NATIONAL CLIMATE BUDGETING A reference guide to climate budgeting at the national level in the Philippines Climate Change Commission Department of Budget and Management June 2016

Abbreviations

BPF Budget Priorities Framework

BPMS Budget Preparation Management System

BTB Budget Technical Bureau – DBM

CC Climate Change

CCA Climate Change Adaptation

CCAM Climate Change Adaptation and Mitigation

CCC Climate Change Commission

CCET Climate Change Expenditure Tagging

CO Capital Outlay

DBM Department of Budget and Management

FAPs Foreign-Assisted Projects

FPRB Fiscal Planning and Reforms Bureau – DBM

FY Fiscal Year

JMC Joint Memorandum Circular
GAA General Appropriations Act
GAB General Appropriations Bill

GAS General Administration and Support

GHG Greenhouse Gases

GOCC Government-Owned and/or Controlled Corporations

GoP Government of the Philippines

HD CCET Help Desk

LFPs Locally-Funded Projects

MOOE Maintenance and Other Operating Expenditures

NBM National Budget Memorandum

NCCAP National Climate Change Action Plan

NEP National Expenditure Program NGA National Government Agencies

OSBP Online Submission of Budget Proposals

P/A/Ps Programs, Activities, and Projects

PS Personal Services

QAR Quality Assurance and Review

RA Republic Act

STO Support to Operations

SUCs State Universities and Colleges

TBH Technical Budget Hearing

UACS Unified Accounts Code Structure

VA Vulnerability Assessment

Message from DBM

Climate change is undoubtedly one of the most pressing issues that the world faces, if not the most pressing. And while the Philippines ranks behind other nations in terms of greenhouse gas emissions, our people—and the growing economy—stand to bear the brunt of globally rising mean temperatures. This reality makes it all the more urgent for the government to take the lead in developing strategies and plans for climate change adaptation and mitigation.

The Government of the Philippines has certainly endeavoured to do this by making many changes in the way we prepare for and respond to calamities and natural disasters.

After Typhoon Yolanda hit the country in November 2013, we committed not simply to rebuild stricken areas, but to "build back better." We've steadily increased our expenditures for climate change in recent years, reaching 5 percent of our total Budget in 2015. In 2014, we mobilized the national budget process to tag climate change expenditures using a common policy-based typology and guidelines. This supported national government agencies to identify, plan, track and report their climate change expenditures at the same time allows oversight agencies to plan, prioritize and monitor the national climate change response allocation and performance.

This manual represents our efforts to implement long-term solutions to climate change by presenting a standard methodology for including it in the budget process. It is the result of tireless and dedicated work by staff from the Department of Budget and Management and the Climate Change Commission, with indispensable technical assistance from the World Bank.

While our country will always be vulnerable to climate change, we can adapt to and mitigate its effects with careful planning and efficient execution. The processes outlined in the following pages will ensure that we build on our current achievements for the benefit of future generations.

FLORENCIO B. ABAD

Secretary

Department of Budget and Management

Foreword from CCC

Proper management and provision of climate finance is crucial to ensure effective national response to climate impacts. The Philippines acknowledges the importance of strengthening its climate finance governance through managing and tracking its climate budget. As the country prepares for the implementation of measures consistent with the Paris Agreement, putting in place a transparent robust system to manage and track climate budget allocation is needed.

The Operations Manual on the National Climate Budgeting is a big boost to our efforts to increase our country's resilience to adverse climate impacts and transition to a climate-smart development. This highlights how the Government gives priority in budget allocation to climate change actions incorporated in the plans ad programs of national government agencies.

The Manual provides a comprehensive reference material to guide agencies in climate budgeting at the national level and show how it is integrated in the budget process. It serves as a monitoring tool to keep track of the government's responses to climate change and earmarking budget for these purposes. This manual also provides the foundation for determining whether the tagged programs, activities and projects are climate responsive.

In particular, the Manual prepares the government managers, planners, budget officers and other technical staff of NGAs for the entire process of climate budgeting – from orientation to provision of relevant and timely data for the formulation of appropriate climate response programs and projects, including estimates of public resources being channeled to these programs and projects.

The Manual has 63 pages. Half of that is dedicated to annexes containing materials that highlight the initiative of the government to institutionalize climate financing. Indeed, the Philippines is stepping up its efforts with the government providing the impetus to enable us to adequately respond to climate change.

EMMAN M. M. DE GUZMAN Secretary and Vice Chairperson Climate Change Commission

Table of Contents

Abbreviations	2 3
Institutionalization through Policy: DBM-CCC Joint Memorandum Circular 2015-01	8
Methodology	
2. Technical Support and Orientation	11
3. Climate Change Expenditure Tagging Guidelines and Typology	12
3.1 CCET Guidelines	13
3.2 CC Typology Codes	16
4. Climate Change Expenditures	20
5. Quality Assurance and Review	21
6. Analysis of CC Expenditures	25
7. Communicating CC Expenditures	
7.1 Technical Budget Hearing (TBH)	26
7.2. Reporting the National Climate Budget	28
8. Climate Change Expenditure Data Storage and Management	32
Support System: CCET Help Desk	33
ANNEXES	
Annex A: Integration of CC Response in the National Budget Cycle	
Annex B: DBM/CCC JMC 2015-01	35
Annex C: Roles and Responsibilities of the Department of Budget and Management	41
Annex D: Roles and Responsibilities of the Climate Change Commission	42
Annex E: National Climate Change Expenditure Tagging Typology Manual	43
Annex F: Climate Budget Brief	57
Annex G: Glossary of Terms	66
Annex H: Frequently Asked Questions	69

Introduction

The Philippines is extremely vulnerable to climate risks due to its geographic location, along with a variety of social, economic, and environmental factors that aggravate climate impacts. Climate projections by the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) indicate that there will be a reduction in rainfall in most parts of the country during the summer months, and a generally decreasing trend in rainfall in Mindanao by 2050. The physical impacts of these changes, combined with warmer oceans, rising sea levels, and ocean acidification, are projected to slow down economic growth, reduce job creation, and make it more difficult to reduce poverty in coming decades.

In recognition of these fast-growing resulting challenges from global climate change, the Government of the Philippines (GoP) has shown strong leadership through the adoption of comprehensive climate policies and plans. In 2009, the GoP passed Republic Act 9729, known as the Climate Change Act, mandated national government which agencies (NGAs) to mainstream climate change into their policies, plans, and programs in order to build a more solid foundation for climate resiliency. In addition, the Climate Change Commission (CCC) was created to lead policy formulation. monitoring, and evaluation of CC programs and activities across NGAs. In 2010, the GoP formulated the National Climate Change Action Plan (NCCAP), a comprehensive strategic climate reform agenda spanning three six-year phases from 2011 to 2028. The NCCAP outlines specific programs and strategies for CC adaptation and mitigation. In 2013, the Climate Public Expenditure and Institutional Review (CPEIR), detailing the current status of the GoP's climate program, was completed by the World Bank under the leadership of the Department of Budget and Management (DBM) and CCC. Recognizing

the challenges in scaling up its climate response, the GoP Oversight Agencies have formulated and are implementing a dynamic three-year work plan to address the key barriers identified in the CPEIR.

Τo sustain the focus on these transformative climate reforms and NCCAP priorities. on Philippines has started to mainstream climate change in its national budgeting process. In 2014, the DBM, together with the CCC, established a common framework for identifying and tagging climate change expenditures across all NGAs. This Climate Change Expenditure Tagging (CCET) framework consists of policy-based definitions of CC response, a detailed CC typology, a common method for tagging CC expenditure, a process of reviewing and reporting on results, and the assignment of roles and responsibilities to NGAs. CCET has been integrated with the DBM's budget systems, a significant step towards its institutionalization. This has enabled the GoP to build further institutional and technical capacity to more effectively plan, coordinate, budget, and deliver on the NCCAP priorities.

The climate budgeting takes advantage of the improvements in the planning budgeting process through the Two-Tier Budget Approach (2TBA). The 2TBA process requires diligent planning from Departments/Agencies in order for them to develop affordable and sustainable budgets that direct resources to the attainment of national goals and improve overall effectiveness of public services. The CCET at the same time can help agencies justify the alignment of expenditures to Climate Change Adaptation and Mitigation which is one of the identified key priority areas of the government.

This Operations Manual on National Climate Budgeting provides technical staff of the DBM, CCC, and NGAs with quidance on the operationalization of CCET. It ensures a consistent approach to implement one of the foundations of climate budgeting at the national level, including enabling the strengthening discussions using climate budget data. This manual complements the DBM-CCC Joint Memorandum Circular 2015-01 (amended the JMC 2013-01) "Revised Guidelines for CC Expenditure Tagging," and details these key steps of climate budgeting processes, which have been designed to fully align with the yearly planning and budgeting stages at the national level. Additionally, this manual is designed to be useful for Congress, and for other oversight bodies and agencies in monitoring and evaluating aovernment performance, as well as for civil society in strengthening their engagement government agencies to review progress and ultimately, continue to improve the national CC response.

This Operations Manual is one of the key products of the climate budgeting framework developed and implemented by the Government of the Philippines since FY2015, anchored on the results of the 2013 CPEIR and the ongoing public finance management reform agenda. Other key products of climate budgeting include:

- (i) climate expenditure tagged budgets at the national government level for the 2015 and 2016 budgets,
- (ii) a set of climate budget briefs for FY2015 and FY2016 for key NGAs,
- (iii) climate expenditure tagged 2016 Annual Investment Plans for many local government units located in highly vulnerable provinces;
- (iv) a corresponding set of AIP briefs for the LGUs;
- (v) climate budget documents for FY2015 and FY2016 that provide comprehensive summaries of the overall climate response of the government in relation to the strategic priorities and goals; (vi) a guidance document for member agencies of the CCAM that provides instruction on the formulation fo the Risk Resiliency Program: (vii) the automation of national CCET; and
- (vi) a local climate budgeting operations manual to complement the DBM-CCC-DILG JMC ensuring consistent approach in climate budgeting at the local level.

When fully implemented, the climate budgeting framework will give the best available indication of public resources being channeled to address specific CC priorities and the extent to which the national policy and institutional context and priorities guide these expenditures. Specifically, it will:

- a) Enable more effective channeling of resources to identified climate change priorities and more efficient delivery of credible results on these priorities through increased coherence and synergy between budget, policies, programs, and institutions, as it:
 - Generates timely statistics and baseline information identifying the GoP's climate response;
 - Provides estimates of the public resources being channeled to address each of the NCCAP priorities;
 - Identifies specific climate programs being implemented by NGAs, thereby enabling improved coordination and collaboration across NGAs:
 - Increases transparency over the allocation of resources across programs and priorities; and
 - Establishes the foundations towards increases of accountability for the outputs to be delivered and the intended outcomes.

- b) Facilitate the Philippines' readiness for accessing, administering, and coordinating flows of domestic and international climate finance by:
 - Promoting formulations of guidelines for climateresponsive project selection and appraisal;
 - Building ownership among NGAs for their respective climate-responsive programs;
 - Measuring the readiness of the effectiveness of the GoP's institutional capabilities in translating climate change policy goals into climateresponsive development outcomes; and
 - Evaluating the quality of the public sector decision-making process for climate response.

To ensure the Manual's conceptual and operational relevance, the DBM and the CCC aim to continually review and update this Manual, guided by feedback from its partners.

Institutionalization through Policy: DBM-CCC Joint Memorandum Circular 2015-01

The GoP has put climate action as a budget priority and major public expenditure. In December 2012, the DBM issued National Budget Memorandum (NBM) No. 115, requiring the identification and prioritization of climate change activities being undertaken by the NGAs. However, the lack of clear instructions on tagging and limited NGA responsiveness to this requirement spurred the DBM and the CCC take steps towards systematically prioritizing, sequencing, financing, tracking, and reporting on programs, activities, and projects (P/A/Ps) that are responsive to climate change.

Starting in 2014, the GoP mobilized the national budget process to tag climate expenditures using a common policy-based typology and guidelines. The DBM-CCC Joint Memorandum Circular 2015-01 (amended the JMC 2013-01) "Revised Guidelines for CC Expenditure Tagging (CCET) amending JMC No 2013-01" (ANNEX B) aims to support all NGAs to identify, plan, track, and report their CC expenditures and the National Oversight Agencies to plan, prioritize, and monitor the national CC response allocation and performance.

The JMC consists of five key elements:

- i) NCCAP-based definitions and strategies of CC response: The JMC adopts the NCCAP definitions of CC responses, classifying them as either adaptation or mitigation (Sec 3.2, and 3.5) and identifies a detailed CC typology of activities (Annex B of the JMC). The typology, which includes NCCAP's seven strategic priorities and one crosscutting area, is used by NGAs to classify and report on their CC responsive actions.
- ii) A process for determining CC response expenditures in the budget, consisting of: (i) identification of CC adaptation and mitigation P/A/Ps, (ii) identification of

- the CC components within P/A/Ps using the CC typology, and (iii) determination of the CC expenditures in the identified components consistent with the definitions (Sec 4.0).
- iii) The assignment of NGA roles and responsibilities: ΑII aovernment instrumentalities are required identify and tag their P/A/Ps with CC expenditures and submit the list of CC tagged P/A/Ps as part of their annual submission of budget proposals. including a duly accomplished Quality Assurance and Review (QAR) form. In addition, NGAs can propose new CC typology codes for CCC's review and approval (Sec 5.0). All NGA proposals are required to be reviewed by the DBM to ensure consistency with the National Budget Call, and by the CCC to evaluate their alignment with the NCCAP. The CCC can also participate in the Technical Budget Hearings (TBHs), if necessary.
- iv) Functions and details of the CCET Help Desk: A help desk, stationed at the CCC, was established and institutionalized to facilitate the implementation of JMC by providing support and assistance to all government instrumentalities on CCET (Sec 5.2.2). The assistance includes orientations and capacity building, updating and disseminating Frequently Asked Questions (FAQs), and providing timely responses to NGAs' inquiries on CC budgeting.
- v) Guide on quality assurance and review: NGAs are mandated to setup an internal quality review process to ensure P/A/Ps are identified based on their objectives using a standardized quality assurance and review process (Sec 5.1.5). QAR Forms are submitted to the help desk and evaluated by the CCC (Sec 5.3.2).

Methodology

The Philippines has led the development of a standardized CC typology and coding structure for use in the planning, budgeting, monitoring, and reporting of public CC expenditures. This section details the processes of climate budgeting, aligned with the yearly planning and budget stages at the national level.

In 2015, the DBM started to adopt a Two-Tier Budget Approach (2TBA) as part of its efforts to improve the effectiveness and transparency of public spending. The 2TBA separates the discussion and deliberation of existing activities and projects from the consideration of entirely new spending proposals, including proposals for the expansion of existing activities. The 2TBA enhances the ability of the government to prioritize and manage spending, and engages the President and the Cabinet in setting the strategic direction and distribution of unallocated resources.

In order to assist agencies in their preparation of their budget under the 2TBA, the DBM has prepared a Guide to the Two-Tier Budget Approach.

1. Agency Internal Planning

The first step under the 2TBA Detailed Processes is Agency Planning and Preparation. Under the planning and preparation phase, Agencies should link their plans and budget proposals to the priorities of the Administration as well as the government's sectoral and sub-sectoral objectives and resource availability.

Climate budgeting formally begins in planning. The effectiveness of the climate response requires incorporation of climate change issues not only within the budget cycle but also upstream agency planning – from developing policies to identifying and designing programs.

In order to strengthen agency-level planning and prioritization, targeted dialogues and discussions with the NGAs responsible for leading NCCAP implementation shall be initiated to review progress on priorities and to identify gaps. With the CC expenditure baseline established in 2015, the CCC conducted several meetings prior to the issuance of the budget call to share the results of the climate budgeting and its impact on the NGAs' internal planning exercises.

Key steps:

Timeline: December-January

- 1.1 The CCC shall organize agency-level dialogue with key NGAs that are critical for the implementation of the NCCAP. This can include, but is not limited to, the following agenda:
 - Determine NGAs' CC responses (e.g. renewable energy portfolio standards, Metro Manila Flood Management Master Plan) in relation to the NCCAP, using their previous year's climate budgets;
 - ii. Identify gaps in NGAs' CC responses in relation to the NCCAP; and
 - iii. Inform the NGA's roles and responsibilities based on the agreed Results-Based Monitoring and Evaluation System.
- 1.2 The NGAs shall undertake internal deliberations on their respective priorities, based on institutional mandates, prior to the issuance of the national budget call. NGAs can prioritize climate response in these deliberations by developing and implementing clear guidelines that incentivize climate responsiveness. The guidelines shall:
 - i. Highlight the importance of addressing climate change and how it will be prioritized in internal NGA deliberations;
 - ii. Solicit information from each regional and program management unit to document its climate responsiveness. Such information will inform the internal deliberations and support the extent to which the requested actions are to be prioritized in NGA budget proposals.

2. Technical Support and Orientation

Deepening of NGAs' knowledge on climate budgeting is required to ensure the quality and reliability of CC expenditure. The preparatory support that is provided by the DBM and the CCC during orientation sessions and through the CCET Help Desk will heighten climate change awareness among the NGAs' staff. The main

challenge faced by NGAs is difficulty in understanding CC concepts and terminologies relevant to their respective sectors. A clearer exposition of CC concepts and terminologies with NGA-specific examples, along with timely dissemination and improved access to support, would enhance CCET quality.

