CLIMATE BUDGET BRIEF

2015

An Analytical Review of the National Climate Budget

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Messages

Considering the high vulnerability of the Philippines to the effects of climate change, it was imperative for us to fund and implement the priority actions identified in the National Climate Change Action Plan. Thus, in 2013, the Department of Budget and Management, in partnership with the Climate Change Commission, studied the National Budget's responsiveness to climate adaptation and climate change mitigation.

What we found was a compelling need to fully integrate the climate change agenda into the government's planning and budgeting processes. It became clear to us that ad hoc solutions would no longer be viable. Instead, the Philippines now requires broader and more insightful interventions to boost the country's resilience against the impact of a changing world, as well as to make communities less prone to rising sea levels, the degradation of marine ecosystems, and extreme weather events.

In 2014, we established expenditure reforms to mainstream climate change in the budgeting process. As a result, forty-three (43) National Government Agencies (NGAs) tagged their budget for climate change expenditures using a common set of guidelines and procedures. The NGAs reported their climate expenditures on a BP Form 201-F, a new budget preparation form that provides a summary of identified programs, activities, and projects (PAPs) that are responsive to climate change adaptation or mitigation.

With this publication, we are pleased to share the FY2015 Climate Budget Briefs for select NGAs that played major roles in the implementation of the Philippines' Climate Change Action Plan. It is expected that the briefs will positively inform the planning and budgeting process for FY2016, mostly by providing agencies with a larger context from which they can appreciate their climate change initiatives. Using climate change expenditure tagging, these budget briefs also demonstrate how public expenditures are mapped for the attainment of strategic priorities of the National Climate Change Action Plan (NCCAP).

Climate budgeting is a critical component in our reform campaign to help NGAs make optimal use of their budget allocations. At the same time, it has allowed us to ensure transparent, accountable, and participatory public spending, with the ultimate goal of crafting a people's budget that effectively addresses the public's needs.

We thank the member agencies of the Cabinet Cluster on Climate Change Adaptation and Mitigation (CCAM) and other participating agencies for supporting our climate budgeting initiatives. We now look forward to the proper institutionalization of the reforms that support our climate change management agenda, so that the Philippine government is well-positioned to protect the futures of the communities we serve.

SECRETARY FLORENCIO B. ABAD
Department of Budget and Management

The Government of the Philippines has long recognized climate change as an overarching sustainable development and social equity issue and has shown strong leadership by adopting comprehensive policies and pursuing convergence across the sectors.

We have detailed our climate response in the National Climate Change Action Plan (NCCAP). In addition, in preparation for the 21st Conference of Parties in Paris in December 2015, we are in the process of developing the Philippines' Intended Nationally Determined Contributions (INDC), which will support several actions at the national level that contribute to global efforts aimed at stalling, if not reversing, the warming of our planet.

However, we also recognize that even the best plans and policies have little impact without the necessary budget and mainstreaming efforts to implement them. Therefore, in collaboration with the Department of Budget and Management, we recently developed a typology of climate adaptation and mitigation actions and aligned them with the strategic priority areas of the NCCAP. Now, all National Government Agencies are mandated to identify their climate change expenditures within their budgets.

Today, we are sharing with you the Climate Budget Briefs as a result of these collaborative activities, which we hope will make it easier for policy makers and the public to be informed on how public funds are currently allocated to address climate change. During this first year of implementation, we have learned a lot about our climate change programs. We are committed to applying the findings from the analyses in these budget briefs to continue strengthening the focus and effectiveness of our climate response in subsequent years. In doing so, we aim to curb the impacts of climate change and prevent more effectively the loss of lives, properties, and livelihoods of Filipinos.

SECRETARY EMMANUEL M. DE GUZMAN
Climate Change Commission

Acronyms

ACPC	Agricultural Credit and Policy Council
AMIA	Adaptation and Mitigation Initiative in Agriculture
ATI	Agricultural Training Institute
BFAR	Bureau of Fisheries and Aquatic Resources
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
CIS	Climate Information System
CHED	Commission on Higher Education
CLEAR	Coastal Law Enforcement Alliance in the Region
CO	Capital Outlay
CPEIR	Climate Public Expenditure and Institutional Review
CSIS	Climate-Smart Industries and Services
DA	Department of Agriculture
DBM	Department of Budget and Management
DENR	Department of Environment and Natural Resources
DND	Department of National Defense
DPWH	Department of Public Works and Highways
DOE	Department of Energy
DOLE	Department of Labor and Employment
DOST	Department of Science and Technology
DOTC	Department of Transportation and Communication
DRR	Disaster Risk Reduction
DSWD	Department of Social Welfare and Development
EES	Ecological and Environmental Stability

EMB	Environmental Management Bureau – DENR
FAPs	Foreign-Assisted Projects
FMR	Farm-to-Market Road
FPRB	Fiscal Planning and Reforms Bureau – DBM
FS	Food Security
FY	Fiscal Year
GAA	General Appropriations Act
GAS	General Administration and Support
GHG	Greenhouse Gases
HUDCC	Housing and Urban Development Coordinating Council
ICM	Integrated Coastal Management
INDC	Intended Nationally Determined Contributions
INREMP	Integrated Natural Resources and Environmental Management Program
JMC	Joint Memorandum Circular
KPA	Key Production Areas
KRA	Key Results Areas
LFPs	Locally-Funded Projects
LRT	Light Rail Transit
MGB	Mines and Geosciences Bureau – DENR
MOOE	Maintenance and Other Operating Expenditures
NAMRIA	National Mapping and Resource Information Authority – DENR
NBM	National Budget Memorandum
NCCAP	National Climate Change Action Plan
NEP	National Expenditure Program
NGA	National Government Agencies
NGP	National Greening Program
NSWMC	National Solid Waste Management Commission
NWRB	National Water Resources Board – DENR
OCD	Office of Civil Defense - DND
OSEC	Office of the Secretary
OSBP	Online Submission of Budget Proposals

PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration – DOST
PAP (PPA)	Programs, Activities, and Projects
PBA	Program Budget Approach
PCAARRD	Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development – DOST
PCC	Philippine Carabao Center – DA
PCIEERD	Philippine Council for Industry, Energy and Emerging Technology Research and Development – DOST
PCIP	Provincial Commodity Investment Plan
PCSD	Palawan Council for Sustainable Development – DENR
PHIVOLCS	Philippine Institute of Volcanology and Seismology – DOST
PS	Personal Services
PSA	Philippine Statistics Authority
QAR	Quality Assurance and Review
RA	Republic Act
RRP	Risk Resiliency Program
SE	Sustainable Energy
SRE	Sustainable and Renewable Energy
STO	Support to Operations
TBH	Technical Budget Hearing
UACS	Unified Accounts Code Structure
VA	Vulnerability Assessment
WS	Water Sufficiency

Abbreviations

E-TRIKE	Energy-Efficient Electric Vehicles Project
PAMANA	PAyapa at MAsaganang PamayaNAn Program
PhilMech	Philippine Center for Postharvest Development and Mechanization
SOCSKSARGEN	South Cotabato, Cotabato, Sultan Kudarat, Sarangani, and General Santos Area Development Program

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Climate Budget Brief: An Introduction

Since 2014, the Philippines has mobilized the national budget process to tag climate change expenditures using a common policy-based typology and guidelines. This process was built on the results of the 2013 Climate Public Expenditure and Institutional Review and the ongoing public finance management reform agenda. As part of this process, the Department of Budget and Management developed a new form (BP Form 201-F), which provides a focal point for setting and communicating climate change expenditures in the national budget. In 2015, the National Budget Call commenced the inclusion of BP Form 201-F as part of the budget preparation forms, and DBM, in partnership with the Climate Change Commission, developed and implemented a climate budgeting framework.

In order to review each National Government Agency's climate change expenditures as reflected in their respective BP Form 201-F submissions, Climate Budget Briefs have been developed for key NGAs. These briefs are divided into three sections: (i) Roles of the NGA in implementing strategic priority areas of the National Climate Change Action Plan (NCCAP); (ii) Summary of 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.

The Climate Budget Brief has enabled the Government of the Philippines to more effectively identify, plan, budget, monitor, and report its climate response. Although limited to analyses of the allocation of CC expenditures, the Brief analyzes the alignment of NGA climate expenditures with NCCAP priorities to inform technical budget hearings (TBHs) and support climate budget preparation for subsequent fiscal years. The brief provides a first level of analyses, allowing government policymakers to better understand the scope, take stock of the national climate change response, and assess the institutional readiness for scaling up climate finance in the Philippines. This provides a platform for much deeper analyses moving forward in the next two to three budget cycles.

The data used in this document came from the approved and validated 2015 CC expenditure forms at the GAA level submitted by the NGAs to DBM. Being the first time to implement the climate budgeting system, the review and analyses of CC expenditures experienced challenges due to the delays in the tagging of the approved 2015 budget that occurred in March 2015 and was completed by the NGAs in May 2015. Quality assurance and refinement of the tagged PAPs were finalized in June 2015.

This document consolidates all of the 2015 climate budget briefs developed by the CCC and DBM, in coordination with the key agencies involved and with support from the World Bank. Comprehensive climate budget briefs were developed for select agencies with major roles in the NCCAP, while summary climate budget briefs were made for member agencies of the Cabinet Cluster on Climate Change Adaptation and Mitigation. This document also includes a discussion on CCC's quality review process for climate expenditure tagging which was setup to ensure the quality of the data collected and increase the transparency of data reported.

A compilation of climate budget briefs, available in a CD (see back cover), provides analyses on CC expenditures submitted at the Online Submission of Budget Proposals that were used to inform the TBHs held in 2014.

Key Messages of the 2015 Climate Budget

Overall, 43 NGAs identified climate change expenditures totaling PHP 140.4 Billion across 260 Programs, Projects, and Activities (PAPs) in the 2015 GAA budget. This corresponds to about 5% of the total National Government Budget.

- **As shares of total 2015 approved climate budget, PAPs are primarily designed to support adaptation** activities (87%), carried out through operations and projects (87%), supported by six NGAs (96%), wherein one NGA (DPWH) accounts for 68% of the total climate budget, and focused on two NCCAP strategic priorities (76%). Furthermore, of the 260 programs with climate expenditures, nearly three-quarters (73%) are concentrated in 27 programs, each with at least PHP 0.5 billion in climate expenditures.

- **Among NCCAP priorities, Sustainable Energy accounts for 42% of climate expenditures, followed by 34% for Water Sufficiency.** Under Sustainable Energy, in contradiction with their NCCAP roles and responsibilities, DOE, DOST, and DENR did not identify any PAPs supporting the output area on climate-resilient energy infrastructure, whereas DPWH allocated significant (87%) climate expenditure towards this area even though it was not designated as a lead NGA. While DOE does not have its own energy infrastructure assets to manage, as the energy and power industry is deregulated, DOE may want to consider how climate change impacts its planning and regulatory services. Additionally, despite its NCCAP mandates, DOE does not have any PAPs that focus on energy efficiency or sustainable and renewable energy.

- **The NCCAP's Water Sufficiency is only supported by 3% of DENR's climate budget despite its lead role in several output areas,** including through its support for the NWRB. This accounts for less than 1% of total WS expenditures. Additionally, despite DPWH's lead role in the installation of Rainwater Collection Systems in public schools and state facilities, less than 1% of its climate budget is approved for this program.

- **Identified as another priority for 2011-2016, the NCCAP's Ecological and Environmental Stability comprise only 7% (or PHP 10.2 billion) of the approved climate budget in 2015.** Of total EES expenditures, the large majority (98%) is for DENR, which mainly supports the National Greening Program (PHP 7.0 billion). Institutional gap is observed for DA, wherein there are no identified PAPs for the output area on "CC mitigation and adaptation strategies for key ecosystems developed and implemented," despite its lead role.

- **In support of Knowledge and Capacity Development, there were no climate expenditures identified for the NCCAP outcome** on "gendered CC knowledge management established and accessible to all sectors at all levels," despite the designation of CICT, DILG, and CCC as lead agencies. Additionally, under the output area on "government capacity for CC adaptation and mitigation planning," the NCCAP states that the government will "develop a system of national GHG inventory from various sectors." However, no PAPs in the FY 2015 GAA have been identified to support the development of a GHG inventory. Furthermore, allocations for Knowledge and Capacity Development were just 3% of total climate expenditures in FY 2015, and allocations for Climate-Smart Industries and Services were just 2%.

- **Finally, under Climate-Smart Industries and Services, three NGAs with lead roles designated by NCCAP did not identify any PAPs** (DILG, CCC, HUDCC), and for **Human Security, six NCCAP lead agencies did not identify climate expenditures** (PIA, CHED, DOH, DepEd, DTI, and Commission on Population).

- Although the level of expenditures alone may not be indicative of government actions and achievements, there are few programs, of any size, identified in the climate budget supporting these priorities and their respective output areas. **To address these gaps in subsequent budget cycles,** these NGAs should (i) identify whether improvements to their CCET are required, and/or (ii) discuss potential ways that they can strengthen their support for the respective NCCAP areas they lead, both through increased expenditures as well as institutional capacity.

As a response to strengthening the delivery of the climate reform agenda, a Program Budget Approach (PBA) is devised by DBM to push convergence among NGAs and bring oppotunirty to scale up climate response by allowing Government to focus its available fiscal space on key priority programs. Mandated by Executive Order 43, the DENR led the coordination of the formulation of the 2015 Risk Resiliency Program (RRP) to strengthen coordination across Agencies and lay the foundation for convergence. The RRP budget in the FY 2015 GAA of PHP 70.6 billion is for 79 PAPs from thirteen Participating NGAs, which is concentrated in 16 PAPs from six NGAs, accounting for over 94% of the budget.

The 2015 RRP is largely focused on climate change. Nearly all (95%) of the approved 2015 budget for the RRP is estimated to address climate change. Climate expenditures through the PBA constitute about half of the total climate expenditures in the budget. Both the PBA and overall climate expenditures have been rising rapidly. Nevertheless, there is significant volatility in the funding levels year-to-year. The use of a medium-term expenditure framework would strengthen planning and encourage prioritization of climate expenditures.

The quality of the RRP can be enhanced through

(i) the development of planning processes within Agencies including the designation of an Undersecretary-level focal point person on PBA and

(ii) leadership by the DENR in strengthening the linkages between the CC PAP submissions against climate change objectives, outcomes, and targets, and (iii) the provision of critical inputs on targeted climate outcomes by the CCC and the National Economic and Development Agency (NEDA).

Key Agencies in the Implementation of NCCAP

Department Of Agriculture

DA's Climate Profile and Responsibilities

The Department of Agriculture is responsible for and leads the implementation of the National Climate Change Action Plan strategic priority area on Food Security and one output area in the Ecological and Environmental Stability priority. It is also a coordinating NGA for several output areas on Water Sufficiency and for one output area on Climate-Smart Industries and Services.

As a member of the Cabinet Cluster on Climate Change Adaptation and Mitigation, the DA is involved in the Cluster's Program Convergence Budgeting for the Risk Resiliency Program (RRP). 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 DA, together with the Philippine Statistics Authority, is tasked under Executive Order No. 174 to lead the greenhouse gas inventory for the agriculture sector. The GHG inventory is needed in defining the government's Intended Nationally Determined Contributions (INDC).
DA mandated the Office of the Secretary and all seven attached agencies and 21 bureaus to mainstream climate change in their programs, plans, and budgets through a memorandum issued on January 25, 2013.

The memorandum directs DA to use agro-ecological zones as the overarching planning domain, with consideration of current and projected climate risks.

It establishes seven climate-focused system-wide programs that cut across policy instruments and DA agencies, namely:

1. Mainstreaming Climate Change Adaptation and Mitigation Initiative in Agriculture (AMIA);
2. Climate Information System (CIS);
3. Philippine Adaptation & Mitigation in Agriculture Knowledge Toolbox;
4. Climate-Smart Agriculture Infrastructure;
5. Financing and Risk Transfer Instruments on Climate Change;
6. Climate-Smart Agriculture & Fisheries Regulations; and
7. Climate-Smart Agriculture Extension Systems.

DA Responsibilities in NCCAP
Outcomes and Output Areas by Strategic Priority

Strategic Priority/Outcome	Output Area	Responsibility
Food Security		
Enhanced resilience of agriculture and fisheries production and distribution systems from climate change	Enhanced knowledge on the vulnerability of agriculture and fisheries to the impacts of climate change	Lead Agency, with LGUs
	Climate-sensitive agriculture and fisheries policies, plans, and programs formulated	Lead Agency
Enhanced resilience of agriculture and fishing communities from climate change	Enhanced capacity for CCA and DRR of government, farming, and fishing communities and industry	Lead Agency
	Enhanced social protection for farming and fishing communities	Lead Agency
Ecological and Environmental Stability		
Ecosystems protected, rehabilitated, and ecological services restored	CC adaptation and mitigation strategies for key ecosystems developed and implemented	Lead Agency, with LGUs
Water Sufficiency		
Water governance restructured toward a climate and gender-responsive water sector	Enabling policy environment for IWRM and CCA created	Coordinating Agency
	CC adaptation and vulnerability reduction measures for water resources and infrastructure implemented	Coordinating Agency
Sustainability of water supply and access to safe and affordable water ensured	Water supply and demand management of water systems improved	Coordinating Agency
Knowledge and Capacity for CC adaptation in the water sector enhanced	Knowledge and Capacity for IWRM and water sector adaptation planning enhanced	Coordinating Agency
Climate-Smart Industries and Services		
Green cities and municipalities developed, promoted, and sustained	Ecological solid waste management implemented toward climate change adaptation and mitigation	Coordinating Agency

DA's Approved Climate Expenditure FY2015

DA's climate expenditure of PHP 14.6 billion in the FY 2015 GAA represents 30% of its total budget of PHP 48.7 billion. It is 10% of the national climate expenditure in the FY 2015 GAA. (See Data 1.)

Data 1: DA FY 2015 GAA
Consolidated Climate Expenditure ('000 PHP)

	FY 2015 GAA
Department's Climate Expenditure	14,622,957
Department Budget	48,373,834
Share of Department's Climate Expenditure in Department Budget	30%
Share of Department's Climate Expenditure in National Climate Budget	10%

Half of DA's climate expenditure in the FY 2015 GAA is funded from Foreign-Assisted Projects. The remainder is divided between domestically-funded Operations (37%) and locally-funded projects (13%). DA's consolidated climate expenditure in the FY 2015 GAA, as in the previous budget submission, continues to be concentrated in the Office of the Secretary (93%). The remainder is allocated to ACPC, BFAR, PCC, and PhilMech.

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

The consolidated climate expenditure of PHP 14.6 billion of DA and its attached agencies in the FY 2015 GAA represents 30% of its total budget of PHP 48.7 billion. (See Data 2.)

