change risk transfer and social protection mechanisms in agriculture and fisheries*		
A111-04	Incorporate risks from climate change and climate variability in irrigation/water management planning		
Code	2 - Research, Development and Extension	Code	2 - Research, Development and Extension
A112-01	Conduct agricultural vulnerability and risk assessments, impact assessments and simulation models on major crops and livestock *	M112-01	Develop, test and introduce practices or techniques that reduce GHG emissions and practices or techniques to sequester carbon dioxide (CO_2) in crop production systems, animal husbandry systems, forest management systems and aquaculture management systems
A112-02	Develop, test and popularize climate-resilient crop and livestock production systems and technologies*	M112-02	Sector studies, surveys, assessments on energy and water use efficiency in agriculture
A112-03	Research on new threats to agriculture, fishing, and forestry from CC and CV		
A112-04	Produce and distribute climate resilient rice varieties		
Code	3 - Knowledge Sharing and Capacity Building	Code	3 - Knowledge Sharing and Capacity Building
A113-01	Awareness raising of risks from climate change, or/and benefits of adaptation*	M113-01	Establish or strengthen institutions, information systems and capacity building on energy and water use efficiency in agriculture sector
A113-02	Establish climate information systems and database/resource network for agriculture and fisheries sectors*		
A113-03	Establish and/or popularize farmers' field school/climate field school to demonstrate best adaptation practices*		
A113-04	Develop formal and non-formal training programs on climate change adaptation (CCA) and disaster risk reduction (DRR)*		
A113-06	Conduct of non-farm entrepreneurial courses		
A113-07	Conduct Slope Agriculture Land Technology (SALT) training and other soil conservation measures in sloping lands for farmers		
A113-08	Improve the adaptive capacity of farmers and fisherfolk through the provision of relevant technologies and information		

CC – Climate Change *CV – Climate Variability* **Activities under the NCCAP*
GHG – Greenhouse Gases

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Annex B: Climate Change Typologies for Local Government

Annex A: Climate Change Typologies (LGUs)

Code	4 - Service Delivery	Code	4 - Service Delivery
A114-01	Establish early warning systems for agriculture*	M114-01	Integrated organic and inorganic nutrient management
A114-02	Introduce or expand soil management practices that control soil erosion, nutrient loss and improve the water regime in the soil profile	M114-02	Switch to soil management techniques that reduce GHG emissions or increase carbon sequestration
A114-03	Introduce or expand use of crops or crop mix more suited to climate change and climate variability	M114-03	Intensify or expand farm and fodder production using techniques that reduce GHG emissions or increase carbon sequestration
A114-04	Reduce vulnerability of crop storage facilities and irrigation systems to climate change and climate variability*	M114-04	Manure management and methane capture in animal husbandry
A114-05	Construct/Repair/Rehabilitate national and communal irrigation systems, dams and water storage systems to manage changes in the water cycle due to climate change and climate variability*	M114-05	Change forage systems to reduce ruminant methane emissions
A114-06	Introduce weather or climate indexed insurance programs (e.g. crop insurance)	M114-06	Introduce or expand water pumping for irrigation using renewable energy sources
A114-08	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	M114-07	Replace existing water pumps with more energy efficient pumps
A114-09	Develop innovative financing mechanisms to provide seed capital for the implementation of CCA among farmers and fisherfolks organization*	M114-08	Implement agricultural and fisheries waste recycling and composting*
A114-10	Construct water impounding dams, rainwater harvesting facilities for irrigation, and water storage systems to manage changes in the water cycle due to CC and CV	M114-09	Switch to less water intensive crops
A114-11	Construct crop storage facilities that consider climate change and variability	M114-10	Establish communal school gardens, and other community gardens for local consumption
A114-12	Promote agro-forestry such as cacao/ coffee/rubber production and seedling distribution		
A114-13	Establish Integrated Pests Management		
A114-14	Develop climate resilient livestock production system and technologies		

CC – Climate Change
GHG – Greenhouse Gases

CV – Climate Variability

**Activities under the NCCAP*

Annex B: Climate Change Typologies for Local Government

Annex A: Climate Change Typologies (LGUs)

Strategic Priority 1 - Food Security			
2- Fisheries			
FY2016	1 - Policy Development and Governance	FY2016	1 - Policy Development and Governance
A121-02	Formulate/implement ordinances on reversion of abandoned fishponds back to mangroves*	M121-01	Formulate/implement ordinances to reduce the emissions of GHGs, or absorption of GHGs in the fishing sectors
A121-03	Harmonize climate change adaptation plans in local resource management and local fisheries development*	M121-02	Develop ordinances to reduce municipal fishing boats/improve fuel efficiency of municipal fishing boats
Code	2 - Research, Development and Extension	Code	2 - Research, Development and Extension
A122-01	Conduct of provincial-level vulnerability and risk assessments for fisheries*		
A122-02	Conduct researches on best practices in fisheries and coastal climate change adaptation, technologies and tools*		
A122-04	Develop and/or update climate change R&D agenda for fisheries sectors*		
A122-05	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).		
A122-06	Establish climate information systems and database for fisheries sector*		
Code	3 - Knowledge Sharing and Capacity Building	Code	3 - Knowledge Sharing and Capacity Building
A123-01	Establish a resource network / information system and database on climate change and fisheries*	M123-01	Establish or strengthen institutions, information systems and capacity building on energy and water use efficiency in fishing sector
FY2016	4 - Service Delivery	FY2016	4 - Service Delivery
A124-02	Establish early warning systems for fisheries*		

Strategic Priority 2 - Water Sufficiency			
1 – Water Supply			
FY2016	1 - Policy Development and Governance	FY2016	1 - Policy Development and Governance
A211-01	Develop ordinances, policies and guidelines for water conservation, allocation, recycling and reuse*	M211-01	Sector reform to improve water use efficiency to reduce energy use for pumping water (e.g. water pricing)
A211-02	Review and streamline existing water resources management and institutional structure and policies*		
A211-03	Develop and implement a comprehensive ground water management program that includes vulnerability assessment*		
A211-04	Develop public financing mechanism for water supply infrastructures rehabilitation and development*		
A211-05	Incorporate risks from climate change and climate variability in water, sanitation and flood protection planning		

CC – Climate Change *CV – Climate Variability* **Activities under the NCCAP*
GHG – Greenhouse Gases

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Annex A: Climate Change Typologies (LGUs)

A211-06	Review financing, tariffs, and system of incentives to reflect the full cost of providing safe water*		
FY2016	2 - Research, Development and Extension	FY2016	2 - Research, Development and Extension
A212-01	Study "low cost, no regrets" adaptation measures and technologies under various hydrologic conditions, supply-demand conditions, and policy scenarios for surface and groundwater systems*	M212-01	Administration, sector studies, surveys, assessments, information systems and capacity building for energy and water use efficiency in water, sanitation and flood protection
A212-02	Define areas not suitable for large water infrastructure development and settlements based on vulnerability assessment*		
A212-03	Conduct ground water resource vulnerability and recharge areas assessment in water stressed cities*		
A212-05	Identify alternative water sources and demand management especially for urbanized areas that rely on reservoirs and are prone to recurrent and severe drought events*		
A212-06	Study and adopt centralized wastewater treatment systems to improve quality in highly urbanized and densely populated areas		
A212-07	Conduct water resource supply and demand analysis under various hydrologic conditions and climate scenarios*		
A212-08	Incorporate water cycles change from CC & CV into trans-boundary water basin planning		
Code	3 - Knowledge Sharing and Capacity Building	Code	3 - Knowledge Sharing and Capacity Building
A213-01	Training for community-based water associations to manage water supply infrastructures	M213-01	Train managers or workers to improve water or energy efficiency in business operations
A213-02	Conduct Integrated Water Resource Management and CC adaptation and disaster risk reduction training for vulnerable communities*		
A213-03	Develop gendered and accessible knowledge products and IEC materials that include local and indigenous knowledge on water resources management, CC impacts on water resources and adaptation best practices*		
A213-04	Develop and network government database on water resources and users*		
Code	4 - Service Delivery	Code	4 - Service Delivery
A214-01	Incorporate climate change and climate variability in water supply infrastructure/ Rehabilitate water infrastructure with climate lens (use of climate projections and other relevant climate data)*	M214-01	Reduce energy intensity of existing water supply systems (e.g. replacing pumps)

CC – Climate Change
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CV – Climate Variability
**Activities under the NCCAP*

Annex A: Climate Change Typologies (LGUs)

A214-02	Construct new and expand existing water supply infrastructures for waterless communities*	M214-02	Reduce or capture methane emission from ventilated improved pit latrines.
A214-03	Treatment of wastewater for conservation/re-use purposes to respond to declines in water availability due to climate change and climate variability	M214-03	Reduce per capita water consumption using demand-side interventions (e.g. household water, shower, toilet, and dishwasher)
A214-04	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	M214-04	Reduce GHG emission (methane and nitrous oxide) from wastewater
A214-05	Implement/install water harvesting technologies* (e.g. small water impounding project)	M214-05	Reduce energy consumption during wastewater treatment (e.g. from activated sludge to up flow anaerobic sludge)

Strategic Priority 2 - Water Sufficiency			
2- Flood Protection			
Code	1 - Policy Development and Governance	Code	1 - Policy Development and Governance
A221-01	Formulate and implement ordinances and policies for rain water collection, such small water impoundments, retarding basins, mini dams to address water shortage and flooding*		
A221-02	Design guidelines, emergency protocols, and encourage preparedness and risk/contingency planning in communities that are at risk to present or future flooding		
Code	2 - Research, Development and Extension	Code	2 - Research, Development and Extension
A222-01	Conduct vulnerability assessments in communities, LGUs, and sectors that are at risk to present or future flooding		
A222-02	Improve hydromet infrastructure and monitoring systems for data collection and management and the development and delivery of information, products and services to increase flood resilience		
A222-03	Develop innovative technologies and methodologies to communicating flood emergency information and longer-term risks of flooding to relevant populations and communities		
Code	3 - Knowledge Sharing and Capacity Building	Code	3 - Knowledge Sharing and Capacity Building
A223-01	Build local capacity for the management of climate change and extreme flood risks, and increase capacity in conducting vulnerability assessments		
A223-02	Increase knowledge to consider climate change information and climate risk in water resources management		

CC – Climate Change
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Annex B: Climate Change Typologies for Local Government

Annex A: Climate Change Typologies (LGUs)

Code	4 – Service Delivery	Code	4 - Service Delivery
A224-01	Incorporate climate change and climate variability in design standards for flood control and drainage systems		
A224-02	Improve resilience of infrastructure (bridges, water supply, community infrastructure, water storage, coastal defense, etc) to account for climate change and climate variability related extreme weather and climate variability that could increase flood risks in infrastructure		
A224-03	Protect or re-establish mangrove forests, wetlands, and other ecosystems as protection against floods risks		
A224-05	Improve early warning information and alert systems to increase readiness to extreme flood risks		

Strategic Priority 2 - Water Sufficiency			
3 - Water and Sanitation			
Code	1 - Policy Development and Governance	Code	1 - Policy Development and Governance
A231-02	Design guidance for incorporating climate change risk into water sanitation and treatment planning, operation, and management (including accounting for increased construction and maintenance costs that account for climate risk)		
A231-03	Incorporate risk of sea level rise, storm surge, and saltwater intrusion on the design and upgrades of coastal water sanitation infrastructure		
Code	2 - Research, Development and Extension	Code	2 - Research, Development and Extension
A232-01	Study and adopt centralized wastewater treatment systems to improve quality in highly urbanized and densely populated areas with respect to increased flooding, storm surge, and extreme precipitation events		
A232-02	Conduct vulnerability assessments for the sanitation and treatment of water supply		
Code	3 - Knowledge Sharing and Capacity Building	Code	3 - Knowledge Sharing and Capacity Building
A233-01	Increase local knowledge for how to consider climate change information and climate risk in water quality and wastewater treatment		
FY2016	4 - Service Delivery	FY2016	4 - Service Delivery
A234-01	Expand the establishment of alternative micro-water purification systems especially to areas that cannot be reached by safe water supply*		

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Annex A: Climate Change Typologies (LGUs)

A234-02	Monitor impact of climate change and climate variability as part of water resource management		
A234-03	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		

Strategic Priority 3 – Ecological and Environmental Stability			
1 - Forest and Biodiversity			
Code	1 - Policy Development and Governance	Code	1 - Policy Development and Governance
A311-01	Design and implement payments for environmental services and other innovative conservation financing mechanisms to support ecosystem-based adaptation and mitigation*	M311-01	Implement and monitor progress of Reducing Emissions from Deforestation and Forest Degradation (REDD+) related policies*
A311-03	Integrated ecosystem management approaches for watersheds and wetlands to reduce vulnerability to climate change and climate variability		
A311-05	Develop guidelines for implementing Integrated Water Resources Management (IWRM) and climate change adaptation at the local, watershed and river basin level*		
A311-06	Formulate ordinances/policies to reduce the human-related impacts to coral reefs to help lessen the reefs' vulnerability to climate change		
Code	2 - Research, Development and Extension	Code	2 - Research, Development and Extension
A312-01	Conduct ecosystems vulnerability and risk assessment*	M312-01	Greenhouse gas accounting and inventory
A312-02	Study, design and implement financing mechanisms for IWRM and climate change adaptation implementation in critical watersheds and river basins*		
FY2016	3 - Knowledge Sharing and Capacity Building	FY2016	3 - Knowledge Sharing and Capacity Building
A313-01	Training on vulnerability and risk assessments*		
A313-03	Establish management information system for different ecosystems that link various data sources*		
A313-04	Document and disseminate best practices, including climate change responsive indigenous practices*		
A313-05	Festivals and events which advocate the protection and preservation of nature		
Code	4 – Service Delivery	Code	4 - Service Delivery

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Annex B: Climate Change Typologies for Local Government

Annex A: Climate Change Typologies (LGUs)