Key steps:

Timeline: January-March

- 2.1 The DBM and the CCC shall organize a series of orientation sessions on climate budgeting, aligned with the budget calendar. The orientation sessions will: (1) provide participants with an overview of climate budgeting and the JMC as well as information on CC definitions and concepts, (2) present the CCET guidelines and typology, and (3) advertise available support for climate budgeting. The specific roles and responsibilities of the DBM and the CCC for the orientation sessions are:
 - i. The DBM shall issue a Circular Letter addressed to all heads of government instrumentalities mandating attendance and participation in climate budgeting orientation sessions. Target participants are NGA planning, budget, and CC focal officers.
 - The CCC shall facilitate logistical preparation as mandated in the DBM-CCC JMC No. 2015-01, including preparation of presentations and CCand CCET-related information materials.
 - iii. Both the DBM and the CCC shall facilitate and document the orientation series.
- 2.2 NGAs may request copies of CC budgeting information materials through the CCET Help Desk (helpdesk@climate.gov.ph) and/or download them from the CCC website (www.climate.gov.ph).

3. Climate Change Expenditure Tagging Guidelines and Typology

Climate Change Expenditure Tagging (CCET) lays the foundation for climate budgeting by tagging programs, activities, and projects as climate responsive. CCET generates timely statistics and baseline information, enabling policy makers to identify the GoP's climate

response and estimate the public resources being channelled to address each of the NCCAP priorities. Results of the CCET, particularly for FY2015, established the GoP's climate change expenditure baseline according to the outcome and output areas of the NCCAP.

Key Steps:

Timeline: March-April

- 3.1 During budget preparation, the DBM shall ensure that the CCET is incorporated in the Online Submission of Budget Proposal (OSBP) System, which includes updating of the CC typology embedded in the OSBP.
- 3.2 Annually, the CCC shall provide the DBM-Fiscal Planning and Reforms Bureau (FPRB) an updated list of NGAs' CC expenditures with their reviewed CC typology codes. This shall be integrated in the OSBP System and the Budget Preparation and Management System (BPMS). The goal of pre-uploading the CC expenditures is to incentivize the NGAs that actively participated in the prior years' climate budgeting processes, as well as to maintain the quality of the tagging. NGAs with pre-uploaded CC expenditures shall be quided as follows:
 - i. NGAs cannot delete pre-uploaded P/A/Ps and CC typology codes;
 - ii. NGAs can add new P/A/Ps as CC expenditures; and
 - iii. For terminated P/A/Ps, NGAs shall input "zero".
- 3.3 The DBM's Information and Communications Technology Systems Service shall ensure that tagged P/A/Ps in the OSBP are automatically carried over in the BPMS for succeeding budgetary levels, including the NEP and the GAA.
- 3.4 NGAs can propose and submit to the CCET Help Desk (helpdesk@climate.gov.ph) a request for additional typology codes. Requests shall be reviewed and evaluated by the CCC.
- 3.5 The CCC shall oversee the updating of the National CCET Typology Manual (see *ANNEX E*), including the issuance of updated CC typology to the NGAs. The same shall be forwarded to the DBM for updating of the CCET in the OSBP.

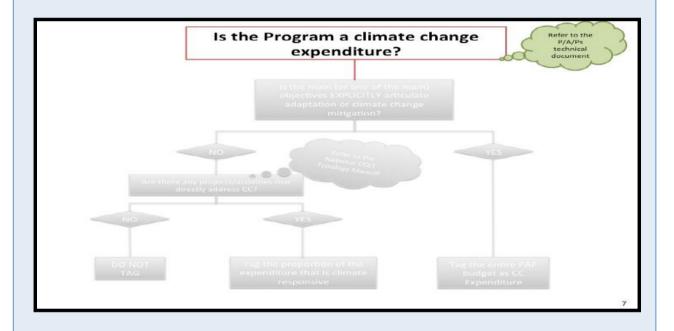
3.1 CCET Guidelines

CCET entails NGA assessments of each P/A/P in the budget along three dimensions: (1) if the P/A/P is climate responsive; (2) for climate responsive P/A/Ps, if the entire P/A/P or only specific components thereof are climate responsive; and (3) classify and tag

the P/A/P using climate expenditure typology codes, and report the budget for the P/A/P or specific component(s). These three dimensions are explained with the following four CCET steps:

<u>CCET Step 1:</u> Using the P/A/P technical document and with reference to the P/A/Ps' objectives, the NGAs shall identify P/A/Ps as <u>EITHER</u> climate change adaptation-related or climate change mitigation-related (*refer to Box 1 for definitions*) under each of the following:

- ✓ General Administration and Support (GAS);
- ✓ Support to Operations (STO);
- ✓ Operations;
- ✓ Locally-Funded Projects (LFPs); and
- ✓ Foreign-Assisted Projects (FAPs).



BOX 1: Defining CC Adaptation and Mitigation

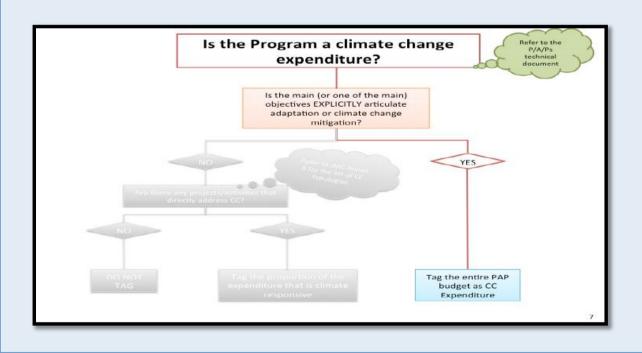
ADAPTATION:

An activity should be classified as adaptation-related if it intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience.

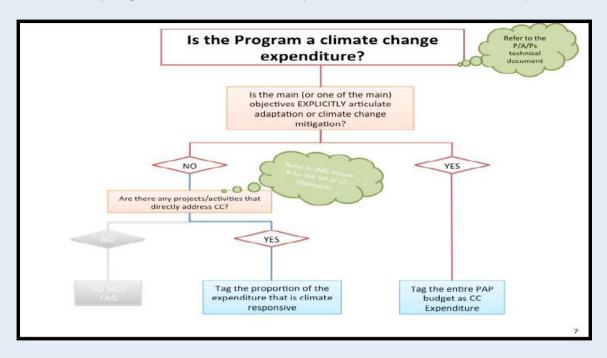
MITIGATION:

An activity should be classified as climate change mitigation-related if it contributes to the objectives of stabilization of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration.

<u>CCET Step 2:</u> For P/A/Ps identified as CC adaptation-related or CC mitigation-related, its entire budget shall be tagged as CC expenditure <u>IF THE MAIN OBJECTIVE OR ONE OF THE MAIN OBJECTIVES OF THE P/A/P</u> is to address climate change.



If the P/A/P's main objective does not explicitly articulate addressing climate change, identify only the components of the P/A/P that directly address climate change based on the CC typology, and include only the expenditure of the identified CC component(s).



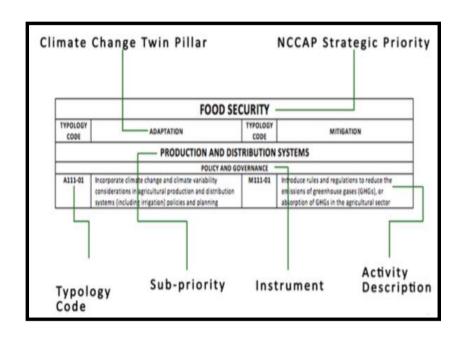
CCET Step 3: NGAs shall tag the identified CC expenditures based on the CC typology and report them on BP Form 201-F in the OSBP. Details 2015 2016 2017 PS MOOE CO FinEx Total BALANCE 0 0 0 0 UACS FPAP ID 186003010100003 Policy formulation Entry Location If nationwide, check this Typology: M831-01 - Setting policy direction on national and local climate change mitigation action MOOE Co FinEx Save New New LOCATION ACTUAL TYPOLOGY MOOE CO FinEx Close

<u>CCET Step 4:</u> In cases when revisions are made to an NGA's total budget request, the NGA shall also update the BP Form 201-F accordingly.

3.2 CC Typology Codes

The Philippines has developed a standardized climate change typology and coding structure. In the absence of established best practices, the CC typology adopted in the JMC was developed by the CCC, based on the priority activities identified

under the NCCAP. This was supplemented by activity-typologies developed by the World Bank and other multilateral development banks to provide a more comprehensive and detailed coverage of CC activities.



The CC typology comprises six main elements in order to guide NGAs' planning and budgeting officers in coursing through the list of CC activities. The elements of the CC typology are as follows:

- i. Climate change objective (Adaptation and Mitigation)
- ii. Strategic priority Seven NCCAP priority areas (Food security, Water sufficiency, Ecosystem and environmental stability, Human security, Climate-smart industries and services, Sustainable energy, Knowledge and capacity development), plus one cross-cutting area
- iii. Sub-priority (Outcomes identified in each NCCAP strategic priority)
- iv. Instrument (Policy and governance, Research & development extension, Knowledge and capacity building & training, Action delivery)
- v. Activity description

These five elements are used to develop a six-digit CC typology code, which consists of:

- (i) a letter (A or M) indicating the climate change objective,
- (ii) three digits denoting the strategic priority, sub-priorities, and instrument, respectively, and
- (iii) a two-digit activity code.

FIGURE 1: Understanding CC typology code



Learning from the first two years of implementation, and with inputs from the NGAs, the CC typology codes were reviewed and revised accordingly. Currently, there are 247 activity-level typology codes (reduced from 412 in 2014) the majority of which focus on adaptation (Table 1). The streamlining of CC typology codes was done to make them distinct from each other, policy-relevant, and operationally manageable to track. In addition, the linkage

of the CC typology to NCCAP was strengthened by converting subsectors to sub-priorities tied to the outcomes of the NCCAP Strategic Priorities (Table 2). Lastly, the CC typology was improved by establishing a standard hierarchical structure with distinct and mutually exclusive elements to uniformly incorporate instruments of action across all NCCAP strategic priorities (Table 3).

TABLE 1: Evolution of CC Activity Typology Codes, 2014-present

	Year 1 (2014)	Year 2 (2015)	Current (2016- onwards)
Strategic Priorities	8	8	8
Sub-priorities	28	14	18
Instruments	71	4	4
Activities	412	239	247
Adaptation Activities	243	<i>157</i>	164
Mitigation Activities	169	82	83

TABLE 2: Conversion of Subsectors to NCCAP Sub-Priorities

Strategic Priority	Subsector (2014-2015)		Sub-priority (2016-onwards)	Notes on changes
1. Food Security	Agriculture and	1.1	Production and Distribution	Merged
	Livestock Fisheries	1.2	Systems Agriculture and Fishing	fisheries, and divided based on
	i isiiciics	1.2	Communities	FS outcomes
2. Water Sufficiency	Flood Protection	2.1	IWRM and Water Governance	Re-categorized into 3, based on
	Water Sufficiency	2.2	Sustainability of Water Supply	outcome
	Water Sanitation and Solid Waste	2.3	Access to Safe and Affordable Water	
3. Ecosystem and environmental stability	Forest and Biodiversity	3.1	Ecosystems and Ecological Services	Renamed (same content)
4. Human Security		4.1	Community and Local-level CCA/DRR	Added 4.1 per
	Health	4.2	Health and Social Protection	NCCAP outcome
	Settlements and Land Use	4.3	Human Settlements and Services	
5. Climate- Smart Industries and Services	Tourism, Trade, and Industries	5.1	Climate-Smart Industry	Divided into 3 outcomes per NCCAP outcome
		5.2	Sustainable Livelihood	
		5.3	Green Cities and Municipalities	
6. Sustainable Energy	Energy Efficiency	6.1	Energy Efficiency	Add in 6.4 per
	Power Generation	6.2	Sustainable Renewable Energy	NCCAP outcome
	Transportation & Communication	6.3	Environmentally-Sustainable Transport	
		6.4	Climate Resilient Energy and Transport Infrastructure	
7. Knowledge and Capacity	Education and CC Science	7.1	Knowledge of Climate Science	Renamed 7.1 and divided into 3
		7.2	Local and Community CCAM & DRR Capacity	outcomes
		7.3	CC Knowledge Management	
8. Cross-cutting		8.1	Convergence Planning and Coordination	Added in 8.1 per NCCAP outcome
	Finance	8.2	Finance	

TABLE 3: Definition of Instruments

Instrument	Definitions
1. Policy and Governance	✓ Enabling activity focused on empowering stakeholders to take action through the development, adoption, monitoring, and review of policies, plans, regulations, department administrative order, or executive order.
2. Research and Development, Extension	 Enabling activity focused on the generation, management, and sharing of information.
3. Knowledge and Capacity Building and Training	✓ Enabling activity focused on institutional capacity to implement climate action, including through dissemination, awareness-raising, and training activities focused on knowledge update.
4. Action Delivery	✓ Includes activities that directly mitigate GHGs / sequester carbon, or that reduce risk and/or vulnerability or increase adaptive capacity or potential impact.

4. Climate Change Expenditures

To formally commence the Tier 1 Budget Submission Process, the DBM releases the National Budget Memorandum on the Budget Call in January. The Budget Call contains general information on the budget process and strategy plus the Budget Preparation (BP) forms and instructions, and timelines for agencies to complete and submit the forms.

As part of the GoP's Public Fiscal Management Reforms, the DBM developed a new form designed to report the NGAs' requested CC expenditures based on the CC typology. Starting in FY2015, the National

Budget Call included BP Form 201-F as part of the budget preparation forms. BP Form 201-F provides a summary of identified P/A/Ps that are responsive to CC adaptation or mitigation, wherein CC expenditures are identified for three fiscal years: (i) previous FY (Actual); (ii) current FY (Current); and (iii) succeeding FY (Proposed), further subdivided into Tier 1 and Tier 2. For P/A/Ps identified as CC responsive, each CC expenditure is subdivided into four allotment classes: (i) Personal Services, (ii) Maintenance and Other Operating Expenses, (iii) Financial Expenses, and (iv) Capital Outlays (CO).

| CUMATE CHANGE PURPORTURES | COMMENT | COMMEN

FIGURE 2: CC Expenditure Form (BP Form 201-F)

Key Steps:

Timeline: March-April

- 4.1 At every budget preparation phase, the DBM shall ensure the inclusion of the BP Form 201-F or the CC Expenditure Form as part of the budget preparation forms.
- 4.2 Accordingly, the DBM shall give the CCC viewing and printing access to BP Form 201-F and BP Form 201 (Summary of Obligations) for climate budget analysis. This shall be communicated to the CCET Help Desk.
- 4.3 The DBM shall ensure that CC expenditure forms can be downloadable in MS Excel and PDF file formats.
- 4.4 The DBM's concerned Budget and Management Bureaus (BMB) shall remind NGAs to complete and submit BP Form 201-F.

5. Quality Assurance and Review

Ensuring the quality of the climate change expenditure data is a key part of the budget review process. Having a documentary basis for the tagging decisions increases transparency and credibility of the CC expenditures reported by the Government. For FY2015, the CCC set up an interim system to ensure the quality of the collected data and to facilitate the update of the data in the budget planning, prioritization, monitoring, and reporting processes.

In FY2016, the CCC introduced the Quality Assurance and Review (QAR) Form to help NGAs document the climate objective, outcome, and relevance of the tagged CC expenditures. The QAR process clarifies the objectives and coverage of the tagged P/A/P, and identifies its interconnectedness with adaptation or mitigation. The JMC enjoins agencies to set up an internal quality review process to ensure that P/A/Ps are identified based on the objectives in the prescribed QAR Form (Sec 5.1.5).

FIGURE 3: Quality Assurance and Review (QAR) Form

P/A/P	CC Typology Used	Main Objective	CC Objectives	CC Risks being addressed?	Climate Information U sed
Planning and Policy Formulation for Soil and Water Resources Conservation, Management and Development	A111-01	To achieve food security and help alleviate poverty in the rural areas amidst climate change	To increase adaptive capacity of natural agriculture ecosystem	drought, flooding	Projections, scenarios, vulnerability studies, hazard/ risk maps)
Forest Development, Rehabilitation, and Protection, including P81,000,000 for slope protection in Regions 6,7,8	M314-02	forestlands and watersheds through reforestation, especially those areas that are critically denuded	that serve as carbon sink that contribute to the mitigating impacts	global warming, flooding, flash floods, soil erosions, landslides, land/coastal degradation	maps, scenarios, vulnerability studies, research studies, climate projections
Construction/Repair/ Rehabilitation of Typhoon-Damaged Weather Stations and Facilities	A714-01	acquisition for the Agency's continuous operations and forecasting	To support and strengthen the Agency's infrastructure and support facilities to be able to conform to CC objectives	Hazardous weather and disaster	Global standards in operations and maintenance of weather-related facilities

- (1) Include the P/A/P tagged as adaptation or CC mitigation.
- (2) Identify the corresponding activity-level typology. Refer to JMC Annex B CC Typology.
- (3) Include the Main Objective of the P/A/P. Refer to the P/A/P technical document.
- (4) Identify objectives that are relevant to 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.

Reviewing the quality and appropriateness of CC expenditure tagging decisions and documentation are essential in strengthening the results of climate budgeting. The review can focus on the three main elements of the

tagging decision: (a) Climate Responsiveness, (b) CC Typology, and (c) CC Expenditure. The data sources that can be used and the type of review for each data element are summarized in Table 4.