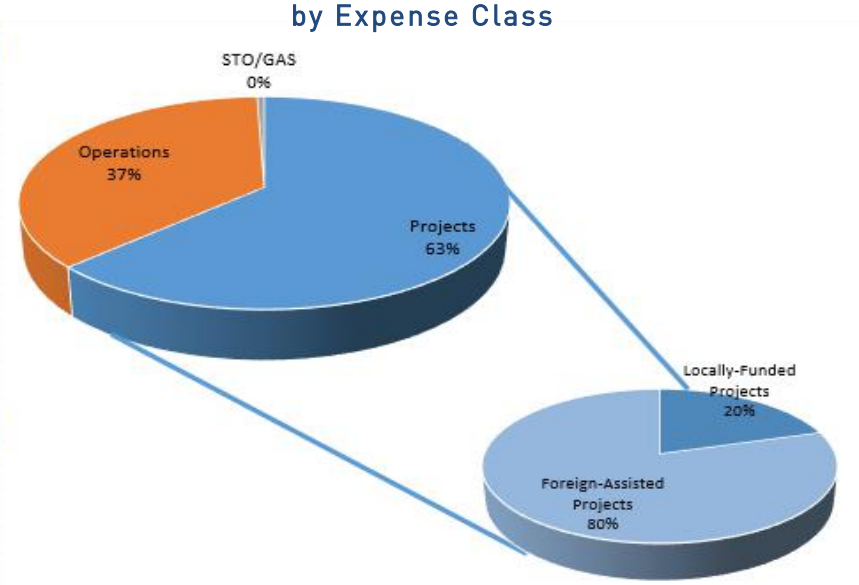
- Five (5) DA Agencies that comprise 98% of DA's budget in the FY 2015 GAA tagged their budget for climate expenditure.
- DA accounts for about 10% of the climate expenditure included in the FY 2015 GAA of all national government agencies.

Data 2: DA FY 2015 GAA Consolidated Climate Expenditure by Agency ('000 PHP)

	Climate Expenditure	Total Appropriation	% Climate Expenditure
OSEC	13,656,897	39,001,736	35%
BFAR	150,000	2,035,659	8%
PCC	492,593	399,009	59%
ACPC	150,000	2,035,659	7%
PHILMECH	121,177	204,047	59%
Other Agencies	-	418,211	-
TOTAL	**14,622,957**	**48,373,834**	**30%**

Almost two-thirds (63%) of DA's climate expenditure in the FY 2015 GAA is allocated for Projects, wherein majority (80%) are funded from Foreign-Assisted Projects. The remainder is divided between Operations (37%), and General Administration Support (GAS) and Support to Operations (STO) with less than 1%. (See Data 3.)

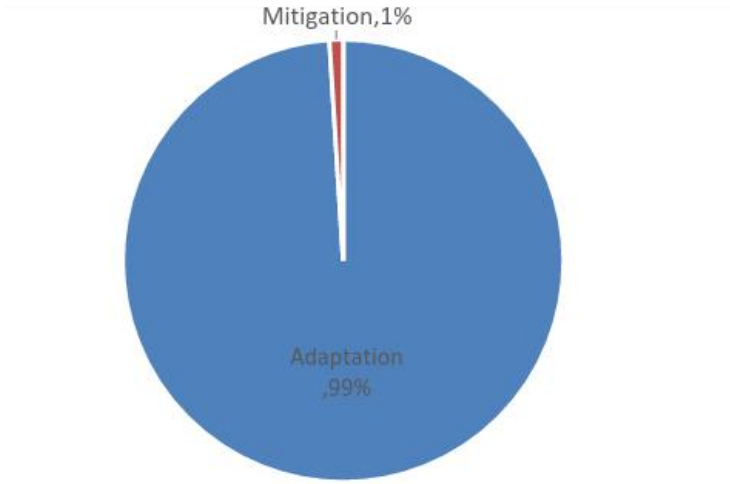
Data 3: DA FY 2015 GAA Consolidated Climate Expenditure by Expense Class



B. DA FY2015 Climate Expenditure: NCCAP Outcomes and Output Areas

Climate Expenditure by Pillar. Almost all (99%) of the climate expenditure in DA's budget in the FY 2015 GAA is focused on adaptation. (See Data 4.) The limited focus on mitigation is not consistent with DA's mandate in the EES strategic priority and DA's policy under AMIA to address climate change mitigation issues in agriculture. This may be a result of climate expenditure tagging, that requires NGAs to tag PAPs using a single typology code only. As a result, the mitigation response of programs with multiple climate benefits (e.g. mangrove plantation in coastal areas) may not be fully reflected in the climate expenditure statistics.

Data 4: DA FY 2015 GAA Climate Expenditure by Climate Pillar



Climate Expenditure by Strategic Priority. All (100%) of DA's climate expenditure in DA's budget in the FY 2015 GAA is focused on Food Security, where DA is a lead NGA. In contrast, there are no PAPs in DA's FY 2015 GAA with a primary focus on another NCCAP strategic priority, EES, also led by DA.

Data 5: DA FY 2015 GAA: Climate Expenditure by NCCAP Strategic Priority

B.1 Food Security

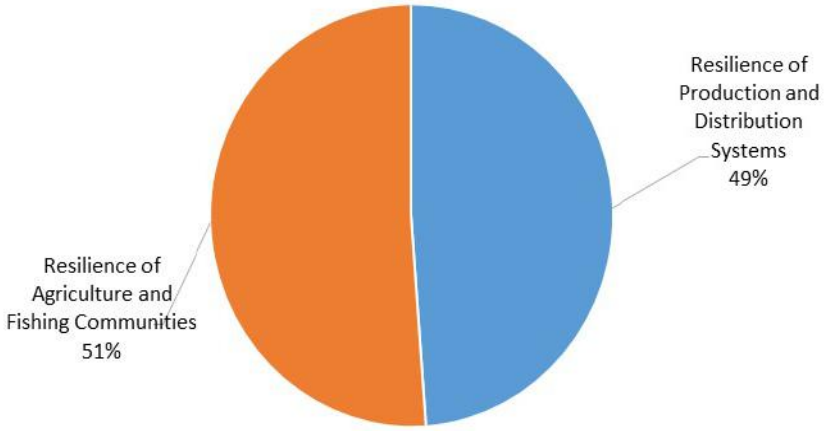
DA's climate expenditure of PHP 14.6 billion in the FY 2015 GAA is divided between the two (2) output areas under Food Security: enhancing resilience of production and distribution systems, and enhancing resilience in agriculture and fishing communities. (See Data 6, Data 7, and Data 8.)

Most (PHP 13.8 billion or 91%) of DA's climate expenditure in the FY 2015 GAA is focused on service delivery. The remainder is distributed among Research and Development (3%), Knowledge and Capacity Development (5%), and Policy and Governance (2%).

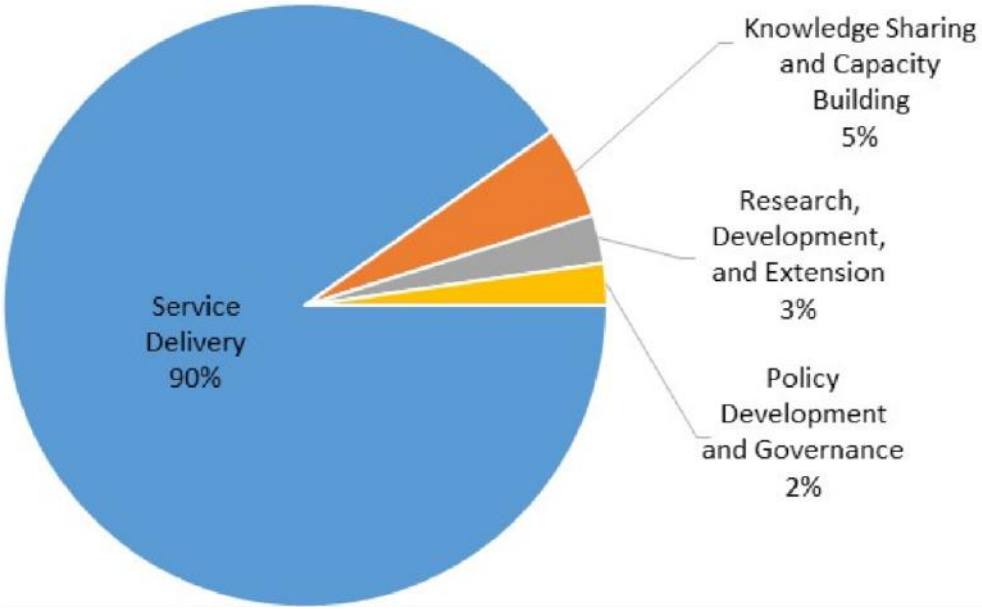
Data 6: DA FY 2015 GAA Consolidated Climate Expenditure for Food Security by Output Area ('000 PHP)

Output Area	GAS/ STO	Operations	Locally-Funded Projects	Foreign-Assisted Projects	Total	Total %
Resilience of Agriculture and Fishing Production and Distribution Systems	78,347	5,202,007	1,861,257	2,965	7,144,577	49%
Resilience of Agriculture and Fishing Communities	-	150,000	-	7,328,380	7,478,380	51%
Total Climate Expenditure	**78,347**	**5,352,007**	**1,861,257**	**7,331,345**	**14,622,957**	**100%**
% of Climate Expenditure	1%	37%	13%	50%	100%	

Data 7: DA FY 2015 GAA Consolidated Climate Expenditure for Food Security by Output Area



Data 8: DA FY 2015 GAA Consolidated Climate Expenditure for Food Security by Activity Type



Climate expenditures are concentrated in seven (7) PAPs of the OSEC, which account for about three-fourths (PHP 10.8 billion) of DA's climate expenditure in the FY 2015 GAA. (See Data 8.) These PAPs include:

- The foreign-assisted project Philippine Rural Development Project for PHP 7.3 billion comprising about half of DA's climate expenditure in the FY 2015 GAA. It finances rural projects in support of the Provincial Commodity Investment Plan (PCIP), which are selected based on an Expanded Vulnerability and Suitability Assessment (e-VSA).

- Two locally-funded projects for the repair, rehabilitation, and construction of farm-to-market roads for PHP 1.2 billion (8%) and the SOCSKSARGEN, an integrated food security program focused on a region in southern Philippines (Mindanao), for PHP 0.3 billion (2%).

- A set of three (3) programs to support rice production and distribution totaling PHP 1.7 billion (12%) focused on Irrigation, Research & Development, and Production Support Services.

- Production Support Services for high value crops (PHP 0.3 billion).

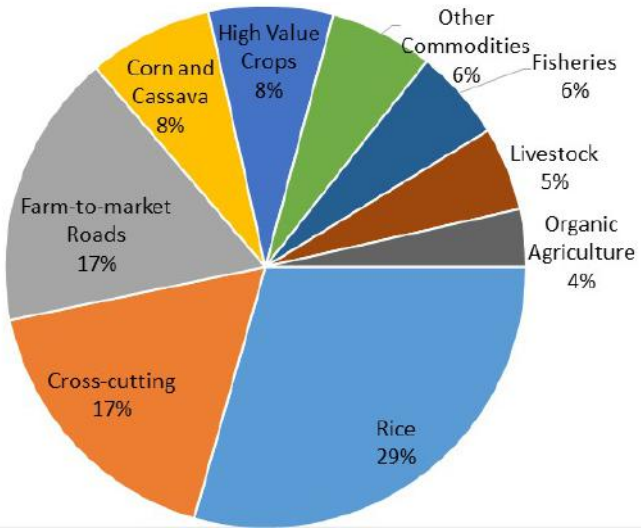
Data 9: DA FY 2015 GAA Programs and Projects with the Largest Allocation by Strategic Priority and Output Area ('000 PHP)

Strategic Priority/ Output Area/ PAP	FY 2015 GAA	%
FOOD SECURITY		
Resilience of Agriculture and fishing communities	**7,320,380**	51%
Philippine Rural Development Project	*7,328,380*	*51%*
Resilience of Agriculture and fisheries production and distribution systems	**7,144,577**	49%
FMR Repair & Construction	*1,200,000*	*8%*
National Rice Program, Irrigation	*676,150*	*5%*
National Rice Program, PSS	*906,505*	*6%*
National Rice Program, R&D	*122,979*	*1%*
SOCSKSARGEN Integrated Food Security	319,708	*2%*
Agriculture R&D, various	*33,295*	*0%*
National High Value Crop: PSS	*290,943*	*2%*
Total	**14,622,957**	**100%**

Almost half of the climate expenditures focused on PAPs to enhance resilience of production and distribution systems directly focus on specific commodities: rice, corn and cassava, organic agriculture, high value crops, fisheries, and livestock.
(See Data 9.)

Rice accounts for the largest climate expenditure (29%), almost equal to the combined climate expenditures for other commodities (36%). About half of the climate expenditures that cut across commodities are focused on farm-to-market roads.

Data 10: DA FY 2015 GAA Consolidated Climate Expenditure for Enhancing Resilience of Agriculture, Fishing Production, Distribution Systems by Commodity ('000 PHP)



DA utilizes a full complement of programs: research and development, irrigation, production support services irrigation, and extension and training, for each of the commodities of focus in order to enhance climate resilience in production and distribution. (See Data 10.) Policy development and governance, on the other hand, is carried out as a cross-cutting issue spanning all agricultural commodities, except fisheries, which has its own. About half of the climate expenditure under the cross-cutting category is allocated to the Farm-to-Market Road Program.

Data 11: DA FY 2015 GAA Consolidated Climate Expenditure for Enhancing Resilience of Agriculture, Fishing Production, and Distribution Systems by Commodity and Activity Type ('000 PHP)

	Policy Development & Governance	Research and Development and Extension	Knowledge Sharing and Capacity Building	Service Delivery	Total
Cross-cutting	177,301	187,958	121,177	1,967,222	2,453,658
Rice	-	122,979	164,021	1,814,168	2,101,168
Corn & cassava	-	2,273	88,104	462,757	553,134
Other commodities	-	33,295	154,322	270,355	457,972
Fisheries	150,319	17,462	-	236,144	403,925
Organic agriculture	-	9,450	101,396	143,050	253,896
High value crops	-	-	54,606	496,528	551,134
Livestock	-	8,037	37,187	324,465	369,689
Total	**327,620**	**381,454**	**720,813**	**5,714,689**	**7,144,577**

B.2 Ecological and Environmental Stability

Despite DA's lead role to develop and implement adaptation and mitigation strategies for key ecosystems, DA does not have any PAPs with climate expenditure to address this output area.

Areas for Discussion

Prioritizing PAPs by location:

The vulnerability of agricultural systems and communities to climate change is a local issue and likewise, requires local response.

- Is DA prioritizing its tagged activities based on the vulnerability of local areas? If yes, at what level (regional, provincial or local) does prioritization occur? How can the barriers to further localization be overcome?

- What is the geographic distribution of the climate expenditure? Is a greater share of climate expenditure directed toward the most vulnerable areas? Is DA using different methods, tools, PAP designs based on the vulnerability of each location? Is DA using climate vulnerability information to prioritize across commodities?

Farm-to-Market Roads:

Climate expenditure for FMR can be allocated to make roads more resilient and make communities less vulnerable.

- What is the primary focus of the FMR program? Has it been made more climate-resilient, for example, through the use of strengthened construction standards? Are these in line with the standards issued by DPWH? If not, what is the basis for these standards?

- Is the focus of the FMR to reduce food security vulnerability of communities addressed? Did the communities benefit? Are climate vulnerability data used in the design of the FMR?

PAPs with multiple benefits:

The climate change expenditure tagging system only allows NGAs to tag PAPs using a single typology code.

- To what extent is this constraint affecting the reporting of climate expenditure data? What types of activities are being under-reported, over-reported?

Ecological and Environmental Stability:

Despite DA's lead role in "CC mitigation and adaptation strategies for key ecosystems developed and implemented", the DA budget in the FY 2015 GAA does not include PAPs specifically focused on this area. The scope of the activities for this area is broad. Moreover, the coordinating NGAs such as DENR lead the implementation of specific activities (e.g., the National REDD+ Strategy) that contribute to this output area.

- Are DA's activities in this area not being tagged as such because they are carried out through PAPs with multiple climate benefits?
- Are there issues in obtaining funding for this output area? What are these issues? Can the issues be addressed in part by representing the value of the PAP better?

GHG inventory for the Agriculture Sector:

Executive Order 174 directs DA to lead the conduct, documentation, archiving, and monitoring of GHG inventory in the agriculture sector. Estimating the GHG emissions levels and reductions is important in shaping the government's INDC.

- The DA budget in the FY 2015 GAA does not include a line item to undertake a GHG inventory of the sector. Is the funding for this already included in an existing line item in the budget?

Key Agencies in the Implementation of NCCAP

Department Of Energy

DOE's Climate Profile and Responsibilities

The Department of Energy is responsible for and co-leads the implementation of the NCCAP strategic priority area on Sustainable Energy, and has a coordinating agency role in the Water Sufficiency priority area.

As member of the Cabinet Cluster on CCAM, DOE is involved in the Cluster's Program Convergence Budgeting for the RRP. 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. DOE focuses on the RRP's cleaner, safer, and healthier environment outcome.

DOE leads the greenhouse gas inventory in the energy sector, as stipulated in Executive Order No. 174. 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 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 conservation program promoted and implemented	Government Energy Management Program (GEMP) implemented	Co-lead with DOST, DENR
	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 9513 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 Development		
Knowledge of climate science enhanced	GHG inventory completed	Lead Agency (energy sector) per EO No. 174
Water Sufficiency		
Water governance restructured toward a climate and gender-responsive water sector	Enabling policy environment for IWRM and CCA created	Coordinating Agency
	Climate change adaptation and vulnerability reduction measures for water resources and infrastructure implemented	Coordinating Agency

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 national climate expenditure for mitigation. (See Data 1.) This accounts for 2% of the national climate expenditure in the FY 2015 GAA.

- DOE's climate expenditure in the FY 2015 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. Operations is composed of sector policies, regulations, and the promotion of innovation.

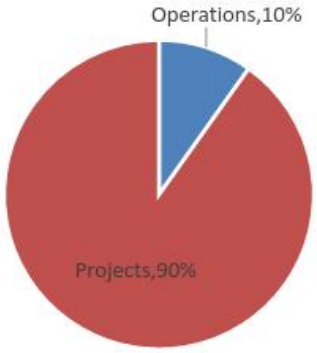
Data 1: DOE FY 2015 GAA Approved Budget: Size and Trends ('000s PHP)

	FY 2015 GAA
Department's Climate Expenditure	2,865,087
Department Budget	3,469,772
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 on one project, which accounts for 90% or PHP 2.6 billion of the total budget. The remaining 10% is allocated 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 FY 2015 GAA.

Data 2: DOE FY 2015 GAA: Climate Expenditure by Expense Class



B. DOE FY2015 Climate Expenditure: NCCAP Outcomes and Output Areas

Climate Expenditure by Pillar:

The entire DOE climate expenditure in the FY 2015 GAA is focused on mitigation. No expenditures are proposed for adaptation, even though DOE has a lead responsibility for climate-resilient energy infrastructure.

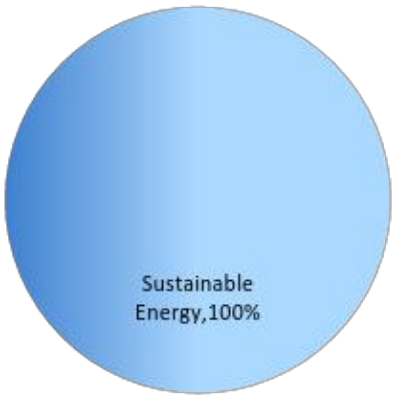
Despite a small allocation (10% of the climate expenditure), Operations has an important role in attaining mitigation objectives.

- With the full decentralization of the energy and power industry, DOE has limited ability to directly attain adaptation or mitigation goals. Its three (3) major final outputs aim to provide incentives to private and quasi-private actors through policies (1% of DOE's FY 2015 climate expenditures), regulations (1%), and promotion of innovation (8%).