A314-01	Delineate/Rehabilitate/Reforest degraded watersheds and forest areas	M314-01	Re-forestation and afforestation that increases vegetative cover or sequesters carbon
A314-02	Conserve and protect existing watershed and protected areas	M314-02	Sustainable peat land/ wetland/forest management and protection
A314-03	Delineate "ridge-to-reef" ecosystem-based management zones for the ecotowns through multi stakeholder process*	M314-03	Avoided deforestation (e.g. Bantay Gubat; Bantay Bakawan)
A314-04	Update status of Protected Areas and Key Biodiversity Areas from results from the vulnerability and risk assessment*	M314-04	Management and protection of Tree Parks/Provincial Forests and Nursery
A314-06	Improve physical system performance of river basins	M314-05	Oplan Sagip Kalikasan/Urban greening program
A314-07	Seedling production; management of mangrove nursery	M314-06	Identify and implement a moratorium of mining operations in protected areas pending vulnerability and risk assessment and economic valuation studies*
A314-08	Agro-forestry to diversify farmers' incomes and provide alternatives livelihood during extreme weather events (i.e. drought)	M314-07	Re-establish and protect mangroves, floodplains and seagrass beds with carbon sequestration properties
A314-09	Integrated tree planting along riverbanks/ river bank rehabilitation / that reduce the risk of flooding	M314-08	Green charcoal briquetting facility that reduce deforestation
A314-10	Establishment of database network on wildlife, genetic biodiversity and biosafety	M314-09	Monitor illegal mining activities that emit greenhouse gasses

Strategic Priority 3 – Ecological and Environmental Stability			
2 – Solid Waste			
Code	1 - Policy Development and Governance	Code	1 - Policy Development and Governance
A321-01	Incorporate change in design of solid waste management systems in response to extreme weather and flood events arising from CC&CV	M321-01	Develop and implement ordinances and policies that promote a system of incentives for the use of reusable bags and containers/ban or impose a fee on the use of plastic bags*
Code	2 - Research, Development and Extension	Code	2 - Research, Development and Extension
		M322-01	Conduct Waste Amount & Composition Study (WACS)
FY2016	3 - Knowledge Sharing and Capacity Building	FY2016	3 - Knowledge Sharing and Capacity Building
		M323-01	Conduct intensive IEC on waste reduction, segregation and composting
Code	4 – Service Delivery	Code	4 - Service Delivery
		M324-01	Waste reduction and diversion program/Intensify waste segregation at source, discard recovery, composting and recycling*
		M324-02	Construction and operation of Materials Composting and Recovery Facility (MRCF) Building; Buyback Center; Purchase of MCRF equipment

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Annex A: Climate Change Typologies (LGUs)

		M324-03	Upgrade existing landfills to capture methane for energy generation or gas flaring for CO2 generation
		M324-04	Establish and implement ecological solid waste management (ESWM) program in accordance with Republic Act 9003
		M324-05	Close solid waste management sites in environmentally critical areas

Strategic Priority 4 – Human Security			
1 - Health			
FY2016	1 - Policy Development and Governance	FY2016	1 - Policy Development and Governance
A411-01	Develop guidelines on treatment of health issues due to climate change and climate variability		
A411-02	Include climate related diseases in basic benefits of insurance policies		
A411-03	Develop policy requiring integration of climate change and disaster risk reduction concepts and approaches in medical and allied health training courses*		
A411-04	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)*		
A411-06	Planning for Climate Change Adaptation for health sector		
A411-07	Expand insurance eligibility to populations vulnerable to climate related diseases		
FY2016	2 - Research, Development and Extension	FY2016	2 - Research, Development and Extension
A412-01	Assess changes in risk, exposure or sensitivity to climate change and climate variability related diseases for vulnerable groups		
A412-02	Assess impact of climate change and climate variability on livelihoods and poverty with focus on vulnerable groups		
A412-03	Vulnerability and risk assessment for government infrastructure (e.g. hospitals, health centers, and barangay health units)		
A412-04	Risk Assessment for barangays		
FY2016	3 - Knowledge Sharing and Capacity Building	FY2016	3 - Knowledge Sharing and Capacity Building
A413-01	Training and education of health personnel on treatment, monitoring and surveillance of climate change and climate variability related health issues *		

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**Activities under the NCCAP*

Annex A: Climate Change Typologies (LGUs)

A413-02	Strengthen health management information management		
A413-03	Incorporate climate related health risks into clinical practice guidelines, and curricula for continuous medical education		
A413-04	Training for health emergency preparedness and response*		
FY2016	4 - Service Delivery	FY2016	4 - Service Delivery
A414-01	Develop and implement program for community-based adaptation measures and health emergency preparedness*		
A414-02	Upgrade health systems to respond to changes in environmental health risks from climate change and climate variability (e.g. malaria)		
A414-03	Develop food safety/ food security measures that take account of new conditions caused by climate change		
A414-04	Development of livelihood diversification strategies to reduce dependence of climate related income opportunities		
A414-05	Implement program for community health emergency preparedness and response*		
A414-06	Development of social protection strategies to respond to climate change and climate variability		

Strategic Priority 4 – Human Security			
2 - Settlements and Local Land Use			
Code	1 - Policy Development and Governance	Code	1 - Policy Development and Governance
A421-01	Mainstreaming of CC-DRRM in local plans* (PDPFP, CLUP, CDP, ELA)		
A421-02	Incorporate vulnerability to CC and CV in housing design standards		
A421-03	Develop green building ordinance/rating scheme, specifications and criteria*		
A421-04	Develop and implement programs and incentive system for CC proofing and retrofitting water infrastructure at the household/community level*		
A421-05	Regulate settlements in areas vulnerable to CC & CV		
Code	2 - Research, Development and Extension	Code	2 - Research, Development and Extension
A422-01	Identify, map and profile areas and communities highly prone to climate-related disasters*		
A422-02	Conduct risk and vulnerability assessment*		
A422-03	Conduct a study on population carrying capacity of areas and CC adaptive capacity of various communities*		

CC – Climate Change
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**Activities under the NCCAP*

Annex A: Climate Change Typologies (LGUs)

A422-04	Identify most CC vulnerable sectors and population*		
A422-05	Conduct of CBMS with DRRM/CCA		
Code	3 - Knowledge Sharing and Capacity Building	Code	3 - Knowledge Sharing and Capacity Building
A423-01	Develop and implement knowledge management on climate change and disaster risks for local government units and communities*		
A423-02	Increase local capacity for forecasting, early warning (including indigenous systems) and disaster risk communication*		
A423-03	Conduct training of trainers to respond to the needs of communities for CCA*		
Code	4 – Service Delivery	Code	4 - Service Delivery
A424-01	Identify and implement gender-responsive sustainable livelihood and social protection programs for resettled and vulnerable poor families*	M424-01	Retrofit/ Install new heating and cooling systems using renewable energy
A424-02	Develop and implement post-disaster resettlement and counseling of displaced families and communities*	M424-02	Promote/Build energy efficient housing
A424-03	Implement mixed-use, medium-to-high density developments, integrated land use-transport plan in developing new urban communities or in expanding existing ones*		
A424-04	Expand the establishment of alternative micro-water purification systems especially to areas that cannot be reached by safe water supply*		
A424-05	Develop and implement a CC adaptation plan for settlement/resettlement in consultation with affected communities, private sector, and civil society organization		
A424-06	Construct new low-cost housing, relocation, and other mass dwellings to climate resilient design standards		
A424-07	Reconstruction of housing projects damaged by calamities (Building Back Better)		
A424-08	Relocating flood prone communities and commercial centers to safer areas		
A424-09	Disaster and Climate Risk Monitoring System		
A424-10	Install Early Warning Systems		
A424-11	Construction of climate resilient elementary and secondary school buildings (safe from climate hazards; considers climate risks)		
A424-12	Climate proofing/retrofitting or relocating of government infrastructure (i.e. schools and government hospitals, health centers,		

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Annex A: Climate Change Typologies (LGUs)

	rural health units, teen centers) from climate hazards		
A424-13	Demolition of illegal structures occupied by informal settlers in high risk areas/ Relocation of informal settlers		

Strategic Priority 5- Climate Smart Industries and Services			
1 - Tourism, Trade and Industries			
Code	1 - Policy Development and Governance	Code	1 - Policy Development and Governance
A511-02	Incorporate new CC&CV resilient design standards in new buildings	M511-01	Introduce rules and regulations to reduce GHG emissions or absorb of GHGs in industry and trade
A511-04	Formulate/enhance tourism plans, policies and strategies to promote green tourism*	M511-03	Introduce a system of incentives to encourage the use of climate-smart technologies and practices
A511-05	Create an enabling ordinance/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*
A511-06	Introduce regulations and programs to support climate resilient investments	M511-05	Implement a system of collection, analysis and reporting of baseline and new data on green jobs and employment*
Code	2 - Research, Development and Extension	Code	2 - Research, Development and Extension
A512-01	Identify the carrying capacity of tourism areas*	M512-01	Conduct baseline inventory of climate-smart industries and services and good practices in the local government unit*
A512-02	Aquasilviculture Demo Farm to rehabilitate mangroves and address climate change and provide livelihood	M512-02	Baseline data on GHG emissions from industry and other sources
		M512-04	Forge partnerships with industry, academe, and research organizations on R&D of climate-smart technologies and products in the locality
Code	3 - Knowledge Sharing and Capacity Building	Code	3 - 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	Develop modules and conduct trainings to capacitate industries to conduct GHG emissions inventory and carbon footprint*
A513-02	Assist SMEs in developing capacity for eco-efficient production*		
Code	4 - Service Delivery	Code	4 - Service Delivery
A514-01	Marketing and trade support for changing agricultural product mix in response to climate change and climate variability	M514-01	Marketing and trade support for products that reduce GHG emissions per unit of output
A514-02	Support new income generating opportunities and industries utilizing natural resource better adapted to climate change and climate variability	M514-02	Marketing and trade support for agricultural products that use integrated organic and inorganic nutrient management
A514-03	Retrofit assets and capital to protect against CC and CV	M514-03	Rehabilitate/reforest degraded tourism areas

CC – Climate Change *CV – Climate Variability* **Activities under the NCCAP*
GHG – Greenhouse Gases

Annex A: Climate Change Typologies (LGUs)

A514-04	Support industries that are better adapted to CC and CV (e.g. Tiger-grass production for agri-business)		

Strategic Priority 6- Sustainable Energy			
1 - Energy Efficiency			
FY2016	1 - Policy Development and Governance	FY2016	1 - Policy Development and Governance
A611-04	Mandatory implementation of AO110 and AO126 directing the institutionalization of Government Energy Management Program*	M611-01	Change operational procedures or techniques, or retrofit technologies to reduce GHG emissions in existing operations
		M611-03	Develop/implement ordinances and policies to improve energy efficiency – in buildings, agriculture, industry and city/municipal services (e.g. public building maintenance program to improve energy efficiency; use of more energy efficient street lighting such as LED).
		M611-04	Develop a certification system/incentives for voluntary adoption of energy efficiency labelling, green building rating, and ISO 50001 certification
		M611-05	Develop a local renewable energy program*
Code	2 - Research, Development and Extension	Code	2 - Research, Development and Extension
A612-01	Conduct sustainable and renewable energy resource assessments (e.g. hydro, geothermal, biomass, wind, ocean and solar)*	M612-02	Sector studies, surveys, assessments and information systems on energy efficiency, efficient energy pricing, and promotion of renewable energy
Code	3 - Knowledge Sharing and Capacity Building	Code	3 - Knowledge Sharing and Capacity Building
A613-02	Conduct capacity building of community-based renewable energy organizations on system maintenance, energy efficiency and conservation, organizational development, tariff setting and management systems*	M613-01	Sector reform and capacity building related to energy efficiency in energy sector, promotion of renewable energy and efficient energy pricing
		M613-02	Strengthen regulatory and institutional framework to support expansion of renewable power generation
		M613-03	Strengthening capacity of institutions to plan for low-carbon growth and environmentally sustainable energy supply
Code	4 - Service Delivery	Code	4 - Service Delivery
A614-01	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*	M614-02	Pilot programs on energy efficiency activities

CC – Climate Change
GHG – Greenhouse Gases

CV – Climate Variability

**Activities under the NCCAP*

Annex B: Climate Change Typologies for Local Government

Annex A: Climate Change Typologies (LGUs)

Strategic Priority 6- Sustainable Energy			
2 - Power Generation			
Code	1 - Policy Development and Governance	Code	1 - Policy Development and Governance
		M621-04	Develop RE project-based and service contracts-based portfolios to encourage potential investors in identified sites
Code	2 - Research, Development and Extension	Code	2 - Research, Development and Extension
		M622-02	Conduct survey of RE potential in off-grid areas
Code	3 - Knowledge Sharing and Capacity Building	Code	3 - Knowledge Sharing and Capacity Building
		M623-01	Conduct capacity building of community-based RE organizations on RE system maintenance, EE&C organizational development, tariff setting and management systems
Code	4 - Service Delivery	Code	4 - Service Delivery
A624-02	Flood protection or irrigation from construction of dams or water storage system that manage changes in the water cycle due to CC & CV	M624-06	Development of renewable energy(i.e. Establishment of Solar Panels/Installation of Wind Mill/Bio-Gas)
A624-03	Improve design of wind turbine structures to withstand higher wind speeds as a result of extreme weather events	M624-07	Clean Cities Initiatives or those that promote/increase utilization of alternative/clean fuels for the transport sector (tricycle, jeepney, bus, private and government vehicles)
A624-04	Improve design of solar panels to withstand higher intensity storms resulting from climate change and climate variability		
A624-05	Secure access to water for crops used as bioenergy source		

Strategic Priority 6- Sustainable Energy			
3 - Transportation and Communication			
Code	1 - Policy Development and Governance	Code	1 - Policy Development and Governance
A631-01	Incorporate risks from climate change and climate variability in transportation system planning	M631-01	Improve vehicle emission standards
		M631-02	Improve fuel efficiency standards
		M631-03	Strengthen vehicle inspection systems on emissions and fuel efficiency
		M631-04	Develop ordinances/policies to encourage shift from higher carbon to lower carbon transport modes (i.e. pedestrianization, bicycle lanes, public transport)
FY2016	3 - Knowledge Sharing and Capacity Building	FY2016	3 - Knowledge Sharing and Capacity Building

CC – Climate Change
GHG – Greenhouse Gases
CV – Climate Variability
**Activities under the NCCAP*

Annex B: Climate Change Typologies for Local Government

Annex A: Climate Change Typologies (LGUs)