TABLE 4:
Data Sources and Type of Review by Tagging Decision Element

Tagging Decision Element	BP Form 201-F	QAR Form	Policy Guidance Document	Type of Review
(a) CLIMATE RESPONSIVENESS	P/A/P tagged (CC typology code exists)	(i) Main objective or (ii) Climate objective	DBM/CCC JMC	Meets definitions in JMC
(b) CC TYPOLOGY				
CC Objective	First character of typology code (A or M)	(i) Climate objective or (ii) CC risks addressed or (iii) CC information used	JMC	Meets adaptation or mitigation criteria in JMC
Strategic Priority	Second character of typology code (1 to 8)	(i) Climate objective or (ii) CC risks addressed	NCCAP	Identifies outcome /output area under NCCAP strategic priority
Sub-Priority	Third character of typology code	(i) Climate objective	NCCAP	Identifies outcome /output area under NCCAP strategic priority
Instrument or Activity Type	Fourth character of typology code in FY16 (1 to 4)	(i) CC risks addressed or (ii) CC information used	JMC	Identifies type of activity as listed in JMC
(c) CC EXPENDITURE	CCE as share of P/A/P budget	(i) Main objective or (ii) Climate objective		Identifies P/A/P components tagged if CC is not main objective

(a) CLIMATE RESPONSIVENESS:

- ✓ Does the climate change objective listed in the QAR form for a tagged P/A/P meet the climate response definitions listed in the JMC?
- ✓ If yes, is the climate expenditure typology code used to classify the P/A/P appropriate and consistent over time?
- ✓ Is the climate expenditure attributed to the P/A/P adequately documented and consistent over time?
- For P/A/Ps that do not meet these criteria, based on consultations with their respective NGAs, the recommendation is to delete them.

(b) CLIMATE TYPOLOGY:

(b.1) Climate Change Objective

- ✓ Does the climate objective in the QAR form substantiate the climate pillar code (first character of the typology code) for a tagged P/A/P? Inconclusive climate objective information in the QAR can be substantiated by responses on the QAR form to the CC risks addressed or CC information used.
- ✓ Does the climate change objective listed in the QAR form for a tagged P/A/P meet the climate adaptation or climate mitigation definitions listed in the JMC?

(b.2) Strategic Priority

- ✓ Do the responses on climate objective or climate risks in the QAR form substantiate the NCCAP strategic priority code (second character of the typology code) for a tagged P/A/P?
- ✓ Does the QAR form substantiate the contribution the P/A/P makes to the outcomes or outputs of a specific NCCAP strategic priority?
- ✓ Does the QAR form validate the strategic priority by locating the activity in the relevant section of the NCCAP technical document?

(b.3) Sub-Priority

- ✓ Does the climate objective in the QAR form substantiate the sub-priority code (third character of the typology code) for a tagged P/A/P?
- ✓ Does the QAR form substantiate the contribution the P/A/P makes to the outcomes or outputs of a specific NCCAP strategic priority?

(b.4) **Instrument:** The QAR form does not have a question to directly substantiate the Instrument code (fourth character of the typology code). However, responses to some of the other QAR questions may be corroborated by the code used in BP Form 201-F.

(c) CLIMATE EXPENDITURE: The JMC instructs NGAs to either report the entire budget for the P/A/P if climate response is its primary objective or only the expenditure for the climate responsive components. Neither the BP Form 201-F nor the QAR Form requires identification of specific components. With the available data, the climate expenditure can be checked to ensure that it is less than the full budget when climate response is not a primary objective or the QAR form clearly identifies that only specific components are climate-responsive.

In addition to reviewing the quality and appropriateness of CC expenditure, matching tagged P/A/Ps from different stages of the budget cycle and years is also a prerequisite for completing a consistency check. The matching is applied to P/A/Ps that have already cleared the consistency check above and only includes P/A/Ps that have been tagged in at least one instance. The matching

is done manually, using the UACS as reference for identifying and matching P/A/Ps. The UACS was adopted by the DBM and the Commission on Audit (COA) to enable the timely and accurate reporting of actual revenue collections and expenditures against budgeted programmed revenues and expenditures.

The following steps are made to review the consistency of tagging over time:

- (i) P/A/P IS TAGGED ONLY IN PROPOSED FY: Review if the P/A/P is redesigned or a completely new proposal. If the P/A/P is redesigned in the proposed FY, also tag the P/A/P in previous and current FY using the updated typology and maintain a constant CC expenditure share for the P/A/P among the three years. However, if the P/A/P is a completely new proposal only tag it in the proposed FY.
- (ii) P/A/P IS TAGGED ONLY IN THE CURRENT FY: Review if the P/A/P is scheduled to be closed in the current FY or if it has been redesigned. If redesigned, also tag the P/A/P in proposed FY using the same typology and maintain a constant climate expenditure share for the P/A/P between the two years.

Key Steps:

Timeline: March-April

- 5.1 The CCC shall enjoin the NGAs to manually submit their duly accomplished QAR Forms, as mandated in the JMC. This shall be an accompanying document to the BP Form 201-F submission of the NGAs, and can be forwarded to the CCET Help Desk via electronic mail.
- 5.2 The CCC shall review the QAR Forms in terms of consistency of tagging and climate responsiveness of the tagged P/A/Ps.
 - i. Consistency of the tagging and typology code reported on the BP Form 201-F with the information reported in the QAR Form; and
 - ii. Quality of the documentation reported in the QAR by linking to the guiding policy documents (JMC, and the NCCAP).
- 5.3 If tagged P/A/Ps do not meet the criteria, the CCC shall consult with the NGA for possible exclusion of the initially tagged P/A/Ps. This shall be communicated to the concerned NGA via the CCET Help Desk.

6. Analysis of CC Expenditures

The climate change expenditures (BP Form 201-F) provides an indicative estimate of the public resources being channelled to address climate change. In order to review each NGA's CC prioritization as reflected in its BP Form 201-F submission, the CCC has developed a Climate Budget Brief for each key CC NGA since FY2015. The Climate Budget Brief is a document that focuses on the responsiveness of an NGA's CC expenditure in addressing the roles and responsibilities identified in the NCCAP, informing the TBHs, and supporting the preparation for the succeeding fiscal years.

The Climate Budget Brief (i) discusses the requested CC expenditure (BP Form 201-F) in relation to the budgets in previous years, thereby identifying and supporting major CC initiatives; (ii) highlights any gaps from the requested budget in relation to activities identified in the NCCAP; and (iii) includes recommendations, when appropriate, and a possible set of issues for discussion during the TBH. The quality and the depth of the budget briefs vary based on the span of time between the NGA submission of the final budget request and the TBH, which was as short as one day in some instances. A sample climate budget brief is available in Annex F.

For FY2015 and FY2016, climate budget briefs are being utilized in three stages of the budget cycle, which can be used in different budget and policy dialogue platforms:

- (i) CC expenditures submitted at the OSBP are being used to inform the TBH;
- (ii) CC expenditures in the NEP are being used to inform congressional budget hearings. In addition, CC expenditures at the NEP level are also used to communicate the President's commitment to addressing climate change; and
- (iii) CC expenditures in the GAA are being used to inform the public on the approved climate budget for the fiscal year, and inform NGAs' internal planning and budgeting framework.

Key Steps:

Timeline: April - May

- 6.1 The CCC shall update the CC expenditure master file as the NGAs' BP Form 201-F are submitted to the DBM. The master file is a temporary consolidation and storage of tagged P/A/Ps, corresponding to CC expenditures in various budget stages and fiscal years. The CCET Help Desk is in charge of updating the CC expenditure master file.
- 6.2 The CCC shall develop climate budget briefs for key CC NGAs to include, but not limited to, the members of the Cabinet Cluster on CCAM and oversight agencies such as the CCC, the National Economic and Development Authority (NEDA), the Department of Finance (DOF), and the DBM.
- 6.3 The climate budget briefs shall be shared with the DBM-FPRB and the responsible bureau of the DBM handling the respective NGAs with CC expenditures submitted/tagged/reported. The briefs will be communicated to the DBM prior to the scheduled TBH.

7. Communicating CC Expenditures

The CCET provides a basis to improve the GoP's strategic dialogue and transparency on its CC expenditure priorities with the public and legislators. Reporting on the results of the CCET strengthens the link between the government's budget and climate change policies by allowing monitoring on the

implementation of NCCAP. Communicating the results of the climate budgeting will assist in measuring the extent to which the government's institutional capability for CC response is effective in translating policy goals into development outcomes.

7.1 Technical Budget Hearing (TBH)

The NGAs are required to defend their annual budget requests at the TBH conducted by the DBM. The CCET initiative has created a specific evidence-based entry point for reviewing the prioritization of CC expenditures by NGAs. Starting in 2014, the TBH also became an avenue to discuss the proposed climate budget. The CCC, as the Philippines' lead policy-making body on CC, became a member of the technical panel of the TBH to discuss identified key CC issues based on its analyses of the NGAs' CC expenditures. The CCC participated in the TBH of NGAs with major roles in the implementation of the NCCAP.

Beginning with the FY2017 Budget Preparation, NGAs are to summarize their CC programs based on what they have tagged in their budget request and how these relate to NCCAP (presented in two slides), as part of their TBH

presentations. This will assist in the conduct of policy dialogues between the NGAs and the CCC to ensure progress is being made in NCCAP implementation and to eliminate gaps systematically.

The slides below show the sample formats for NGAs in reporting their requested climate budgets, guided by the following questions:

- (i) How much of the total requested budget will be allocated to address climate change?
- (ii) What is the share of CC expenditure in the total requested budget?
- (iii) What is the focus of the climate budget—adaptation or mitigation?
- (iv) What are the big-ticket P/A/Ps that respond to CC? (v) Is there any department policy passed in relation to CC?

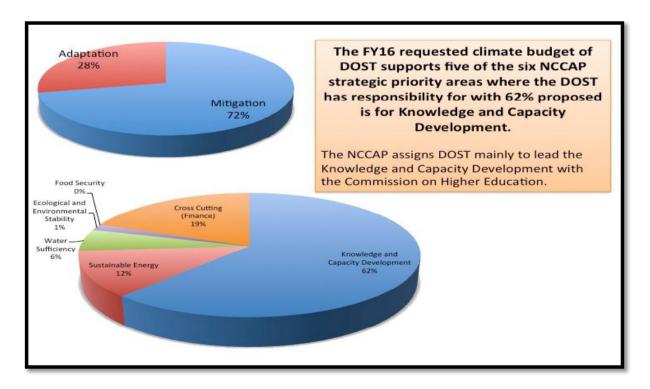
Slide #1: Summary of the Agency's requested climate budget

- Table or Pie chart of the climate budget and the total requested budget
- List of large CC expenditures

Particulars		Levels in '000		Growt	Growth Rates	
	2015	2016	2017	2015-2016	2016-2017	
	Actual	Adjusted	Proposed			
CC Budget						
Adaptation						
Mitigation						
Share to Local Budget						
arge CC Expenditure in	cludes:					

Slide #2: Climate objective of the NGA's requested climate budget and relationship with the NCCAP

- · Pie chart on adaptation and mitigation
- Pie chart on the NCCAP's strategic priority



Key Steps:

Timeline: April - May

- 7.1.1 In accordance with the JMC, the CCC shall be included in the TBH panel to provide feedback and raise issues in relation to climate change at every budget cycle.
- 7.1.2 The DBM-Budget Technical Bureau (DBM-BTB) shall provide the CCC with regular updates on the dynamic TBH schedule to facilitate the CCC's participation. This can be communicated to the CCC via electronic mail (helpdesk@climate.gov.ph).
- 7.1.3 The DBM-BTB shall require each NGA to include a summary of its requested CC expenditure in its TBH presentation. NGAs shall also address CC-related inquiries raised during the TBH by the DBM and the CCC. This ruling shall be included in the Guidelines in the Conduct of the TBH disseminated to NGAs prior to the TBH.
- 7.1.4 The CCC shall develop a formal set of recommendations with standardized form on the CC expenditures to be submitted to the DBM-BMBs for consideration after the TBH.

7.2. Reporting the National Climate Budget

The results of CCET provide an evidentiary basis for communicating the CC priorities of the GoP. Reporting the national climate budget also increases transparency over the allocation of funds to P/A/Ps, aids in the identification of potential gaps, and reports on the impacts of CC response financing across programs and projects. Reporting the results of climate budgeting:

- ✓ Provides a common information basis across NGAs for making more effective climate response planning and implementation decisions;
- ✓ Enables the CCC to better coordinate across agencies in a holistic manner and to advocate climate response priorities;
- ✓ Provides the DBM with increased clarity on how to prioritize funding of proposed climate action: and
- ✓ Fosters increased public support for scaling up climate financing domestically and internationally through increased transparency and accountability in budgeting, in line with the government's public finance management reform and good governance agenda.

There are two identified avenues to report the climate budget:

- (i) in the President's Budget and
- (ii) after the legislation of the budget (GAA).

Once the budget is considered and approved by the President and his Cabinet, the National Expenditure Program (NEP) is then prepared and printed together with the Budget of Expenditures and Sources of Financing (BESF), Staffing Summary and the President's Budget Message. The

President's budget combines the outcomes of Tier 1 and Tier 2 process into a consolidated budget proposal. In the third week of July, and within 30 days of the State of the Nation Address (SONA), the President's Proposed Budget is submitted to Congress.

President's Budget: A Proposed Climate Budget

The Proposed Climate Budget provides a summary of the President's climate change priorities and proposed budget. As the budget preparation ends with the submission of the President's Budget to Congress, the Proposed Climate Budget provides a summary of NGAs' CC expenditures as approved and included in the NEP. The CC

expenditures are consolidated by department and then identified as supporting CC adaptation or mitigation. The President's proposed climate budget also provides detailed discussions and analyses on select CC expenditures, mostly covering those with allocations higher than PHP 1.0 Billion.

Key Steps:

Timeline: May-June

- 7.2.1 The DBM's Strategic Communications Unit in coordination with CCC, shall include a detailed discussion on CC expenditures and analyses in the following budget reports:
 - i. Technical Note;
 - ii. Budget ng Bayan; and
 - iii. President's Budget Message.
- 7.2.2 The BMB for Food Security, Ecological Protection and Climate Change Management Sector (FSEPCCMS), based on the Management Status Report that will be generated in the System as validated/updated by the BMBs, shall consolidate the results of climate budgeting (CC expenditures tagged) for inclusion in the Budget of Expenditures and Sources of Financing (BESF), following the table format below:

This table provides a summary by department and its CC expenditures classified according to CC adaptation or mitigation.

Dept		Actual		А	djusted		Р	roposed	
	CC Expenditure		CC Expenditure			CC Expenditure			
	Adaptation	Mitigation	Total	Adaptation	Mitigation	Total	Adaptation	Mitigation	Total
Dept #1									
Dept #2									
Total									

This table provides a summary of the Climate Budget by NCCAP Strategic Priority

National Climate Change Action Plan Strategic Priorities	Actual	Adjusted	Proposed
Food Security			
Water Sufficiency			
Ecological and Environmental Stability			
Human Security			
Climate-Smart Industries and Services			
Sustainable Energy			
Knowledge and Capacity Development			
Cross-cutting			
Total			

National Climate Budget Document

The National Climate Budget Document is an annual report on the national government's climate change program, as reflected in the budget approved in the General Appropriations Act (GAA). It summarizes the total amount of National Government financing directed towards attaining CC adaptation or mitigation objectives, and it

identifies how the allocated resources are distributed across government agencies and across P/A/Ps. It also summarizes the level of support that has been provided towards the attainment of the intermediate outcomes under each of the NCCAP strategic priorities, and provides an initial assessment of the funding gaps across output areas.

Key Steps:

Timeline: December-January

- 7.2.3 The CCC shall develop a National Climate Budget Document based on CC expenditure tagging of the NGAs in the approved GAA. Its scope is limited to characterizing the approved budget and towards assessing the climate allocation decisions of the Government in relation to its stated policies and plans.
- 7.2.4 The CCC shall update the National Climate Budget Document available on its website (www.climate.gov.ph) for public dissemination. This shall also be shared with the NGAs for guidance in their internal planning and prioritization.
- 7.2.5 The CCC shall also coordinate with the DBM-Open Data Initiative to update the climate change expenditure database available at the Open Data Initiative (www.data.gov.ph). This will be updated annually.

8. Climate Change Expenditure Data Storage and Management

The CCET enables the Government to establish a transparent baseline. The data initially gained from the implementation of the DBM-CCC JMC will enable policy discussions of CC response, and aid in strengthening accountability and transparency of the GoP through the full disclosure of the climate budget. Therefore, it is critical to carefully store and manage climate budget data to sustain the gains of the CCET.

Starting in 2015, the DBM mobilized the Open Data Initiative (ODI) as a platform to share climate budget data, which includes datasets from CCET such as climate budget per NGA and climate budget per NCCAP strategic priority, along with climate budgeting infographics. These datasets can be freely accessed by the public and can be downloaded as spreadsheets, among other formats.

Key Steps:

Timeline: January - February

- 8.1 The CCC shall create a data storage and management system of all submissions of BP Form 201-F (CC Expenditure Form).
- 8.2 The CCC shall periodically update the CC Expenditure Master file, a temporary consolidation and storage of tagged P/A/Ps, corresponding to CC expenditures in various budget stages and fiscal years. The CCET Help Desk will take charge of updating the master file.
- 8.3 The DBM, in coordination with the CCC, shall update the climate budget data that is made available in the ODI.

Support System: CCET Help Desk

The CCC and the DBM put in place several mechanisms to strengthen the capacity of NGAs in climate budgeting, including the establishment and institutionalization of a Help Desk to assist in the implementation of the DBM-CCC JMC 2015-01. The help desk shall provide assistance to NGAs on climate budgeting, including CCET. This includes, but is not limited to:

- Supporting the implementation of NGA-specific orientations and providing capacity building on climate budgeting;
- Assisting in the facilitation of the CCC and DBM training sessions on climate budgeting;

- 3. Starting an online community of climate budgeting practices;
- 4. Prompting advisories (e.g. memorandums, circulars) on climate budgeting;
- Providing timely responses to queries on climate change and climate budgeting, and tracking communication by keeping records of exchanges;
- 6. Consolidating and updating the Frequently Asked Questions (FAQs) section:
- 7. Disseminating relevant climate budgeting materials, including climate change information; and
- 8. Assisting the CCC in collecting, organizing, analyzing, and reporting climate expenditures.