Climate Expenditure by NCCAP Strategic Priority:

DOE's climate expenditure in the FY 2015 GAA focuses on Sustainable Energy, where DOE has a lead role. (See Data 3.) The budget does not include any PAPs for Knowledge and Capacity Development and Water Sufficiency, where DOE has specific lead and coordinating responsibilities, respectively.

Data 3: DOE FY 2015 GAA: Climate Expenditure by NCCAP Strategic Priority



B.1 Sustainable Energy

DOE's climate expenditure focuses on two (2) output areas in Sustainable Energy: Environmentally-Sustainable Transport (90%) and Sustainable Renewable Energy (3%). In addition, three (3) PAPs (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 FY 2015 GAA: Climate Expenditure on Sustainable Energy by Output Area and by Expense Class (in '000 PHP)

NCCAP Strategic Priority/ Output Area	Major Final Output			Projects		TOTAL	% Climate Budget
	Policy Service	Promo-tion/ Imple-mentation	Regula-tory Service	Locally-Funded	Foreign Funded		
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 PAPs focused on energy efficiency.

- Three (3) PAPs totaling 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 GEMP, 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 PAPs 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 FY 2015 GAA includes the 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 off-grid, decentralized community-based renewable energy systems.
- In line with the Renewable Act of 2008 (RA 9513), 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, not more than doubling hydropower, doubling geothermal power, and increasing biomass capacity by 25% by year 2030.
- DOE has a budget request for a locally-funded project on household electrification, but this is not included in the FY 2015 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 PAP 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 FY 2015 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 FY 2015 budget request but is not included in the FY 2015 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 PAP 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 PAPs 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 GHG emission inventory for the energy sector, the climate expenditure in the FY 2015 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 INDC of the Philippine government, particularly for a sector that accounts for a significant share of the country's emissions.

B.3 Water Sufficiency

The DOE budget in the FY 2015 GAA does not include any PAPs 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, 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 DOE promote and monitor energy savings by government and the private sector?

Sustainable Transport:

Although 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 in energy efficiency and renewable energy. However, DOE may want to consider that it has a high leverage toward achieving its targets by using proper incentives and setting up the 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 Project 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 GHG emissions in the energy sector. Estimating the levels of GHG emissions and removals is important in determining the Government of the Philippines' INDC, particularly in reducing emissions to adopt low carbon pathways in the energy sector.

- Funding for this initiative is not in the FY 2015 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?

Key Agencies in the Implementation of NCCAP

Department Of Environment and Natural Resources

DENR's Climate Profile and Responsibilities

The Department of Environment and Natural Resources, together with its attached agencies, is responsible for and leads the implementation of the NCCAP strategic priority areas on Ecological and Environmental Stability, Water Sufficiency, Climate-Smart Industries and Services, and Sustainable Energy.

As chair of the Cabinet Cluster on CCAM, DENR leads the Cluster's Program Convergence Budgeting for the RRP. 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.

DENR's responsibilities are aligned with the department's primary mandate for the conservation, management, development, and proper use of the country's environment and natural resources. These resources include forest and grazing lands, mineral resources, reservation and watershed areas, and lands in the public domain.

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

Strategic Priority/Outcome	Output Area	Responsibility	Agency
Ecological and Environmental Stability			
Ecosystem protected, rehabilitated, and ecological services restored	Management and conservation of protected areas and key biodiversity areas improved	Lead Agency	DENR
	Environmental laws strictly implemented	Lead Agency	DENR
	Capacity for integrated ecosystem-based management approach in protected areas and key biodiversity areas enhanced	Co-lead with CCC	DENR
	Climate change mitigation and adaptation strategies for key ecosystems developed and implemented	Coordinating Agency	DENR
Climate-Smart Industries and Services			
Climate-smart industries and services promoted, developed, and sustained	Eco-efficient production adopted by industries	Co-lead with DTI and DOLE	DENR
	Information, education, communication, and capacity building program for climate-smart industries and services developed	Co-lead with DTI	DENR
	Enabling environment for the development of climate-smart industries and services created	Coordinating Agency	DENR
Green cities and municipalities developed, promoted, and sustained	Ecological solid waste management implemented toward climate change adaptation and mitigation	Lead Agency	DENR
Water Sufficiency			
Water governance restructured towards a climate and gender-responsive water sector	Enabling policy environment for integrated water resources management and climate change adaptation created	Lead Agency	NWRB
	Climate change adaptation and vulnerability reduction measures for water resources and infrastructure implemented	Co-lead Agency with DPWH	DENR
Sustainability of water supply and access to safe and affordable water ensured	Water supply and demand management of water systems improved	Lead Agency	NWRB
	Water quality of surface and groundwater improved	Co-lead Agency with DOH, NAPC	DENR
	Equitable access of men and women to sustainable water supply improved	Co-lead with DOH	NWRB
Knowledge and capacity for climate change adaptation in the water sector enhanced	Knowledge and capacity for integrated water resources management and water sector adaptation planning enhanced	Co-lead with PIA	NWRB
Sustainable Energy			
Nationwide energy efficiency and conservation program promoted and implemented	GEMP implemented	Co-lead with DOE, DOST	DENR
Energy systems and infrastructure made climate-resilient, rehabilitated, and improved	Energy systems and infrastructure made climate-resilient	Co-lead with DOE, DOST	DENR

DENR's Approved Climate Expenditure FY2015

The consolidated climate expenditure of DENR and its attached agencies is PHP 10.9 billion, 52% of its total budget of PHP 21.0 billion. It represents 8% of the national climate budget in the FY 2015 GAA. (See Data 1.)

Data 1: DENR FY 2015 GAA
Consolidated Climate Expenditure ('000s PHP)

	FY 2015 GAA
Department's Climate Expenditure	10,858,286
Department Budget	21,017,958
Share of Department's Climate Expenditure in Department Budget	52%
Share of Department's Climate Expenditure in National Climate Budget	8%

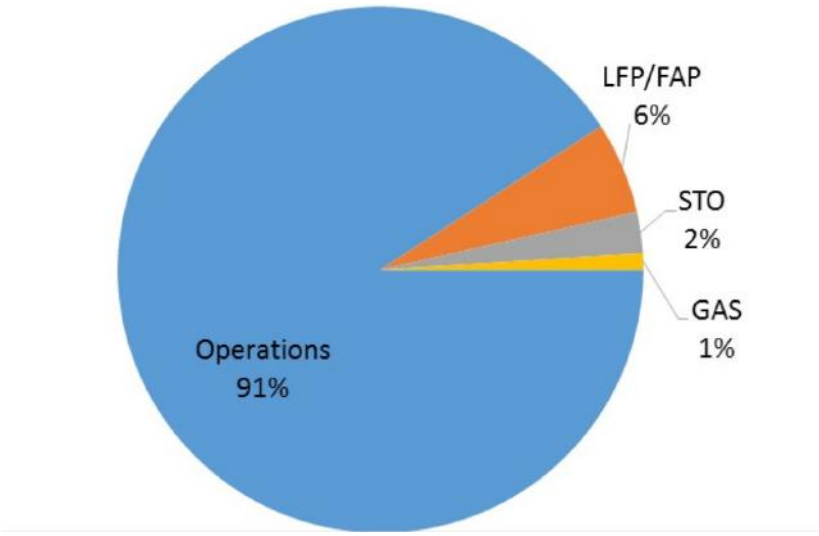
DENR's consolidated climate expenditure is concentrated in the Office of the Secretary (93%) and on three (3) PAPs (78%).

- The National Greening Program, one of the government's flagship programs, is DENR's largest climate expenditure. The program accounts for 65% of DENR's total climate expenditure, and 5% of the national climate budget for FY 2015.
- Other programs with large climate expenditures are the Enforcement of Forestry Laws, Rules, and Regulations (8%), and Protected Areas Development and Management (5%).

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

DENR's climate expenditure is focused on Operations (92%), complemented by support from a few foreign-assisted projects, General Administration Support (GAS), and Support to Operations (STO). (See Data 2.)

Data 2: DENR FY 2015 GAA Climate Expenditure by Expense Class



The OSEC accounts for 93% (PHP 10.1 billion) of DENR's consolidated climate expenditure in the FY 2015 GAA. (See Data 3.)

- The EMB accounts for 5% of DENR's consolidated climate expenditure. All other agencies account for the remaining 2%. These shares correspond to the shares of each Agency's total budget.
- Despite its lead role in specific output areas of the NCCAP, the NWRB has less than 1% of the consolidated climate expenditure.

Data 3: DENR FY 2015 GAA Consolidated Climate Expenditure by Agencies ('000s PHP)

	Climate Expenditure	% of Consolidated Climate Budget	Total Budget	% of Consolidated Total Budget	% Climate Budget
OSEC	10,120,561	93%	18,170,005	87%	56%
EMB	551,674	5%	797,238	4%	69%
MGB	147,780	1%	762,822	4%	19%
NWRB	20,071	0%	86,823	5%	23%
NAMRIA	15,690	0%	1,138,213	0%	1%
PCSD	2,509	0%	62,857	0%	4%
TOTAL	**10,858,286**	**100%**	**21,017,958**	**100%**	**52%**

Eight (8) PAPs account for most (86%) of DENR's climate expenditure in the FY 2015 GAA. (See Data 4.)

- The Office of the Secretary's focus is accelerating national afforestation through the NGP, which accounts for nearly two-thirds (65%, or PHP 7.0 billion) of DENR's climate expenditure. It is complemented by targeted programs on protected area management (5%, or PHP 0.5 billion) and projects on forestry and natural resource management (4%, or PHP 0.4 billion).

- A second focus area of the OSEC is enforcement of forestry-related rules and regulations (8%, or PHP 0.9 billion) and the development of ENR policies and plans (1%, or PHP 0.1 billion).

- Among all attached agencies, the EMB has the largest climate expenditure (4%, or PHP 0.4 billion), focused on the implementation of ecological solid waste management programs and clean air regulations through the establishment of climate-smart industries.

- The MGB has a small but critical program to assess groundwater vulnerability to multiple hazards. The program accounts for 1% of DENR's consolidated climate expenditure (PHP 0.1 billion).

Data 4: DENR FY 2015 GAA Programs and Projects with the Largest Climate Expenditure ('000 PHP)

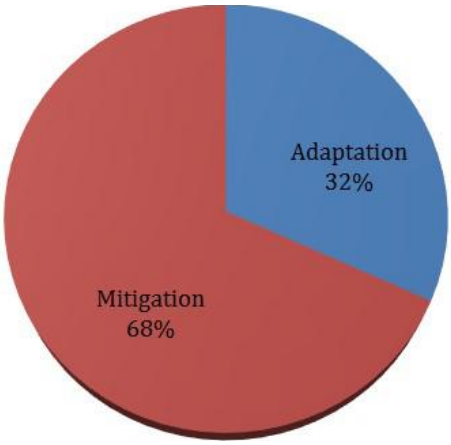
Agency: MFO Program, Activity, Project	Climate Expenditure	% Climate Expenditure
OSEC: Ecosystem Policy Services (MFO1)	**122,226**	**1%**
Formulation and Monitoring of ENR Sector Policies, Plans	122,226	1%
OSEC: Ecosystem Management Services (MFO2)	**8,168,678**	**75%**
National Greening Program	7,022,349	65%
Protected Areas Development and Management	518,587	5%
OSEC: Ecosystem Regulation Services (MFO3)	**905,493**	**8%**
Enforcement of Laws, Rules, Regulations	905,493	8%
OSEC: Foreign-Assisted Projects / Locally-Funded Projects	**406,189**	**4%**
JICA-Assisted Forestland Management Project	193,428	2%
EMB: Environmental Regulation Services (MFO1)	**551,674**	**5%**
Implementation of Clean Air Regulations	292,971	3%
Implementation of Ecological Solid Waste Management Regulations	136,230	1%
MGB: Mineral Resource Development Services (MFO1)	**147,780**	**1%**
Geo-hazard Assessments	147,780	1%
Total DENR Climate Expenditure	**10,858,286**	**100%**

B. DENR FY2015 Climate Expenditure: NCCAP Outcomes and Output Areas

Climate Expenditure by Pillar:

Two-thirds (68%) of DENR's consolidated climate expenditure focuses on mitigation, primarily through the NGP and its supporting activities, such as clonal nurseries. (See Data 5.) DENR's adaptation response, on the other hand, covers a number of NCCAP strategic priorities.

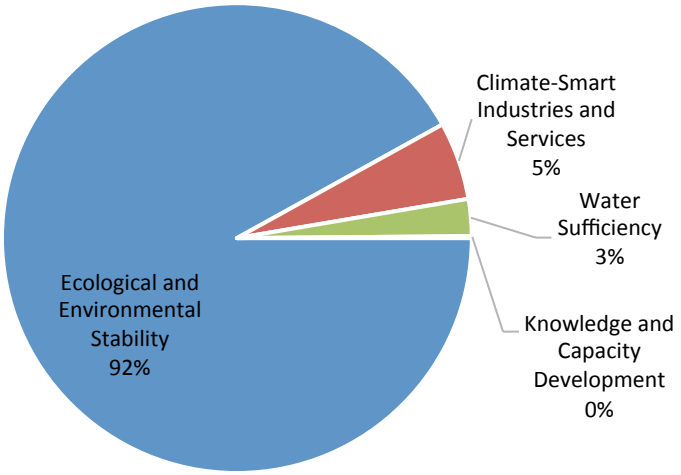
Data 5: DENR FY 2015 Consolidated Climate Expenditure by Climate Pillar



Climate Expenditure by Strategic Priority:

DENR's climate expenditure in the FY 2015 GAA supports three (3) of the four (4) NCCAP strategic priority areas where DENR has responsibility, but with a concentration on Ecological and Environmental Stability (92%). (See Data 6.) The other strategic priorities supported in the FY 2015 GAA are Climate-Smart Industries and Services, Water Sufficiency, and Knowledge and Capacity Development. There are no activities to support Sustainable Energy. DENR's climate expenditure for each strategic priority and output area is concentrated in a few PAPs. (See Data 7.)

Data 6: DENR FY 2015 GAA Consolidated Climate Expenditure by Strategic Priority



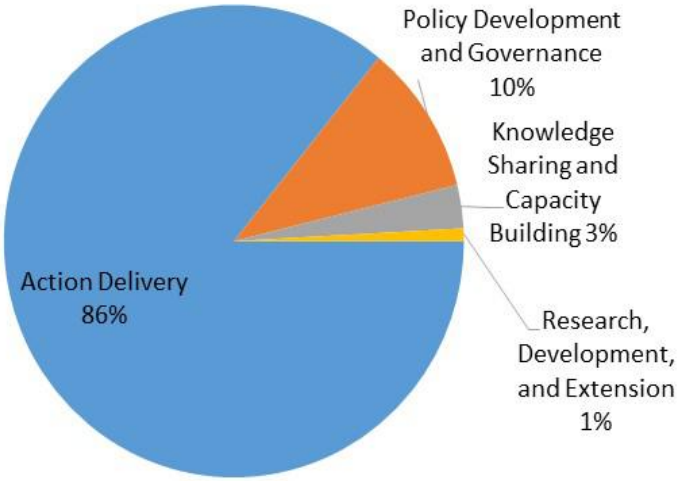
Data 7: DENR FY 2015 GAA Programs and Projects with the Largest Climate Expenditure by NCCAP Strategic Priority (in '000 PHP)

Strategic Priority: Output Area Major Program, Activity, Project	FY 2015 GAA	%
Ecological and Environmental Stability: Ecosystems and Ecological Services	**9,985,507**	**92%**
National Greening Program	7,022,349	65%
Enforcement of Laws, Rules, and Regulations	905,493	8%
Formulation/Monitoring of ENR Sector Policies, Plans, Programs, and Projects	122,226	1%
Integrated Natural Resources and Environmental Management Program	55,361	1%
Protected Areas Development and Management	518,587	5%
Forestland Management Project	193,428	2%
Climate-Smart Industries and Services: Climate-Smart Industry	**588,201**	**5%**
Implementation of Ecological Solid Waste Management Regulations	136,230	1%
Implementation of Clean Air Regulations	292,971	3%
Water Sufficiency: Integrated Water Resource Management and Governance	**276,092**	**3%**
Geo-Hazard Assessments	147,780	1%
Knowledge and Capacity Development: Knowledge of Climate Science	**14,485**	**0%**
TOTAL	10,858,286	100%

B.1 Ecological and Environmental Stability

DENR uses various activity types to implement the four (4) output areas in this strategic priority. Most (86%) of DENR's approved climate expenditure for Ecological and Environmental Stability focus on Action Delivery, while the remainder are focused on enabling activities consisting of Policy Development and Governance (10%); Research, Development, and Extension (1%); and Knowledge Sharing and Capacity Building (3%). (See Data 8.)

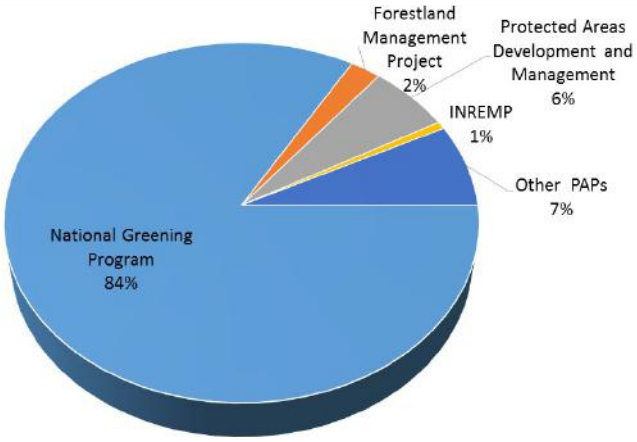
Data 8: DENR FY 2015 GAA Consolidated Climate Expenditure for Ecological and Environmental Stability by Activity Type



Four (4) PAPs account for 92% of DENR's FY16 climate expenditure for climate action delivery in this strategic priority. (See Data 9.)

- **National Greening Program:** This flagship program for carbon sequestration accounts for over four-fifths (83%) of DENR's FY 2015 approved climate expenditure. It is the DENR's largest climate program, accounting for 65% (PHP 7.0 billion) of the department's total climate expenditure in the FY 2015 GAA. By December 2014, it achieved 67% of the 1.5 million hectares targeted for planting from 2011-2016. While the program indicates the quality of economic and social benefits, it is not designed for climate adaptation. Nor does it monitor the benefits of adaptation, which are important in fulfilling DENR's responsibilities in the NCCAP output areas, most of which are focused on adaptation.
- **Protected Areas Development and Management:** This PAP focuses on two (2) of the four (4) output areas for Ecological and Environmental Stability. It includes in-situ measures to conserve biodiversity in protected areas. It accounts for 6% of the climate expenditure for action delivery under this strategic priority.
- **Other PAPs:** A number of small programs and some foreign-assisted projects that have just started comprise the remaining climate expenditure on action delivery in this strategic priority. They include the management of coastal and marine resources, the JICA-assisted Forestland Management Project, and the Integrated Natural Resources and Environmental Management Program (INREMP).

Data 9: DENR FY 2015 GAA Programs and Projects with Large Climate Expenditure for Ecological and Environmental Stability



Enabling supportive action is an important complement to the NGP, protected areas development, and other PAPs. It accounts for about a sixth of DENR's approved climate expenditure for Ecological and Environmental Stability. The activities include Policy and Governance (10%); institutional strengthening through Knowledge Sharing and Capacity Building (3%); and Research and Development (1%). Most of the climate expenditures focus on the implementation of policies under the Regulatory Services major final output.