		M633-01	Capacity building related to energy efficiency in the transport sector
FY2016	4 – Service Delivery	FY2016	4 - Service Delivery
A634-01	Protect transport infrastructure against extreme weather events (especially floods and storms) becoming more frequent and violent due to CC and CV	M634-01	Urban traffic management (e.g. improve traffic flow) to reduce GHG emissions per unit transported
A634-02	Establish emergency services designed to cope with climate change and climate variability related emergencies in the transport sector	M634-02	Improved waterways, port and aviation facilities to reduce the carbon intensity per unit transported
A634-03	Construct new roads, ports, airports and aviation infrastructure to climate resilient design standards	M634-03	New railway lines for electricity based railcars
A634-04	Upgrade existing roads, ports and aviation infrastructure to climate resilient design standards	M634-05	Improve energy efficiency in telecommunications information technologies
A634-05	Development of telecommunications infrastructure for use as part of an emergency response system during extreme weather events		
A634-06	Enhance road maintenance to respond to climate change and climate variability		
A634-07	Enhanced waterway maintenance to respond to climate change and climate variability		

Strategic Priority 7 – Knowledge and Capacity Development			
1 - Education and Climate Science			
Code	1 - Policy Development and Governance	Code	1 - Policy Development and Governance
A711-04	Creation of offices with a mandate for climate change adaptation and mitigation		
Code	3 - Knowledge Sharing and Capacity Building	Code	3 - Knowledge Sharing and Capacity Building
A713-01	Awareness raising programs on climate change and climate variability		
A713-02	Training for pre-elementary, elementary, high school and college teachers on integrating climate change in basic courses*		
A713-03	Upgrade personnel's capacity and skills on climate change modeling and weather forecasting*		
A713-04	Capacity building to address vulnerability to climate change and climate variability		
A713-05	Climate Change 101 or Introductory Course on Climate Change		
A713-06	Support to international campaigns that promote climate change adaptation and mitigation (e.g. Earth month)		
Code	4 - Service Delivery	Code	4 - Service Delivery

CC – Climate Change *CV – Climate Variability* **Activities under the NCCAP*
GHG – Greenhouse Gases

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Annex B: Climate Change Typologies for Local Government

Annex A: Climate Change Typologies (LGUs)

A714-01	Review and development of curricula to take account of climate aspects in basic education, vocational training and other forms of follow-up training and education	M714-01	Development of curricula or programs focused on reducing GHG emissions, energy consumption or water consumption for elementary and high school
A714-02	Review and revise, current textbooks, modules and exemplars for pre-elementary, elementary, for climate change content and gender-sensitivity*		
A714-03	Review and revise, current textbooks, modules and exemplars for high school and alternative learning system for climate change content and gender-sensitivity*		
A714-05	Improve government systems and infrastructure required for climate change modeling and climate forecasting*		
A714-06	Establish centers on climate change adaptation/mitigation and best practices and innovations (e.g. Climate Change Academy)		

Strategic Priority 8 - Finance			
Code	1 - Policy Development and Governance	Code	1 - Policy Development and Governance
A811-01	Introduce ordinances and programs to support climate resilient investments	M811-01	Introduce ordinances, programs or financial instruments to support GHG reducing activities
A811-02	Expand insurance eligibility to populations vulnerable to climate related diseases	M811-02	Strengthen institution and policies to mobilize carbon finance
A811-03	Regulate or provide incentives in housing finance to encourage upgrading of existing real estate that reduces vulnerability to CC and CV	M811-03	Prepare for carbon markets or implement carbon finance market transactions
A811-04	Develop and introduce weather or climate indexed insurance programs (e.g. crop insurance)	M811-04	Develop ordinances or provide incentives in housing finance to support energy saving designs and standards
Code	2 - Research, Development and Extension	Code	2 - Research, Development and Extension
A812-04	Economic analysis of financial needs for adapting to climate change and climate variability (cost of adaptation)	M812-03	Reduce fossil-fuel consumption through taxes, levies or fees on energy or transport services
Code	3 - Knowledge Sharing and Capacity Building	Code	3 - Knowledge Sharing and Capacity Building
		M813-01	Strengthen LGUs in developing policies to mobilize carbon finance
Code	4 - Service Delivery	Code	4 - Service Delivery
A814-02	Introduce green bonds or other securities specifically targeted at adaptation to climate change and climate variability	M814-01	Provide lines of credit for investments in reduction of GHG emissions and/or absorption of GHGs
		M814-02	Support to access carbon markets
		M814-03	Introduce green bonds or other securities specifically targeted at reducing GHG emission or sequestering GHGs

CC – Climate Change
GHG – Greenhouse Gases

CV – Climate Variability

**Activities under the NCCAP*

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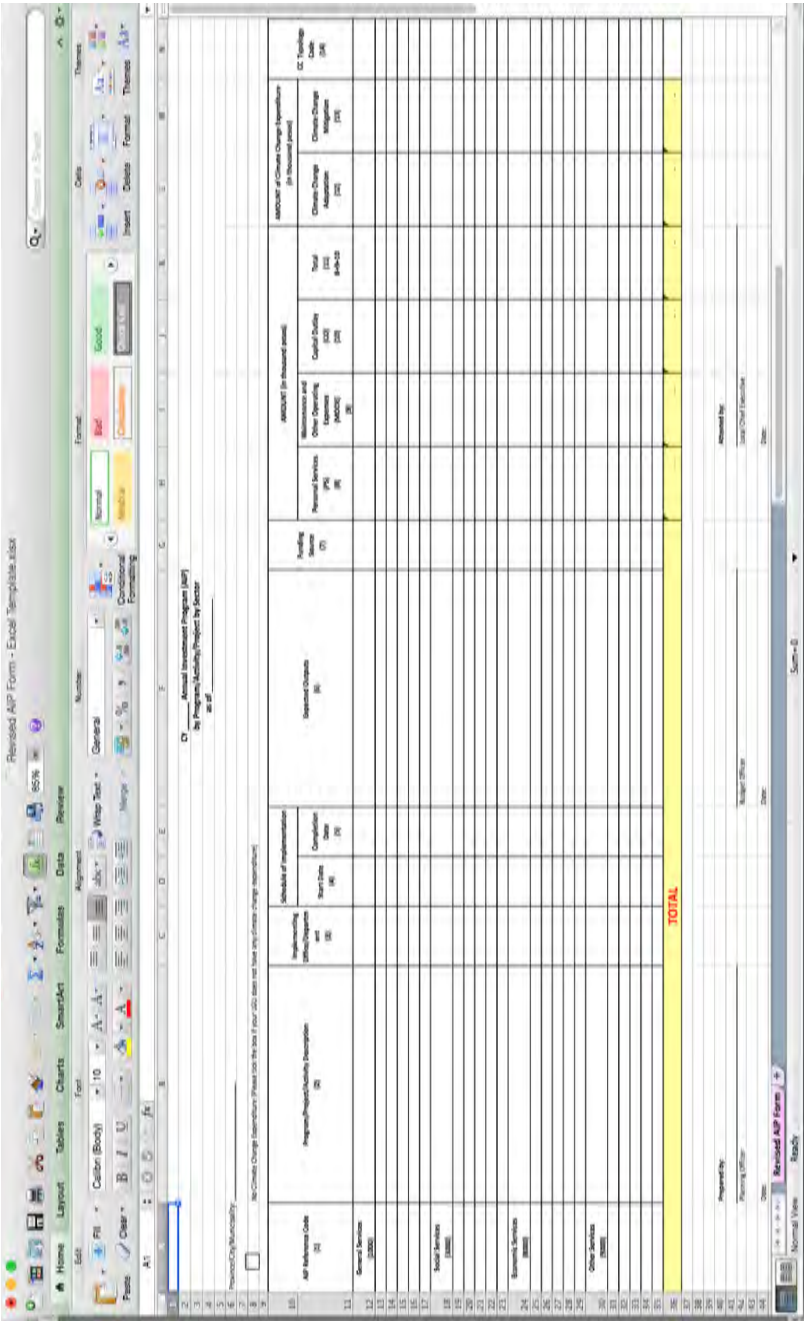
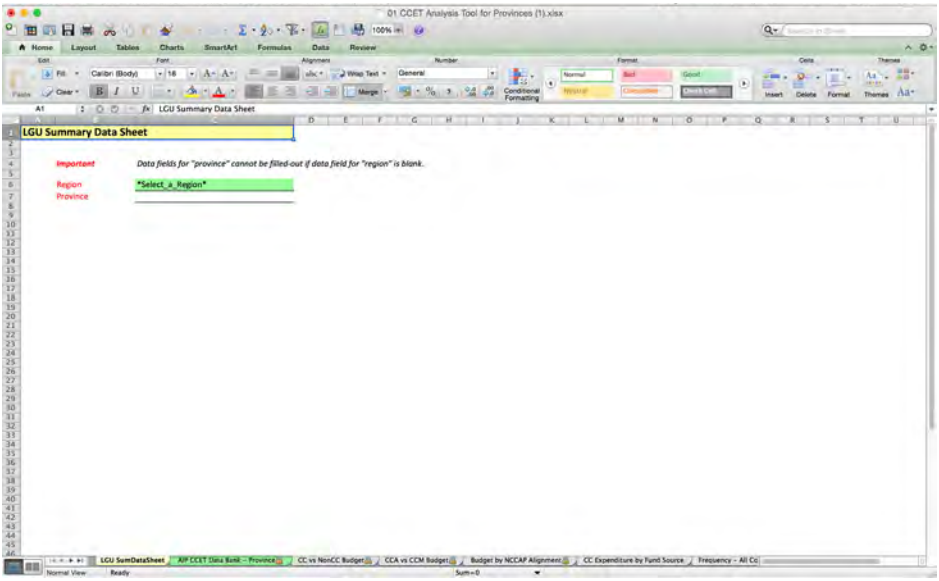
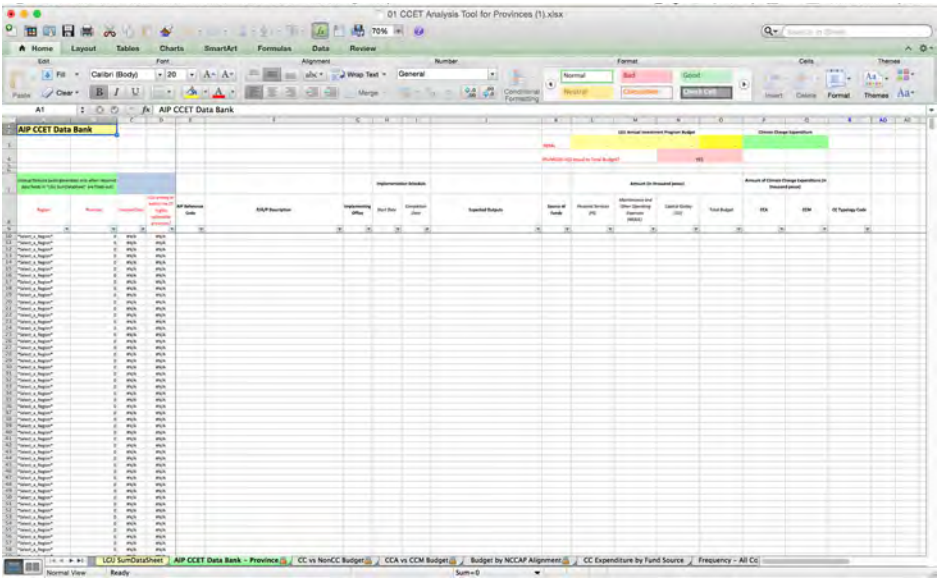
Annex C: Annual Investment Program Form



Annex D: Climate Change Expenditure Tagging Analysis Tool for Provinces





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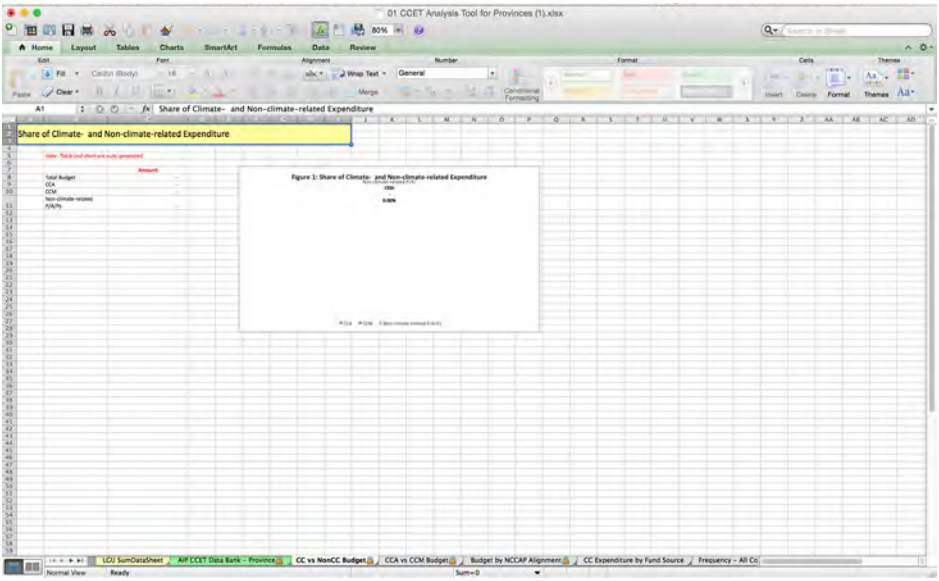