The Help Desk is stationed at the CCC Office, Malacañang, and is composed of CCC staff, namely:

Ms. Harriet A. Tauli - Team Leader

Ms. Maricar S. Palaña Ms. Jeninah F. Castro

Phone: (02) 735-3144

Email: helpdesk@climate.gov.ph
Mail: Climate Change Commission

2/U Little President's Learning Palace

1558 J.P Laurel Street.

Malacañan Complex, San Miguel

Manila, Philippines 1005

Annex A

Integration of CC Response in the National Budget Cycle

Stages of the National Budget Cycle	Integration of CC Response into the Stages of the Budget Cycle
Budget Preparation	
National Budget Call	Development of inclusion of BP Form 201-F (Climate Change Expenditure Form), guidelines for CCET, and CC typology
Submission of Budget Requests	(1) Online submission of BP Form 201-F,(2) Creation of a CCET help desk at the CCC, and support services, including orientation for NGAs
Budget Request Review	(1) Submission of QAR Form to CCC,(2) Quality assurance and review process
Technical Budget Hearings	(1) Development of climate budget briefs, (2) CC discussions at TBH
The President's Budget	 (1) Inclusion of CC expenditures in the President's Budget Message (PBM), and Budget of Expenditures and Sources of Financing (BESF); (2) CC expenditure approved in the NEP are automatically generated by the DBM
Budget Legislation	
Congressional deliberations	(1) CC discussions at congressional deliberations(2) Reporting of the proposed National Climate Budget
Enactment	(1) CC expenditure approved in the GAA are automatically generated by the DBM(2) Reporting of the National Climate Budget Document
Budget Execution	
Budget Accountability	

Annex B

DBM/CCC JMC 2015-01







REPUBLIC OF THE PHILIPPINES

Department of Budget and Management Climate Change Commission

JOINT MEMORANDUM CIRCULAR

No. 2015-01 March 24, 2015

FOR

All Heads of Departments, Agencies, Bureaus, Offices, Commissions, State Universities and Colleges, Government-Owned and Controlled Corporations, and Other Instrumentalities of the National Government

and all Others Concerned

SUBJECT

Revised Guidelines for Climate Change Expenditure Tagging

(CCET) amending JMC No. 2013-01

1. OBJECTIVE

The Government of the Philippines has demonstrated leadership and strong commitment in implementing a comprehensive reform agenda to respond to climate change (CC). With the goal of using the budget process to plan, prioritize, and monitor CC expenditure, the Government has mobilized the National Budget Preparation Process to tag climate change expenditures using a common policy-based typology and guidelines. The Government also developed the Risk Resiliency Program (RRP), a program that constitutes a major part of the overall climate change expenditure.

Building on the lessons learned during the 2015 budget process, coupled with the developments in the budgeting system introduced by the DBM, e.g, the implementation of the Unified Accounts Code Structure (UACS) to strengthen the process for tracking, monitoring, and reporting of CC expenditures, and performance-informed budget-outcome based starting 2015, and the revision in the climate change typologies, the previously issued Joint Memorandum Circular No. 2013-01 dated December 27, 2013 is hereby amended.

To be consistent with outcome-based budgeting of the DBM, performance indicators specific to climate change expenditures shall also be formulated in sync with the National Climate Change Action Plan.

2. PURPOSE

To track, monitor and report climate change programs, projects and activities to enable oversight and line department managers to monitor climate change-related expenditures; and

To define and clarify responsibilities of national government agencies, the Department of Budget and Management (DBM), and the Climate Change Commission (CCC) relative to the climate change expenditure tagging at the various stages of the budgeting process.

3. 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.
- 3.2. Climate Change Adaptation an activity should be classified as adaptation-related if it intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience. Climate change adaptation includes the following responses:
 - 3.2.1. Measures that address the drivers of vulnerability. Vulnerability is the result of the magnitude of exposure of humans and ecosystems to climate-related hazards. Some of the drivers of vulnerability are poverty, lack of economic assets and lack of knowledge on the risks since they limit the capacity of the exposed population to cope properly to climate change. Some of the expenditure programs that fall under this category include poverty reduction, income and livelihood diversification, and health programs that are specifically designed to respond to climate change risks and variability.
 - 3.2.2. Measures that directly confront climate change impacts. These types of expenditures are those that directly address the impacts or potential impacts of climate change variability, such as infrastructures that incorporate climate change risks in their design and/or their implementation to minimize impacts from climate change risks.
 - 3.2.3. 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. Expenditure programs under this category shall include but not be limited to reducing land degradation, reforestation programs, climate resilient crop varieties or farming techniques, effective early warning systems and other investments specifically designed to respond to projected climate changes and variability.
- 3.3. Climate Finance financing used to fund climate change expenditures.

- 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 an activity should be classified as climate change mitigation if it aims at reducing greenhouse gas emissions (GHG), directly or indirectly, by avoiding or capturing GHG before they are emitted to the atmosphere or sequestering those already in the atmosphere by enhancing "sinks" such as forests. Climate change mitigation includes the following responses
 - 3.5.1. Measures to reduce greenhouse gas (GHG) emissions such as but not limited to improved energy efficiency, renewable energy projects, reforestation/ improved forest management, and improved transport systems.
- 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. Outcomes are the likely or achieved short-term and medium-term effects of an intervention's outputs. These are the observable behavioral and institutional changes, usually as the result of coordinated short-term investments in individual and organizational capacity building for key development stakeholders.¹ In the context of the National Climate Change Action plan, these are <u>immediate outcomes</u> defined along the seven thematic areas whose interrelated result areas contribute to the NCCAP's ultimate outcomes of "enhanced adaptive communities, resilience of natural ecosystems and sustainability of built environment to climate change and successful transition towards climate smart development".
- P/A/Ps refers to programs (GAS, STO, operations)/activities and projects of the agency.
- 3.9. 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, policies, other related activities.
- 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.
- 3.11. 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)
- Vulnerability the degree to which geo-physical, biological and socioeconomic systems are susceptible to, unable to cope with the adverse impacts of climate change.

²⁰¹¹⁻²⁰¹⁶ Philippine Development Plan Results Matrices

3.13. Unified Accounts Code Structure (UACS) – is a government-wide system established to aid in reporting financial transactions of the National Government of the Republic of the Philippines. The UACS provides a framework for identifying, aggregating, and reporting financial transactions in budget preparation, execution, accounting, and auditing.

4.0 GUIDELINES

- 4.1 All climate change related strategies and investments of the government shall be identified as adaptation and mitigation as defined in Sections 3.2 and 3.5 of this JMC.
- 4.2 Agencies shall be guided by the Quality Review and Assurance (QAR) Guidelines (Annex A) developed by the CCC, which shall be accomplished by the Agencies in the evaluation and finalization of the P/A/Ps that will be tagged based on the CC typology. The QAR shall provide for the basis for tagging, analysis of proposed P/A/Ps and relationship of contributing factors toward the attainment of NCCAP outcomes.
- 4.3 To classify climate change related-expenditures to be tagged in the Online Submission of Budget Proposal (OSBP), NEP and GAA, the following shall be undertaken:
 - 4.3.1 National Government Agencies, SUCs and GOCCs shall review/examine the P/A/Ps technical documents if it qualifies as an adaptation or mitigation response based on the guided questions included in Annex A;
 - 4.3.2 For P/A/Ps that qualify as adaptation or mitigation, the entire P/A/P budget shall be tagged as CC expenditures, if one of the main objectives of the P/A/P is to address CC. Otherwise, only the budgets for those components of the P/A/P that directly address CC, based on the CC typology (Annex B), will be included as CC expenditure;
 - 4.3.3 NGAs, SUCs, and GOCCs will tag the identified CC expenditures based on the CC typology, which will be included in the BP Form 201-F or DBM Form 712 as part of their online submission of budget proposed (OSBP).
- 4.4 Agencies who do not have any P/A/Ps that can be tagged as either climate change adaptation or mitigation can tick 'No Climate Change Expenditure' in their respective BP Form 201-F or DBM Form 712;
- 4.5 The Help Desk will provide support and assistance to NGAs, SUCs, and GOCCs in climate change expenditure tagging. For technical and system inquiries, Help Desk can be reached through phone at (02) 735-3144 or email at helpdesk@climate.gov.ph.

5.0 ROLES AND RESPONSIBILITIES

- 5.1 Departments, Agencies, Bureaus, Offices, Commissions, State Universities and Colleges, Other Instrumentalities of the National Government and all Others Concerned shall:
 - 5.1.1 Identify and tag climate change expenditures based on Climate Change Typologies (Annex B);
 - 5.1.2 Establish and document the baseline for identified climate change P/A/Ps. The baseline cost is the total cost of a P/A/P in the absence of any climate proofing action.
 - 5.1.3 Submit to the DBM through the OSBP, the climate change expenditures as prescribed in the National Budget Call (NBC);
 - 5.1.4 After submission of the climate change expenditures to the OSBP, submit to the CCC through email (<u>helpdesk@climate.gov.ph</u>) the agency's duly accomplished QAR Form for evaluation;
 - 5.1.5 Set up an internal quality review process to ensure P/A/Ps are identified based on their objectives using a standardized Quality Review and Assurance (QAR) (Annex A) with support of the CCC;
 - 5.1.6 Submit to DBM the BP Form 201-F or Form 712 consistent with the National Expenditure Program (NEP) and the General Appropriations Act (GAA) within two (2) weeks upon submission to Congress and effectivity of the GAA, respectively; and,
 - 5.1.7 Propose and seek the approval of the CCC for new typologies.
- 5.2 The Department of Budget and Management (DBM) shall:
 - 5.2.1 Ensure that the submission of the concerned Departments, Agencies, Bureaus, Offices, Commissions, State Universities and Colleges, Other Instrumentalities of the National Government and all Others Concerned is consistent with the above Section 5.1.3;
 - 5.2.2 Establish, together with the CCC, a Help Desk to provide support to agencies consistent with functions stated in Section 4.5;
 - 5.2.3 Provide the CCC generated BP Form 201-F (for NGAs and SUCs) or DBM Form 712 (for GOCCs) and other pertinent data needed in order to take stock of, monitor, and analyze national climate change expenditure;
 - 5.2.4 Ensure readiness of the tagging systems, consistent with the UACS.
- 5.3 The Climate Change Commission (CCC) shall:
 - 5.3.1 Streamline the typology consistent with the UACS.

- 5.3.2 Evaluate agency proposal of climate change components against the existing typology and duly accomplished QAR Form;
- 5.3.3 Review and approve new typology proposals of the agencies consistent with the UACS;
- 5.3.4 Attend and participate in the Technical Budget Hearings (TBH) of concerned agencies, when necessary; and
- 5.3.5 Together with DBM, strengthen NGAs', SUCs' and GOCCs' capacity to undertake CCET.

6.0 For immediate compliance.

FLORENCIO B. ABAD

Secretary

Department of Budget and Management,

MARY ANN LUCILLE L. SERING

Climate Change Commission



Annex C

Roles and Responsibilities of the Department of Budget and Management

As per Section 5.2 of the DBM/CCC JMC 2015-01, the DBM shall:

- Ensure that the submissions of the concerned Departments, Agencies, Bureaus, Offices, Commissions, State Universities and Colleges, Other Instrumentalities of the National Government and all Others Concerned are consistent with Section 5.1.3;
- Establish, together with the CCC, a Help Desk to provide support to agencies consistent with functions stated in Section 4.5;
- Provide the CCC generated BP Form 201-F (for NGAs and SUCs) or DBM Form 712 (for GOCCs) and other pertinent data needed in order to take stock of, monitor, and analyze national climate change expenditure; and
- Ensure readiness of the tagging systems, consistent with the UACS.

Annex D

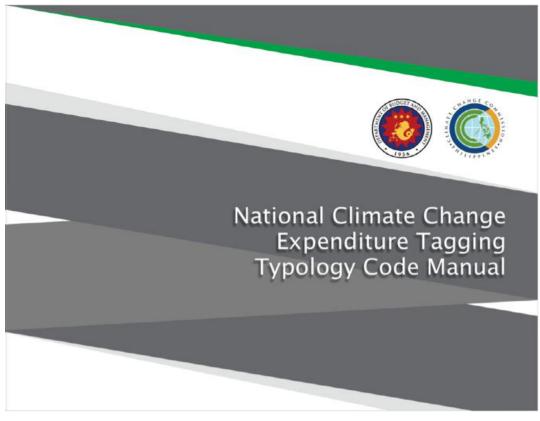
Roles and Responsibilities of the Climate Change Commission

As per Section 5.3 of the DBM/CCC JMC 2015-01, the CCC shall:

- 1. Streamline the typology consistent with the UACS;
- 2. Evaluate NGAs' proposed climate change expenditures against the existing typology and duly accomplished QAR Form;
- 3. Review and approve new typology proposals by the NGAs consistent with the UACS;
- 4. Attend and participate in the Technical Budget Hearings (TBH) of concerned agencies, when necessary; and
- 5. Together with DBM, strengthen NGAs', SUCs' and GOCCs' capacities to undertake CCET.

Annex E

National Climate Change Expenditure Tagging Typology Manual





ntroductior

The Climate Change Expenditure Tagging (CCET) lays the foundation for climate budgeting, it enables identification and tracking of climate responsive expenditure in the budget and facilitates a discussion on its performance. CCET also generates timely statistics and baseline information for assessing trends, tracking budget execution and monitoring physical performance. The finalized data is expected to facilitate the establishment of a climate change expenditure baseline by the National Climate Change Action Plan (NCCAP) outcome and output area in support of an informed policy dialogue within and outside government.

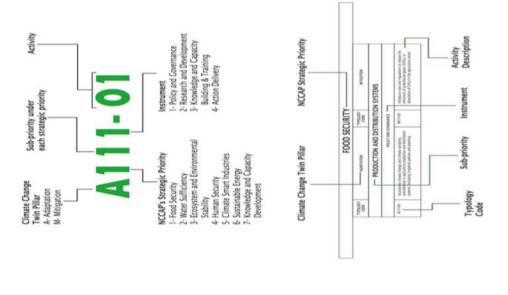
Since 2014, the National Government Agencies (NGAs) is tagging its respective budget since the adoption of the CCET of the national budget through the Department of Budget and Management (DBM) and the Climate Change Commission (CCC) loint Memorandum Circular (IMC) 2013-01.

Climate change expenditure tagging entails NCA assessments about each Program, Activity, and Project (PAP) in the budget along three dimensions: (i) if the PAP is climate responsive; (ii) for climate responsive PAPs, if the entire PAP or only specific components are climate expenditure typology code, and responsive the budget for the PAP or specific identified components.

The Philippines developed a standardized climate change (CC) typology and coding structure. In the absence of established best practices, the CC typology and guidelines adopted in the JMC were developed by the CCC from the CC activities based on the priorities identified under the National Climate Change Action Plan (NCCAP) and restructuring the overall structure in use at the World Bank and other MDBs to provide comprehensive and detailed coverage of CC activities.

Learning from the first two years of implementation, and with inputs from the NGAs, the CC typologies were reviewed with the objectives of: (i) streamlining the CC typology to ensure distinction from each other, remain policy-relevant, and operationally manageable to track; (ii) establishing a standard hierarchical structure of typology with distinct and mutually exclusive elements, and uniformly incorporates instruments of action across all strategic priority areas.

The CC typologies now include 247 activity-level typologies, coming from the 412 activity-level typologies in 2014; with majority focused on adaptation activities.



Definition of Terms

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

Climate Change Adaptation

an activity should be classified as adaptation-related if it intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate related risks, by maintaining or increasing adaptive capacity and resilience

Climate Change Mitigation

an activity should be classified as climate change mitigation if it aims at reducing greenhouse gas emissions (GHG), directly or indirectly, by avoiding or capturing GHG before they are emitted to the atmosphere or sequestering those already in the atmosphere by enhancing "sinks" such as forests

NSTRUMENT

Policy and Governance

Enabling activity focused on empowering stakeholders to take action through the development, adoption, monitoring, and review of policies, plans, regulations, department administrative order, or executive order.

Research & Development, Extension

Enabling activity focused on the generation, management, and sharing of information.

Knowledge and Capacity Building & Training

Enabling activity focused on institutional capacity to implement climate action including through dissemination, awareness raising and training activities focused on knowledge update.