- The OSEC's program on enforcement of forestry laws and regulations (8%) uses various approaches, including cash incentives for informers and institutional strengthening in hotspot areas. The objectives are: (1) to protect against illegal logging, entry and occupation, forest fires, pests, and diseases; (2) to issue tenure instruments to provide security and incentives to conservation; and (3) to manage protected areas, coastal and marine resources, and wildlife.
- Most of the climate expenditure for policy formulation is focused on data management.

B.2 Climate-Smart Industries and Services

The EMB supports the development of climate-smart industries and the implementation of the clean air and solid waste management regulations. About 5% of climate expenditures in the FY 2015 budget are directed toward this priority.

B.3 Water Sufficiency

DENR has a limited set of activities to support the output area for Water Sufficiency, accounting for 3% of DENR's climate expenditure. Most of DENR's climate expenditures (93%) in this priority area are with two agencies: the MGB and EMB. Despite the NWRB's lead role in several output areas, it accounts for less than 1% of the DENR's total climate expenditure. The board's program includes the evaluation, integration, and coordination of water resources plans and programs in specific local sites.

B.4 Sustainable Energy

The DENR's approved climate expenditure does not focus on Sustainable Energy, which it co-leads with the DOST and the DOE. While the DOE has programs to promote energy efficiency, a gap exists in making energy systems and infrastructure climate-resilient.

Areas for Discussion

National Greening Program:

DENR has made significant commitments of 65% of its approved climate expenditure for this program.

- The level of allocations may be resulting in the unintended consequence of limiting action in other areas of DENR's responsibilities, such as on adaptation and vulnerability reduction for water resources and management and conservation of protected areas. This scenario assumes that there are limits to how much an agency's total budget can be increased. Large increases in one PAP can limit or crowd out how much increases are possible in other PAPs. It may even result in reductions in other areas. How does DENR plan to address gaps in coverage in NCCAP outcome areas?

- The NGP is tagged as a mitigation program and its performance is tracked based on the number of seedlings planted. However, most of the responsibility areas of DENR are on adaptation. Moreover, NCCAP envisions public financing of adaptation action and enabling actions for mitigation. How can DENR redesign the program to deliver adaptation benefits? For instance, can the program's budget be oriented toward increasing resilience, for example, through improved targeting of vulnerable locations, vulnerable populations, and types of seedlings planted?

- Despite its huge allocation, the NGP's allocations, disbursements, and performance cannot be isolated and tracked due to the lack of a unique Unified Accounts Code Structure (UACS) code. UACS is used to track budget allotments and performance. How can DENR and DBM facilitate and automate the tracking and monitoring of the program within the Program Expenditure Classification (PREXC)?

Ecological Solid Waste Management:

DENR requested an expansion of the Solid Waste Management Program in FY 2015. The program was not included in the FY 2015 GAA.

- What are the reasons for excluding the program from the FY 2015 GAA? How can the program be redesigned for resubmission in FY16? Is the EMB's capacity sufficient to accommodate the expansion? Can the expansion be implemented in phases while the bureau builds its capacity?

Water Sufficiency:

- Recognizing the complexities in the water sector, how is DENR, and in particular, the NWRB, organized so that it can deliver in the output areas where it has a lead role? What challenges does the limited budget allocation present in meeting the requirements of this NCCAP strategic priority area?

Sustainable Energy:

The DENR co-leads this priority area with the DOST and the DOE. Yet, its climate expenditure does not reflect this role.

- How can the DENR incorporate Sustainable Energy among its PAPs? How can it work together with DOST and DOE to fulfill the requirement?

Key Agencies in the Implementation of NCCAP

Department Of Public Works and Highways

DPWH's Climate Profile and Responsibilities

The Department of Public Works and Highways is responsible for and leads the implementation of the NCCAP strategic priority areas on Water Sufficiency, and Climate-Smart Industries and Services.

As member of the Cabinet Cluster on CCAM, DPWH is involved in the Cluster's Program Convergence Budgeting for the RRP. 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.

DPWH's responsibilities are aligned with the department's primary mandate to plan, construct, and maintain major public infrastructure, including national roads and bridges, flood control systems, water resources, and other public works--all of which are affected by climate change.

However, despite DPWH's mandate in construction, the NCCAP does not identify specific responsibilities for DPWH to make transportation infrastructure climate-resilient. The Departments of Energy, Environment and Natural Resources, and Science and Technology are the lead agencies responsible for making energy and transport infrastructure climate-resilient.

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

Strategic Priority/Outcome	Output Area	Responsibility
Water Sufficiency		
Water governance restructured toward a climate- and gender-responsive water sector	Climate change adaptation and vulnerability reduction measures for water resources and infrastructure implemented	Co-lead Agency with DENR
	Enabling policy environment for integrated water resources management and climate change adaptation created	Coordinating Agency
Sustainability of water supply and access to safe and affordable water ensured	Water supply and demand management of water systems improved	Coordinating Agency
	Water quality of surface and groundwater improved	Coordinating Agency
	Equitable access of men and women to sustainable water supply improved	Coordinating Agency
Climate-Smart Industries and Services		
Green cities and municipalities developed, promoted, and sustained	Infrastructure in cities and municipalities developed, promoted, and sustained	Co-lead Agency with DILG, LGUs
Sustainable Energy		
Energy systems and infrastructure made climate-resilient, rehabilitated, and improved	Energy systems and infrastructure made climate-resilient	No specified leadership role

DPWH's Approved Climate Expenditure FY2015

DPWH's approved climate expenditure of PHP 96.6 billion is a third (33%) of its total budget appropriation of PHP 290.5 billion. It represents three-fourths (69%) of the national climate budget in FY 2015. (See Data 1.)

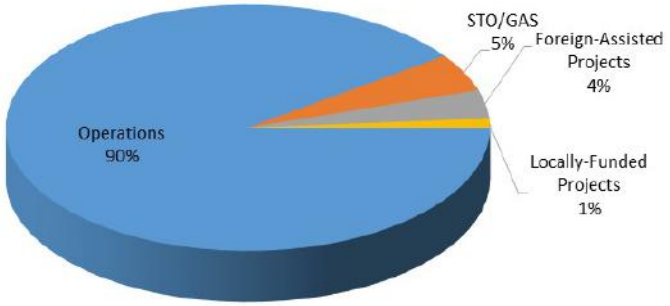
Data 1: DPWH FY 2015 GAA Climate Expenditure ('000s PHP)

	FY 2015 GAA
Department's Climate Expenditure	96,614,911
Department Budget	290,470,888
Share of Department's Climate Expenditure in Department Budget	33%
Share of Department's Climate Expenditure in National Climate Budget	69%

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

DPWH's climate expenditure focuses on Operations (90%), complemented by feasibility studies in support of Operations and a few locally-funded and foreign-assisted projects. (See Data 2.)

Data 2: DPWH FY 2015 GAA Climate Expenditure by Expense Class



DPWH's climate expenditure is concentrated in a few PAPs, divided between flood protection and drainage, and strengthening the climate resilience of national roads and bridges. (See Data 3.)

- Out of the PHP 42.3 billion climate expenditure for Flood Management Services, 91% (PHP 38.6 billion) is for the construction and maintenance of flood mitigation structures and drainage systems. This is complemented by smaller programs on the major and principal river basins and a few foreign-assisted projects.
- DPWH is improving the climate resilience of transport infrastructure, specifically roads and bridges, with a climate expenditure allocation of PHP 44.5 billion (46%). DPWH also considers current and future climate risks in the design of new construction projects, retrofitting, and/or rehabilitation of infrastructure.

Data 3: DPWH FY 2015 GAA: Programs & Projects with the Largest Allocation ('000 PHP)

Main Final Outputs/Programs	FY 2015 GAA	
	Climate Expenditure	% Distribution
Flood Management Services (MFO2)	**42,283,158**	**44%**
Construction/Maintenance of Flood Mitigation Structures & Drainage Systems	38,633,158	40%
National Road Network Services (MFO1)	**44,486,686**	**46%**
Construction and Maintenance of Bridges along National Roads	23,575,124	24%
Construction/Upgrading/Rehabilitation/Reconstruction of National Roads (3 PAPs)	20,911,562	22%
Total DPWH Climate Expenditure	**96,614,911**	**100%**

B. DPWH FY2015 Climate Expenditure: NCCAP Outcomes and Output Areas

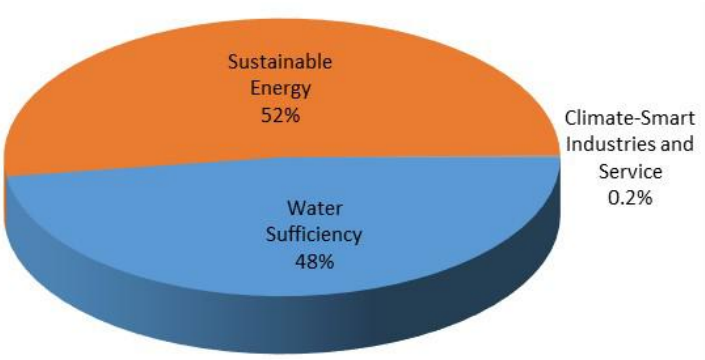
Climate Expenditure by Pillar:

All of DPWH's climate expenditure in the FY 2015 GAA is focused on adaptation.

Climate Expenditure by Strategic Priority:

DPWH's climate expenditure supports all strategic priority areas where it has a lead role. (See Data 4.) More than half (52%) of the expenditure is allocated for Sustainable Energy, 48% for Water Sufficiency, and 0.2% for Climate-Smart Industries and Services. DPWH's climate expenditure for each strategic priority and output area is concentrated in a few PAPs. (See Data 5.)

Data 4: DPWH FY 2015 GAA Climate Expenditure by NCCAP Strategic Priority



Data 5: DPWH FY 2015 GAA: Programs and Projects with the Largest Allocation by NCCAP Strategic Priority (in '000 PHP)

Strategic Priority/Output Area	FY 2015 GAA	% Distribution
Water Sufficiency: Integrated Water Resources Management and Water Governance	**45,893,830**	**48%**
Construction/Maintenance of Flood Mitigation Structures and Drainage Systems	38,633,158	40%
Construction/Rehabilitation of Flood Mitigation Structures along Major and Principal River Basins	3,650,000	4%
Flood Control Structures/Facilities (Foreign-assisted project)	3,610,672	4%
Water Sufficiency: Sustainable Water Supply	**270,000**	**0%**
Construction/Rehabilitation of Water Supply/Septage and Sewerage/Rainwater Collectors	270,000	0%
Climate-Smart Industries and Services: Green Cities	**200,000**	**0%**
National Building Program (Standardization of DPWH Building)	200,000	0%
Sustainable Energy: Climate-Proof Transport Infrastructure	**50,251,081**	**52%**
National Road Network Services	45,446,491	47%
Feasibility Studies, Research and Development	4,804,590	5%
Total Climate Budget	**96,614,911**	**100%**

B.1 Water Sufficiency

Nearly all (99%) of the PHP 46.2 billion climate expenditure for Water Sufficiency is focused on flood protection. This focus is part of the Integrated Water Resources Management and Governance Output Area for which DPWH is responsible. The remainder is allocated to Sustainable Water Supply.

- DPWH accounts for over 98% of the national climate expenditure for Water Sufficiency.
- Out of the PHP 45.9 billion for Flood Management Services and supporting projects, 84% (PHP 38.6 billion) is allocated for the construction and maintenance of flood mitigation structures and drainage systems. Flood mitigation is the largest climate expenditure in the FY 2015 GAA and is a major contributor to DPWH's 2015 target of reducing areas vulnerable to major flooding by 1.8%, casualties and property loss in major flooding by 1%, and flood inundation area by 1%.
- With the increasing cost of maintaining and rehabilitating roads, particularly resulting from floods, DPWH shifted focus from road repairs to managing flood risks through the Flood Risk Management and Resiliency Program. The program uses a river basin approach and focuses on designing and constructing disaster-resilient public infrastructure facilities for effective flood control. As a result, the DPWH budget for flood protection has grown in absolute terms and in relation to the overall budget.
- DPWH leads a program (less than 1% of the DPWH's approved climate expenditure) for the installation of Rainwater Collection Systems in public schools and other state facilities, as mandated by Republic Act 6716. By 2014, a total of 1,242 rainwater collection systems have been installed nationwide.

The programs tagged by DPWH under the Water Sufficiency strategic priority consists entirely of capital outlays focused on delivering climate adaptation outcomes: reducing risks or vulnerability, reducing potential impact or increasing the adaptive capacity to climate risks.

- While DPWH has strengthened the design standards for its flood protection programs, upfront capital costs limit the achievement of the standards through structural measures alone. Consequently, the DPWH incorporates alternative non-structural measures to meet the design standards.

Cagayan de Oro River Basin Flood Control Project

This project, developed under the Flood Risk Management and Resiliency Program, aims to lessen flooding and handle water flow from a typhoon with 100-year return period. Structural measures include construction of retarding basin with consideration of the projected flood flow and volume, improvement of Kagay-an Bridge using the structural resiliency approach, and raising of existing roads for evacuation. These measures are complemented with non-structural measures such as preparation/update of flood hazard maps, evacuation planning, community-based flood early warning systems, and information campaigns.

B.2 Sustainable Energy

Even without a lead role in Sustainable Energy, DPWH allocates more than half (52%, or PHP 50.3 billion) of its climate expenditure to climate-resilient transport infrastructure, such as roads and bridges. DPWH is the only department that proposed a budget for climate-resilient infrastructure in the FY 2015 GAA.

- Nearly all (90%) of the climate expenditure in the FY 2015 GAA supports increasing the resilience of DPWH's National Road Network Services (PHP 45.4 billion).
- The remaining 10% is for Support to Operations through feasibility study, research and development.

B.3 Climate-Smart Industries and Services

DPWH includes green building measures in the National Building Code of the Philippines (Presidential Decree No. 1096). The Green Building Referral Code integrates sustainability features and measures in the design, construction, operation, and management of buildings. The measures support the green cities and municipalities output area under Climate-Smart Industries and Services, for which DPWH is responsible. This strategic priority accounts for 0.2% of DPWH's FY 2015 GAA climate expenditure.

Areas for Discussion

Flood Management Services:

DPWH, with support from DBM, made significant commitments and rapidly increased its budget for flood management.

- DPWH has not tagged any programs for policy and governance, research and development or institutional strengthening/capacity building for flood protection. The climate expenditure consists of capital outlays. Planning and prioritizing programs are needed in making decisions about these investments. How does DPWH use climate information to plan and prioritize the selection of these investments? Should this function be carried out outside of the capital outlays?

- DPWH approved the upgrading of the flood design standards for 1:100 return period events. How have these standards been implemented? What are the challenges to their implementation? How does DPWH plan to manage these challenges? How are the standards communicated?

- DPWH's flood risk management strategy uses the river basin approach for flood control. However, only 8% of the flood management services expenditure goes to major and principal basins. How does the PAP for the construction/management of flood management structures support the river basin approach? How does DPWH improve its upstream planning and convergence with other programs, such as the NGP? How does DPWH prioritize the implementation of the major river basins master plans?

Rainwater Collection Systems are being installed nationwide.

- With a modest budget, how will DPWH include climate change in the appraisal criteria and prioritization of projects so that investments are protected and maximized?

Climate-Resilient Roads and Bridges:

DPWH is the only department that is focusing on climate-resilient infrastructure, and this accounts for about a third of the national climate budget.

- DPWH has not tagged any program for policy and governance, research and development, or institutional strengthening and capacity building for climate-resilient national roads and bridges. The approved climate expenditure consists of capital outlays. How does DPWH use climate information to plan and prioritize the selection of investments? Should this function be carried out outside of the capital outlays?

- DPWH approved the upgrading of the flood design standards for 1:100 return period events. How have these standards been implemented? What are the challenges to their implementation? How does DPWH plan to manage these challenges? How are the standards communicated?

Green Buildings.

DPWH integrated climate mitigation measures in the National Building Code, such as energy efficiency and other greening measures (e.g., water-saving faucets).

- How can DPWH help facilitate the integration and implementation of climate and weather risk reduction measures in local infrastructure based on risk and vulnerability assessments?

Key Agencies in the Implementation of NCCAP

Department Of Science and Technology

DOST's Climate Profile and Responsibilities

The Department of Science and Technology leads the implementation of the Knowledge and Capacity Development, and Sustainable Energy strategic priorities of the NCCAP. It also coordinates with other NGAs on four other strategic priorities: Ecological and Environmental Stability, Water Sufficiency, Climate-Smart Industries and Services, and Food Security. DOST does not have a specific role in the Human Security strategic priority.

Select agencies under DOST participate in the budget planning and preparation of the Cabinet Cluster on CCAM, including the Cluster's Program Convergence Budgeting for the RRP. 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.
DOST promotes science-based weather information, and climate change scenarios with associated impact assessment to enable agencies to develop appropriate mitigation strategies for a disaster- and climate-resilient Philippines.

Those responsibilities are consistent with and support DOST's primary mandate of providing scientific and technological services and ensuring that the results are utilized for the economic and social benefits of Filipinos. The role of DOST is to enhance knowledge of the science of climate change through research, technology, and innovation.

DOST Responsibilities on NCCAP Outcomes and Output Areas by Strategic Priority

Strategic Priority/Outcome	Output Area	Responsibility
Food Security		
Enhanced resilience of agriculture and fisheries production and distribution systems from climate change	Enhanced knowledge on the vulnerability of agriculture and fisheries to the impacts of climate change	Coordinating Agency
	Climate-sensitive agriculture and fisheries policies, plans, and programs formulated	Coordinating Agency
Enhanced resilience of agriculture and fishing communities from climate change	Enhanced capacity for CCA and DRR government, farming, and fishing communities and industry	Coordinating Agency
	Enhanced social protection for farming and fishing communities	Coordinating Agency
Water Sufficiency		
Water governance restructured toward a climate- and gender-responsive water sector	Enabling policy environment for IWRM and CCA created	Coordinating Agency
	Climate adaptation and vulnerability reduction measures for water resources and infrastructure implemented	Coordinating Agency
Sustainability of water supply and access to safe and affordable water ensured	Water supply and demand management of water systems improved	Coordinating Agency
Ecological and Environmental Stability		
Ecosystem protected, rehabilitated, and ecological services restored	Climate mitigation and adaptation strategies for key ecosystems developed and implemented	Coordinating Agency
Climate-Smart Industries and Services		
Climate-smart industries and services promoted, developed, and sustained	Eco-efficient production adopted by industries	Coordinating Agency
	IEC and capacity building program for climate-smart industries and services developed	Coordinating Agency
Sustainable Energy		
Nationwide energy efficiency and conservation program promoted and implemented	GEMP implemented	Co-lead with DOE, DENR
Sustainable and renewable energy (SRE) development enhanced	National renewable energy program and technology roadmap based on RA 9513 and its IRR developed and implemented	Coordinating Agency
Energy systems and infrastructure climate-proofed, rehabilitated, and improved	Energy systems and infrastructure climate-proofed	Co-lead with DOE, DENR
Knowledge and Capacity Development		
Enhanced knowledge on the science of climate change	Improved capacity for climate scenario modeling and forecasting	Co-lead with CHED
	Government capacity for climate adaptation and mitigation planning improved	Co-lead with CCC

DOST's Approved Climate Expenditure FY2015

DOST's consolidated climate expenditure of PHP 4.6 billion in the FY 2015 GAA accounts for about a quarter (26%) of the overall DOST budget and comprises 3% of the climate expenditure of all national government agencies. (See Data 1.)