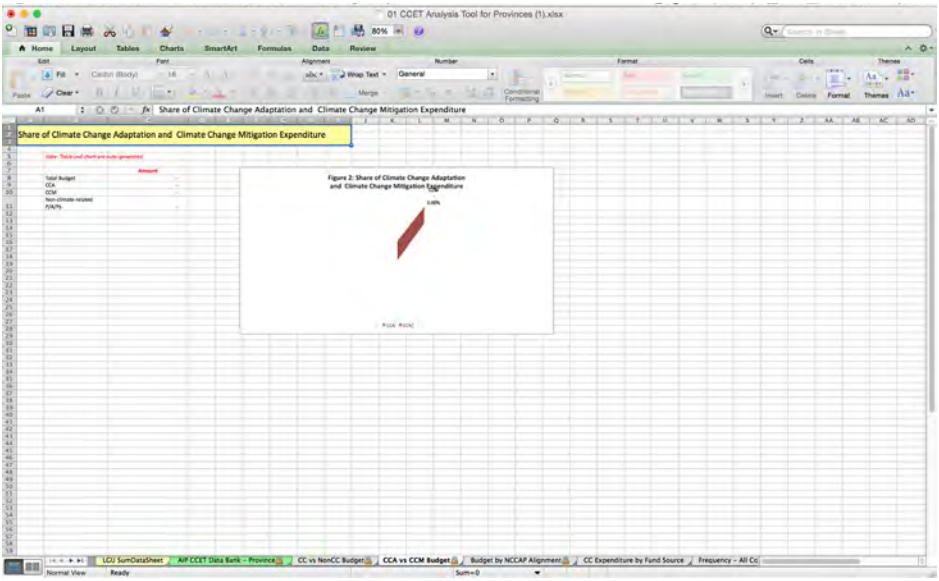

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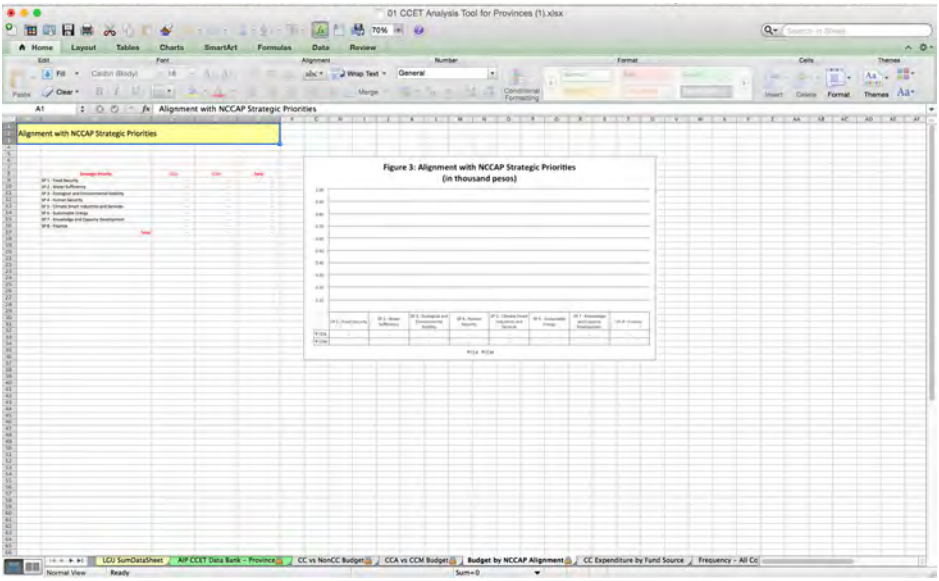

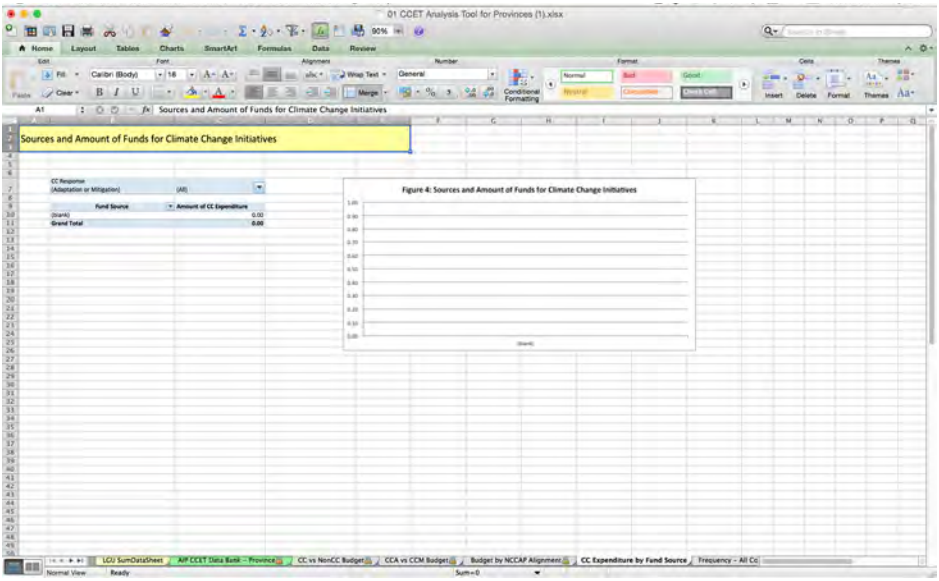

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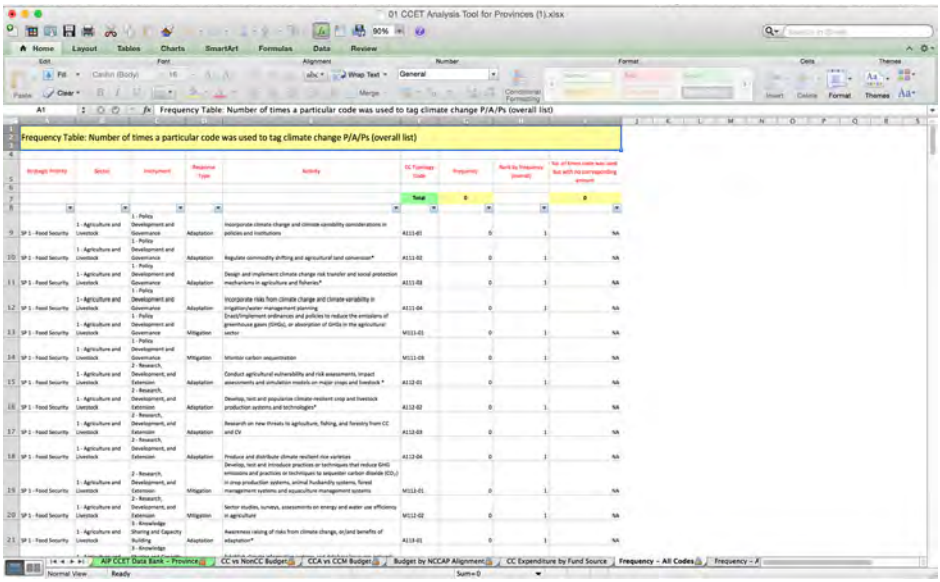


01 CCET Analysis Tool for Provinces (1).xlsx

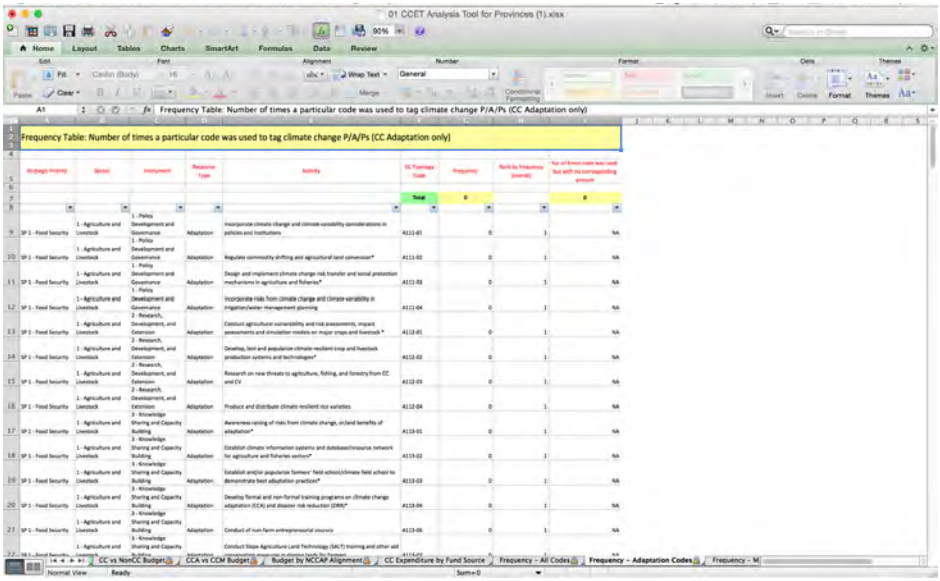
A1 | Frequency Table: Number of times a particular code was used to tag climate change P/A/Ps (overall list)

Frequency Table: Number of times a particular code was used to tag climate change P/A/Ps (overall list)

Strategic Priority	Sector	Instrument	Response Type	Activity	CC Typology Code	Frequency	Rank by Frequency (overall)	No. of times code was used but with no corresponding amount
					Total	0		0
SP 1 - Food Security	1 - Agriculture and Livestock	1 - Policy Development and Governance	Adaptation	Incorporate climate change and climate variability considerations in policies and institutions	A111-01	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	1 - Policy Development and Governance	Adaptation	Regulate commodity shifting and agricultural land conversion*	A111-02	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	1 - Policy Development and Governance	Adaptation	Design and implement climate change risk transfer and social protection mechanisms in agriculture and fisheries*	A111-03	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	1 - Policy Development and Governance	Adaptation	Incorporate risks from climate change and climate variability in irrigation/water management planning	A111-04	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	1 - Policy Development and Governance	Mitigation	Enact/implement ordinances and policies to reduce the emissions of greenhouse gases (GHGs), or absorption of GHGs in the agricultural sector	M111-01	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	1 - Policy Development and Governance	Mitigation	Monitor carbon sequestration	M111-09	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	2 - Research, Development, and Extension	Adaptation	Conduct agricultural vulnerability and risk assessments, impact assessments and simulation models on major crops and livestock *	A112-01	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	2 - Research, Development, and Extension	Adaptation	Develop, test and popularize climate-resilient crop and livestock production systems and technologies*	A112-02	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	2 - Research, Development, and Extension	Adaptation	Research on new threats to agriculture, fishing, and forestry from CC and CV	A112-03	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	2 - Research, Development, and Extension	Adaptation	Produce and distribute climate resilient rice varieties	A112-04	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	2 - Research, Development, and Extension	Mitigation	Develop, test and introduce practices or techniques that reduce GHG emissions and practices or techniques to sequester carbon dioxide (CO_2) in crop production systems, animal husbandry systems, forest management systems and aquaculture management systems	M113-01	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	2 - Research, Development, and Extension	Mitigation	Sector studies, surveys, assessments on energy and water use efficiency in agriculture	M112-02	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Awareness raising of risks from climate change, or/and benefits of adaptation*	A113-01	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Establish climate information systems and database/resource network for agriculture and fisheries sectors*	A113-02	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Establish and/or popularize farmers' field school/climate field school to demonstrate best adaptation practices*	A113-03	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Develop formal and non-formal training programs on climate change adaptation (CCA) and disaster risk reduction (DRR)*	A113-04	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Conduct of non-farm entrepreneurial courses	A113-06	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Conduct Slope Agriculture Land Technology (SALT) training and other soil conservation measures to climate-proofs the farmer	A113-05			

AIP CCET Data Bank – Province | CC vs NonCC Budget | CCA vs CCM Budget | Budget by NCCAP Alignment | CC Expenditure by Fund Source | Frequency – All Codes | Frequency – A

Normal View | Ready | Sum=0



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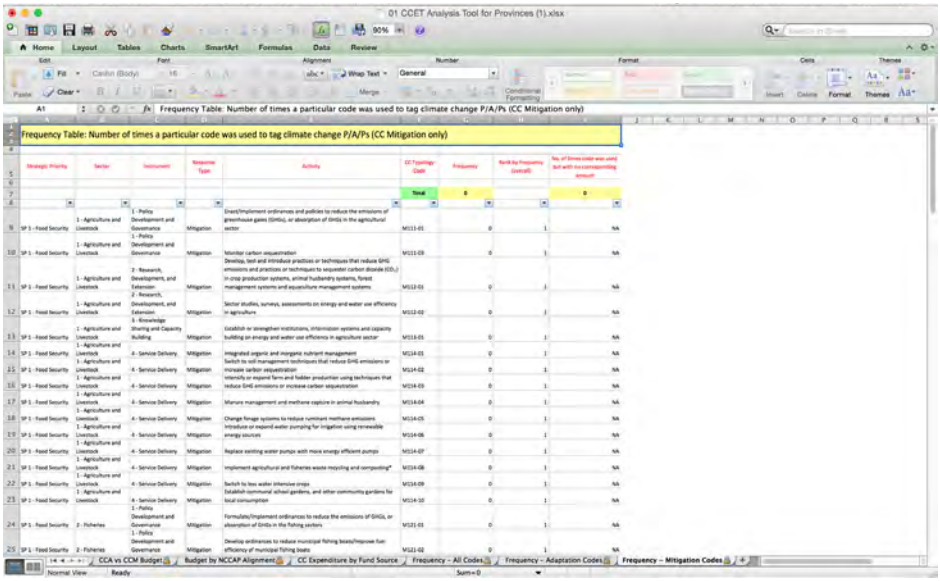
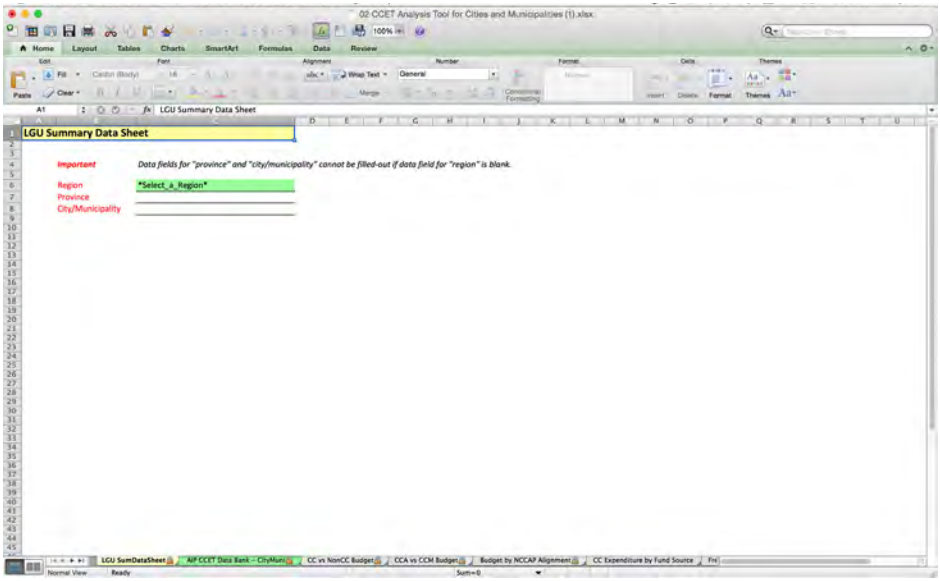
SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Develop formal and non-formal training programs on climate change adaptation (CCA) and disaster risk reduction (DRR)*	A113-04	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Conduct of non-farm entrepreneurial courses	A113-06	0	1	NA
SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Conduct Slope Agriculture Land Technology (SALT) training and other soil conservation measures to climate-proofs the farmer	A113-05			