Action Delivery

Includes activities that directly mitigate GHG/sequester carbon or reduce risk and/or vulnerability, increase adaptive capacity or potential impact.

and Capacity Development Ultimate Outcomes Knowledge Sustainable ind Services Industries Climate-Smart Security Human of communities, resilience of Enhanced adaptive capacity natural ecosystems, and environment to climate sustainability of built change. Ecological & Stability Sufficiency Water Intermediate Outcomes Security Food

Source: D8M and CCC Joint Memorandum Circular 2015-01

Food Security

Food Security

CODE	NOTIVITION	CODE	ипсатоя
	PRODUCTION AND DISTRIBUTION SYSTEMS	D DISTRIBUT	ON SYSTEMS
	POLICY A	POLICY AND GOVERNANCE	CE
A111-01	Incorporate climate change and climate variability considerations in agricultural production and distribution systems (including irrigation) policies and planning	M111-01	Introduce rules and regulations 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	M111-02	Introduce rules and regulations to reduce the emissions of GHGs, or absorption of GHGs in the fishing sectors
A111-03	Formulate guidelines on reversion of abandoned fishponds back to mangroves		
A111-04	Harmonize climate change adaptation plans in local resource management and local fisheries development.		
	RESEARCH	RESEARCH AND DEVELOPMENT	ENT
A112-01	Conduct agricultural vulnerability and risk assessments, impact assessments and simulation models on major crops and livestock	M112-01	Develop practices or rechniques that reduce GHG emissions and/or rechniques to sequester carbon dioxide (CO ₃) in crop production systems, animal husbandry systems, and aquaculture management systems.
A112-02	Conduct of provincial-level vulnerability and risk assessments for fisheries	M112-02	Sector studies, surveys, assessments on energy and water use efficiency in agriculture and fishery sector
A112-03	Develop climate-resilient crop and livestock production systems and technologies		
A112-04	Research on new threats to agriculture, fishing, and forestry from climate change and climate variability		
A112-05	Conduct researches on best practices in fisheries and coastal climate change adaptation, technologies and tools		
	KNOWLEDGE AND CAPACITY BUILDING & TRAINING	APACITY BUILDIN	IC & TRAINING
A113-01	Establish climate information systems and database/resource network on agriculture sector	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 on fishery sector	M113-02	Establish or strengthen institutions, information systems and capacity building on energy and water use efficiency in fishery sector
	ACT	ACTION DELIVERY	
A11401	Establish early warning systems for agriculture	M114-01	Integrated organic and inorganic nutrient management
A114-02	Establish early warning systems for fisheries	M114-02	Reduce fishing fleet
A114-03	Introduce or expand soil management practices that control soil erosion, nutrient. loss and improve the water regime in the soil profile	M114-03	Improve energy efficiency in fishing fleets
A114-04	Construct/Repail/Rehabilitate national and communal impation systems, dans and water storage systems to manage changes in the water cycle due to climate change and climate variability	M11404	Switch to soil management techniques that reduce CHC emissions or increase carbon sequestration
A114-05	Change fish farming and aquaculture practices or techniques to reduce winerability to climate change and climate variability	M114-05	Intensify or expand farm and fooder production using techniques that reduce GHG emissions or increase carbon sequestration
A114-06	Implement climate-responsive and gender-sensitive Comprehensive National Fisheries Industry Development Plan	M114-06	Manure management and methane capture in animal husbandry
		M114-07	Change forage systems to reduce ruminant methane emissions
		M114-08	Introduce or expand water pumping for irrigation using renewable energy sources
		M114-09	Replace existing water pumps with more energy efficient pumps
		M114-10	Implement agricultural and fisheries waste recycling and composting
		M114.11	Cauteh to lace undare interesting crows

THOLOGY	ADAPTATION	THPOLOGY CODE	MITGATION
	AGRICULTURE AND FISHING COMMUNITIES	ND FISHING CO	MMUNITIES
	POLICY	POLICY AND GOVERNANCE	
A121-01	Design climate change risk transfer and social protection mechanisms in agriculture and fisheres		
A121-02	Develop policies on food safety/food security measures that take account of new conditions caused by climate change.		
	RESEARCH	RESEARCH AND DEVELOPMENT	נו
A122-01	Conduct policy study on climate change risk transfer and social protection mechanisms for agriculture and fisheries		
	KNOWLEDGE AND CAPACITY SUILDING & TRAINING	APACITY BUILDING	& TRAINING
A123-01	Establish farmers' field school to demonstrate best adaptation practices		
A123-02	Develop and conduct formal and non-formal training programs on climate change adaptation (CCA) and disaster risk reduction (DRR)		
A123-03	Review fisheries education and develop climate change- responsive curricula		
	ACI	ACTION DELIVERY	
A124-01	Implement climate change risk transfer and social protection mechanisms in agriculture and fisheries		
A124-02	Introduce weather and/or climate indexed insurance programs le o, cron insurance)		

ter Sufficiency

Review and streamline existing water resources management and institutional and concentures. POLICY AND GOVERNANCE POLICY AND GOVERNANCE Review and streamline existing water resources management and institutional and review and policies. Develop guidelines for many terresources management and institution, recycling and reuse Develop guidelines for many terresources for many terresources for the process and character concentration, allocation, recycling and reuse Develop guidelines for many water conservation, allocation, recycling and reuse and character terresources for many water contention, such small water impoundments, and character terresources and character and retrobusings under vehicles for such share for conficient such policy conditions, supply demand conditions, and policy scenarios for surface and gradient publish and asserts in communities, circle, and sectors that are at its of present or future flooding. Confident vehicles for the present of the many formation measures and development and settlements based on whereafting and seasoner. Mounter releavable for the hydrologic tread and always is, forecasting and detecting shifts in percel of greedpation and stream flows Read of presidential stream flo	CODE	ADAFTATION	TPPOLOGY	MITGATION
PROLECY AND CONSENANCE PROLECY AND CONSENANCE of the prolecy of t		INTEGRATED WATER RESOURCE MANAG	GEMENT (IWRA	4) AND WATER GOVERNANCE
Review and tresumine existing water resources management and institution structure and policies. Structure and policies. Develop guidelines for water construction, allocation, recycling and climate change adaptation at the folk, watershird and finet basis here been to guidelines for rain water collection, such small water impoundment resurding basists, mini dans to address water shortage and finoding. Study "one cost, no regress" adaptation messures and struchologies under vibritogies under vibritogies under vibritogies under vibritogies under vibritogies under vibritodiogies, conditions, supply-demand conditions, and policy scenarios for and general private fibritogies under vibritodiogies conditions, supply-demand conditions, and policy scenarios for man general private fibritogies. Conduct vulnerability assessments in communities, cities, and sectors that conduct vulnerability and sessoners. Defens areas not sustable for large water infrastructure development and se based on vulnerability and sessoners. Menoler reservoir for hydrologic trend analysis, forecasting and detecting a precipation and stream film.		POUCY AN	ID COVERNANCE	
Develop policy and guidelines for water conservation, allocation, recycling Develop guidelines for implementing finegrated Water Resources Management change adaptation at the local, watershed and river time steal new Develop guidelines for rain water collection, such strong and finodriff conditions, may also address and stronger and finodriff Soundy Town cost, no regents' adaptation measures and stronger and shooting and groundwater spetims to be address, supply-demand conditions, and policy steraines for and groundwater spetims in communities, cities, and sectors that tiks to present or future flooding. Define anses not suitable for large water infrastructure development and selected on wherefalling and assessment. Monitor resources for the groundwater and selection of the precision of a stream flow.	4211-01	Review and streamline existing water resources management and institutional structure and policies		
Develop guidelites for implementing tinegrated Water Riscources Managem and future change adoption at the best, beside her beside her beginning to the property of the property and stock of the property of the	7511-05	Develop policy and guidelines for water conservation, allocation, recycling and reuse		
Develop guidelines for rain water collection, sock small water impoundment returning basins, min dams to address water shringer and fhooding. Sough five cost, no regress' adaptation measures and rechnologies under verbreiding conditions, supply-demand conditions, and policy streams to supply-demand conditions, and policy streams to supply-demand conditions, and policy streams first to a present or full return flooding. Defice areas not suitable for large water infrastricture development and se based on winerability and assessment. Newlor reservoir supply and suscessment. Newlor reservoir supply supply servation infrastricture development and se based on winerability and assessment.	4211-03	Develop guidelines for implementing integrated Water Resources Management (IMRM) and climate change adaptation at the local, watershed and river basin level		
Study Tow cost, no regrest "adaptation measures and technologies under yethologic conditions, supply-demand conditions, and policy steraints for and groundwater systems. Conduct vertexbilling systemstes in communities, cities, and sectors that its to present or future flooding. Define areas not suitable for large wazer infrastructure development and sw based on wherefalling hand assessment: Monitor resonoris for hydrologic tend analysis, forecasting and detecting therets of precipations and stream from	1211-04	Develop guidelines for rain water collection, such small water impoundments, retarding basins, mini dams to address water shortage and flooding		
		RESEARCH AN	ND DEVELOPMENT	
	A212-01	Study Tow cost, no regress' adaptation measures, and sechnologies under various hydrologic conditions, supply-demand conditions, and policy scenarios for surface and groundwater systems		
	4212-02	Conduct vulnerability assessments in communities, cities, and sectors that are at risk to present or future flooding		
	1212-03	Define areas not suitable for large water infrastructure development and settlements based on vulnerability and assessment.		
	1212-04	Monitor networks for hydrologic trend analysis, forecasting and detecting shifts in trends of precipitation and stream flow		
		KNOWLEDGE AND CAPA	ACITY BUILDING &	TRAINING
KNOWLEDGE AND CAPACITY BUILDING & TRAINING	A213-01	Conduct Integrated Water Resource Management (WRM) and climate change adaptation and disaster risk reduction training for winnerable communities		
Conduct Integrated Water Resource Management (MRM) and clin adaptation and disaster risk reduction training for winnerable to	4213-02	Develop gendered and accessible knowledge products and IEC materials that include focal and insigenous knowledge on water resources management, climate change impacts on water resources and adaptation best practices		
Corduct Integrand Ritter Resource Management (RRM) and cit adaptement (RRM) and cit adaptement additions and distance risks reduction training for vulnerable to Develop generated and accessible knowledge products and EC, flocal and religionous knowledge powarter resources and adaptation best practices impacts on water resources and adaptation best practices.		ACTIO	IN DELIVERY	
Conduct integrated Water Resource Management (IMM) and clic additions and distance risk reductors rusining to vulnerable to Develop genedered and accessible fromkedage products and IEC. To Develop genedered and accessible fromkedage on water resources management local and infegences innovelope on water resources and adaptation best practices.	A21401	Improve early warning information and alert systems to increase readiness to extreme flood risks		
Corduct Integrated Water Resource Management (WRM) and cit adaptation and distater risk reduction training for vulnerable to Develop genetered and excessible knowledge products and EC on local and infigerous inconfedge on water resources management imputs on water resources and adaptation best practices impose and watering information and alert systems to increase extreme food risks.	4214-02	Monitor impact of climate change and climate variability as part of water resource management		
Conduct integrated Water Resource Management (MRM) and clic adaptation and distance risk reduction training for waterstable to adaptation and distance risk reduction training for waterstable training to products and till produce and adaptation best practices impacts on water resources and adaptation best practices impacts on water resources and adaptation best practices impact of change distances to intrease sections flood risks. Rendere impact of change change and climate variability as part management.	4214-03	Incorporate climate change and climate variability in design standards for flood control and drainage systems		
Conduct Integrated Water Resource Management (WMM) and cit adaptation and distaster risk reduction training for vulnerable to Develop gendered and accessible howardings groubststs and EC no local and disipperous knowledge on water resources management impacts on water resources and adaptation best gractices improve early warming information and alert systems to increase extreme flood risks. Worston impact of climate changes and climate variability is part management and climate change and climate variability in design start control and desinage systems.	121404	insprue resilience of infrastructure (bridges, water supply, community britastructure, water stronge, castal defense, etc.) to account for climate change and climate weighbor water extreme weather and climate variability that could increase flood risks in infrastructure.		
Conduct integrated Water Resource Management (MRM) and cif- adaptation and distater risk reductors training for wheretable to Develop gendered and accessible knowledge products and RC. Develop gendered and accessible knowledge products management from and water stoucters and adaptation best practices improve early warning information and about systems to increase extreme food risks. Monther impact of climate change and climate waitability in design start management management management control and climate changes and climate variability in design start control and customage systems, etc.) to account for climate chan was tenege, cassal defense, etc.) to account for climate chan variability relates beautiful management chan variability relates customers.	A214-05	Rehabilitate of degraded watersheds and forest areas		

THOUGH	ADMINIST	TYPOLOGY	MITGATION
	SUSTAINABILITY OF WATER SUPPLY	TY OF WATER	SUPPLY
	POLICY A	POLICY AND GOVERNANCE	
A221-01	Develop public financing mechanism for water supply infrastructures rehabilitation and development		
A221-02	Develop a comprehensive ground water management program that includes CC vulnerability assessment		
	RESEARCH	RESEARCH AND DEVELOPMENT	NT
A22201	Conduct ground water resource vulnerability and recharge areas assessment in water stressed cities.		
A222.02	Improve hydrones infrastructure and monitoring systems for data coflection and management and the development and delivery of information, products and services to increase flood resilience.		
A222-03	Identify alternative water sources and demand management especially for unbanized areas that rely on reservoirs and are prone to recurrent and severe drought events		
	KNOWLEDGE AND CAPACITY SUILDING & TRAINING	PACITY SUILDIN	& TRAINING
A223-01	Training for community-based water associations to managed water supply infrastructures.	M223-01	Administration, sector studies, surveys, assessments, information systems and capacity building for energy and water use efficiency in water, sanitation and flood protection, and solid waste management
	YCLI	ACTION DELIVERY	
A22401	Implement water harvesting technologies and designs to improve management of storm water		
A22402	Construct new and expand existing water supply infrastructures for waterless communities		
A22463	Rehabilizate water infrastructure with climate lens (use of climate projections and other relevant climate dea)		

Water Sufficiency

Ecosystem & Environmental

Upgrade existing landfills to capture methane for energy generation or gas flaring for CO, generation Provide trainings on improving water efficiency in business operations ACCESS TO SAFE AND AFFORDABLE WATER KNOWLEDGE AND CAPACITY BUILDING & TRAINING RESEARCH AND DEVELOPMENT POLICY AND GOVERNANCE M231-01 M233-01 Design galdares for incorporating climate risk into water sanitation and treatment planning, operation, and management (including accounting for increased construction and maintenance costs that account for climate risk) Conduct vulnerability assessments for the sanitation and treatment of water supply Treatment of wastewater conservation/re-use purposes to respond to declines in water availability due to climate change and climate variability Study and adopt centralized wastewater treatment spitems to improve quality in highly urbanized and densely oppulated areas with respect to increased flooding, storm surge, and extreme precipitation events Develop programs and incentive system for CC proofing and retrofitting water infrastructure at the household/community levels 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. Increase local knowledge for how to consider climate change information and climate risks in water quality and wastewater treatment. incorporate risk of sea level rise, storm surge, and saliwater intrusion on the design and upgrades of coastal water sanitation infrastructure A231-02 A232-01 A231-01 A234-03 A232-02 A233-01 A234-01 A234-02

M314-02 Re-forestation and afforestation that increases vegetative cover or sequesters carbon Sustainable peat land/wetland/forest management and protection Implement and monitor progress of REDD+ related policies MITIGATION KNOWLEDGE AND CAPACITY BUILDING & TRAINING RESEARCH AND DEVELOPMENT M31401 M314-03 M314-04 POLICY AND GOVERNANCE Establish zoning guidelines for different ecosystems based on the vulnerability and risk assessment results Design and develop integrated ecosystem management approaches for watersheds and wetlands to reduce vulnerability to climate change variability Establish management information system for different ecosystems that link various data sources Study, design and implement financing mechanisms for IMPM and climate change adaptation implementation in critical watersheds and river basins Design payments for ecosystem services (PES) and other innovative conservation financing mechanisms to support ecosystem-based adaptation and mitigation Study and design financing mechanisms for IMRM and climate change adaptation implementation in critical watersheds and river basins. Review PEENRA policy and implement greening of the national income accounts Document and disseminate best practices, including climate change responsive A31402 Conserve and protect exciting watershed and protected areas. Delineate 'ridge-to-red' excessum based management zones for the excrowns through mail's stakeholder process Update status of Protected Areas and Key Biodiversity Areas from results from the vulnerability and risk assessment. Retain or re-establish mangrove forests, wetlands, and other ecosystems considerations to as protection against floods risks Implement training program on wealth accounting or ENRA Conduct ecosystems vulnerability and risk assessment Training on vulnerability and risk assessments indigenous practices A311-04 A311-01 A311-02 A312-02 A312-03 A313-02 A313-03 A313-04 A314-01 A311-03 A312-01 A312-04 A313-01

Human Security

TYPOLOGY CODE	ADATATION	TYPOLOGY	мпель
	COMMUNITY AND LOCAL LEVEL CLIMATE CHANGE ADAPTATION AND DISASTER RISK REDUCTION	ANGE ADAPTA	KTION AND DISASTER RISK REDUCTION
	POUCY	POLICY AND GOVERNANCE	
A411-01	Mainstreaming climate change adaptation (CCA) and disaster risk reduction and management (DRNM) in local plans		
A411-02	Design guidelines, emergency protocols, and encourage preparedness and risk/contingency planning in communities that are exposed to climate risk		
	RESEARCH	RESEARCH AND DEVELOPMENT	NT
A411-01	Develop innovative technologies and methodologies to communicating climate- related emergency information to relevant populations and communities		
A412-02	Identify, map and profile areas and communities highly proze to climate-related disasters		
A412-03	Assess impact of climate change and climate variability on livelihoods and poverty with focus on vulnerable groups		
	KNOWLEDGE AND CAPACITY BUILDING & TRAINING	APACITY BUILDING	& TRAINING
A413-01	Develop and implement knowledge management on climate change and disaster risks for local government units and communities		
A413-02	Increase local capacity for forecasting, early warning (including insigenous systems) and disaster risk communication		
A413-03	Conduct training of trainers to respond to the needs of communities for climate change adaptation		
	DV	ACTION DELIVERY	
A414-01	Identify and implement gender-responsive sustainable livelihood and social protoction programs for resettled and vulnerable poor families		