Data 1: DOST FY 2015 GAA
Consolidated Climate Expenditure ('000s PHP)

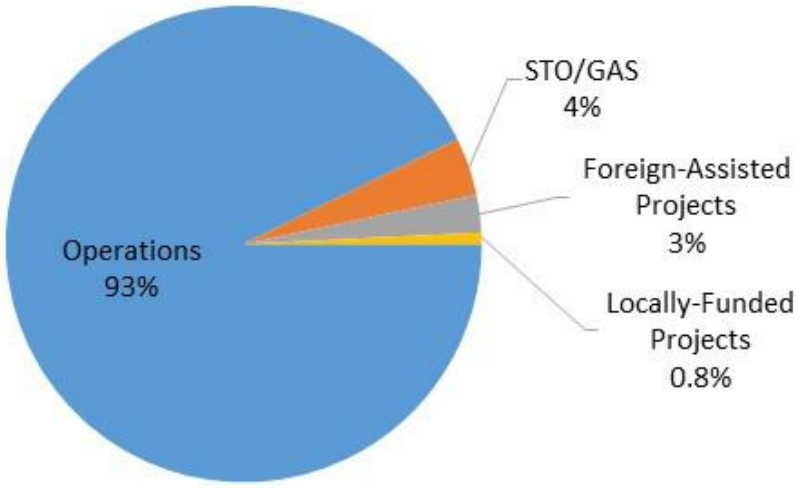
	FY 2015 GAA
Department's Climate Expenditure	4,579,480
Department Budget	29,702,021
Share of Department's Climate Expenditure in Department Budget	26%
Share of Department's Climate Expenditure in National Climate Budget	3%

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

The consolidated climate expenditure in the DOST FY 2015 GAA is concentrated in Operations (93%), and General Administration Support in selected agencies (PAGASA, 4%). (See Data 2.) DOST also undertakes some short duration locally-funded and foreign-assisted projects to support its operations, and these introduce year-to-year fluctuations in climate expenditure.

DOST's consolidated climate expenditure in the FY 2015 GAA is concentrated in PAGASA (75%), OSEC (16%), and PCIEERD (6%). The remainder is divided between two (2) specialized attached agencies. (See Data 2.) The large capital outlay for PAGASA skews the distribution toward the agency. (See Data 3.)

Data 2: DOST FY 2015 GAA Consolidated Climate Expenditure by Expense Class



Data 3: DOST FY 2015 GAA Consolidated Climate Expenditure by Agencies ('000s PHP)

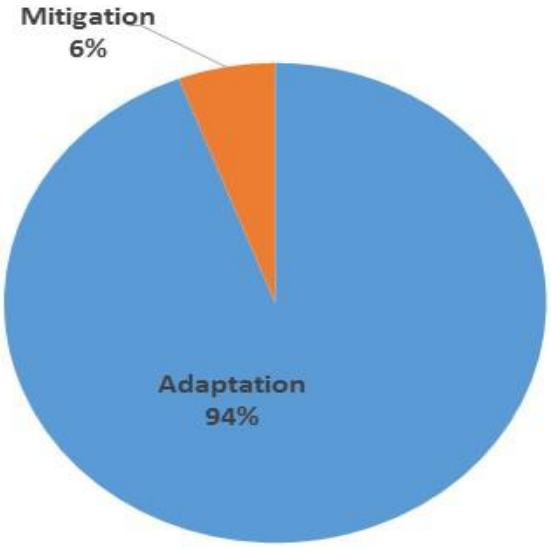
	Climate Expenditure	%	Total Budget	%	% Climate Expenditure
OSEC	734,573	16%	3,033,219	17%	24%
PAGASA	3,435,419	75%	3,437,572	20%	100%
PCIEERD	264,811	6%	616,581	4%	43%
PCAARRD	88,312	2%	976,774	6%	9%
PHIVOLCS	56,365	1%	334,210	2%	17%
Subtotal	**4,579,480**	**100%**	**8,398,356**	**48%**	**55%**
Other Agencies	-		9,179,458	52%	Na
DOST TOTAL	**4,579,480**	**100%**	**17,577,814**	**100%**	**26%**

B. DOST FY2015 Climate Expenditure: NCCAP Outcomes and Output Areas

Climate Expenditure by Pillar:

Nearly all (94%) of DOST's climate expenditure in the FY 2015 GAA is focused on adaptation. (See Data 4.) The concentration of climate expenditure is likely to be much higher because of a one-time capital expenditure, which constitutes over half of the climate expenditure in the FY 2015 GAA. PCIEERD is the only DOST agency focused on mitigation.

Data 4: DOST FY 2015 GAA Consolidated Climate Expenditure by Climate Pillar

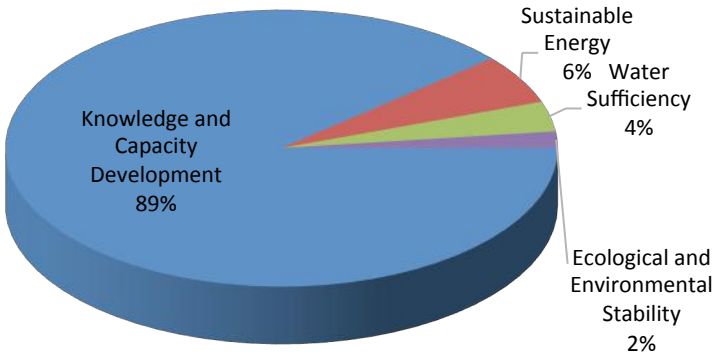


Climate Expenditure by Strategic Priority:

Nearly all (95%) of DOST's consolidated climate expenditure in the FY 2015 GAA is focused on the two (2) NCCAP strategic priorities where DOST has a lead role: Knowledge and Capacity Development (89%) and Sustainable Energy (6%). (See Data 5.) DOST also provides some support in other NCCAP priorities: Water Sufficiency (3%) and Ecological and Environmental Stability (2%).

- Key gaps remain in actions to support two (2) output areas where DOST has a lead role: implementation of the GEMP aimed at reducing the government's energy costs through improvements in energy efficiency, and climate-resilient energy systems and infrastructure.

Data 5: DOST FY 2015 GAA Consolidated Climate Expenditure by Strategic Priority



DOST's climate expenditures in the FY 2015 GAA are concentrated in five (5) PAPs, which together account for most (88% or PHP 4.0 billion) of DOST's climate budget. (See Data 6.) These PAPs include:

- PAGASA's two (2) PAPs on weather, climate, and flood forecasting and warning, with PHP 2.9 billion in combined climate expenditure. They represent about two-thirds (63%) of DOST's climate expenditure in the FY 2015 GAA. The PAP in surface and air observation network includes a one-time capital outlay of over PHP 2.1 billion.
- With climate expenditure accounting for 99% of its overall budget, PAGASA tags nearly all of its general management services (PHP 0.2 billion).
- The OSEC's funding assistance to science and technology research, development, and extension work accounts for 16% (PHP 0.7 billion) of DOST's climate expenditure in the FY 2015 GAA.
- PCIEERD's research and development activities focus on industry, energy, and emerging technologies in support of sustainable energy and sustainable mass transport account for 6% (PHP 0.3 billion) of DOST's climate expenditure in the FY 2015 GAA.

Data 6: DOST FY 2015 GAA Programs and Projects with the Largest Allocation ('000 PHP)

Strategic Priority/Major PAP	FY 2015 GAA	Share of Climate Expenditure
Knowledge and Capacity Development	**4,065,546**	**89%**
Weather and Climate Service (PAGASA): O&M Weather Surveillance Radar Network	397,290	9%
Weather and Climate Service (PAGASA): O&M Surface and Upper Air Observation Network	2,461,483	54%
Funding Assistance to Science and Technology (OSEC)	734,573	16%
Sustainable Energy	**264,811**	**6%**
Research and Development Management Services for Industry, Energy and Emerging Technology (PCIEERD)	264,811	6%
Water Sufficiency	160,811	4%
Flood Forecasting Services (PAGASA)	148,811	3%
Ecological and Environmental Stability	88,312	2%
Food Security	-	-
TOTAL	4,579,480	100%

B.1 Knowledge and Capacity Building

DOST's climate response in this area is comprised of PAGASA's PAPs focused on weather, climate, and flood forecasting and warning (81%), the OSEC's program to manage and coordinate funding support for all research activities (18%), and PHIVOLCS's PAPs on strengthening disaster preparedness from multiple hazards, including climate- and weather-related hazards (1%).

PAGASA generates and disseminates weather, climate, and flood forecasts and warning based on 260,304 real-time weather observations from its 591 observation stations. The FY 2015 GAA includes capital outlays of PHP 2.1 billion. The amount is in addition to PAGASA's regular ongoing budgets for the procurement of equipment to strengthen its surface and upper air observation network. This budget should help PAGASA deliver more timely and higher resolution forecasting services.

In addition to providing general forecasting and warning services under its regular operations, PAGASA also provides, on a projectized basis, additional services relevant to specific locations and agencies.[1] PAGASA has a 2016 target of supporting all LGUs located in the 28 highly-vulnerable provinces in incorporating robust science-based weather-related information in the local disaster risk reduction plans. These services directly support the two (2) output areas under Knowledge and Capacity Development strategic priority, which is led by the DOST.

All of the OSEC's climate expenditures focus on coordinating funding support for research, accounting for a quarter of DOST's climate expenditure for Knowledge and Capacity Development.

B.2 Sustainable Energy

The FY 2015 GAA includes PHP 0.3 billion in climate expenditure, representing 6% of DOST's consolidated climate expenditure, to support the research program of PCIEERD on the development and management of industry, energy, and emerging technology. This constitutes the entire DOST engagement in this strategic priority. The program covers research and development on a wide range of areas, including energy efficiency and renewable energy to make them a more attractive option, lower carbon or non-fossil fuel transport technologies, reduction of greenhouse gas emissions from public utility vehicles, and traffic and transport using advanced information system to modernize traffic management. The program also conducts risk and vulnerability assessments of energy system in order to help encourage the adoption of renewable energy.

Key gaps remain in actions to support two (2) output areas where DOST has a lead role: implementation of the GEMP, aimed at reducing the government's energy costs through improvements in energy efficiency, and climate-resilient energy systems and infrastructure.

B.3 Water Sufficiency

The FY 2015 GAA includes PHP 0.2 billion (4%) in climate expenditure for PAGASA to provide support for flood forecasting and warning and other hydro-meteorological services. PAGASA provides its services through regular operations (about two-fifths) and localized services to LGUs and other government agencies on a project basis (about three-fifths).

B.4 Ecological and Environmental Stability, and Food Security

Other specialized agencies of DOST support other strategic priorities: PHP 0.1 billion in climate expenditure for PCAARRD's research and development management services for agriculture, aquatic, and marine in the FY 2015 GAA, representing 2% of DOST's climate expenditure.

[1] Examples of current projects are the JICA-assisted rehabilitation of meteorological radar system in typhoon Yolanda-affected Guiuan, and the improvement of flood forecasting and warning systems in the Bicol river basin.

Areas for Discussion

- Together with the CCC, DOST leads the improvement of government's capacity for climate adaptation and mitigation planning. Climate change projections and scenarios are to be used as tools for assessing risks. Localized projections (to municipality level) from various global climate change model projections can reduce the uncertainty in the climate scenarios. However, PAGASA's budget for this is only 11% of the total Weather, Climate, and Flood Forecasting Services.

- Communicating climate change to LGUs and vulnerable sectors is critical to increasing the adaptive capacity of the country. One of NCCAP's key strategic priorities is building Knowledge and Capacity Development. However, DOST has very minimal budget for this priority. How can this be reconciled?

- DOST has many research projects related to NCCAP priorities. However, most of these lack the use of climate change in evaluating issues. PCAARRD tagged 61 research activities in biological systems and natural resources as climate expenditures. How did PCAARRD use the climate lens in its research? What support does PCAARRD need in this area?

- How does DOST work with industries and communities to share its researches, especially on climate change? Are there any success stories in its partnership with DPWH? Are there any policy recommendations to enhance access to climate data, information, and researches?

Other Relevant Agencies in the Implementation of NCCAP

Climate Change Commission

CCC's Climate Profile and Responsibilities

The Climate Change Commission is the lead agency for climate policy formulation and coordination. As an oversight agency, CCC is also responsible for monitoring and evaluating climate programs and action plans, especially on the progress of the NCCAP implementation.

CCC is responsible for, and co-leads the implementation of the NCCAP strategic priority areas on Knowledge and Capacity Development, Human Security, Ecological and Environmental Stability, and Sustainable Energy; it acts as a coordinating agency for Climate-Smart Industries and Services, and Food Security.

CCC is also participating in the Cabinet Cluster on CCAM in the budget planning and preparation of the RRP, which is aimed at strengthening the resiliency of both the natural system and the urban built environment, as well as the adaptive capacities of vulnerable groups and communities to current and future climate and non-climate risks and disasters through the Program Convergence Budgeting.

CCC Responsibilities on NCCAP Outcomes and Output Areas by Strategic Priority

Strategic Priority/Outcome	Output Area	Responsibility	Agency
Knowledge and Capacity Development			
Enhanced knowledge on the science of climate change	Improved capacity for CC scenario modeling and forecasting	Coordinating Agency	CCC
	Government capacity for CC adaptation and mitigation planning improved	Co-lead with DOST	CCC
Capacity for CC adaptation, mitigation, and disaster risk reduction at the local community level enhanced	CC resource centers identified and established	Co-lead with DILG and CICT	CCC
Gendered CC knowledge management established and accessible to all sectors at all levels	Gendered CC knowledge management established	Co-lead with DILG and CICT	CCC

Human Security			
CCA-DRRM implemented in all sectors at the national and local levels	Climate change adaptation and disaster risk reduction and management integrated in local plans	Co-lead with NDRRMC and LGUs	CCC
	Knowledge and capacity for CCA-DRRM developed and enhanced	Co-lead with NDRRMC and LGUs	CCC
Climate-Smart Industries and Services			
Climate-smart industries and services promoted, developed, and sustained	Enabling environment for the development of climate-smart industries and services created	Co-lead with DTI and LGUs	CCC
Sustainable livelihood and jobs created from climate-smart industries and services	Increase productive employment and livelihood opportunities in climate-smart industries and services	Co-lead with DOLE	CCC
Ecological and Environmental Stability			
Ecosystems protected, rehabilitated, and ecological services restored	CC adaptation and mitigation strategies for key ecosystems developed and implemented	Coordinating Agency	CCC
	Capacity for integrated ecosystem-based management approach in protected areas and key biodiversity areas enhanced	Co-lead with DENR-PAWB (now BMB)	CCC
Sustainable Energy			
Nationwide energy efficiency and conservation program promoted and implemented	Increase in the private sector and community participation in energy efficiency and conservation	Co-lead with DOE	CCC
Food Security			
Enhanced resilience of agriculture and fisheries production and distribution systems from climate change	Enhanced knowledge on the vulnerability of agriculture and fisheries to the impacts of climate change	Coordinating Agency	CCC
	Climate-sensitive agriculture and fisheries policies, plans, and programs formulated	Coordinating Agency	CCC
Enhanced resilience of agriculture and fishing communities from climate change	Enhanced capacity for CCA and DRR of government, farming, and fishing communities and industry	Coordinating Agency	CCC
Water Sufficiency			
Water governance restructured towards a climate and gender-responsive water sector	Enabling policy environment for IWRM and CCA created	Coordinating Agency	CCC

CCC's Approved Climate Expenditure FY2015

The CCC's entire approved budget is identified as climate change. It represents 1% of the national CC expenditures in the FY 2015 GAA. (See Data 1.)

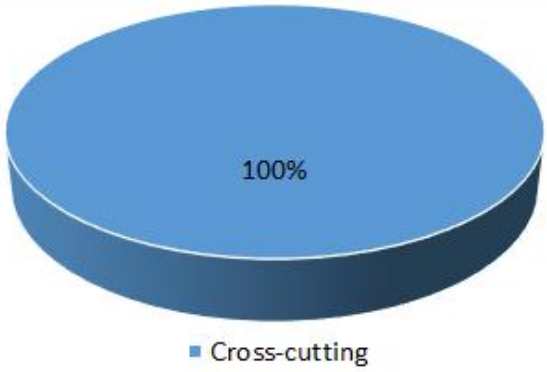
Data 1: CCC FY 2015 GAA Approved Climate Expenditure ('000s PHP)

	FY 2015 GAA
Department's Climate Expenditure	1,044,592
Department Budget	1,048,814
Share of Department's Climate Expenditure in Department Budget	99.6%
Share of Department's Climate Expenditure in National Climate Budget	1%

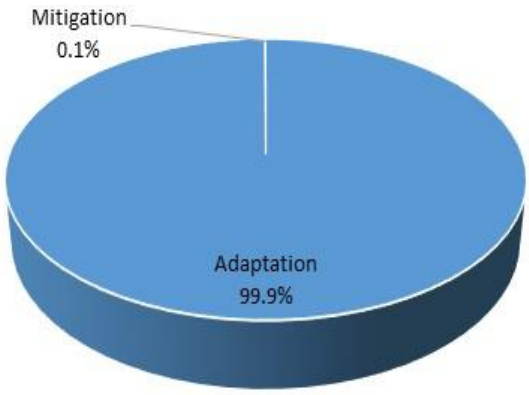
In compliance with its mandate as an oversight agency, all of CCC's FY 2015 climate expenditure are directed towards convergence planning and coordination:

- Almost all (99%) of the FY 2015 approved climate expenditure of the CCC is allocated for Action Delivery.
- The RA 9729 provided recommendatory functions to the CCC in terms of legislation, policies, strategies, programs for climate change adaptation and mitigation (Sect 9-e). CCC then identified climate expenditures for technical advisory services (4%) and for climate change policy services (1%); and
- Aligned with the NCCAP and the country's priorities on climate change, almost all of the CCC's climate expenditure is intended for adaptation activities.

Distribution by NCCAP Priority



Distribution by Climate Pillar



The majority (99%) of the CCC's climate expenditure focuses on the delivery of adaptation response, of which 95% is dedicated to funding adaptation responses under the People's Survival Fund. (See Data 2.)

- Less than 1% of the CCC's total climate expenditure responds to the function mandated by RA 9729 (Sect 9-p) for CCC to oversee the dissemination of information on climate change, local vulnerabilities and risks, and (Sect 9-n) facilitate capacity building for local adaptation planning, implementation, and monitoring climate change initiatives.

Data 2: CCC FY 2015 Approved Climate Expenditure by Activity Type

Other Relevant Agencies in the Implementation of NCCAP

Department of National Defense – Office of Civil Defense

OCD's Climate Profile and Responsibilities

The National Disaster Risk Reduction and Management Council, of which the Office of Civil Defense is the secretariat, is one of the lead agencies--together with the CCC and the Local Government Units (LGUs)--for the implementation of the NCCAP strategic priority area on Human Security, tasked with:

(i) ensuring that disaster risk reduction and management and climate change adaptation are mainstreamed in national, sectoral, regional, and local development policies, plans, and budgets; and

(ii) developing and enhancing knowledge and capacity for DRRM-CCA at national and local levels.