CC vs NonCC Budget | CCA vs CCM Budget | Budget by NCCAP Alignment | CC Expenditure by Fund Source | Frequency – All Codes | Frequency – Adaptation Codes | Frequency – M

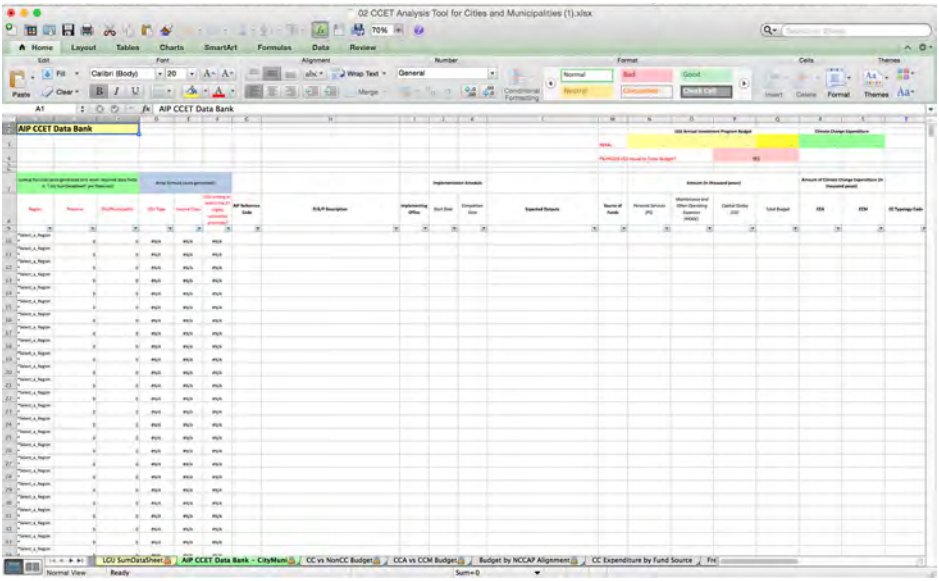
Normal View | Ready | Sum=0

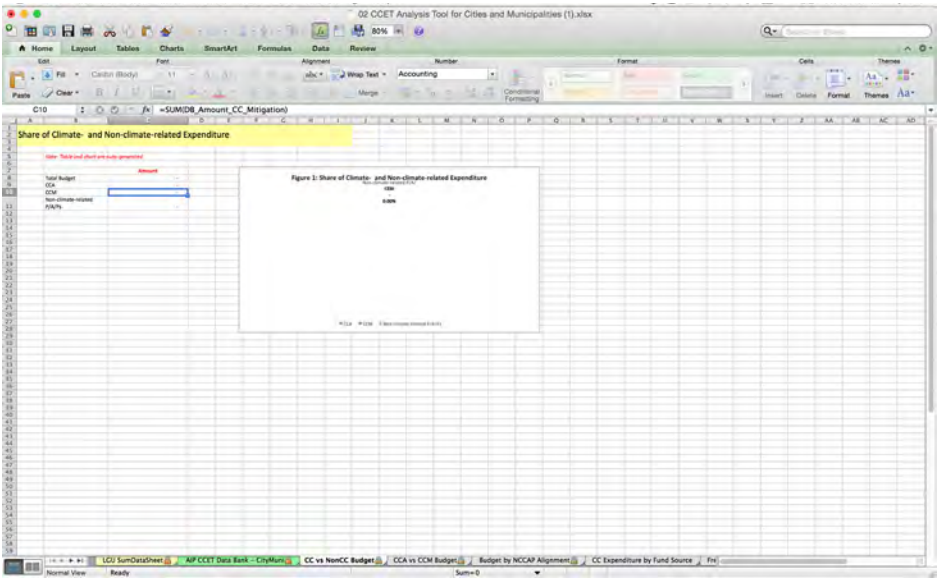
Annex D: Climate Change Expenditure Tagging Analysis Tool for Provinces





Annex D: Climate Change Expenditure Tagging Analysis Tool for Cities and Municipalities





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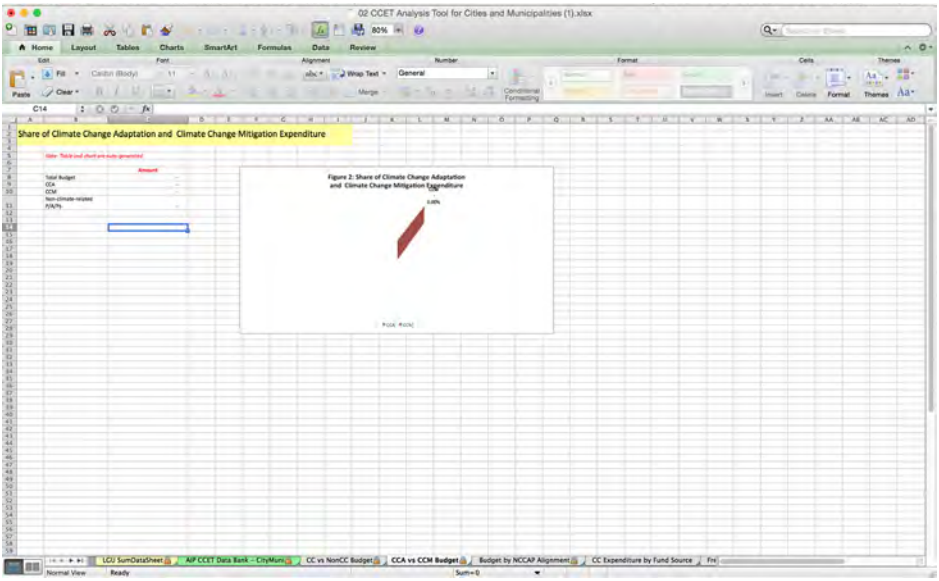
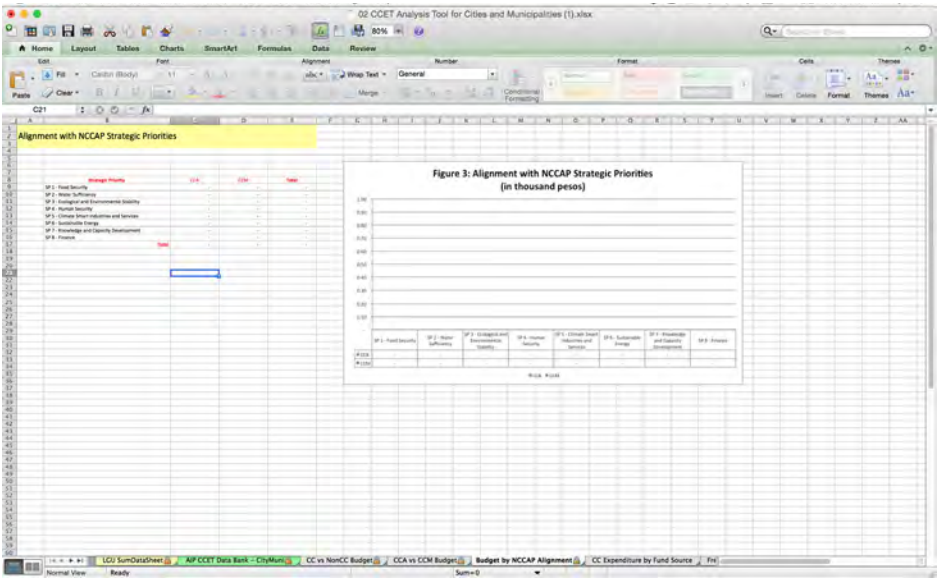
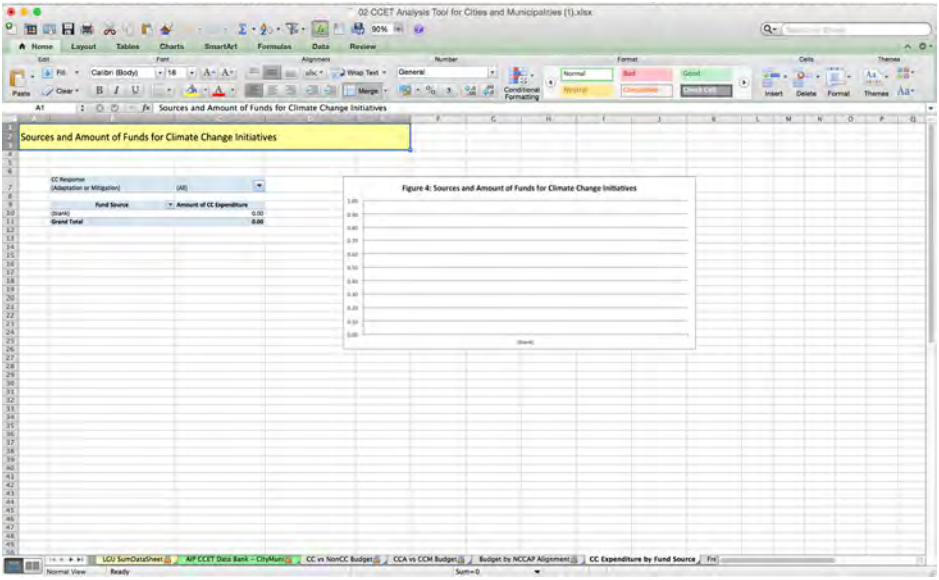
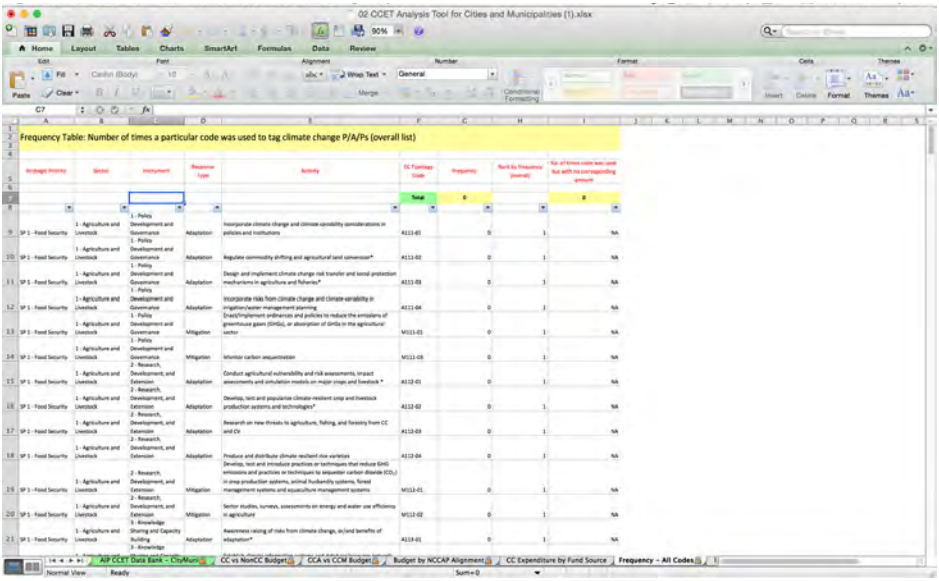


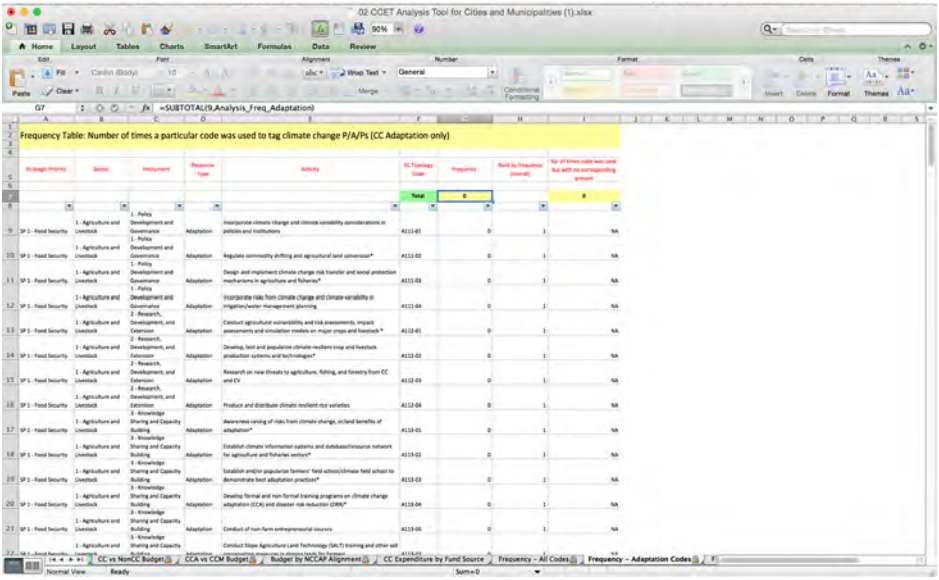


Annex D: Climate Change Expenditure Tagging Analysis Tool for Cities and Municipalities





Annex D: Climate Change Expenditure Tagging Analysis Tool for Cities and Municipalities



02 CCET Analysis Tool for Cities and Municipalities (1).xlsx

G7 =SUBTOTAL(9,Analysis_Freq_Adaptation)

Frequency Table: Number of times a particular code was used to tag climate change P/A/Ps (CC Adaptation only)