WITCHON	NO									ANING						
THOLOCY	HEALTH AND SOCIAL PROTECTION	POLICY AND GOVERNANCE						RESEARCH AND DEVELOPMENT		CITY BUILDING & TR				ACTION DELIVERY		
ADAPTATION	HEALTH AND S	POLICY AN	Develop policy requiring integration of climate change and disaster risk reduction concepts and approaches in medical and allied health training courses	Develop monitoring health infrastructure damage and rehabilitation plan	Develop post disaster epidemic outhreak management and disease surveillance system (ex. water-borne diseases and other health risks due to climate change)	Develop guidelines on treatment of health issues due to climate change and climate variability	Include climate related diseases in basic benefits of insurance policies	RESEARCH A	Assets changes in risk, exposure or sensibirity to climate change and climate variability related diseases for vulnerable groups	KNOWLEDGE AND CAPACITY SUILDING & TRANSAG	Training and education of health personnel on treatment, monitoring and surveillance of climate change and climate variability related health issues	Strengthen health management information management	Incorporate climate related health risks into clinical practice guidelines, and curricula for continuous medical education	ACTIO	Upgrade health systems to respond to changes in environmental health risks from climate change and climate variability (k.g. malaria)	Develop and implement program for community-based adaptation measures and basish americans necessoreless:
TYPOLOGY CODE			A421-01	A421-02	A421-03	A421-04	A421-05		A422-01		A423-01	A423-02	A423-03		A424-03	A424-02

Human Security

Climate Smart Industries & Services

พกาผูกกดพ	83								IINC			
TYPOLOGY	NTS AND SERVIC	POLICY AND GOVERNANCE				RESEARCH AND DEVELOPMENT			TY BUILDING & TRAI		ACTION DELIVERY	
ADAPTATION	HUMAN SETTLEMENTS AND SERVICES	POLICY AND (Consider changes to zoning and land use to accommodate increase flood risk from sea level rise, storm surge, and tropical cyclones in coastal and riverine communities.	Incorporate vulnerability to climate change and climate variability in housing design standards	Develop green building rating scheme, specifications and criteria	RESEARCH AND	Conduct risk and vulnerability assessment	Conduct a study on population carrying capacity of areas and CC adaptive capacity of various communities.	KNOWLEDGE AND CAPACITY BUILDING & TRAINING	Conduct of trainings and capacity buildings in integrating of climate-risks and information into land use planning and zoning	ACTION I	Develop and implement post-disaster resettlement and counseling of displaced families and communities
TYPOLOGY			A431-01	A431-02	A431-03		A432-01	A432-02		A433-01		A434-01

TYPOLOGY		TYPOLOGY	
CODE	NO INTERNATIONAL PROPERTY OF THE PROPERTY OF T	100	MINGRADA
	CLIMATE SM	CLIMATE SMART INDUSTRY	
	POLICY AND	POLICY AND GOVERNANCE	
A511-01	Enhance tourism policies and strategies to promote green tourism	M511-01	Introduce rules and regulations to reduce CHC emissions or absorb of CHCs in industry and trade.
		M511-02	Introduce a system of incentives to encourage the use of climate-smart technologies and practices
		M511-03	Integrate monitoring of existing and new-climate smart industries and services within existing business registration system
	RESEARCH AN	RESEARCH AND DEVELOPMENT	
A512-01	Conduct of research on green and climate-smart products	M512-01	Conduct baseline inventory of climate-smart industries and services and good practices in the country
		M512-02	Baseline data on CHC emissions from industry and other sources
		M512-03	Conduct national needs assessment on the state of eco efficiency in SMEs
	KNOWLEDGE AND CAPACITY BUILDING & TRAINING	ACITY BUILDING &	TRAINING
A513-01	Design and conduct training modules on climate-proofing industries and services	MS13-01	Develop modules and conduct trainings to capacitate industries to conduct GHG emissions inventory and carbon footprint.
	NOTTON	ACTION DELIVERY	
A514-01	Retrofit assets and capital to protect against climate change and climate variability		
	SUSTAINABL	SUSTAINABLE LIVELIHOOD	
	POLICY AND	POLICY AND COVERNANCE	
A521-01	Development of livelihood diversification strategies to reduce dependence of climate related income opportunities		
A521-02	Develop a nationally acceptable operational definition of "green jobs"		
	RESEARCH AN	RESEARCH AND DEVELOPMENT	
A522-01	Conduct studies and research on innovative and indigenous approaches promoting sustainable livelihood		
	KNOWLEDGE AND CAPACITY BUILDING & TRAINING	ACITY BUILDING &	TRAINING
A523-01	Conduct of trainings on sustainable livelihood for the communities and the vulnerable		
A523-02	Promoting and operating centers for skills development and sustainable development		
	ACTION	ACTION DELIVERY	
A524-01	Marketing and trade support for changing agricultural product mix in response to climate change and climate variability	MS24-01	Markeling and trade support for products that reduce CHC emissions per unit of output
A524-02	Support new income generating opportunities and industries utilizing natural resource better adapted to climate change and climate variability		

Sustainable Energy

FOLICY AND COVERNACE Record water excluded and climate change and climate untability risk facros in assessment of total and sessoonal water excludes and climate untability risk facros in assessment of total and sessoonal water excludes and climate untability for hydropouse generations and water storage Waster from management throughout the hydropouse generation and water storage Waster from management throughout the hydropouse generation and water storage Begin special or management throughout the hydropouse generation and water storage Begin special water excludes and service contracts based portfolios to a recovarge potential investors in identified sites Compass to government unit that can be seed for statinative level frood programs and climate Compass to government or special season and peak demand results from Compass to government or copy used as bilbereingy source Compass to government or copy used as bilbereingy source Section and the season and the second season and the section of the section of received to management or contract or direct change and climate variability on power system RESEARCH AND DENELOHMENT Conduct studies on hybrid systems (a.g. feet clin, electric vehicles)	TIERNEY/SIEENE Tittle	CODE	ADAPTATION	T/2000	мшелтон
Incorporate climate change and climate variability visit factors in assessments of trait and seasonal water availability for infortogone generation and water storage Water flow management throughout the hydrogone generation and water storage generation of presentation or seasonable to the hydrogone generation of the hydrogone generation of the hydrogone generation of the hydrogone generation of the hydrogone seasonable being the hydrogone good climate change and climate swarfallity in seasonal peak demand results from Change to one systems to cope with this in seasonal peak demand results from Change and climate variability source Received access to water for crops used as bloevering source Secure access to water for crops used as bloevering source for corporate motats of climate change and climate variability on power system MAG2 01	Incorporate climate change and climate variability visit factors in assessments of trait and seasonal water anability for infortooner generation and water storage Water flow management throughout the hydrogoner generation and water storage Water flow management throughout the hydrogoner generation and water storage generation Design system of incentives for receivable persign for hydrogoner storage Change and climate bested for unstainable levelshood programs and climate Change and climate windality to sustainable levelshood programs and climate Change and climate variability to sustainable levelshood programs and climate Change and climate variability to sustainable levelshood programs and climate Change and climate variability to sustainable levelshood programs and climate Change and climate change and climate variability to power system MAC2-01 RACHOR BELIABRY ACTION RELIABRY Recorporate climate change and climate variability or openinational development, and setting and management systems RECARCH AND CAPACTY BUILDING A MAC2-03 MAC2-04 MAC2-04 MAC2-04 MAC2-04 MAC2-05 MAC2-05 MAC2-05 MAC2-06 MAC2-06 MAC2-07 MAC2-07 MAC2-07 MAC2-08 MAC2-08 MAC2-09 MA		SUSTAINABLE REI	NEWABLE EN	ERGY
Incorporate climate charge and climate variability risk factors in assessments of trail and seasons were availability for hydroponer generation and water strainge with the management throughout the hydrological cycle for the hydrological cycle for for the hydrological cycle for the hydrological c	Interoporate climate charge and climate variability risk factors in sussessents of tratal and seasonals ware analysing for hydropone generation and water surage generation. Design system of incentives for recentable helptooppical cycle for hydropolectricity generation. Design system of incentives for recentable helptoop programs and climate charge to power systems to cope with shifts in seasonal peak demand results from climate charge and climate variability Scoure access to water for cope used as bleenings source RESSARCH AND DEPICIOPHENT Receptorate impacts of climate charge and climate variability on power system MEZ2-02 RANDMEDECE AND CAPACITY BUILDING & Conduct capacity building of community-based retenable energy organizational development, aurif setting and management systems MEZ2-03 MEZ2-04 MEZ2-05 MEZ2-04 MEZ2-04 MEZ2-04 MEZ2-04 MEZ2-04 MEZ2-04		POLICY AND	COVERNANCE	
Neter from management throughout the hydrological cycle for hydrolectricidity generation generation Charge to read in centering for recensible neeting host communities and local generation measures charge adoptation measures Charge to cope with shifts in seasonal peak demand results from clamate charge and climate variability Secure access to water for crops used as bloeneiny source RESSACIA AND DEPICLOPHENT RECOPERATE OF THE PROPERATE OF THE P	Nezer from nanagement throughout the hydrological cycle for hydrolectricity Degical present of incertives for recentable begins best communities and limite change adoption in the standard present of incertives for recentable best board organisms and climate change adoptions to systems to cope used as bloenergy source RESEARCH AND DEVELOPMENT Forcept to power systems to cope used as bloenergy source RESEARCH AND DEVELOPMENT Incorporate change and climate variability on power system RESEARCH AND DEVELOPMENT RESEARCH AND DEVELOP	21-01	Incorporate climate change and climate variability risk factors in assessments of total and seasonal water availability for hydropower generation and water storage	M621-01	Strengthen regulatory and institutional framework to support expansion of renewable energy production and use
Design system of incentives for recenable energy host communities and local government units that can be used for issuincible livelihood programs and climate operationable adequation to the used for issuincible livelihood programs and climate. Chappes to power systems to cope with shifts in seasonal peak denand results from climate charge and climate variability. Secure access to water for crops used as bloomergy source. RESEARCH AND DEVELOPMENT Incorporate impacts of climate charge and climate variability on power system. MIGSZ 601	Design system of incentives for recentable best post communities and local government of incentives for recentable localized change and climate change adoptation masters be used for sustainable localized demand results from climate change and climate variability Secure access to water for cope used as bleenergy source RESEARCH AND DEPELOPHENT Receptorate impacts of climate change and climate variability on power system MES2-03 RACHINE SECURE MASS OF COMMUNITY AND DEPELOPHENT Receptorate impacts of climate change and climate variability on power system MES2-03 RACHINE MASS OF CONDUCTORS OF COMMUNITY AND DEPELOPHENT AND DEPELOPHENT AND DEPELOPHENT MES2-03 MES2-04	21-02	Water flow management throughout the hydrological cycle for hydroelectricity generation	M621-02	Develop renewable energy project-based and service contracts-based portfolios to encourage potential investors in Identified sites
Changes to power systems to cope with shifts in seasonal peak demand results from climate change and climate variability. Secure access to water for cope used as bleevering source. RESEARCH AND DEPELLOPMENT INCOME. RESEARCH AND DEPELLOPMENT. INCOMPOSE IN MACH CLIMATE CLIMATE AND CHIMATE VARIABILITY on power system. MICHANGE ASSESSMENTS.	Charges to power systems to cope with shifts in seasonal peak demand results from climate charge and climate smalling steed as bloomergy source RESEARCH AND DEVELOPMENT incorporate impacts of climate charge and climate variability on power system MAZ242 (Coduct capacity building of teamminh based reversable energy organizations on system maintenance, energy efficiency and conservation, organizational development, MAZ3401 (MAZ3401 et and team or charge and climate variability related risk factors (charges in precipitation, num off, temperature, experimentation in high or meteorological master charge and climate variability related risk factors (charges in precipitation, num off, temperature, experimentation in high or meteorological master cleaned for everyy generation in high or meteorological master cleaned for everyy generation in high or meteorological master cleaned for everyy generation in high or meteorological master cleaned for everyy generation in high or meteorological master cleaned for everyy generation in high or meteorological master cleaned for everyy generation in high or meteorological master cleaned for everyy generation in high or meteorological master cleaned for everyy generation in high or meteorological master cleaned for everyy generation in high or meteorological master cleaned for everyy generation in high or meteorological master cleaned for everyy generation in high or meteorological master cleaned for every generation and master cleaned for every generation in high or meteorological master cleaned for every generation in high or meteorological master cleaned for every generation and master	21-03	Design system of incentives for resewable energy host communities and local government units that can be used for sustainable livelihood programs and climate charge adaptation messures		
Secure access to water for crops used as bloeneings source RESEARCH AND DEVELOPMENT Recorporate impacts of climate change and climate variability on power system MG22-01	Secure access to water for crops used as bloomergy source RESEARCH AND DEPLLOPMENT Information and access to a community based retreatable you power system RECORDACT QUARTHY BUILDING &T Conduct capacity building of community based retreatable energy organizations on system maintenance, energy efficiency and conservation, organizational development, MAS2 401 MAS2 401 MAS2 402 MAS2 403 MAS2 403 MAS2 403 Forecasts related to water comman watership related risk factors (change in previous or organization) in high or meteorological for change in the conservation or the community organization in high or meteorological for the community and management systems MAS2 403 MAS2 403 MAS2 404 MAS2 404 MAS2 405 MAS2	1.04	Changes to power systems to cope with shifts in seasonal peak demand results from climate change and climate variability		
RESEARCH AND DEVELOPMENT Incorporate impacts of climate change and climate variability on power system W622.01	RESEARCH AND DEPLEADMENT Incorporate impacts of climate change and climate variability on power system MG22 07 reliability assessments MG22 07 RECORDER CHANGE building of community-based revenable every organizations on system mattersance, energy efficiency and conternation, organizational development, MG23 01 AMC23 01 MG23 02 MG23 03 MG24 03 MG24 04 MG24 05 MG24 05 MG24 06 MG24 07 MG24 07 MG24 08 MG24 08 MG24 08 MG24 08 MG24 09	50-13	Secure access to water for crops used as bloenergy source		
Incorporate impacts of climate change and climate variability on power system M622-01 reliability assessments	Interoporate impacts of climate change and climate variability on power system NECOPOCAT CAPACITY BUILDING R EXCONESTED CAPACITY BUILDING R EXCONESTED CAPACITY BUILDING R SECTION BUILDING R MACE OI NACE O		RESEARCH AND	DEVELOPMENT	
	M62402	2-01	Incorporate impacts of climate change and climate variability on power system reliability assessments	M622-01	Conduct studies on hybrid systems (e.g., fuel cells, electric vehicles)
	Conduct capacity building of community-based revenable energy organizations on system maintenance, energy efficiency and conservation, organizational development, MESS 401 MESS 402 MESS 403		KNOWLEDGE AND CAPAC	TTY BUILDING &	TRAINING
KNOWLEDGE AND CAPACITY BUILDING & TRAINING	M62-69 M67-08 M67-08 M67-08 M67-08 M67-08 M67-09 M67-09 M67-09 M67-09 M67-09 M67-09 M67-09 M67-09	301	Conduct cipacity building of community-based renewable energy organizations on system maintenance, energy efficiency and conservation, organizational development, anif setting and management systems	M623-01	Screoghering capacity of institutions to plan for low-carbon growth and environmentally sustainable energy supply
CODACT CADACT BUILDING & TO COMPACT BUILDING & TO CODACT CADACT BUILDING & TO SYSTEM make teach of protein make teach of the compact of content and teach of the compact of content of the compact of content of the compact of content of the compact	MG24GS ACTION RELINERY Incorporate cimate change and climate availability related risk factors (shanges in precisionism, nunoff, temperature, exapotensipality in hydro-meteorological MG24GS (brecasis related to water demand for energy generation in MG24GS (MG24GS) MG24GS (MG24GS)			M623-01	Conduct capacity building of community-based RE organizations on RE system maintenance, EEAC organizational development, tariff setting and management systems
EXONEEDCE AND CARCITY BUILDING & T Conduct capacity building of community-based revenable energy organizations on system maintenance, energy efficiency and consensation, organizational development, MR23-01 MR23-01	ACTION DELINEST MICHAEL Incorporate climate change and climate avitability related risk factors (change in precisions, run-off, temperature, exapotrasspiration) in hydro-meteorological Directasis related on water certaind for energy generation MIGS-403 MIGS-403 MIGS-404 MIGS-405			M623-03	Sector reform and capacity building related to promotion of renewable energy
RECONDED AND CAPACITY BUILDING & T CONDACT CAPACITY BUILDING & T SYSTEM matterenative, energy efficiency and conservation, organizational development, AMERICA and management systems MESS 401 MESS 403 MESS 403 MESS 403 MESS 403 MESS 403	Proceporate climate change and climate variability related risk factors (sharges in precidition, un'ed.; temperature, espaparaspiration in hydro-meteoriological forecasts related to water clemand for energy generation Michael Mich		ACTION	DELIVERY	
Coduct capacity building of community-based revenible energy organizations on system maintenance, energy eliferency and conservation, organizational development, M623-01 and an management systems M623-01 M		24-01	Incorporate climate change and climate variability related risk factors (changes in precipitation, run-off, temperature, reappotranspiration) in hydro meteorological forecasts related to water demand for energy generation	M624-01	Retrolis/install new heating and cooling system using renewable energy
ROUNLEGG AND CARCITY BUILDING ST Coduct capacity building of community-based revenible energy organizations on system maintenance, energy efficiency and conservation, organizational development, starff setting and management systems and conservation, organizational development, setting and management systems MC23-01 INC3-01				M624-02	Transmission and distribution capacity (new, expansion or strengthening of existing) or any new system to facilitate the integration of renewable energy sources into the grid
Coduct capacity building of community-based revenable energy organizations on system maintenance, energy electron and consensation, organizational development, ME23-01 and Setting and management systems of consensation, organizational development, ME23-01 and Setting and management systems or setting and consensation organizational development, ME23-01 in precipitation, num-01 temperature, expatransportation in high or metric nilogical in ME24-01 forecasts related to water demand for every generation.				M624-03	Construct or rehabilitate energy generation capacity from renewable sources other than hydropower including demonstration and pilots
ROUNLEGG AND CARCITY BUILDING ST CONDACT CIPACITY BUILDING ST CONDACT CIPACITY SUBJECT ST CONDACT CIPACITY SUBJECT ST ALIT! SETTING and management systems Incoporate climate change and climate suitability related risk factors (changes in preciditation, mundi; temperature, exapotracipation) in hydro-meteroriogical INCEAGO INC				M624-04	Rehabilitate existing hydropower plant
ROUNLEGG AND CARCITY BUILDING ST Coduct capacity building of community-based revealble energy organizations on system maintenance, energy efficiency and conservation, organizational development, MG2-01 and setting and management systems MG2-01 and setting and management systems MG2-01 and setting and management systems MG2-01 and setting and climate variability related risk factors (changes in precopated climate change and climate variability related risk factors (changes in precipation, unleft, temperature, supportance) in high or meteorological MG2-03 MG2-03 MG2-04 MG2-04 MG2-04 MG2-04 MG2-04 MG2-04				M624-05	Construct new hydropower plant