The OCD is also participating in the Cabinet Cluster on CCAM in the budget planning and preparation of the RRP, aimed at strengthening the resiliency of both the natural system and the urban built environment, as well as the adaptive capacities of vulnerable groups and communities to current and future climate and non-climate risks and disasters through Program Convergence Budgeting.

The OCD is also mandated under Republic Act 10121 (Philippine Disaster Risk Reduction and Management Act of 2010) to formulate and implement the National Disaster Risk Reduction and Management Plan (NDRRMP). The OCD's primary mission is to provide leadership in the continuous development of strategic approaches and measures to reduce the vulnerabilities and risks arising from disasters and manage the consequences of the same.

The OCD is tasked under the NDRRMP to be the lead agency in:

(i) ensuring that DRRM and CCA are mainstreamed in national, sectoral, regional, and local development policies, plans, and budgets;

(ii) with DILG, equipping communities with necessary skills and capabilities to cope with the impact of disasters, and to develop and implement comprehensive national and local preparedness and response policies, plans, and systems; and

(iii) conducting prompt assessment of damages, losses, and needs following a disaster.

DND-OCD Responsibilities on NCCAP
Outcomes and Output Areas by Strategic Priority

Strategic Priority/Outcome	Output Area	Responsibility	Agency
Human Security			
CCA-DRRM implemented in all sectors at the national and local levels	Climate change adaptation and Disaster risk reduction and management integrated in local plans	Co-lead with CCC and LGUs	NDRRMC
	Knowledge and capacity for CCA-DRRM developed and enhanced	Co-lead with CCC and PIA	NDRRMC
	Head emergency response, preparedness, and post-disaster management implemented at the national and local levels	Co-lead with DOH	NDRRMC

OCD's Approved Climate Expenditure FY2015

The climate expenditure of the DND-OCD in the FY 2015 GAA of PHP 0.6 billion is over half (59%) of its total budget of PHP 0.9 billion. It represents 0.4% of the national Climate Change expenditures in the FY 2015 GAA. (See Data 1.)

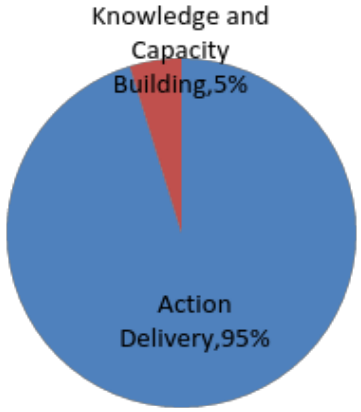
Data 1: DND-OCD's FY 2015 GAA
Approved Climate Expenditure ('000s PHP)

	FY 2015 GAA
Department's Climate Expenditure	556,596
Department Budget	942,817
Share of Department's Climate Expenditure in Department Budget	59%
Share of Department's Climate Expenditure in National Climate Budget	0.4%

Aligned with the NCCAP and the country's priorities on climate change, all of OCD's climate expenditure in FY 2015 GAA is directed towards adaptation, majority (95%) of which is on delivering adaptation responses while the remainder is focused on capacity building and training programs. (See Data 2.)

- OCD allocated 95% of its FY 2015 total approved climate expenditure for disaster management operations, focusing on the implementation of disaster preparedness measures of communities and local government;
- OCD allocated 5% of its FY 2015 total approved climate expenditure to strengthen local institutions in CCA/DRRM planning.

Data 2: DND-OCD FY 2015 GAA
Approved Climate Expenditure by Activity Type



In accordance with the NCCAP, all of OCD's FY 2015 approved climate expenditure supports the implementation of the NCCAP's strategic priority on Human Security with CCC, particularly, on the implementation of CCA-DRRM in all sectors, at all levels of government.

- Majority of the OCD's climate expenditure for responding to NCCAP Human Security is dedicated to leading emergency response, preparedness, and post-disaster management;
- The remaining 5% supports the building of knowledge and enhancing capacities for community and local level CCA/DRRM. This includes providing assistance to local government units in enhancing their local disaster risk reduction and management plans, and creating official hazard and risks assessment maps for select LGUs.

Other Relevant Agencies in the Implementation of NCCAP

Department of Transportation and Communication

DOTC's Climate Profile and Responsibilities

The DOTC and its attached agencies are responsible for, and lead the implementation of the NCCAP strategic priority areas on Ecosystem and Environmental Sustainability, Climate-Smart Industries and Services, Water Sufficiency, and Sustainable Energy.

The DOTC is also part of the Cabinet Cluster on CCAM in the budget planning and preparation of the RRP, aimed at strengthening the resiliency of both the natural system and the urban built environment, as well as the adaptive capacities of vulnerable groups and communities to current and future climate and non-climate risks and disasters through Program Convergence Budgeting.

The above responsibilities are consistent with and support the DOTC's primary mandate on the promotion, development, and regulation of a dependable and coordinated network of transportation and communication systems, as well as in fast, safe, efficient, and reliable transportation and communication services.

DOTC Responsibilities on NCCAP Outcomes and Output Areas by Strategic Priority

Strategic Priority/Outcome	Output Area	Responsibility	Agency
Sustainable Energy			
Sustainable and renewable energy (SRE) development enhanced	National renewable energy program and technology roadmap based on RA 9513 and its IRR developed and implemented	Coordinating Agency	DOTC
Environmentally-sustainable transport promoted and adopted	Environmentally-sustainable transport strategies and fuel conservation measures integrated in development plans	Co-lead with HUDCC, and DILG	DOTC
	Innovative financing mechanisms developed and promoted	Co-lead with DOF	

DOTC's Approved Climate Expenditure FY2015

The consolidated climate expenditure of the DOTC in the FY 2015 GAA of PHP 5.6 billion represents 11% of its total budget of PHP 52.9 billion. It represents 5% of the national climate change expenditures in the FY 2015 GAA. (See Data 1.)

- Of the seven (7) attached agencies of the DOTC, including the OSEC, only two (2) submitted their BP Form 201-F to the DBM for FY 2015: the (1) OSEC and the (2) Philippine Coast Guard (PCG).

Data 1: DOTC FY 2015 Consolidated Approved Climate Expenditure ('000s PHP)

	FY 2015 GAA
Department's Climate Expenditure	5,625,656
Department Budget	52,874,542
Share of Department's Climate Expenditure in Department Budget	11%
Share of Department's Climate Expenditure in National Climate Budget	4%

The DOTC's climate expenditure in the FY 2015 GAA supports the NCCAP's strategic priority on Sustainable Energy where the DOTC has responsibilities but with focus on the outcome for environmentally-sustainable transport.

- More than half (67%) of the identified climate change expenditure is for the expansion of the LRT system; the remaining 33% covers the construction of the BRT in Metro Manila and in Cebu;
- Majority (64%) of the expenditure for the LRT extension project is for the Line-2 East (Masinag), which will add 4.2 kms to the existing LRT Line-2 extending to Antipolo City, which is expected to serve an additional 75,000 passengers by the third quarter of 2017; and
- In addition, despite having no defined functions under it, the DOTC also supports NCCAP strategic priority on Water Sufficiency.

Almost all of DOTC's climate change expenditure for FY 2015 GAA responds to climate change mitigation. Only 0.1% of the total climate change expenditure has been identified for adaptation.

- The DOTC-PCG has identified a lone adaptation-responsive PAP: the Enforcement of laws, rules, and regulations for the protection of marine environment. This supports the implementation of the IWRM and water governance.

Areas for Discussion

Expansion of LRT System. The DOTC has made significant commitments to this program with 67% of the DOTC's FY 2015 final climate expenditure allocated to these activities.

- The LRT expansion, as an environmentally-sustainable transport (EST), is tagged as a mitigation program. This is one of the two (2) identified EST broad priorities under the NCCAP. In particular, the NCCAP identified the climate proofing, rehabilitation, and improvement of the country's transport infrastructure as a priority for 2011-2016. How can the DOTC redesign the detailed engineering designs of the LRT to deliver adaptation benefits? For instance, can the LRT budget be oriented toward increasing resilience of the railway infrastructure (consideration of vulnerability and risks assessment)?

Other Relevant Agencies in the Implementation of NCCAP

Department of Social Welfare and Development

DSWD's Climate Profile and Responsibilities

The DSWD and its attached agencies are responsible for, and coordinate the implementation of the NCCAP strategic priority areas on Food Security, Water Sufficiency, and Human Security.

The DSWD is also part of the Cabinet Cluster on CCAM in the budget planning and preparation of the RRP, aimed at strengthening the resiliency of both the natural system and the urban built environment, as well as the adaptive capacities of vulnerable groups and communities to current and future climate and non-climate risks and disasters through Program Convergence Budgeting.

The responsibilities stated in the NCCAP are consistent with and support the DSWD's mandate on the development, implementation, and coordination of social protection and poverty reduction solutions for the poor and the vulnerable.

DSWD Responsibilities on NCCAP
Outcomes and Output Areas by Strategic Priority

Strategic Priority/Outcome	Output Area	Responsibility	Agency
Food Security			
Enhanced resilience of agriculture and fishing communities from climate change	Enhanced social protection for farming and fishing communitiies	Coordinating Agency	DSWD
Water Sufficiency			
Water governance restructured towards a climate and gender-responsive water sector	CC adaptation and vulnerability reduction measures for water resources and infrastructure implemented	Coordinating Agency	DSWD
Human Security			
Health and social protection delivery systems are responsive to climate change risks	Health personnel and communities' capacity on CC health adaptation and risk reduction developed	Coordinating Agency	DSWD

DSWD's Approved Climate Expenditure FY2015

The consolidated climate expenditure of the DSWD in the FY 2015 GAA of PHP 0.001 billion represents 0.001% of its total budget of PHP 108 billion. It represents 0.001% of the national climate change expenditures in the FY 2015 GAA. (See Data 1.)

- The consolidated FY 2015 climate expenditure in the GAA is concentrated on the National Youth Commission (93%), wherein the PAP on youth development policy advisory and advocacy services captures the majority (93%) of the total climate expenditure.
- **Of the six (6) attached agencies of the DSWD, including the OSEC, two (2) agencies submitted their BP Form 201-F** to the DBM for FY 2015: the (1) Council for the Welfare of Children (CWC) and the (2) NYC.

Data 1: DSWD FY 2015 GAA
Consolidated Climate Expenditure ('000s PHP)

	FY 2015 GAA
Department's Climate Expenditure	1,574
Department Budget	108,077,730
Share of Department's Climate Expenditure in Department Budget	0.001%
Share of Department's Climate Expenditure in National Climate Budget	0.001%

The DSWD's consolidated climate expenditure in the FY 2015 GAA supports one (1) of the three (3) NCCAP strategic priority areas where the DSWD has coordinating responsibilities: Human Security.

- The entire climate expenditure of the DSWD supports the outcomes of NCCAP's Human Security, particularly on policy and governance on health and social protection;
- All of DSWD's consolidated climate expenditure in the FY 2015 GAA is on adaptation;
- There are no climate expenditures identified to support NCCAP's strategic priority areas on Food Security and Water Sufficiency, on all of which, the DSWD has coordinating responsibilities.

Other Relevant Agencies in the Implementation of NCCAP

Department of Labor and Employment

DOLE's Climate Profile and Responsibilities

The DOLE and its attached agencies are responsible for, and lead the implementation of the NCCAP strategic priority areas on Climate-Smart Industries and Services, and Knowledge and Capacity Development.

The responsibilities stated in the NCCAP are consistent with and support the DOLE's mandate on the formulation and implementation of policies and programs in the field of labor and employment, serving more than 40 million workers, and covering both formal and informal economies, private and public.

DOLE Responsibilities on NCCAP
Outcomes and Output Areas by Strategic Priority

Strategic Priority/Outcome	Output Area	Responsibility	Agency
Climate-Smart Industries and Services			
Climate-smart industries and services promoted, developed, and sustained	Eco-efficient production adopted by industries	Co-lead with DTI, and DENR	DOLE
Sustainable livelihood and jobs created from climate-smart industries and services	Increased productive employment and livelihood opportunities in climate-smart industries and services	Co-lead with CCC Coordinating Agency	DOLE TESDA
Knowledge and Capacity Development			
Capacity for CC adaptation, mitigation, and disaster risk reduction at the local and community level enhanced	Formal and non-formal capacity development program for climate change science, adaptation, and mitigation developed	Co-lead with DepEd, CHED, DILG, and LGA	TESDA
Food Security			
Enhanced resilience of agriculture and fishing communities from climate change	Enhanced capacity for CCA and DRR of government, farming, and fishing communities and industries	Coordinating Agency	TESDA
Human Security			
Health and social protection delivery systems are responsive to climate change risks	Health personnel and communities' capacities for CC health adaptation and risk reduction developed	Coordinating Agency	TESDA

DOLE's Approved Climate Expenditure FY2015

The consolidated climate expenditure of the DOLE in the FY 2015 GAA of PHP 1.2 billion represents 10% of its total budget of PHP 11.6 billion. It represents 1% of the national climate change expenditures in the FY 2015 GAA. (See Data 1.)

- The consolidated FY 2015 climate expenditure in the GAA is concentrated in the OSEC (99%), wherein the PAP on employment facilitation and capacity building accounts for 95% of the total climate expenditure.
- Of the nine (9) attached agencies of the DOLE, including the OSEC, four (4) agencies submitted their BP Form 201-F to the DBM for FY 2015: the (1) OSEC, (2) Institute for Labor Studies (ILS), (3) Technical Education and Skills Development Authority (TESDA), and (4) National Wages and Productivity Commission (NWPC).

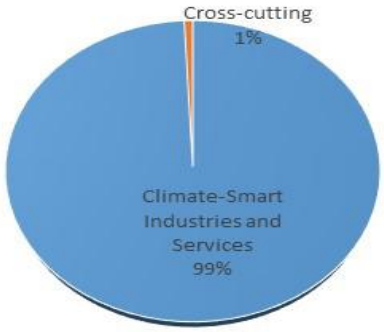
Data 1: DOLE FY 2015
Consolidated Climate Expenditure ('000s PHP)

	FY 2015 GAA
Department's Climate Expenditure	1,162,086
Department Budget	11,550,153
Share of Department's Climate Expenditure in Department Budget	10%
Share of Department's Climate Expenditure in National Climate Budget	1%

The DOLE's FY 2015 consolidated climate expenditure supports one (1) of the four (4) NCCAP strategic priority areas where the DOLE has leadership and coordinating responsibility: Climate-Smart Industries and Services, and cross-cutting strategic priority on Finance.

- Almost all (99%) of the DOLE's climate expenditure supports the outcomes of NCCAP's Climate-Smart Industries and Services, particularly on creating and promoting sustainable livelihood and jobs.
- There are no climate expenditures identified to support NCCAP's Knowledge and Capacity Development, Food Security, and Human Security, all of which, the DOLE has leading and coordinating responsibilities.
- All of DOLE's consolidated climate expenditure in the FY 2015 GAA are allocated for adaptation.

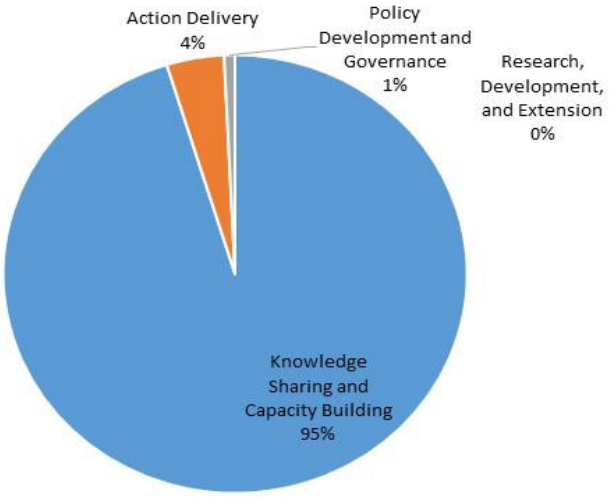
Data 2: DOLE FY 2015 GAA Consolidated Climate Expenditure by NCCAP Strategic Priority



The DOLE mostly utilized a full spectrum of activity types to lead the implementation of this strategic priority – focusing on Sustainable Livelihood. Majority (95%) of the climate expenditure to support this NCCAP strategic priority focuses on knowledge and capacity building and training programs, while the remainder focus on actions that directly deliver on the adaptation response (4%) and policy development and governance (1%). (See Data 3.)

- Almost all (99%) of the knowledge and capacity building and training-type of activities under Climate-Smart Industries and Services come from a single PAP from DOLE-OSEC: the conduct of training, livelihood, and enterprise development and other capacity building programs for rural workers.
- The remaining PAPs come from TESDA in terms of technical education and skills development services.

Data 3: DOLE FY 2015 Consolidated Climate Expenditure for Climate-Smart Industries and Services by Activity Type



Other Relevant Agencies in the Implementation of NCCAP

Housing and Urban Development Coordinating Council

HUDCC's Climate Profile and Responsibilities

Housing and Urban Development Coordinating Council is responsible for, and leads the implementation of the NCCAP strategic priority areas on Human Security, Climate-Smart Industries and Services, and Sustainable Energy.

HUDCC is also a participating agency in the Cabinet Cluster on CCAM in the budget planning and preparation of the RRP, aimed at strengthening the resiliency of both the natural system and the urban built environment, as well as the adaptive capacities of vulnerable groups and communities to current and future climate and non-climate risks and disasters through Program Convergence Budgeting.

The above responsibilities are consistent with and support the HUDCC's primary mandate as an oversight agency in the housing sector.

HUDCC Responsibilities on NCCAP Outcomes and Output Areas by Strategic Priority

Strategic Priority/Outcome	Output Area	Responsibility	Agency
Human Security			
CC-adaptive human settlements and services developed, promoted, and adopted	Adaptive and secured settlement areas for vulnerable communities, and climate refugees defined	Co-lead with LGUs	HUDCC
Climate-Smart Industries and Services			
Green cities and municipalities developed, promoted, and sustained	CC adaptive housing and land use development implemented	Co-lead with LGUs	HUDCC
Sustainable Energy			
Environmentally-sustainable transport promoted and adopted	Environmentally-sustainable transport strategies and fuel conservation measures integrated in development plans	Co-lead with DOTC, and DILG	HUDCC

HUDCC's Approved Climate Expenditure FY2015

HUDCC's FY 2015 approved climate expenditure of PHP 0.01 billion represents 10% of its total budget of PHP 0.1 billion. It represents 0.01% of the national climate change expenditure in the FY 2015 GAA. (See Data 1.)

Data 1: HUDCC FY 2015 GAA
Climate Expenditure ('000s PHP)

	FY 2015 GAA
Department's Climate Expenditure	11,500
Department Budget	119,507
Share of Department's Climate Expenditure in Department Budget	10%
Share of Department's Climate Expenditure in National Climate Budget	0.01%

The HUDCC FY 2015 approved climate expenditure supports one (1) of the three (3) NCCAP strategic priorities where HUDCC has responsibilities: Human Security. There are no activities to support the NCCAP strategic priorities on Climate-Smart Industries and Services, and Sustainable Energy.

- The HUDCC identified a locally-funded project, provision of capacity building and training programs on local shelter plan for LGUs within the 18 major river basins and in multi-hazard provinces, as its lone climate-responsive activity approved for FY 2015 GAA. This is responsive to NCCAP's Human Security outcome on promoting CC-adaptive human settlements for vulnerable communities. This represents 89% of the total locally-funded projects of HUDCC.
- The climate expenditure of HUDCC's budget in the FY 2015 GAA is responsive to climate change adaptation.