	Strategic Priority	Sector	Instrument	Response Type	Activity	CC Typology Code	Frequency	Rank by Frequency (overall)	No. of times code was used but with no corresponding amount
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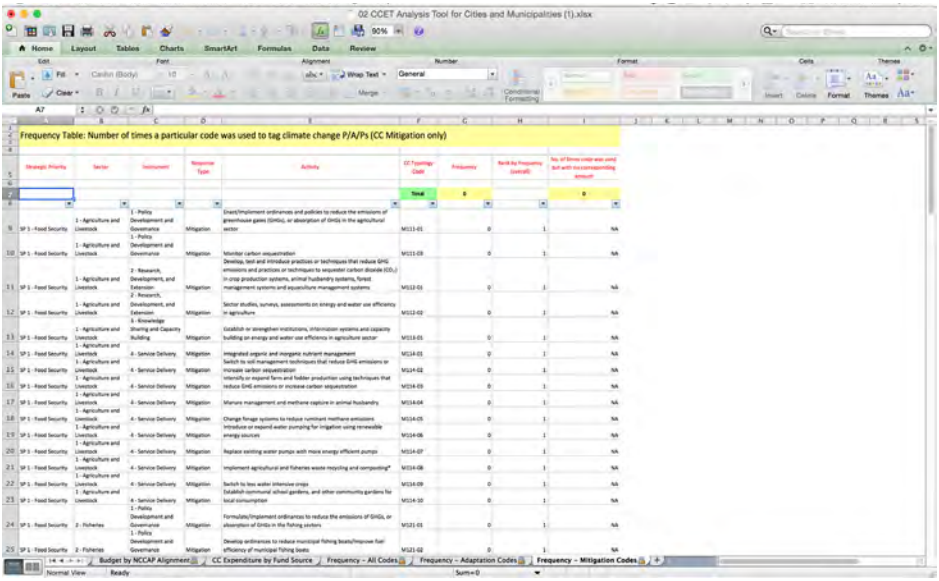
10	SP 1 - Food Security	1 - Agriculture and Livestock	1 - Policy Development and Governance	Adaptation	Regulate commodity shifting and agricultural land conversion*	A111-02	0	1	NA
11	SP 1 - Food Security	1 - Agriculture and Livestock	1 - Policy Development and Governance	Adaptation	Design and implement climate change risk transfer and social protection mechanisms in agriculture and fisheries*	A111-03	0	1	NA
12	SP 1 - Food Security	1 - Agriculture and Livestock	1 - Policy Development and Governance	Adaptation	Incorporate risks from climate change and climate variability in irrigation/water management planning	A111-04	0	1	NA
13	SP 1 - Food Security	1 - Agriculture and Livestock	2 - Research, Development, and Extension	Adaptation	Conduct agricultural vulnerability and risk assessments, impact assessments and simulation models on major crops and livestock *	A112-01	0	1	NA
14	SP 1 - Food Security	1 - Agriculture and Livestock	2 - Research, Development, and Extension	Adaptation	Develop, test and popularize climate-resilient crop and livestock production systems and technologies*	A112-02	0	1	NA
15	SP 1 - Food Security	1 - Agriculture and Livestock	2 - Research, Development, and Extension	Adaptation	Research on new threats to agriculture, fishing, and forestry from CC and CV	A112-03	0	1	NA
16	SP 1 - Food Security	1 - Agriculture and Livestock	2 - Research, Development, and Extension	Adaptation	Produce and distribute climate resilient rice varieties	A112-04	0	1	NA
17	SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Awareness raising of risks from climate change, or/and benefits of adaptation*	A113-01	0	1	NA
18	SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Establish climate information systems and database/resource network for agriculture and fisheries sectors*	A113-02	0	1	NA
19	SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Establish and/or popularize farmers' field school/climate field school to demonstrate best adaptation practices*	A113-03	0	1	NA
20	SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Develop formal and non-formal training programs on climate change adaptation (CCA) and disaster risk reduction (DRR)*	A113-04	0	1	NA
21	SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Conduct of non-farm entrepreneurial courses	A113-05	0	1	NA
22	SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Adaptation	Conduct Slope Agriculture Land Technology (SALT) training and other soil conservation trainings	A113-06			

CC vs NonCC Budget | CCA vs CCM Budget | Budget by NCCAP Alignment | CC Expenditure by Fund Source | Frequency - All Codes | Frequency - Adaptation Codes

Normal View Ready Sum=0



02 CCET Analysis Tool for Cities and Municipalities (1).xlsx

A7

Frequency Table: Number of times a particular code was used to tag climate change P/A/Ps (CC Mitigation only)

	Strategic Priority	Sector	Instrument	Response Type	Activity	CC Typology Code	Frequency	Rank by Frequency (overall)	No. of times code was used but with no corresponding amount
						Total	0		0
9	SP 1 - Food Security	1 - Agriculture and Livestock	1 - Policy Development and Governance	Mitigation	Enact/implement ordinances and policies to reduce the emissions of greenhouse gases (GHGs), or absorption of GHGs in the agricultural sector	M111-01	0	1	NA
10	SP 1 - Food Security	1 - Agriculture and Livestock	1 - Policy Development and Governance	Mitigation	Monitor carbon sequestration	M111-03	0	1	NA
11	SP 1 - Food Security	1 - Agriculture and Livestock	2 - Research, Development, and Extension	Mitigation	Develop, test and introduce practices or techniques that reduce GHG emissions and practices or techniques to sequester carbon dioxide (CO_2) in crop production systems, animal husbandry systems, forest management systems and aquaculture management systems	M112-01	0	1	NA
12	SP 1 - Food Security	1 - Agriculture and Livestock	2 - Research, Development, and Extension	Mitigation	Sector studies, surveys, assessments on energy and water use efficiency in agriculture	M112-02	0	1	NA
13	SP 1 - Food Security	1 - Agriculture and Livestock	3 - Knowledge Sharing and Capacity Building	Mitigation	Establish or strengthen institutions, information systems and capacity building on energy and water use efficiency in agricultural sector	M113-01	0	1	NA
14	SP 1 - Food Security	1 - Agriculture and Livestock	4 - Service Delivery	Mitigation	Integrated organic and inorganic nutrient management	M114-01	0	1	NA
15	SP 1 - Food Security	1 - Agriculture and Livestock	4 - Service Delivery	Mitigation	Switch to soil management techniques that reduce GHG emissions or increase carbon sequestration	M114-02	0	1	NA
16	SP 1 - Food Security	1 - Agriculture and Livestock	4 - Service Delivery	Mitigation	Intensify or expand farm and fodder production using techniques that reduce GHG emissions or increase carbon sequestration	M114-03	0	1	NA
17	SP 1 - Food Security	1 - Agriculture and Livestock	4 - Service Delivery	Mitigation	Manure management and methane capture in animal husbandry	M114-04	0	1	NA
18	SP 1 - Food Security	1 - Agriculture and Livestock	4 - Service Delivery	Mitigation	Change forage systems to reduce ruminant methane emissions	M114-05	0	1	NA
19	SP 1 - Food Security	1 - Agriculture and Livestock	4 - Service Delivery	Mitigation	Introduce or expand water pumping for irrigation using renewable energy sources	M114-06	0	1	NA
20	SP 1 - Food Security	1 - Agriculture and Livestock	4 - Service Delivery	Mitigation	Replace existing water pumps with more energy efficient pumps	M114-07	0	1	NA
21	SP 1 - Food Security	1 - Agriculture and Livestock	4 - Service Delivery	Mitigation	Implement agricultural and fisheries waste recycling and composting*	M114-08	0	1	NA
22	SP 1 - Food Security	1 - Agriculture and Livestock	4 - Service Delivery	Mitigation	Switch to less water intensive crops	M114-09	0	1	NA
23	SP 1 - Food Security	1 - Agriculture and Livestock	4 - Service Delivery	Mitigation	Establish communal school gardens, and other community gardens for local consumption	M114-10	0	1	NA
24	SP 1 - Food Security	2 - Fisheries	1 - Policy Development and Governance	Mitigation	Formulate/implement ordinances to reduce the emissions of GHGs, or absorption of GHGs in the fishing sectors	M121-01	0	1	NA
25	SP 1 - Food Security	2 - Fisheries	1 - Policy Development and Governance	Mitigation	Develop ordinances to reduce municipal fishing boats/improve fuel efficiency of municipal fishing boats	M121-02	0	1	NA

Budget by NCCAP Alignment | CC Expenditure by Fund Source | Frequency - All Codes | Frequency - Adaptation Codes | Frequency - Mitigation Codes

Normal View Ready Sum=0

AIP Brief on Climate Change
Province of Albay

Introduction

The DBM, DILG and CCC through JMC 2014-01 agreed to pilot Climate Change Expenditure Tagging (CCET) with selected local government units (LGUs) for FY 2015. The objectives of the CCET are to identify and tag climate change programs, projects, and activities (PPAs) in the Annual Investment Program (AIP) of the LGUs; to take stock of climate change PPAs; and to track and report climate change expenditures of LGUs.

The Province of Albay is one of 42 LGUs that volunteered to pilot the CCET sytem in 2015. This AIP brief provides baseline information on the LGU's climate program based on the tagged 2015 AIP which were reviewed for tagging quality by the CCET pilot implementation team. The quality review did not include an independent assessment of the climate change objectives, and expected outputs of the tagged PPAs.

The baseline information provides timely statistics on the allocation of resources that is expected to:

1) Facilitate discussions in the Local Development Councils (LDC) and the Sanggunian on the prioritization of climate action in the annual investment programs, increasing transparency on the allocation of funds;
2) Support the LGUs in strengthening the incorporation of climate action in their Comprhensive Land Use Plans (CLUP), Comprehensive Development Plans (CDP) and Local Development Investment Programs (LDIP) including specific guidelines on how CC issues are to be addressed in the project selection and appraisal process;
3) Provide a path to a climate planning and budgeting system including a baseline for evaluating CC impacts of public expenditures; and
4) Enable the LGUs and the Oversight Agencies[1] to more effectivley monitor and report on the budget planning, prioritization, execution and performance of the climate investments, strengthening their coherence across sectors and levels of government. It can also support LGUs in applying for climate finance.

The CCET results from all of the pilot LGUs will be consolidated to provide further recommendations to strengthen the quality of the LGU CCET in FY 2016 and to provide Oversight Agencies a snapshot of the coverage and gaps in the climate program at the LGU level.

[1] The DBM, the CCC, the DILG, the Commission on Audits (COA), the National Economic Development Authority (NEDA), the Office of Civil Defense (OCD).

Background and Context

Section 14 of the Philippine Climate Change Act (CCA) of 2009 (Republic Act 9729) recognizes that LGUs are at the frontline for climate change action. The Act requires all units of government to mainstream climate change in various phases of policy formulation, development plans, poverty reduction strategies and other development tools and techniques. LGUs are required to formulate and implement local climate change action plans (LCCAP) for their respective areas, consistent with the national, regional, and provincial frameworks on climate change. Recognizing that climate change and disaster risk reduction are closely interrelated and effective disaster risk reduction will enhance climate change adaptive capacity, the Act requires the integration of disaster risk reduction into climate change programs.

Likewise, the Philippine Disaster Risk Reduction and Management Act of 2010 (Republic Act 10121) recognizes the need for LGUs to integrate disaster risk reduction and climate change adaptation into local development plans, programs and budgets. Reducing vulnerability to climate hazards and enhancing the adaptive capacity of communities are key objectives of the National Disaster Risk Reduction Management Plan. As part of the paradigmatic shift towards disaster prevention, LGUs are allowed to direct up to 70% of the Local Disaster Risk Reduction Management Fund (LDRRMF) for disaster risk prevention activities.

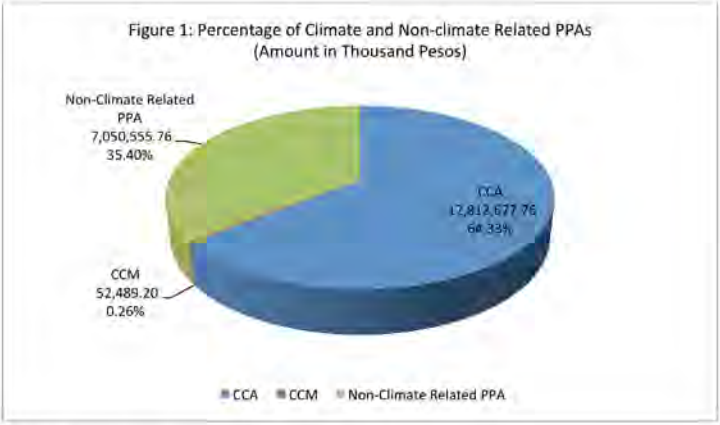
As early as 2007, the Sangguniang Panlalawigan has issued SP Resolution 2007-04, proclaiming climate change adaptation as a provincial policy. The policy states that "All behavior, projects, programs grants of license and permits should be consistent with adaptation." The core philosophy of the province is to promote a culture of reduction, thus its thrust on building back better.[2] For FY 2015, the LGU has prioritized a number of programs, projects and activities that contribute to the goal of building the locality's adaptive capacity and increasing the resilience of natural ecosystems to climate change.

Climate Change Investments

The LGU's total AIP fund for FY 2015 is Php 19.9 Billion. Of this amount, Php 12.86 Billion or 64.6% has been tagged as climate change adaptation (CCA) and climate change mitigation (CCM). The province has earmarked a large chunk for climate change adaptation at 64% compared to climate change mitigation at 0.26%[3] (see Figure 1 below). A total of 164 PAPs has been tagged as climate change initiatives.

[2] Lasco, R, Delfino, R and Sanchez, P. n.d. Local Government Initiatives to Climate Change Adaptation: A Case Study of Albay, Philippines.

[3] Amount for CCM can be larger since a number of PPAs tagged as adaptation have co-benefits (see discussion on Climate Change Mitigation).



Climate Change Adaptation

The LGU has made good progress in mainstreaming climate change in the various LGU plans, programs, projects and activities. For FY 2015, Albay is moving further ahead in its mainstreaming efforts by integrating CCA and DRR in the preparation of the GUICADALE (Guinobatan-Camalig-Daraga-Legazpi) Master Development Plan (A900-01). Of high importance are investments in the construction and upgrading of roads to climate resilient design standards (A624-02 and A624-03) and flood control (A440-08) which comprise the biggest programmed investments for 2015. Significant investments have also been programmed for the climate proofing/retrofitting or relocating of government infrastructure (i.e. centralized bodega, government buildings, hospitals and health centers) (A440-09). Various adaptation initiatives have also been programmed for highly vulnerable sectors such as agriculture.