TYPOLOGY	MONTATON	THOLOCY COOE	WITGITON
	ENVIRONMENTALLY SUSTAINABLE TRANSPORT	LY SUSTAINABL	E TRANSPORT
	POLICY	POLICY AND COVERNANCE	See
A631-01	Incorporate risks from climate change and climate variability in transportation system planning	M531-01	Review and integrate the National Biofuels Program
		M531-02	Improve vehicle emission standards
		M631-03	Improve fuel efficiency standards
		ME31-04	Strengthen vehicle inspection systems in emissions and fuel efficiency
	RESEARC	RESEARCH AND DEVELOPMENT	DAT
		M632-01	Conduct study on feasibility (performance and safes) of biofuels blends in other transport system (air and see transport)
		M532-02	Conduct technical study on the development of standards on energy efficiency labelling for vehicle
		M632-03	Review current standards for fael quality to support clean fleet program and fael efficiency labeling for vehicles
		M632-04	Research and development in low-carbon or non-fossil fael transport technologies
		M632-05	Research & development to reduce the CHC intensity in sea and lake bound transport operations
	KNONLEDGE AND CAPACITY BUILDING & TRAINING	CAPACITY BUILDIN	CATRANNG
		M533-01	Capacity building related to energy efficiency in the transport sector
	AC	ACTION DELINERY	
A634-01	Implement mixed-use, medium-to-high density integrated land use-transport plan in developing new urban communities or in expanding existing ones	M63401	Urban traffic management (e.g. improve traffic flow) to reduce CHC emissions per unit transported
		M634-02	improved waterways, port and aviation facilities to reduce the carbon intensity per

Climate Smart Industries & Services

TYPOLOGY CODE	ADAPTÁTION	TYPOLOGY	MITIGATION
	CREEN CITIES AND MUNICIPALITIES	D MUNICIPAL	ZIT.
	POLICY AND	POLICY AND COVERNANCE	
A531-01	Integrate in the National Building Code a requirement for all water-intensive facilities to have water recovery system	M531-01	Develop a system of incentives for the use of reusable bags and containers
A531-02	Incorporate new CC and CV resilient design standards in new buildings		
A531-03	Incorporate change in design of solid waste management systems in response to extreme weather and flood events arising from climate change and climate variability		
	RESEARCH AND	RESEARCH AND DEVELOPMENT	
A532-01	Identify the carrying capacity of tourism areas		
	KNOWLEDGE AND CAPACITY BUILDING & TRAINING	TTY BUILDING & T	RAINING
	ACTION	ACTION DELIVERY	
A534-01	Design and construct new buildings with climate risk considerations	M53401	Construction of sanitary landfill facilities
A534-02	Renovate old buildings with climate risk considerations	M534-02	Intensify waste segregation at source, discard recovery, composting and recycling

TYPOLOGY	ADAPTATION	TYPOLOGY	мпалок
	ENERG	ENERGY EFFICIENCY	
	POLICY	POLICY AND GOVERNANCE	14
		M611-01	Promote energy efficient housing
		M611-02	Change operational procedures or techniques, or retrofit technologies to reduce CHC emissions in existing operations
		M611-03	Sector reform and capacity building related to energy efficiency and efficient energy pricing
		M611-04	Improve non-transport fuel efficiency standards
	RESEARCH	RESEARCH AND DEVELOPMENT	TN
		M612-01	Sector studies, surveys, assessments and information systems on energy efficiency, efficient energy pricing, and promotion of renewable energy
	KNOWLEDGE AND CAPACITY BUILDING & TRAINING	APACITY BUILDIN	G & TRAINING
		M613-01	Sector reform and capacity building related to energy efficiency in energy sector, promotion of renewable energy and efficient energy pricing
	ACT	ACTION DELIVERY	
A634-01	Mandatory implementation of A0110 and A0126 directing the institutionalization of Government Energy Management Program	M614-01	Improve energy efficiency in telecommunications information technologies
		M614-02	Pilot programs on energy efficiency activities
		M614-03	Replace existing power plant with more efficient facility
		M614-04	Rehabilitate transmission and distribution systems to reduce technical losses

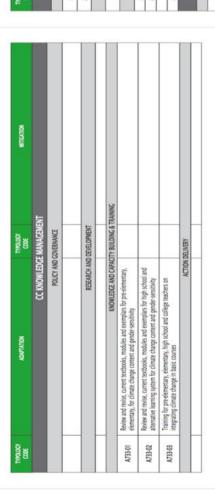
ustainable Energy

																	λı			
MITGATION	VFRASTRUCTURE													INING			Rehabilitate existing power plants to decrease CHC emission intensity			
TYPOLOGY CODE	TRANSPORT	OVERNANCE							DEVELOPMENT					IY BUILDING & TRA		ELIVERY	M644-01			
ADAPTATION	CLIMATE RESILIENT ENERGY AND TRANSPORT INFRASTRUCTURE	POLICY AND GOVERNANCE	Taking account of climate variability and change in planning for power system reliability and designing future energy supply mix	Design of new design criteria and technical standards in planning location, and construction of power generation facilities in order to respond to climate change and climate variability.	Develop guidelines for climate-proofing of existing and new energy system	Incorporate effects of extreme weather events caused by climate change and climate variability in design standards of power systems, transmission and distribution lines.	Develop/upgrade design standards to take action of climate change impact on transportation infrastructure	Change operational management practices at power generation facilities due to climate change and climate variability	RESEARCH AND DEVELOPMENT	Conduct risk and vulnerability assessment of the transport system	Conduct of risk and vulnerability assessments of energy systems	Improve design of turbines to withstand higher wind speeds as a result of extreme weather events	Improve design of solar panels to withstand higher intensity storms resulting from climate change and climate variability	KNOWLEDGE AND CAPACITY BUILDING & TRAINING	Capacity building or strengthening capacity for energy sector institutions to improve climate risk management in the energy sector	ACTION DELIVERY	Protect transport infrastructure against extreme weather events (especially floods and storms) becoming more frequent and violent due to climate change and climate variability.	Establish of emergency services designed to cope with climate change and climate variability related emergencies in the transport sector	Construct new roads, ports, airports and aviation infrastructure to climate resilient design standards	Development of telecomunications infrastructure for use as part of an emergency response system during extreme weather events
TYPOLOGY			A641-01	A641-02	A641-03	A641-04	A641-05	A641-06		A642-01	A642-02	A642-03	A642-04		A643-01		A644-01	A644-02	A644-03	A644-04

	KNOWLEDGE OF CLIMATE SCIENCE	AND DESCRIPTION OF THE PERSONS	
		MATE SCIE	Œ
	POLICY AND COVERNANCE	WERNANCE	
	Review and rationalize systems and infrastructure requirements to improve climate change modeling and weather forecasting		
	RESEARCH AND DEVELOPMENT	EVELOPMENT	
	ptation	M712-01	Support research on CC mitigation
	KNOWLEDCE AND CAPACITY BUILDING & TRAINING	F BUILDING & TR	AINING
	Upgrade personnel's capacity and skills on climate change modeling and weather forecasting		
	Establish centers of excellence on climate change science at the national and regional level		
	Improve government systems and infrastructure required for climate change modeling and climate forecasting		
ľ	ACTION DELIVERY	LIVERY	
A714-01 Construction/Rehabilitation	Construction/Rehabilitation of Weather stations and facilitates		
A714-02 Operation of weather surveillance infrastructures	lance infrastructures		
LOCAL AND	LOCAL AND COMMUNITY CLIMATE CHANGE ADAPTATION (CCA) AND DISASTER RISK REDUCTION (DRR)	TION (CCA) A	ND DISASTER RISK REDUCTION (DRR)
- 0.0	POLICY AND GOVERNANCE	WERNANCE	
	RESEARCH AND DEVELOPMENT	EVELOPMENT	
A722-01 Development of climate cha	Development of climate change adaptation focused curricula, graduate courses and programs		
	KNOWLEDGE AND CAPACITY BUILDING & TRAINING	F BUILDING & TR	AINING
A723-01 Awareness raising programs	Awareness raising programs on climate change and climate variability		
A723-02 Conduct of disaster awarene	Conduct of disaster awareness and preparedness trainings		
A723-03 Production and dissemination materials	Production and dissemination of disaster awareness and preparation information materials		
A723-04 Conduct trainings on commu- reduction	Conduct trainings on community-based climate change adaptation and disaster risk reduction		
	ACTION DELIVERY	LIVERY	
A724-01 Conduct of disaster risk reduction operations			

Knowledge & Capacity Development

Cross Cutting



TPPOLLOCY	ADVIATOR	TPPOLOCY	ипслон
	CONVERGENCE PLANNING AND COORDINATION	NG AND COOR	DINATION
	POLICY AND	POLICY AND GOVERNANCE	
A831-01	Setting policy direction on national and local climate change adaptation action	M831-01	Setting policy direction on national and local climate change mitigation action
A831-02	Planning on national and local climate change adaptation action	M831-02	Planning on national and local climate change mitigation action
	RESEARCH AND	RESEARCH AND DEVELOPMENT	
	KNOWEDCE AND CAPACITY BUILDING & TRAINING	TTY BUILDING & T	DANING
A833-01	Provide trainings and information material on community-based adaptation actions	W833-01	Provide trainings and information material on community-based mitigation actions
A833-02	Policy dissemination on dimate charge adaptation	M833-02	Policy dissemination on climate change mitigation
	ACTION	ACTION DELIVERY	
A83401	Coordination of national and local climate change adaptation actions	M834-01	Coordination of national and local climate change mitigation actions
	FINA	FINANCE	
	POLICY AND	POLICY AND GOVERNANCE	
A841-01	introduce regulations and programs to support climate resilient investments	M841-01	Introduce regulations, programs or financial instruments to support CHG reducing activities
A841-02	Expand insurance eligibility to populations vulnerable to climate related diseases	M841-02	Strengthen institution and policies to mobilize carbon finance
A841-03	Fiscal policy and management measures in support of adaptations	M841-03	Fiscal policy and management measures in support of mitigation
		M841-04	Reduce fossil-fuel consumption through taxes, levies or fees on energy or transport services
	RESEARCH AND	RESEARCH AND DEVELOPMENT	
A842-01	Analysis of impact of climate change and climate variability on long-term growth, and poverty	M842-01	Prepare for carbon markets or implement carbon finance market transactions
A842-02	Economic research, modeling and policy making for adaptation	M842-02	Economic research, modeling and policy making for mitigation
A842-03	Economic analysis of financial needs for adapting to climate charge and climate variability (sost of adaptation)		
	KNOWLEDCE AND CAPACITY BUILDING & TRAINING	TTY BUILDING & T	MING
	ACTION	ACTION DELIVERY	
A844-01	Monitoring of national and local climate change adaptation actions	M844-01	Monitoring of national and local climate change mitigation actions

Annex F

Climate Budget Brief

A climate budget brief is a document that focuses on the responsiveness of an NGA's CC expenditures in addressing the country's climate policies and priorities, informing TBHs, and supporting preparation for succeeding fiscal years. It is divided into three sections:

- (i) Roles of the NGA in implementing strategic priority areas of the NCCAP;
- (ii) Summary discussion on the NGA's approved climate expenditure; and
- (iii) Items for discussion to highlight the gaps and enhance decisions in allocating resources to implement the NCCAP.

Below is an example of a climate budget brief:

Department Of Energy



DOE's Climate Profile and Responsibilities

The Department of Energy is responsible for and co-leads the implementation of the National Climate Change Action Plan (NCCAP) strategic priority area on Sustainable Energy, and has a coordinating agency role on the Water Sufficiency priority area.

As a member of the Cabinet Cluster on Climate Change Adaptation and Mitigation, the DOE is involved in the Cluster's Program Convergence Budgeting for the Risk Resiliency Program. The RRP aims to strengthen the resiliency of natural systems and the urban built environment, as well as the adaptive capacities of vulnerable groups and communities to climate and non-climate risks and disasters. The DOE focuses on the RRP's cleaner, safer, and healthier environment outcome.

The DOE leads the greenhouse gas inventory in the energy sector, as stipulated in Executive Order No. 174 (Institutionalizing Philippine Greenhouse Gas Inventory Management and Reporting System). This output area falls under NCCAP's Knowledge and Capacity Development strategic priority. Specifically, the DOE is tasked to conduct, document, archive, and monitor the greenhouse gas emission inventory in the energy sector. The inventory enables the government to define ways of reducing emissions and adopt low-carbon pathways to support the government's Intended Nationally Determined Contributions (INDC).

DOE's responsibilities are aligned with the department's primary mandate to prepare and supervise all government's plans and programs on energy exploration, development, utilization, distribution, and conservation.

Responsibilities of DOE for NCCAP Outcomes and Output Areas, by Strategic Priority Area

Strategic Priority/Outcome	Output	Responsibility
Sustainable Energy		
Nationwide energy efficiency and	Government Energy Management Program (GEMP) implemented	Co-lead with DOST, DENR
conservation program promoted and implemented	Private sector and community participation in energy efficiency and conservation increased	Co-lead with CCC
Sustainable and renewable energy development enhanced	National renewable energy program and technology roadmap based on RA 9531 and its IRR developed and implemented	Lead Agency
	Off-grid, decentralized community-based renewable energy system to generate affordable electricity adopted	Lead Agency
Environmentally- sustainable transport promoted and adopted	Environmentally-sustainable transport strategies and fuel conservation measures integrated in development plans	No explicit leadership role
Energy systems and infrastructure made climate resilient, rehabilitated, and improved	Energy systems and infrastructure made climate resilient	Co-lead with DOST, DENR
Knowledge and Capacity De	velopment	
Knowledge of climate science enhanced	GHG inventory completed	Lead Agency (energy sector) per EO No. 174
Water Sufficiency		
Water governance restructured toward a	Enabling policy environment for IWRM and CCA created	Coordinating Agency
climate and gender- responsive water sector	Climate change adaptation and vulnerability reduction measures for water resources and infrastructure implemented	Coordinating Agency

Abbreviations

E-TRIKE Energy Efficient Electric Vehicles
PAMANA PAyapa at MAsaganang PamayaNAn Program

DOE's Approved Climate Expenditure FY2015

A. In Finer Detail: DOE's FY2015 Climate Expenditure

DOE's climate expenditure of PHP 2.9 billion represents 83% of its total budget. It represents about a sixth of the national climate expenditure for mitigation. (See Data 1.) This represents 2% of the national climate expenditure in the FY15 GAA.

- DOE's climate expenditure in the FY15 GAA is concentrated on the energy-efficient electric vehicles (E-Trike) project, which accounts for 90% (PHP 2.6 billion). E-Trike supports the sustainable transport output area in the Sustainable Energy strategic priority.
- Operations, representing only 10% of DOE's climate expenditure, catalyze the attainment of mitigation objectives. This is composed of sector policies, regulations, and the promotion of innovation.

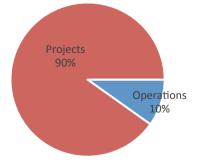
Data 1: DOE FY15 GAA Approved Budget: Size and Trends ('000s PHP)

	FY15 GAA
Department's Climate Expenditure	2,865,087
Share of Department's Climate Expenditure in Department Budget	83%
Share of Department's Climate Expenditure in National Climate Expenditure	2%

DOE's climate expenditure is concentrated in one project, which accounts for 90% or PHP 2.6 billion of the total budget. The remaining 10% is for Operations. (See Data 2.)

 DOE implements the foreign-assisted E-Trike Project to transform the market toward energy efficient public transport. There is one locally-funded project included in the FY15 GAA.

Data 2: DOE FY15 GAA: Climate Expenditure by Expense Class



Despite a small allocation (10% of the climate expenditure), Operations has an important role in attaining mitigation objectives.

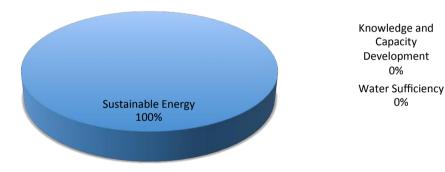
 With the full decentralization of the energy and power industry, DOE has limited ability to directly attain CC adaptation or mitigation goals. Its three major final outputs aim to provide incentives to private and quasi-private actors through policies (1% of DOE's FY15 climate expenditures), regulations (1%), and promotion of innovation (8%).