Risk Resiliency Program

A. Background and Context

Through Executive Order (EO) 43, the Aquino Administration established five Key Results Areas (KRAs) for the government and accordingly reorganized the Cabinet into clusters to strengthen the delivery of results in each KRA. The Cabinet Cluster on Climate Change Adaptation and Mitigation (CCAM cluster) is mandated to take the lead in pursuing measures to adapt to and mitigate the effects of climate change and to undertake all the necessary preparation for both natural and man-made disasters.

The Risk Resiliency Program (RRP) is being developed to foster convergence across NGAs during budget preparation on the Integrity of the Environment and Climate Change Adaptation and Mitigation Key Results Areas (KRA) of the government. It is one of the programs under the Department of Budget and Management's Program Convergence Budgeting.

- The PCB strengthens results delivered from public sector expenditures on the KRAs by: (i) channeling the available fiscal space to essential priority programs, (ii) better targeting the appropriated resources to high priority areas, and (iii) catalyzing convergence among the National Government Agencies in the planning and results delivery by fostering coordination during budget preparation.

- For FY 2015, the emphasis is on ensuring that the programs, activities, and projects (i) target Major River Basins (MRBs) and identified Principal River Basins, (ii) focus on addressing climate and other disaster risks, and (iii) geographically target provinces with high poverty magnitude, and high poverty incidence and high vulnerability to shocks and disasters.

The RRP includes three components and outcomes, roughly following the three subsectors of the Sustainable and Climate Resilient Environment and Natural Resources Chapter of the Philippine Development Plan:

- Resiliency of the natural systems – Improved conservation, protection or rehabilitation of natural resources aimed to enhance resiliency of the natural systems to the risks brought about by hydro meteorological and geological factors;
- Cleaner, safer, and healthier environment – Improved air and water quality, reduced greenhouse gases (GHG) emissions from transport, energy and waste, and proper waste management aimed to reduce risks to human and ecosystems health from degradation of environmental quality; and
- Enhanced adaptive capacities of communities and government institutions at local and national levels – Reduced threats to human security from risks and disasters by addressing the sources of vulnerability and strengthening coordination on disaster risk reduction and climate change adaptation.

This climate budget brief focuses on the responsiveness of the RRP budget in the FY 2015 General Appropriations Act in addressing the national climate change priorities as outlined in the National Climate Change Action Plan. It is based on the climate expenditure tagging of their respective budgets in the FY 2015 GAA completed by the NGAs participating in the RRP and reflects subsequent adjustments to it as a part of a quality assurance review process.

B. RRP Budget Preparation Process

The Climate Change Adaptation and Mitigation (CCAM) Cabinet Cluster adopted a Guidance Document (GD), which includes the objectives, outcomes criteria for selecting PAPs in the RRP and towards better organizing itself to strengthen the RRP budget preparation process. Under the leadership of the DENR, the CCAM Cabinet Cluster adopted a GD in November 2014. It identifies the main objective of the RRP as strengthenng the resiliency of both the natural systems and the urban built environment, as well as the adaptive capacities of vulnerable groups and communities to current and future cimate and non-climate risks and disasters. The GD identifies three outcomes consistent with the CCAM Cluster Roadmap and the NCCAP, and is focused on promoting convergence between NGAs across programs along the 18 MRBs.

The GD also clarifies the roles and responsibilities of NGAs and the process for RRP budget preparation as: (i) the DENR creates an Interagency Technical Review Committee (TRC) to oversee RRP budget formulation, (ii) each Participating NGA designates an Under Secretary (U-Sec) level focal point person on RRP formulation and to propose PAPs that meet criteria established in the GD, and document these in CCAM Forms 1 and 2 created for this purpose, (iii) the TRC reviews and assesses Participating NGA submissions against the established criteria and recommends to the DENR the PAPs that are to be included in the RRP, and (iv) the DENR formulates and submits the full RRP program to the DBM. The GD also includes the overall timeline for the RRP formulation process.

There are no specific mechanisms in place at the Oversight or NGA levels for monitoring and reporting on the execution and performance of the FY 2015 RRP. However, NGAs use regular processes to monitor and report at the PAP level. The absence of such mechanisms limits the potential expansion of the RRP program.

Monitoring and reporting achievements against the objectives, outcomes, and outputs established during budget preparation will be essential, as the RRP is firmly established, to strengthen the justification for the continued funding and the expansion of the programs in the RRP.

This entails

(i) more clearly defining objectives, outputs, and outcomes of each PAP in relation to that of the overall RRP,

(ii) implementing PAPs to achieve objectives in a cost-effective manner, and

(iii) building up an effective analysis, monitoring, reporting, and performance assessment system. Pending the development and implementation of such a framework, possibly under the auspices of the TRC, performance can still be reviewed and reported based on relevant existing PAP-level indicators and objectives.

C. RRP Budget in the FY 2015 GAA

The RRP budget in the FY 2015 GAA of PHP 70.6 billion is for 79 programs, activities, and projects (PAPs) from thirteen Participating NGAs.

Data 1: RRP Budget in the FY 2015 GAA: Size and Trends

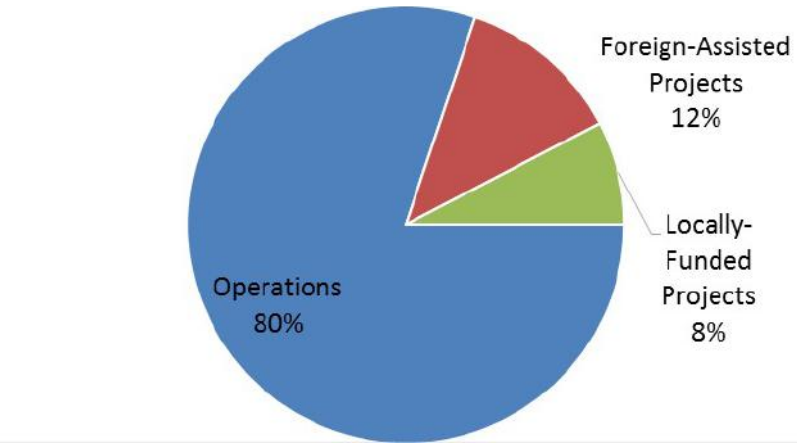
	FY 2015 GAA
Number of Participating National Government Agencies	13
Number of PAPs	79
Budget ('000s PHP)	70,556,857

The RRP budget in the FY 2015 GAA of PHP 70.6 billion is concentrated in 16 PAPs from six (6) NGAs which account for over 94% of the budget. (See Data 2). The DPWH accounts for two-thirds (66%) of the FY 2015 RRP budget. The budget for the program on the Construction and Maintenance of Flood Mitigation Structures and Drainage Systems alone is for PHP 39.4 billion or over 52% of the entire RRP budget.

- The DENR has the next highest budget of PHP 7 billion, accounting for 10% of the RRP budget in the FY 2015 GAA.
- The next four Agencies (DOTC with PHP 5.4 billion, DOST with PHP 4.2 billion, DA with PHP 3.9 billion, and DSWD with PHP 0.8 billion) account for 20% of the FY 2015 GAA.

The RRP for FY 2015 GAA budget is concentrated on Operations (80%), locally-funded (8%), and foreign-assisted projects (12%). (See Data 2).

Data 2: RRP Budget in the FY 2015 GAA
by Expense Class



The FY 2015 GAA RRP budget is concentrated in DPWH (66%), DENR (13%), DOTC (8%), and DOST (6%).

Data 3:
RRP Budget in the FY 2015 GAA by NGA

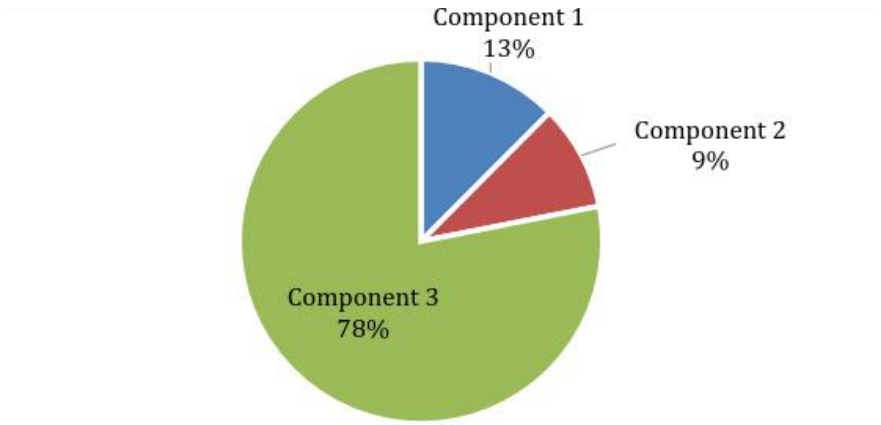
NGA	No of PAPs	FY 2015 GAA ('000s PHP)	%
DA	3	3,868,500	5%
DAR	3	25,670	0.04%
DENR	19	9,314,268	13%
DILG	6	87,892	0.1%
DOE	6	273,146	0.4%
DOST	19	4,165,655	6%
DOTC	4	5,421,055	8%
DPWH	9	46,216,830	66%
DSWD	1	800,000	1%
MMDA	2	317,978	0.5%
OEO-CCC	4	40,350	0.06%
OEO-HUDCC	1	9,685	0.01%
OEO-PRRC	2	15,828	0.02%
Total	79	70,556,857	100%

D. Program Components

The RRP includes three components, each of which aims to deliver specific outcomes, but the guiding documents do not provide targets or the relative priorities to guide the allocation of budgets or the review of the budget request.

- The largest component, **Component III (enhanced adaptive capacities of communities and government institutions)**, is comprised of 50 PAPs from nine (9) Participating NGAs for PHP 55.1 billion (or 78%) of the RRP budget in the FY 2015 GAA. The flood protection related programs account for about 67% of the RRP budget in the FY 2015 GAA. In addition, the budget requests from DA and DOST constitute 14% of FY 2015 GAA.
- **Component I (resiliency of the natural systems)** has the next highest budget, comprised of nine (9) PAPs from two (2) Participating NGAs for PHP 8.8 billion (or 13%) of the RRP budget in the FY 2015 GAA.
- **Component II (cleaner, safer, and healthier environment)** has the smallest budget, comprised of 20 PAPs from six (6) Participating NGAs for PHP 6.6 billion (or 9%) of the RRP budget in the FY 2015 GAA.

Data 5: RRP Budget in the FY 2015 GAA by Component ('000s PHP)



RRP Component	No of PAPs	FY 2015 GAA Amount	%
I. Resiliency of Natural Systems	9	8,831,971	13%
II. Cleaner, Safer, Healthier Environment	20	6,626,366	9%
III. Enhanced adaptive capacity	50	55,098,520	78%
All Components	**79**	**70,556,857**	**100%**

Component I:
Resiliency of Natural Systems

Data 6: RRP Component I PAPs Larger than PHP 0.3 billion by NGA ('000s PHP)

NGA/PAP	FY 2015 GAA	%
DENR	**8,491,578**	96%
National Greening Program	7,022,349	80%
Protected Areas Development and Management Program	758,213	9%
Forest Protection Program	500,983	6%
Integrated Natural Resources and Environmental Management Program (INREMP)	210,033	2%
Unified Mapping Project (under Topographic Base Mapping) (NAMRIA)	398	0.005%
Other – DENR	92,434	1%
All Other Agencies (DOST)	**247,561**	**3%**
Total Component I	**8,831,971**	**100%**

- **National Greening Program (NGP):**

The full requested expansion is included in the FY 2015 GAA. The NGP is a forest rehabilitation program which aims to plant 1.5 billion seedlings of indigenous and climate-resilient species in 1.5 million hectares of open and denuded forestland areas between 2011 and 2016. The Program had met 67% of its targets by 2014 with the remainder targeted for completion in FY 2015 and FY16. This program aims to sequester carbon and improve the resiliency of communities by supplementing income, particularly the indigenous peoples, fisher-folks, upland as well as lowland households. The program also intends to improve the resiliency of the forest ecosystem to prevent erosion, maximize water storage, and arrest forest degradation. In the coastal areas, mangrove reforestation will also enhance natural protective services, which mangroves provide against tsunami and storm surges. The program is national in scope, including within the 18 Major River Basins and eight (8) Principal River Basins.

- **Forest Protection Program – Anti-Illegal Logging Program:**

  The program aims to protect untenured forestlands from illegal human activities to sustain the resiliency of the forest ecosystem, particularly in 31 identified illegal logging hotspots. In FY14, the program covered 6.8 million hectares, some of which are located within the 18 MRBs and eight (8) PRBs. The program is expanding the targeted areas in FY 2015 and FY16 to 7.2 million hectares, including NGP sites from 2011-2012. This program also contributes to carbon sequestration. Strong coordination with the DILG, particularly PNP, the Philippine Army, and the LGUs is essential for successful implementation of this program.

- **Protected Areas Development and Management Program:**

  It utilizes in-situ measures to conserve biodiversity and protect natural habitats within and adjacent protected areas. The program aims to ensure continuity of the full stream of goods and ecological services, sustain habitat interconnectivity and wildlife corridors; and improve resiliency of ecosystems in the face of climate change. The implementation of this Program can also contribute to carbon sequestration.

- **Coastal and Marine Environment Comprehensive Management Program:**

  The program includes the implementation of the Integrated Coastal Management (ICM) strategy adopted through EO 533 in 2006, complemented by the Sustainable Coral Reef Ecosystem Management Program. The program aims to develop the knowledge base through baseline, benchmarking, inventory (16,753 hectares in FY16), and habitat and vulnerability assessment (82,749 hectares in FY16) of costal and marine resources, including reefs, to provide guidance and support to LGUs in developing their respective local ICM programs, and to sustainably manage coral reefs, including coral bleaching. The program also contributes to improving/restoring the ecological functions and services of coastal and marine areas in the face of climate change, and cushioning the impacts of storm surges and sea level rise directly benefiting fisher-folks and coastal communities living in coastal municipalities, particularly within the 18 MRBs and eight (8) PRBs. Strong coordination with the Coastal Law Enforcement Alliance Region (CLEAR) and LGUs is essential for the successful implementation of this program.

Component II:
Cleaner, Safer, and Healthier Environmen

Two NGAs, DOTC and DENR-EMB, account for about 86% of the budget for RRP Component II in the FY 2015. (See Data 7.) The DOTC is focused on four (4) public transport projects in urban areas while the DENR-EMB is focused on ecological solid waste management and clean air programs. The GAA also includes 11 PAPs each with less than 0.3 billion from four (4) NGAs (DILG, DOE, MMDA, and PRRC).

- **DOTC's two BRT projects (Cebu and Metro Manila):**

  The projects aim to reduce traffic congestion, local air pollution, and GHG emissions by investing and promoting the use of low carbon public transport. The project will benefit directly the commuting public of Cebu City and Metro Manila and indirectly, all the residents of these cities through improved air quality. The projects will be implemented in Cebu (located within the Central Cebu River Basin) and Metro Manila (located in the Pasig-Laguna River Basin) in collaboration with the MMDA (for Metro Manila), and the DPWH (Cebu) and the DILG.

- **Projects to extend LRT Lines 1 and 2:**

  The LRT projects aim to decongest EDSA of 800 provincial buses, improving traffic flow, and reducing commuter travel times. This will also reduce local air pollutants and reduce GHG emissions. The projects will be implemented in Metro Manila and Cavite, benefitting the urban population of Mega-Manila and areas around the Pasig-Laguna River Basin. Strong coordination with the MMDA, the DPWH, the DILG, and the concerned LGUs of Cavite is essential for this project's success.

Data 7: RRP Component II PAPs Larger than PHP 0.3 billion by NGA ('000s PHP)

NGA/PAP	FY 2015 GAA	%
DOTC	**5,421,055**	**82%**
LRT Line-2 East Extension Project	2,400,000	36%
LRT Line-1 Cavite Extension	1,157,334	17%
Cebu BRT	1,385,721	21%
Metro Manila BRT Quezon Avenue	478,000	7%
DENR	**548,359**	**8%**
Ecological Solid Waste Management Program (EMB)	136,200	2%
Air Quality Program (including Philippine Greenhouse Gas Inventory Management and Reporting System (PGHGIMRS) & Establishment of a Dioxins/Furans (under Implementation of Clean Air Regulations) (EMB)	139,245	2%
Other – DENR	272,914	4%
All Other Agencies	**656,952**	**10%**
Grand Total Component II	**6,626,366**	**100%**

- **The Ecological Solid Waste Management Program:**

The program aims to achieve 50% waste diversion by the end of 2016. The program aims to establish 1123 Materials Recovery Facilities across the country and to support 73 provinces, 144 cities, and 1490 municipalities in developing ecological solid waste management plans. The program is national in scope, but with a particular focus on highly-urbanized areas and coastal communities. The program contributes to reducing GHG emissions from decaying garbage and from burning of waste, as well as reducing water pollution and flooding from uncollected garbage that clog waterways. Coordination with the National Solid Waste Management Commission (NSWMC), DILG, LGUs, DepEd, and CHED is essential to the success of this program.

- **The EMB's Air Quality Program:**

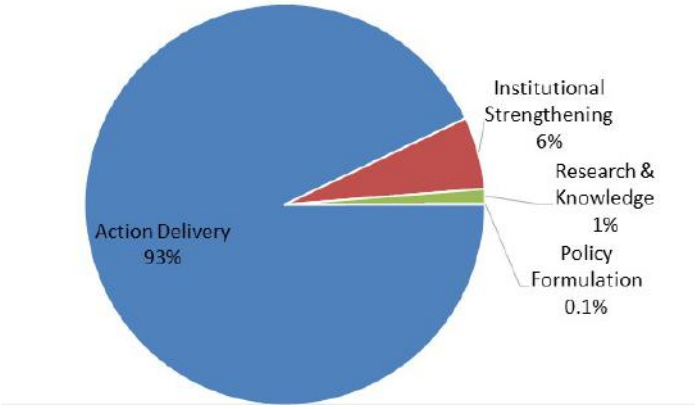
The program aims to reduce local air pollution through stricter implementation of air quality regulations, monitoring of ambient air quality, and the adoption and implementation of EURO IV fuel standards for light and heavy duty vehicles. The program also includes the conduct of national GHG inventory in five sectors (agriculture, forestry and land use change, industry, waste, and energy). Air quality monitoring and management is focused in Metro Manila and other highly-urbanized centers nationally. Coordination with the DOTC, the LTO, the DILG, the MMDA, the DOE, and LGUs is necessary for successful implementation of air quality regulations.

Component III:
Enhanced Adaptive Capacities of Communities and Government Institutions

Component III, aimed at enhancing adaptive capacity, has the most Departments (9), Participating NGAs (15), the most PAPs (50 or 63%), and the largest budget (PHP 55.1 billion or 78%) in the FY 2015 GAA.

- **The PAPs under this component fall along four general themes** – direct actions focused on (i) strengthening infrastructure resilience and (ii) enhancing adaptive capacity of communities; and indirect actions focused on (iii) strengthening institutional capacity by enhancing the quality and timely availability of hazard and risk information, and (iv) enhancing policy/plan formulation and governance. Most of the budget request is directed towards direct actions, with some of them embedding policy/planning and capacity building activities. (See Data 8.)