Albay's Center for Initiatives and Research on Climate Adaptation (CIRCA) has programmed the following for FY 2015:

- Conduct trainings/seminars/ workshops/consultations and module development on CCA/DRR specific each sector and hazards for capacity development/mainstreaming and advocacy in all sectors.
- Conduct of research and productivity studies on vulnerability assessment in agriculture and water sectors
- Development of IT based data and information system (server) for all sectors to be used for disaster preparedness, response and recovery
- Review and integration of climate change concepts in curriculum for primary, secondary and tertiary levels including training for the Department of Education

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- Conduct advocacy campaign for all sectors including the development and maintenance of website
- Establish a research facility that brings together national expertise to help local industries and communities adjust to the impacts of climate change.

Other significant CCA PPAs are detailed below:

- Risk Mapping/Identify, map and profile highly disaster prone areas and communities* (A430-01). Included in the priorities is the identification/tagging of areas, families and persons vulnerable of flooding to be funded out of the City Disaster Risk Reduction Management Fund
- Small water impounding projects, small irrigation facilities, small farm reservoirs to manage changes in the water cycle due to climate change and climate variability (A260-04)
- Disaster and Climate Risk Monitoring System (A430-07) and Install Early Warning Systems (430-08). Included in this typologies are the improvement of communication system during disasters and enhanced Early Warning Systems funded through the CDDRMF;
- Incorporate climate change and climate variability in design standards for flood control and drainage systems (A240-03). These include the Proposed Rehabilitation of NIA Canal,
- Enhance road maintenance to respond to climate change and climate variability (624-04); Enhance waterway maintenance to respond to climate change and climate variability (A626-04);
- Study and adopt centralized wastewater treatment systems to improve quality in highly urbanized and densely populated areas (A250-03). Programmed for investments include the construction of a wastewater treatment plant and the development of system for monitoring the volume and quality of effluent (sewage/wastewater) discharges;
- Coastal Resource Management (CRM) to rehabilitate 3-5 km of shorelines and 20-50 hectares of mangrove areas

Climate Change Mitigation

In addition to the identified programs above, the LGU has identified CCM measures that help sequester and reduce greenhouse gas emissions such as carbon dioxide and methane. Some programs such as the CRM, which involves the re-establishment of mangroves with carbon sequestration properties have been tagged as a CCA measure. Among the programs on mitigation include the following:

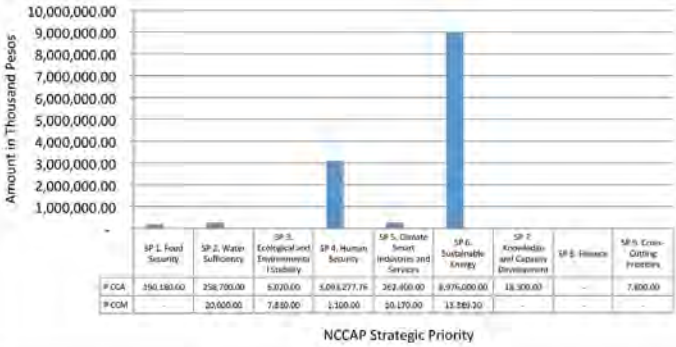
- Green Economic Development Program that installs solar power in 200 barangays
- National Greening Program (M312-02) which includes tree planting of adaptive species and mo monitoring growth of the planted seedlings
- Vegetable Seeds Dispersal (M114-02) to households for backyard gardens

- Develop/implement ordinances and policies to improve energy efficiency – in buildings, agriculture, industry and city/municipal services (e.g. public building maintenance program to improve energy efficiency; use of more energy efficient street lighting such as LED). (M613-03)
- Solid waste and management program including waste reduction and diversion program/Intensify waste segregation at source, discard recovery, composting and recycling* (M330-08 and M330-09). Included are the construction of three Material's Recovery Facilities in three barangays; and the adoption of a plastics recycling and recovery technology
- Improve energy efficiency in information technology (M720-01). The City Information Technology Office is investing in more energy efficient computers.
- Development of micro-watershed areas (M312-05), which includes activities such as tree planting using adaptive species

Alignment with National Climate Change Action Plan

The LGU's FY 2015 AIP supports implementation of a number of National Climate Change Action Plan (NCCAP) priorities. Figure 2 below shows the amounts allocated for the various NCCAP Priorities. Strategic priority 6 on Sustainable Energy[4] gets the lions share at 8.99 Billion followed by Strategic Priority 4 on Human Security at Php 3 Billion. A complete set of investments that details CCA and CCM NCCAP priorities is shown in Figure 2.

Figure 2: Alignment with NCCAP Strategic Priorities



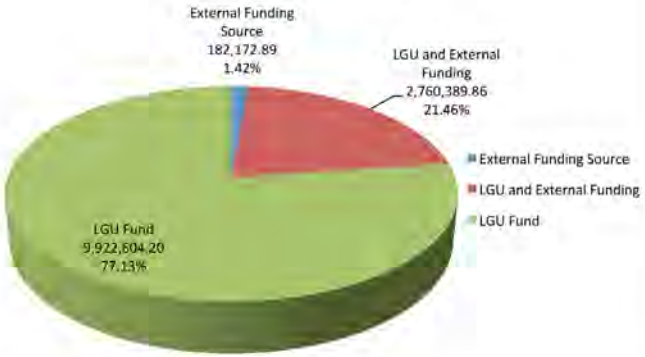
	SP 1. Food Security	SP 2. Water Sufficiency	SP 3. Ecological and Environmental Stability	SP 4. Human Security	SP 5. Climate Smart Industries and Services	SP 6. Sustainable Energy	SP 7. Knowledge and Capacity Development	SP 8. Finance	SP 9. Cross-Cutting Priorities
P CCA	250,180.00	258,700.00	6,020.00	3,093,277.76	262,400.00	8,976,000.00	18,300.00	-	7,800.00
P CCM	-	20,000.00	7,880.00	1,100.00	10,170.00	13,380.30	-	-	-

[4] Construct new roads and bridges to climate resilient design standards is included under Sustainable Energy (SE), although it does not contribute to SE per se.

Sources of Funds for Climate Change Initiatives

Albay, a first class province, has managed to mobilize funds from various external sources to fund their CC adaptation and mitigation programs. Many of the PPAs are funded from a combination of sources (i.e. national with general fund; ODA and other sources) at 52%. Another major source of fund is the General Fund (GF) at 46%. A substantial portion comes from national government (e.g. Department of Agriculture, Department of Health). Other sources of funds for climate change initiatives include the development fund (DF) and the LDRRMF. Figure 3 below shows the sources of funds for climate change PAPs.

Figure 3: Sources of Funds for CC Initiatives
(Amount in Thousand Pesos)



Fund Source Category	Fund Source	CCA	CCM	Total
LGU Fund	GF	5,576,015.00	36,600.00	5,612,615.00
LGU Fund	20% DF	300.00	-	300.00
LGU Fund	LGU Various Sources	4,303,800.00	5,889.20	4,309,689.20
External Funding Source	NGA	179,158.44	-	179,158.44
External Funding Source	NGA-Grant/ODA	1,514.45	-	1,514.45
External Funding Source	Other External Source	1,500.00	-	1,500.00
LGU and External Funding	LGU-Grant/ODA	95,970.00	-	95,970.00
LGU and External Funding	LGU-NGA	894,033.99	-	894,033.99

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Fund Source Category	Fund Source	CCA	CCM	Total
LGU and External Funding	LGU-NGA-Grant/ODA	202,823.00	-	202,823.00
LGU and External Funding	LGU-NGA-Other External Sources	1,447,562.87	-	1,447,562.87
LGU and External Funding	LGU-Other External Source	110,000.00	10,000.00	120,000.00
Total		**12,812,677.76**	**52,489.20**	**12,865,166.96**

References

Lasco, R, Delfino, R and Sanchez, P. n.d. Local Government Initiatives to Climate Change Adaptation: A Case Study of Albay, Philippines.

Annex C: CCET Quality Review and Assurance Guidelines

Ensuring the quality of the climate change (CC) expenditure data is a key part of the budget review process. Having a documentary basis for the tagging decisions increases the transparency and credibility of the CC expenditures reported by the Government. At the national level, for FY 2015, the Department of Budget and Management (DBM) and the Climate Change Commission (CCC) set up a Quality Assurance Review system for FY 2016 to ensure the quality of the collected data and to strengthen the uptake of the data in the budget planning, prioritization, monitoring, and reporting processes.

Likewise, a Quality Review and Assurance Tool (see form below) is being introduced at the LGU level for FY 2016 to guide LGUs in assessing and documenting the evidence base that support their CC tagging decisions. The Quality Review and Assurance (QAR) Tool reviews the climate change objectives and coverage of the tagged P/A/Ps, and identifies their interconnectedness with CC adaptation and/or CC mitigation responses. In addition, the QAR helps document which CC vulnerabilities of the locality the PPA responds to and how the PPA design has been informed by these CC vulnerabilities. The QAR also reports on the contribution of the PPA to the existing LGU plans.

LGUs located in highly vulnerable provinces are required to accomplish the form below for CC tagged PPAs in their AIPs and submit the same to the CCC (lguhelpdesk@climate.gov.ph) together with their AIP. LGUs are to refer to the prepared program/project profile when filling out the form. The increased accuracy and transparency in the budgeted climate program of the LGU is expected to strengthen the AIP CC briefs which summarize the LGU's climate change program priorities and to support a more informed public discourse on CC priorities within the LGU. The information in the Form will also be used by the CCC to guide climate policies related to LGUs. An example of the filled out CCET QAR is found below:

Table 1: Example of Filled-out CCET Quality Review and Assurance (QAR) Form

						Alignment of PPA with LGU Plans					
Program/Project /Activity (PPA) Description	**CC Typology Used**	**Main Objective**	**CC Objectives**	**Climate Risks being addressed?**	**Climate information used?**	**PDPFP/ CLUP (7)**	**CDP (8)**	**LCCAP (9)**	**LDRRMP (10)**	**LDIP (11)**	**Not identified in Plans (12)**
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**						
Construction of rainwater harvesting facility for irrigation	A114-05	Improved farm productivity	Provide irrigation water during the dry season	Drought	Drought statistics			X			
Flood Control Program	A224-01		Ensure efficiency and effectiveness of flood control management	Floods, Storm Surges	Climate projections, Flood susceptibility maps	X	X			X	

Awareness raising programs on climate change and climate variability	A713-01		Improved community awareness and knowledge on CC	All types of climate risks	Observed and Projected Annual Mean Temperature		X	X			
Reforestation Program	M314-01	Increased forest cover	Increased carbon sequestration potential			X	X	X		X	

(1) Include the PAPs tagged as CC adaptation or CC mitigation in the AIP form
(2) Identify the corresponding activity-level typology. Refer to Annex A – CC Typologies
(3) Include the Main Objective of the PAP. Refer to the Program/Project Brief.
(4) Identify objectives that are relevant to CC adaptation or CC mitigation. Refer to JMC – Definition
(5) Identify climate risks being addressed. Refer to JMC – Definition
(6) Identify climate information used. Refer to the JMC – Definition
For Columns (7-11), put an X in the columns if the tagged PPA is included or contributes to the identified LGU plan (select all that apply)
(12) Put an X under the column when the PPA has not been identified in any of the plans identified in Cols 7-11

Annex C: CCET Quality Review and Assurance Guidelines

CCET Quality Review and Assurance Form

						Alignment of PPA with LGU Plans					
Program/Project /Activity (PPA) Description (1)	CC Typology Used (2)	Main Objective (3)	CC Objectives (4)	Climate Risks being addressed? (5)	Climate information used? (6)	PDPFP/ CLUP (7)	CDP (8)	LCCAP (9)	LDRRMP (10)	LDIP (11)	Not identified in Plans (12)

(1) Include the PAP tagged as CC adaptation or CC mitigation in the AIP Form
(2) Identify the corresponding activity-level typology. Refer to Annex A – CC Typologies
(3) Include the Main Objective of the PAP. Refer to the Program/Project Brief.
(4) Identify objectives that are relevant to CC adaptation or CC mitigation. Refer to JMC – Definition
(5) Identify climate risks being addressed. Refer to JMC – Definition
(6) Identify climate information used. Refer to the JMC – Definition
For Columns (7-11), put an X in the column s if the tagged PPA is included or contributes to the identified LGU plan (select all that apply)
(12) Put an X under the column when the PPA has not been identified in any of the plans identified in Cols 7-11

Annex G: DILG MC 2014-135 regarding the Guidelines on the Formulation of the LCCAP

Republic of the Philippines
DEPARTMENT OF THE INTERIOR AND LOCAL GOVERNMENT
DILG-NAPOLCOM Center, EDSA corner Quezon Avenue, Quezon City
www.dilg.gov.ph

OCTOBER 21, 2014

MEMORANDUM CIRCULAR
NO: 2014-135

TO : Provincial Governors, City and Municipal Mayors, Punong Barangays, DILG Regional Directors and All Others Concerned

SUBJECT : Guidelines on the Formulation of Local Climate Change Action Plan (LCCAP)

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1. Purpose

1.1 To clarify the roles and responsibilities of LGUs to deliver their mandates as provided for under RA 9729 (as amended by RA 10174)

1.2 To provide guidelines on the steps and processes in the formulation of Local Climate Change Action Plan (LCCAP)

1.3 To inform the process of mainstreaming and integration of DRR and CCA in local mandated plans

2. LGU Mandates in Climate Change Adaptation and Disaster Risk Reduction

2.1 As a political unit, LGU is mandated to exercise their inherent powers such as police power, as well as share with the national government the responsibility in the management and maintenance of ecological balance in their respective territorial jurisdiction (RA 7160, Sections 2a, 15, 3i). Being a corporate body, every LGU is mandated to promote the general welfare among the inhabitants within its territorial jurisdiction (RA 7160, Sections 2a, 16 and 17)

2.2 Section 11, (2) of RA 10121 (Disaster Risk Reduction and Management Act of 2010), states that LGUs shall ensure the integration of disaster risk reduction and climate change adaptation into local development plans, programs and budgets as a strategy in sustainable development and poverty reduction;

2.3 Section 14 of RA 9729 (Climate Change Act of 2009), as amended by RA 10174, provides that, LGUs shall be the frontline agencies in the formulation, planning and implementation of climate change action plans in their respective areas, consistent with the provisions of the Local Government Code (LGC), the National Framework Strategy on Climate Change (NFSCC), and the National Climate Change Action Plan (NCCAP)

2.3.1 Barangays shall be directly involved with municipality and city governments in prioritizing climate change issues and in identifying and implementing best practices and other solutions;

2.3.2 Municipal and city governments shall consider climate change adaptation, as one of their regular functions;

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2.3.3 Provincial governments shall provide technical assistance, enforcement and information management in support of municipal and city climate change action plans;

2.3.4 Inter-local government unit collaboration shall be maximized in the conduct of climate-related activities;

2.3.5 LGUs shall regularly update at least annually, their respective action plans to reflect changing social, economic, and environmental conditions and emerging issues;

2.4 As provided for in Section 24 of RA 10174, the Commission shall develop criteria to prioritize use of the fund (PSF) based on, but not limited to, the following: ... (h) availability of climate change adaptation action plan.