B. DOE FY15 Climate Expenditure: NCCAP Outcomes and Output Areas

Climate Expenditure by Pillar: The entire DOE climate expenditure in the FY15 GAA is focused on mitigation. No expenditures are proposed for adaptation, even though DOE has a lead responsibility for climate resilient energy infrastructure.

Climate Expenditure by NCCAP Strategic Priority: DOE's climate expenditure in the FY15 GAA focuses on Sustainable Energy, where DOE has a lead role. (See Data 3.) The budget does not include any P/A/Ps for Knowledge and Capacity Development and Water Sufficiency, where DOE has specific lead responsibilities.

Data 3: DOE FY15 GAA:
Climate Expenditure by NCCAP Strategic Priority



B.1 Sustainable Energy

DOE's climate expenditure focuses on two output areas in Sustainable Energy: Environmentally Sustainable Transport (90%) and Sustainable Renewable Energy (3%). In addition, three P/A/Ps (7%) support both of these output areas. DOE does not have a lead role in Sustainable Transport, but most of its

climate expenditure is focused on this area. [See Data 4.]

 DOE has a lead role in Energy Efficiency and Conservation, and Climate Resilient Energy Systems and Infrastructure. However, there are no climate expenditures for these output areas.

Data 4: DOE FY15 GAA: Climate Expenditure on Sustainable Energy by Output Area and by Expense Class (in '000 PHP)

	Мај	or Final Out	put	Pr	ojects		01
NCCAP Strategic Priority/Output Area	Policy Service	Promo- tion/ Impleme ntation	Regu- latory Service	Locally - Funded	Foreign- Funded	TOTAL	% Climate Budget
SUSTAINABLE ENERGY (SE)						
Energy Efficiency and Conservation	-	-	-	-	-	-	0%
Sustainable Renewable Energy	20,528	42,069	27,828	3,320	-	93,745	3%
Environmentally- Sustainable Transport	-	-	-	-	2,580,010	2,580,010	90%
Climate Resilient Energy Systems & infrastructure	-	-	-	-	-	-	0%
Multiple Output Areas: (Alternative Fuels/ Technologies/ Energy Efficiency	2,553	182,222	6,557		-	191,332	7%
TOTAL SE Outcome	23,081	224,291	34,385	3,320	2,580,010	2,865,087	100%
TOTAL APPROVED CLIMATE EXPENDITURE	23,081	224,291	34,385	3,320	2,580,010	2,865,087	100%
% Climate Expenditure	0%	4%	0%	20%	75%	100%	

Energy Efficiency and Conservation. DOE has no P/A/Ps focused on energy efficiency.

- Three P/A/Ps that total PHP 0.19 billion support Operations that are focused on multiple Sustainable Energy output areas, including Energy Efficiency.
- DOE has a lead role in implementing the Government Energy Management Program, which has a target of 10% energy savings in all public agencies. It also aims to increase private sector participation in energy efficiency and conservation programs. While some of the activities may be funded through special funds, the extent of such funding and its adequacy in achieving the energy savings target are unclear.

Sustainable Renewable Energy. All P/A/Ps under Operations are either focused solely (3% or PHP 0.09 billion) on Sustainable Renewable Energy or address multiple outputs (7% or PHP 0.19 billion) in this strategic priority. In addition, the FY15 GAA includes the PAyapa at MAsaganang PamayaNAn or PAMANA Program with an allocation of less than PHP 0.003 billion.

- DOE leads Sustainable Renewable Energy, which focuses on enhancing the development of sustainable and renewable energy; and adopting offgrid, decentralized community-based renewable energy systems.
- In line with the Renewable Act of 2008, DOE is focused on accelerating the development and exploration by the private sector of the country's renewable energy resources. DOE uses policy and regulation development and implementation, complemented by
- promotion and incentives. DOE does not have major projects focused on attaining renewable energy expansion targets, specifically more than doubling hydropower, doubling geothermal power, and increasing biomass capacity by 25% by year 2030.
- DOE has a budget request for a locallyfunded project on household electrification, but this is not included in the FY15 GAA. The adequacy of the funding for this objective outside of the GAA is unclear.

Environmentally-Sustainable Transport. Although DOE does not have a lead role in Environmentally-Sustainable Transport, it implements the largest P/A/P in the national government for this output area, accounting for 30% of the national climate expenditure for sustainable transport.

- The E-Trike Project accounts for 90% of DOE's climate expenditure in the FY15 GAA. This foreign-funded project aims to transform the market toward energy efficient public transport with the initial
- deployment of 100,000 electric tricycles in 2015.
- The locally-funded portion of the project (16% or PHP 0.5 billion) is in DOE's FY15 budget request but is not included in the FY15 GAA.

Climate Resilient Energy Systems and Infrastructure. DOE has a lead role in climate resilient energy systems and infrastructure. However, its budget request does not include a P/A/P for this output area.

 With the energy and power industry deregulated, DOE does not have its own energy infrastructure assets to manage. However, DOE may want to consider how climate projections inform its planning and regulatory services. DOE may also tag the P/A/Ps if these planning and regulatory services are climate responsive.

B.2 Knowledge and Capacity Development

While the DOE is tasked to lead the conduct and monitoring of greenhouse gas emission inventory for the energy sector, the climate expenditure in the FY15 GAA does not include funding to accomplish this activity.

 Estimating the levels of GHG emissions and removals is an important element in defining approaches to the implementation of the potential Intended Nationally Determined Contributions (INDC) of the Philippine government, particularly for a sector that accounts for a significant share of the countries emissions.

B.3 Water Sufficiency

The DOE budget in the FY15 GAA does not include any P/A/Ps that support the NCCAP Water Sufficiency strategic priority, highlighting a potential gap in the scope of DOE's engagement.

The DOE has a coordinating agency role for two output areas under the NCCAP strategic priority on Water Sufficiency focused on an enabling policy environment for Integrated Water Resource Management and implementation of adaptation and vulnerability reduction measures for water resources and infrastructure. The updated Philippine Energy Plan incorporated in the NCCAP has a target of more than doubling hydropower capacity by 2030. This planned expansion could be at risk without increased clarity on the sharing of water resources among competing users in the face of a changing climate.

Areas for Discussion

Sustainable Renewable Energy and Energy Efficiency:

To meet the demand, NCCAP projects that DOE needs to more than double its hydropower, double its installed capacity for geothermal power, and increase power from biomass by approximately 25%. These targets will result in 10% energy savings. The Operations budget does not itemize the expenditures for various sources of energy or programs that will catalyze energy efficiency in various sectors of the economy.

 Do the programs under the major final outputs adequately support the attainment of goals in Sustainable Energy and Energy Efficiency? How does the DOE promote and monitor energy savings by government and the private sector?

Sustainable Transport:

Although the DOE has no lead role in Sustainable Transport, its climate expenditure focuses on this strategic priority. With the deregulation of the energy industry, DOE now relies on indirect means to achieve its targets of energy efficiency and renewable energy. However, DOE may want to consider that it has a high leverage in achieving its targets using proper incentives and environment for the private sector.

 What is the comparative advantage of DOE in engaging in and leading a major program on Sustainable Transport? Can the E-Trike be designed to deliver results on Energy Efficiency?

Climate Resilient Energy Infrastructure:

DOE has a lead role in Climate Resilient Energy Infrastructure. It conducted an orientation workshop on vulnerability assessment and climate resiliency in renewable energy projects.

 Do current policies and the regulatory environment support and encourage service providers to improve the design of energy infrastructure (for example, strengthening cable lines, protecting energy facilities along coastal defense walls)? How does DOE plan to address gaps in coverage in its program for increasing climate resilience of energy infrastructure?

Financing Gap in GHG Inventory:

DOE leads the conduct and monitoring of the inventory of greenhouse gas emission in the energy sector. Estimating the levels of GHG emissions and removals is important in determining the INDC of the Philippine government, particularly in reducing emissions to adopt low carbon pathways in the energy sector.

• Funding for this initiative is not in the FY15 budget. Will the DOE be able to implement this program under its existing budgets?

Water Sufficiency:

DOE is a coordinating agency for Water Sufficiency. Its tasks include supporting the development of water-related public policies and implementing climate adaptation measures in water resources and infrastructure. While DOE's climate expenditure does not identify programs for hydropower development and addressing climate vulnerabilities, such programs may be embedded in DOE's Operations.

 How is DOE collaborating with the National Water Resources Board, which leads the Water Sufficiency strategic priority, to promote the equitable sharing of water resources? How can the Risk Resiliency Program support DOE's goals? Do energy sector plans and projections consider the impact of climate change, for example, through the use of robust designs?

Annex G

Glossary of Terms

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 decades or longer, whether due to natural variability or as a result of human activity.

CLIMATE CHANGE ADAPTATION:

An activity should be classified as adaptation related if it intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks by maintaining or increasing adaptive capacity and resilience.

CLIMATE BUDGET:

The total amount of public financing directed towards programs, activities, and projects (P/A/Ps) that are responsive to climate change adaptation and/or climate change mitigation.

CLIMATE BUDGETING:

Classifies public expenditures through a process called climate change expenditure tagging, which uses a typology of the climate responses as identified in government policies

CLIMATE CHANGE MITIGATION:

A P/A/P should be classified as climate change mitigation if it aims to reduce greenhouse gas (GHG) emissions, directly or indirectly, by avoiding or capturing GHGs before they are emitted in the atmosphere or by sequestering those already in the atmosphere by enhancing 'sinks' such as forests.

CLIMATE CHANGE EXPENDITURE:

Any program, activity, and/or project (P/A/P) that includes components that are responsive to climate change adaptation and/or climate change mitigation.

CLIMATE SMART INDUSTRIES AND SERVICES:

A Strategic Priority of the National Climate Change Action Plan (NCCAP), with the main objectives of prioritizing the creation of green and eco-jobs, and sustainable consumption and production.

DOMESTICALLY FUNDED OPERATIONS:

Projects financed out of revenue collections and domestic borrowings

ECOLOGICAL AND ENVIRONMENTAL STABILITY:

A strategic priority of the NCCAP, with the main objectives of protecting and rehabilitating critical ecosystems and restoring ecological services.

FOOD SECURITY:

A strategic priority of the NCCAP, with the main objective of ensuring availability, stability, accessibility, and affordability of safe and healthy food amidst climate change.

HUMAN SECURITY:

A strategic priority of the NCCAP, with the main objective of reducing risks of women and men to climate change and disasters.

KNOWLEDGE AND CAPACITY DEVELOPMENT:

A strategic priority of the NCCAP, with the main objectives of:

- (i) enhancing knowledge on the science of climate change,
- (ii) enhancing capacity for adaptation, climate change mitigation, and disaster risk reduction at the local and community levels, and
- (iii) establishing gendered climate change knowledge management accessible to all sectors at the national and local levels.

LOCALLY FUNDED PROJECTS:

Government projects which are wholly or partly financed by foreign loans and/or foreign grants.

NATIONAL CLIMATE CHANGE ACTION PLAN (NCCAP):

The National Climate Change Action Plan 2011-2028, adopted by the Climate Change Commission, outlines a three-phase action plan to implement specific programs and strategies for CC adaptation and mitigation. NCCAP's main goals are to build the adaptive capacities of women and men in their communities, increase resilience of vulnerable sectors and natural ecosystems to climate change, and optimize CC mitigation opportunities towards gender-responsive and rights-based sustainable development.

PROGRAM:

A homogenous group of activities necessary for the performance of a major purpose for which a government agency is established, for the basic maintenance of the agency's administrative operations, or for the provision of staff support to the agency's administrative operations or line functions.

PROJECTS:

Special agency undertakings that are to be carried out within a definite time frame and that are intended to result in some pre-determined measure of goods and services.

RESILIENCE:

The ability of a social or ecological system to absorb disturbances while retaining the same basic structure, functionality, and capacity for self-organization, and to adapt to stress and change.

RISK:

The combination of the magnitude of an impact (a specific change in a system caused by its exposure to climate change) with the probability of its occurrence.

SUSTAINABLE ENERGY:

A strategic priority of the NCCAP, with the main objectives of (i) prioritizing the promotion and expansion of energy efficiency and conservation; (ii) developing sustainable and renewable energy; (iii) promoting environmentally-sustainable transport; and (iv) supporting climate-proofing and rehabilitation of energy system infrastructure.

TAGGING:

A process of identifying and tracking P/A/Ps in a particular sector or category.

VULNERABILITY:

The degree to which geo-physical, biological, and socio-economic systems are susceptible or unable to cope with the adverse impacts of climate change.

WATER SUFFICIENCY:

A strategic priority of the NCCAP, with the main objectives of sustainably managing and ensuring equitable access to water resources.

Annex H

Frequently Asked Questions

WHY CLIMATE CHANGE?

The Philippines is exposed to a wide range of hydro-meteorological hazards, including typhoons, floods, droughts, and landslides, which have significant economic and social costs. Projected changes in precipitation patterns and trends for extreme rainfall events, when combined with warmer oceans, rising sea levels, and ocean acidification, are projected to slow down economic growth,

reduce job creation, and make it more difficult to reduce poverty in the Philippines. The Government of the Philippines (GoP) has recognized climate change as an overarching sustainable development and social equity issue and has shown strong leadership by adopting comprehensive policies and institutions to coordinate action to address this rapidly-growing challenge.

WHY TAG CLIMATE-RELATED EXPENDITURES?

Given the country's vulnerability, the GoP has identified climate change adaptation and mitigation as priorities. It is vital to track relevant expenditures to ensure transparency and increase effectiveness. Tagging climate

change expenditures is useful to assess progress on policy implementation, provide a basis for annual policy discussions, and guide subsequent budget cycles.

WHAT IS THE LEGAL BASIS FOR TAGGING?

The Climate Change Commission (CCC) and the Department of Budget and Management (DBM) issued a Joint Memorandum Circular (JMC) 2013-01 on December 27, 2013 amended to JMC 2015-01 on March 24, 2015, which mandates National Government Agencies

(NGAs), Government-Owned and Controlled Corporations (GOCC) and State Universities and Colleges (SUCs) to track their climate change expenditures in their budget submission using the Climate Change Expenditure Tagging (CCET) Guidelines.

HOW IS THE CLIMATE BUDGET DIFFERENT FROM THE REGULAR BUDGET?

The climate budget is a "virtual budget" that aims to provide a comprehensive view of the Government's climate change response. As the spending cuts across a number of different NGAs, the aggregation of these P/A/Ps form the Government's climate budget.

WHAT IS A NATIONAL CLIMATE BUDGET?

A national climate budget identifies climate response that is either planned for implementation or is being implemented. It makes available regular and timely data on climate change response expenditures to support planning and prioritization of climate action. It focuses attention on tracking actual

expenditures and monitoring physical performance of activities that are essential for delivering climate results. It provides an informed basis for identifying overlapping climate actions and for scaling up climate finance to address gaps in climate response coverage commensurate with perceived needs.

WHAT FORM/S WILL AN AGENCY USE IN TAGGING CLIMATE EXPENDITURES?

Starting in FY2015, the DBM Budget Call included BP Form 201-F as part of the budget preparation forms for NGAs and SUCs, while DBM Form NO. 712 is for GOCCs.

WHAT WILL BE TAGGED?

The NGAS shall identify and tag CC related expenditures based on the P/A/Ps document (refer to Annex A. DBM/CCC JMC 2015-01).

WHAT IS CC TYPOLOGY?

The CC typology provides a comprehensive and detailed coverage of CC activities based on the priorities identified in the NCCAP. Each CC typology code identifies a tagged P/A/P by its:

(a) adaptation or mitigation focus; (b) NCCAP strategic priority; (c) sub-priority for sectoral outcome; (d) instrument, and (e) activity (refer to National CCET typology Manual).

CAN NGAs ADD OR SUGGEST NEW CC TYPOLOGY CODES?

Yes, NGAs may propose new typology codes to the CCC. All proposed typology codes will be subjected to review and approval of the CCC (Section 5.3, DBM/CCC JMC 2015-01).

CAN A P/A/P HAVE MULTIPLE TYPOLOGY CODES?

No, only one typology code is allowed per P/A/P. Due to the multitude of typology codes that could be associated with one P/A/P, choose the typology that most likely represents

the P/A/P's main objective. Agencies may refer to the P/A/P Technical Document and the definition of terms in the DBM/CCC JMC 2015-01 for guidance.

WHAT IF THERE IS NO CC EXPENDITURE?

Agencies with no CC expenditure shall write a cross mark at the ellipse located on the lower-left corner of the form, and submit it to DBM and CCC.

WHO SHOULD TAG THEIR EXPENDITURE?

Since climate change adaptation and mitigation expenditures cut across all sectors, ALL government instrumentalities are instructed to fill out and submit BP Form 201-F/DBM Form No. 712 (CC Expenditure Form).

WHAT IS THE QUALITY ASSURANCE AND REVIEW FORM?

The QAR Form is a reference document for the CCC that contains the climate objectives, outcomes, and CC relevance of the tagged CC expenditures. Its purpose is to examine the

tagging decisions of the agencies and include an assessment of the evidence base to support it.

WHO CAN ASSIST US IN THE TAGGING PROCESS?

A CCET Help Desk was established to provide technical assistance to NGAs on the implementation of the JMC 2015-01. You can email: helpdesk@climate.gov.ph.

IS THERE A MODULE AVAILABLE ABOUT CLIMATE CHANGE SO THAT NGAs CAN BE BETTER INFORMED?

NGAs may get in touch with the CCC and request a climate change orientation session or related trainings tailored for their specific mandates and needs.



With the support of