3. The LCCAP Formulation Process

The following are the suggested steps in the formulation of LCCAP in consonance with the Rationalized Local Planning System:

3.1. Preparatory Stage

3.1.1 The Local Chief Executive, as the Champion shall organize a LCCAP Core Team, who will lead, oversee and ensure that an LCCAP will be drafted, eventually approved, implemented, regularly monitored and updated when necessary. It is recommended that the following LGU Offices be represented in the core team: Planning and Development, Health, Engineering, Agriculture, Social Welfare & Development, Budget, Treasurer, DRRM and LGOO. Other members may be selected from other offices and a representative from the SB may also be invited to be a member of the core team.

3.1.2 Conduct a climate change orientation for LGU officials, LGU functionaries and other key stakeholders such as the private sector, NGOs, community-based groups, the academe, media and other civil society representatives to be more informed and have a better understanding of the relevance and importance of climate change adaptation planning to LGU's sustainable development.

3.1.3 Agree on the purpose and scope of climate change adaptation planning. This is essential before proceeding with the assessment and planning steps considering the complexities of climate change.

3.1.4 In accordance with Section 2,(c) of the LGC, LGU which requires LGUs to always consult their constituents in planning and policy/decision making, identify the stakeholders who should be involved along with their interest, capacity and influence to the planning process.

3.1.5 LGU may seek assistance from DILG Regional/Field Office for Training on the Formulation of LCCAP

3.2. Data Gathering, Vulnerability Assessment, Risk Analysis and Validation

3.2.1. Revisit the LGU vision in the context of climate change adaptation and disaster risk reduction planning and see whether CCA-DRR agenda is already included, if not, it is recommended to include CCA-DRR elements.

3.2.2. Prior to the assessment, gathering of relevant data from the local government, relevant national government agencies and private sources is imperative and would be very helpful. Some of the important data and information that must be gathered, but not limited to, are the following:

- LGU Ecological Profile (using the most recent CBMS data)
- Local Development Indicators System (LDIS)
- Current/Updated CLUP, CDP, LDIP and ELA
- Local weather & climate data (from PAGASA or DOST)
- Hazard and risk maps (check PHILVOLCS for geophysical hazards, MGB for other geohazard maps such as rainfall-induced landslides, storm surges, liquefaction, and other development analysis from local scientific institutions from Universities and Colleges (local, national, international), the private sector, NGOs and projects funded by development partners).
- National and LGU produced GIS maps
- Other thematic maps held by government agencies
- Economic, Agriculture and Health data
- Inventory of existing infrastructures
- News clippings of climate & disaster events (if available, for a span of 20-30 years)
- Provincial, City, Municipal Climate Projections (refer to PAGASA and CCC websites)
- Other relevant information needed for vulnerability and adaptation assessment

3.2.3. Make use of other available tools and audit forms of other government agencies which are currently being used by LGUs to assess their current governance and management situation may also be used to gather additional data and information that can be used to assess and measure vulnerability of certain places, elements and sectors. Some of these tools and audit forms are:

- Infrastructure Audit (this is particularly important in assessing vulnerability and sensitivity of schools and other government buildings being used as evacuation centers and command response centers)
- Disaster Preparedness Audit
- Environmental Compliance Audit

3.2.4. Identify climate-related hazards, climate trends, anomalies and abnormalities that your LGU has observed and experienced (30 years span)

3.2.5. Conduct vulnerability and adaptation assessment (VAA) by looking at three factors namely: exposure, sensitivity and adaptive capacity

- *Exposure* is to identify elements, places, people & sectors exposed to the climate related and geologic hazards
- *Sensitivity* is to determine the degree to which exposed people, places, institutions and sectors are impacted by climate change hazards today and in the future
- *Adaptive capacity* is to determine the coping/adaptive capacity of the people, institutions places and sectors to the identified climate hazards

The purpose of VAA is to provide LGUs with information relevant in defining their adaptation priorities and plans. The VAA will also provide guidance in identifying where and what programs, projects and activities are needed to effectively manage the un-avoidable impacts of climate change

3.2.6. Ask the help of a climate science expert or Resource Persons (e.g. Climate Change Commission, scientific institutions and other Private Organizations focused on CCA/DRR issues and/or from Local Academic & Research Institutions) to interpret and translate local climate change related data and information (*maybe provincial or regional in scope*) into climate trends and identify/create climate change projections to be used in the different stages of LCCAP formulation

3.2.7. Prepare the result of the VAA taking into consideration the limitations in terms of scope and agreed objectives at the beginning of the assessment process. It is also important to include maps generated and all data gathered as part of the annexes or attachments. The list of people, sectors and institutions who participated in the VAA process must also be included in the report for future follow-up or involvement in the implementation of adaptation options and plans. The LGU may use the outline to prepare the VAA Report.

I. BACKGROUND & RATIONALE

- Rationale of the Plan
- LGU Profile
- Planning Context
- Planning Approach
- LCCAP Core Team & Stakeholders

II. VULNERABILITY & ADAPTATION ASSESSMENT RESULT

- Climate Related Hazards & Its Impacts to LGU
- Elements, Sectors and Institutions Exposed to CC Hazards & its Impacts
- Vulnerability and Cross-sectoral Analysis
- Adaptive Capacity
- Identified CC Adaptation Options (that will make up a large part of LGU's final Climate Change Action Plan)

III. ANNEXES

- The VAA Team Members
- Pictures
- MAPS (enhanced)
- Workshop Outputs (per sector)
- Attendance Sheets (participants & Resource Persons)
- List of References

3.3. Planning, Prioritization and Budgeting

3.3.1 Refer to the result of the VAA and Risk Analysis to determine what CC risks you want to reduce and what coping/adaptive capacities you want to enhance

3.3.2 Check with the goals, objectives and targets of the LGU for the period (short term, medium term & long term goals) as stated in the CLUP, CDP & ELA. Refer to the National Climate Change Action Plan (NCCAP), LGU mandates and current thrusts of the national and local government for project ideas and objectives

3.3.3 Enhance the objectives of the sectors (social, economic, infrastructure, environmental and institutional) by re-stating the current objectives or create additional objectives that would address the identified vulnerabilities and risks from projected climate hazards.

3.3.4 Check with the list of PPAs and legislations as stated in the CLUP, CDP & ELA, and then refer to the result of the VAA and Risk Analysis to determine what climate change options you want to implement in the short, medium and long term plans which should include program, project and policy actions to reduce LGU's vulnerability, develop its adaptive capacity and to build its overall resilience to climate change.

3.3.5 Although priority is given to the identification of the adaptation options, it is also strongly suggested to identify mitigation options (such as but not limited to energy and water conservation, improvements in energy and water efficiency and overall greening) to help reduce carbon footprints of the LGU and communities and contribute to the efforts of reducing our impact to the world's climate.

3.3.6 Prioritize programs, projects and activities and identify appropriate timeline for each, then recommend policies that would enable the implementation of the prioritized adaptation and mitigation options.

3.3.7 LGU may opt to use an alternative set of criteria as given below for prioritizing adaptation and mitigation options.

CATEGORY	GENERAL CRITERIA
Urgent	• Projects that cannot be reasonably postponed • Projects that would remedy conditions dangerous to public health, safety and welfare • Projects needed to maintain critically needed programs • Projects needed to meet emergency situations

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Essential	▪ Projects required to complete or make usable a major public improvement ▪ Projects required to maintain minimum standards as part of ongoing program ▪ Desirable self-liquidating projects ▪ Projects for which external funding is available
Necessary	▪ Projects that should be carried out to meet clearly identified and anticipated needs ▪ Projects to replace obsolete or unsatisfactory facilities ▪ Repair or maintenance projects to prolong life of existing facilities
Desirable	▪ Projects needed for expansion of current programs ▪ Projects designed to initiate new programs considered appropriate for a progressive community
Acceptable	▪ Projects that can be postponed without detriment to present operations if budget cuts are necessary
Deferrable	▪ Projects recommended for postponement or elimination from immediate consideration in the current LDIP ▪ Projects that are questionable in terms of over-all needs, adequate planning, or proper timing

In addition, it may also help the LGUs if they can classify their projects as climate proofing of development projects or discrete climate change adaptation projects such as rainwater harvesting, identification and designation of no build zones.

Furthermore, a comprehensive cost-benefit analysis that also considers indirect costs and benefits, non-monetary values and externalities or other tools can also be used for prioritizing options.

3.3.8 Mainstream or incorporate the identified priority actions and policies in existing mandated LGU Plans and Investment Programs

3.3.9 For uniformity and compliance in formatting, use the specified LGU format for these plans as mandated or required in the Rationalized Local Planning System and prevailing DILG or other government guidelines

3.3.10 In case the LCCAP Team decides to also create a stand-alone plan on CCA that can be used in proposal writing or project development for fund sourcing, the group must use the prescribed format of the potential funding source or agency or make use of this narrative plan template in writing their Local Climate Change Action Plan.

Local Climate Change Action Plan	
I. Background	This should include the following: (a) **Rationale** (a brief discussion of the plan, how it was developed and the purpose and limitations of the plan) (b) **LGU Profile** (Ecological Profile, demographic trends, current land use and development issues and challenges) (c) **Planning Context** (LGU development priorities, Vision-Mission-Goal, LGU planning context including existing and implemented climate change plans and programs) (d) **Planning Approach** (Planning framework, guiding principles, stakeholders and engagement)

II. Vulnerability Assessment	This should discuss the results of vulnerability assessment in summary with the following details: • Identified climate-related hazards and their impacts to the LGU • Elements, sectors and institutions exposed to climate change impacts • Summary and findings of vulnerability assessment (exposure, sensitivity and adaptive capacity) • Vulnerability and cross-sectoral analysis • Identified climate change key development issues
III. Plan Objectives	• Link to LCCAP to the goals and objectives of CDP and CLUP • Convert climate change issues into objectives
IV. Adaptation Actions	This part should include the following: • Identified adaptation options (taking into considerations the PPAs in the CDP and ELA, LDIP) • Prioritized PPAs(using GAM and CCC matrices, Urgency test, PFCC's ranking of Options), indicators, resource needed, budget sources and office/person responsible • Identified enabling requirements (considering current LGU legislative agenda)
V. Monitoring and Evaluation	This should contain the following: • The M & E Team • M&E Plan and Targets

3.3.11 In case there is no prescribed format, the following matrix may be used, provided that, it should be supported by a VAA Report and Risk Analysis.

OBJECTIVES (per Sector)	PRIORITY PROGRAMS, PROJECTS, ACTIVITIES & POLICIES			INDICATORS (Objectively Verifiable Indicators of success/ performance)	INSTITUTIONS /SECTORS or DEPARTMENT INVOLVED/IN-CHARGED	RESOURCES REQUIRED *(identify where is it included: (LDIP or AIP of Yr____)*
	SHORT TERM (1-3 YRS)	MEDIUM TERM (4-6 years)	LONG TERM (7 years & above)			
IMPORTANT REMINDERS: - *Always refer to VAA result to keep the link with Climate Change Impact in identifying adaptation and mitigation options*						

3.3.12 For LGUs with already adopted LCCAP, review by conducting vulnerability assessment and use climate projections in your analysis.

3.4. Monitoring and Evaluation

3.4.1 If there are M&E templates for the LGU mandated plans where the LCCAP, programs, projects and activities were mainstreamed (i.e., CDP or ELA) it is advisable to use the LGU or DILG required monitoring and evaluation formats for purposes of uniformity and compliance. An M&E plan with budget must be created to direct the activities of the monitoring team.

4. Funding for the preparation and implementation of LCCAP

4.1 Section 20 of RA 9729 (as amended by RA 10174) states that the fund (People's Survival Fund) shall be used to support adaptation activities of local government and communities. Taking from this provision, LGU may submit copy of their LCCAP to Climate Change Commission (CCC) for possible funding.

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4.2 The NDRRMC-DBM-DILG Joint Memorandum Circular No. 2013-1 dated March 25, 2013 stipulates the allocation and utilization of the Local Disaster Risk Reduction and Management Fund (LDRRMF) for the following:

- Conduct of risk assessment, vulnerability analysis, and other science-based technology and methodologies to enhance LGU ecological profile, sectoral studies and maintain DRRM activities/climate change adaptation in CLUP and CDP *(Item 5.1.1)*
- Capability building (train, equip, organize, provide funding, sustain) on mainstreaming DRRM/CCA in development planning, investment programming/financing, and project evaluation and development *(Item 5.1.3)*
- Conduct of activities to review and integrate DRRM/CCA into various environmental policies, plans, programs, and projects *(Item 5.1.4)*

5. Role of the DILG Regional and Field Officers

The DILG Regional and field officers shall ensure provision of technical assistance to the LGUs in the formulation of LCCAP. The DILG Field Officers shall act:

5.1 As trainer or training facilitator, assist or train the LGUs on the formulation of LCCAP

5.2 As mobilizer and organizer, coordinate the provision of technical guidance necessary for LGUs to formulate their respective LCCAP. Establish a network of partners among the local resource institutions, national government agencies and other stakeholders to support the LGUs in LCCAP formulation and implementation.

5.3 As strong advocate for local governments, persuade LGUs to recognize the rationalized local planning system in the formulation of LCCAP and as entry point in mainstreaming CCA and DRR in local mandated plans, the CDP and CLUP.

Relative to this, all DILG Regional Directors are hereby directed to cause the immediate and widest dissemination of this Memorandum Circular and as deemed necessary, provide guidance and technical assistance in the formulation of LCCAP of your LGUs in your respective region.

For compliance.

MAR ROXAS
Secretary

DILG-OSEC OUTGOING 14-05025

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