Data 8: RRP Component III Budget in the FY 2015 GAA by Activity Type ('000s PHP)



- **Strengthening resilience of infrastructure and natural systems:**

Most of the funding is for the construction of flood mitigation and drainage systems (PHP 40 billion, or about 67% of the total RRP budget) to prevent flooding during extreme rainfall events, especially benefiting the urban poor who are particularly vulnerable. The construction of rainwater collection systems and water supply level 3 projects is to help address water scarcity during droughts benefiting the rural poor in waterless municipalities who are without access to clean water for domestic uses (PHP 0.1 billion). It will also reduce flooding during occasions of heavy rainfall. The other major PAP with focus on this area is the repair/rehabilitation and construction of farm-to-market roads (FMRs) using improved specifications that consider the climate impacts in designated Key Production Areas (KPAs) to ensure smooth flow of goods and services from the farm to the market, even following extreme weather events, benefiting farmers.

- **Enhancing Adaptive Capacity of Communities:**

  PAPs belonging to this category aim to improve the resiliency of communities/households affected by extreme weather events through the provision of alternative livelihood opportunities, as in the case of the Risk Resiliency Program thru Cash-for-Work of DSWD, Weather Index-based crop insurance of DA-PCIC, and the adaptation credit financing of DA-ACPC. These programs target the poorest urban families and farmers. The Cash-for-Work Program of DSWD specifically focuses on the 18 MRBs and eight (8) PRBs; DA's programs will benefit all farmers affected by extreme events.

- **Strengthening institutional capacity through timely availability of climate hazard and risk information:**

  The DOST had been upgrading equipment to automate observational data from the Surface and Upper Air Observation Network as part of the FY 2015 budget to enhance its capacity to monitor weather systems and to generate higher quality weather forecasting data. When fully operational, the DOST will be able to project and disseminate the higher resolution data through its early warning systems, benefiting communities nationally. In addition, the DOST provides support for applied research including RRP-relevant programs such as hazard mapping and deployment of early warning systems. The DENR-MGB's National Geo-Hazard Mapping and Assessment Program aims to develop fine-scale flood hazard maps that characterize vulnerability to rain-induced landslides, flash floods, and other geohazards at the barangay level. The program also aims to develop a system to forecast water levels in the rivers located in 257 river basins to provide communities with early warnings of imminent extreme events.

- **Strengthening plans and policy formulation and governance:**

  Most Departments do not have a standalone program on policy formulation planning or governance. The exceptions are the CCC, which coordinates policy formulation, and the DAR, which primarily assists communities to climate-proof development plans.

Data 9: RRP Component III PAPs larger than PHP 0.3 billion by NGA ('000s PHP)

NGA/PAP	FY 2015 GAA	%
DPWH	46,216,830	84%
Construction and maintenance of Flood mitigation structures and Drainage systems	36,985,438	67%
Flood Control Structures/Facilities (Foreign-assisted)	3,610,672	7%
Construction and Rehabilitation of Flood mitigation facilities along MRBs	3,000,000	5%
Drainage Protection Works	996,800	2%
Flood Control Structures/Facilities	650,920	1%
Construction and Rehabilitation of Flood mitigation facilities along Principal Rivers	650,000	1%
Water Supply Level 3 Projects	323,000	0.6%
DA	3,868,500	7%
Repair / Rehabilitation and Construction of FMRs in the designated KPAs	2,609,500	5%
Crop Insurance premiums (DA-PCIC)	1,109,000	2%
DA - Other	150,000	0.3%
DOST	3,918,094	7%
Development of Philippine Scientific Earth Observation Microsatellite (PHL-MICROSAT) (DOST)	433,081	1%
Operation and Maintenance of Weather Surveillance Radar Network	397,290	1%
PHIL-LIDAR 1 Hazard Mapping using LIDAR	220,934	0.4%
Observation, Measurement, Recording, and Reporting of Atmospheric, Geophysical, and Astronomical Data	2,461,483	4%
DOST - Other	405,306	1%
DSWD	800,000	1%
RRP thru Cash-for-Work (CW) for CCAM	800,000	1%
DENR	181,499	0.3%
National Geo-Hazard Mapping and Assessment Program	102,542	0.2%
Other	78,957	0.1%
All Other Agencies	113,597	0.2%
Grand Total Component III	55,098,520	100%

E. Contributions to the National Climate Change Program and Strategies

Climate change is a major area of focus of the RRP comprising nearly all 95% of the RRP budget in the FY 2015 GAA (or PHP 67 billion). (See Data 11.) This represents a 13% increase in the climate expenditure in the RRP compared to the FY 2015 NEP. Both the PBA and overall climate expenditures have been rising rapidly. Nevertheless, there is significant volatility in the funding levels year-to-year. The use of a medium-term expenditure framework would strengthen planning and encourage prioritization of climate expenditures.

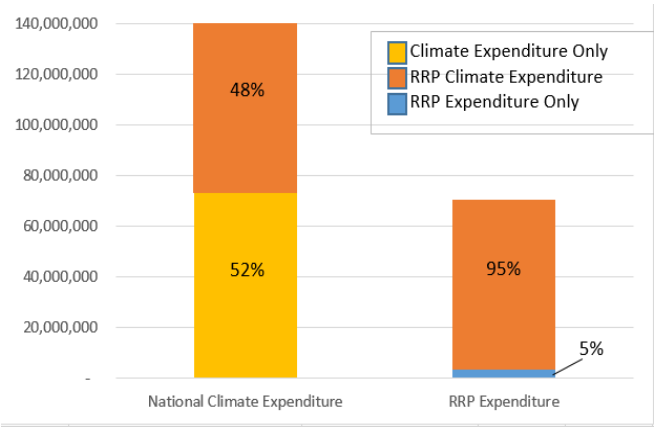
Data 11: RRP Climate Expenditure in the FY16 NEP: Size and Trends ('000s PHP)

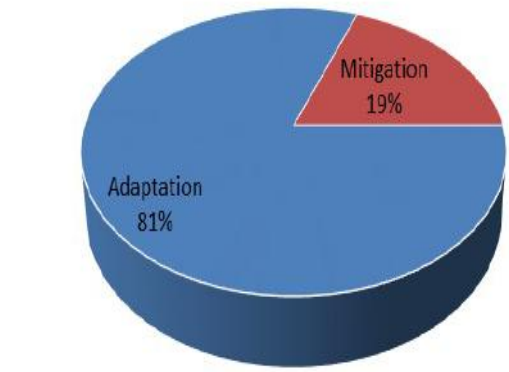
	FY 2015 NEP	FY 2015 GAA	% Change from FY 2015 NEP to FY 2015 GAA
RRP Climate Change Expenditure	59,395,495	66,974,766	13%
RRP Total Budget	76,361,798	70,556,857	-8%
Share of RRP climate expenditure in the RRP budget	78%	95%	
RRP CCE as share of national climate expenditure	43%	48%	

The RRP is an important vehicle for operationalizing the NCCAP as it comprises almost half (48%) of the climate expenditure in the FY 2015 GAA (Data 12). The RRP budget in the FY 2015 GAA is concentrated on adaptation (81%). 9

- Adaptation response in the FY 2015 GAA is comprised of 36 PAPs from eight (8) NGAs covering all NCCAP strategic priorities. While the mitigation response is narrowly focused on 14 PAPs from five (5) NGAs covering only four (4) strategic priorities.

Data 12: RRP Climate Expenditure in the FY 2015 GAA: As part of the National Climate Expenditure (left) and by Climate Pillar (right)





The RRP contirbutes almost all its approved climate budget for the following NCCAP Strategic Priorities:

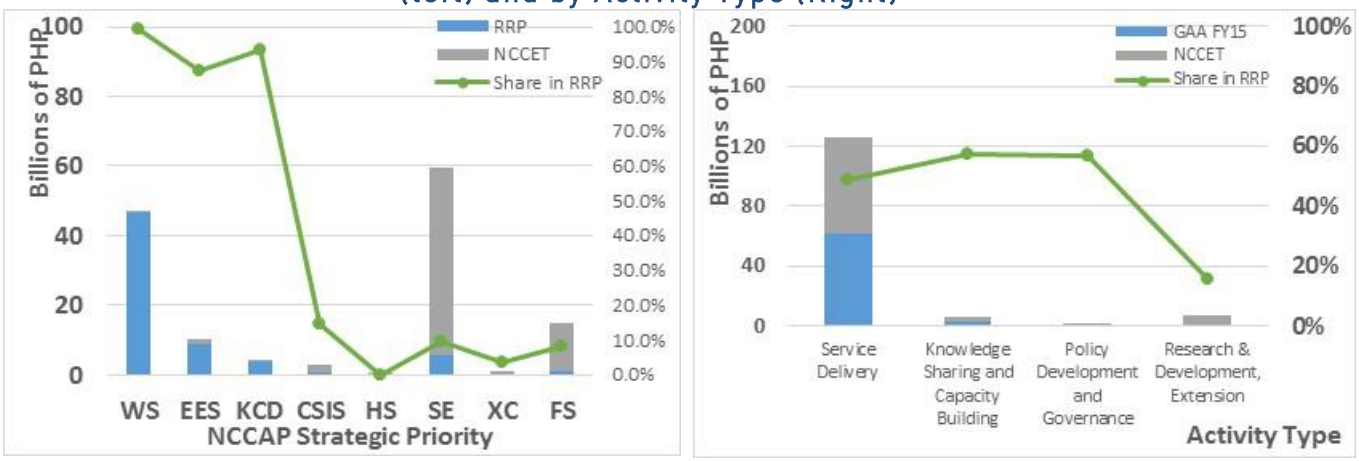
(i) Water Sufficiency (99.2%),
(ii) Ecological and Environmental Stability (87.6%), and
(iii) Knowledge and Capacity Development (93.4%) (See Data 13.)

- In contrast, less than 15% of the climate expenditure in the FY 2015 GAA for the other strategic priorities are channeled through the RRP.

- RRP coverage in the Knowledge and Capacity Development and Sustainable Energy priorities varies by output area. The RRP continues to be important for the knowledge of climate science output area, accounting for over almost all (94%) of climate expenditure in this area. While 80% of the climate expenditure in local and community CCA & DRRM capacity is channeled through the RRP.

- On sustainable energy, the RRP does not include any PAPs on energy efficiency, and conservation and climate proofing of transport infrastructure (primarily, roads and bridges) but includes almost all (95%) of the climate expenditure on renewable energy and about two-thirds (62%) for environmentally-sustainable transport.

Data 13: RRP's Share of the National Climate Expenditure by NCCAP Strategic Priority (left) and by Activity Type (Right)*



*FS=Food Security; WS=Water Sufficiency; EES=Ecological and Environmental Stability; HS= Human Security; CSIS=Climate-Smart Industries and Services; SE=Sustainable Energy; KCD=Knowledge and Capacity Development; and XC=Cross-cutting

F. Potential Convergence Opportunities for Strengthening Climate Response of the RRP

The climate response embedded in the RRP is large enough for delivering stronger climate results through increased convergence along several channels. The complementarity and scope of convergence activities for each strategic priority vary but can be scoped out based on the density of RRP climate expenditure activity (the types of activity, concentration of climate expenditure in the RRP overall, and by NGA) and the co-location of activity (by Local Government Unit or Major River Basin) among NGAs.

- While half of the national climate expenditure on service delivery (49%) are within the RRP, a large share of the climate expenditure on knowledge sharing and capacity building (43%), policy development and governance (43%), and research and development (84%) is being undertaken outside of the RRP (Data 14).

- Knowledge exchange between the PAPs in the RRP and outside of the RRP contributing to the same NCCAP outcome areas can strengthen the RRP as well as leverage the RRP to strengthen the PAPs outside of the RRP. Augmenting the RRP with specific PAPs can also streamline knowledge exchange to fill in any critical information gaps.

Data 14: Climate Expenditure in the RRP FY 2015 Budget by NCCAP Strategic Priority and Activity Type

Activity type/ NCCAP Strategic Priority	Policy Development and Governance	Research, Development, and Extension	Knowledge Sharing and Capacity Building	Service Delivery	Total as share of National CCE
Food Security	-	-	-	1,200,000	8%
Water Sufficiency	-	196,081	152,425	46,469,495	99%
Ecological and Environmental Stability	905,493	15,690	-	7,966,109	88%
Human Security	-	-	-	-	0%
Climate-Smart Industries and Services	-	-	-	429,201	15%
Sustainable Energy	48,356	-	221,528	5,440,533	10%
Knowledge and Capacity Development	-	840,606	2,992,646	56,253	93%
Cross-cutting	1,450	-	1,400	37,500	4%
Total for climate change-tagged PAPs	955,299	1,052,377	3,367,999	61,599,091	48%
No. of CC-tagged PAPs in the RRP	5	8	14	23	19%

Food Security:

Convergence in this priority entails

(i) strengthening planning, prioritization, and monitoring systems among climate-tagged PAPs within the DA and

(ii) adjusting the selection criteria for RRP PAPs to include PAPs that can catalyze knowledge exchange that enhances the quality of the outputs.

- 90% of the climate expenditure are outside of the RRP. The DA only included a few PAPs that are the most important for RRP outcomes, instead of including all of the PAPs in it mainstreaming effort.
- The DA and attached NGAs account for over 99% of the activities and climate expenditure both within and outside of the RRP.
- All of the PAPs within the RRP focus on service delivery.

Water Sufficiency:

Convergence in this priority entails

(i) strengthened coordination among the NGAs within the RRP especially DPWH, the specialized Agencies of the DENR (MGB and NWRB), and the DOST, and

(ii) assessment of gaps in policy development and governance.

- Five NGAs (DPWH, DENR, DOST, MMDA, and PRRC) account for all of the climate expenditure, with nearly all (99%) included within the RRP FY 2015 budget.
- Nearly all of the climate expenditure is focused on the IWRM and governance output area. Less than 1% is focused on the other output areas: sustainable water supply and access to safe and affordable water.
- Planning and policy development is not the primary focus of any PAP that is tagged within or outside the RRP.

Ecological and Environmental Stability:

Convergence in this priority entails

(i) strengthened coordination among the PAPs within DENR and

(ii) coordination with LGUs in planning and implementing DENR programs.

- The DENR and its attached Agencies account for almost all of the activities and climate expenditure both within and outside of the RRP.
- While the DENR has a full complement of activity types, the activities with primary focus on knowledge sharing and capacity building are outside of the RRP.
- The DENR has identified on CCAM Form-1 strengthened coordination with LGUs and DILG as key determinants of success for most of the PAPs included in the RRP.

Human Security:
Convergence in this priority entails

(i) selectively finding niche areas of complementarity with PAPs that address non-climate risks and shifting the focus of those activities toward prevention and preparedness, and

(ii) selectively augmenting the RRP with health and social protection-focused PAPs as part of an overall package of engagement at the LGU level.

- Human Security accounts for less than 1% of climate expenditure in the overall FY 2015 GAA from NGAs but only one of this is within the RRP.
- The DOH, DND-OCD, and HLURB submitted small requests in FY 2015 but did not submit any in FY16. The DSWD, on the other hand, engaged in the RRP for the first time but did not tag its program for climate expenditure. Successfully engaging these NGAs within the RRP requires defining the value of the RRP engagement to them.

Climate-Smart Industries and Services:
Convergence in this priority entails sharing knowledge and best practices between the PAPs focused on the different industries and services, possibly in conjunction with LGUs.

- Most of the climate expenditure is outside of the RRP. Three of the six NGAs that tagged their PAPs (DOLE, DOT, and DTI) are not part of the RRP.
- The PAPs are heterogeneous, covering multiple industries under three broad output areas: climate-smart industries, sustainable livelihood, and green cities. The underlying theme is to bring about transformation by establishing or supporting new markets.

Sustainable Energy: Convergence in this priority entails

(i) coordinated planning among the relevant NGAs,

(ii) establishing and sharing knowledge on best practices among the relevant NGAs as well as LGUs, and

(iii) knowledge-sharing on best practices in mobilizing the private sector.

- Mobilization of the private sector to undertake climate response is a common theme across three of the four output areas under this strategic priority.
- The energy efficiency output area is not part of the RRP.
- Only the DOE is engaged in the renewable energy output area with most of its Operations included in the RRP but not its locally-funded and foreign-assisted projects.
- The entire climate expenditure on environmentally-sustainable transport is comprised of projects from the DOTC, focused on long-term infrastructure, and the DOE, on technology. The RRP includes all of DOTC's CC-tagged projects but not DOE's market transformation project.
- Only DPWH is engaged in climate-proofing infrastructure, primarily roads and bridges, which is not included in the RRP.

Knowledge and Capacity Development:

Convergence in this priority entails

(i) compiling the information needs of the key NGAs, identifying gaps, and developing a strategy for its provision and access; and

(ii) setting up mechanisms for information-sharing on best practices on CCA/DRRM planning, monitoring, and reporting at the LGU level.

- NGAs identified on CCAM Form-1 show the availability of climate information and knowledge as a critical factor for many of the PAPs to successfully respond to climate change.
- Almost all of the climate expenditure (98%) on the knowledge of climate science--including weather and climate monitoring and forecasting--is concentrated in the DOST and attached Agencies.
- 100% of the climate expenditure to capacitate LGUs in the RRP is from DILG-OSEC.

Cross-cutting:

Convergence in this area entails

(i) institutionalizing systems to plan, coordinate, monitor, and report on climate response priorities; and

(ii) mobilizing and coordinating financing for climate response.

- About 1% of national climate expenditure in the FY 2015 GAA focuses on cross-cutting issues. Of this, only 4% focused on cross-cutting policy and on coordinating, monitoring, and reporting climate response led by the CCC is within the RRP.
- Other tagged activities not included in the RRP include climate education and convergence platforms with poverty.

Annex 1:

Quality of Climate Change Expenditure Tagging

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 Climate Change Commission has put in place several mechanisms to ensure the quality of the tagged CC expenditure data. As part of the budget review process, the CCC has begun to set up systems to ensure the quality of the data collected and to strengthen updates to the data that is monitored and reported.

- *Initial review focused on the tagging accuracy*

  As an initial step in ensuring the quality of the CC tagged data, the CCC set up a system within its office for reviewing the quality and accuracy of tagging completed by NGAs. On an interim basis, the CCC established a quality assurance and review team consisting of the CCC focal persons for each of the strategic priorities. NGAs were categorized based on the NCCAP strategic priorities and their submissions, and routed to the respective focal person for initial review. Without a standard process or definite criteria, the CCC reviewed the submissions using expert judgment and based on the nature of the specific PAP. The results of the review are then sent as feedback to the NGAs, including suggestions for changes.

- *Documentary basis for CC Expenditure Tagging*

  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 PAP, and identifies its interconnectedness with adaptation or mitigation. The JMC enjoins agencies to set up an internal quality review process to ensure that PAPs are identified based on the objectives in the prescribed QAR Form (Sec 5.1.5).

Initially in FY2015, the DBM-CCC JMC did not require the NGAs to submit the documentary basis for their tagging decisions. Following the completion of the TBHs, key agencies were assisted by the TA to undertake a detailed QAR. The QAR process clarified the definition and objectives of the tagged PAPs, and identified its interconnection with adaptation or mitigation and with the NCCAP strategic priorities and sub-priorities. Adjustments were made on the submissions of the BP Form 201-F after the QAR forms had been completed.

Summary of PAPs identified as CC Expenditures in FY2015

Number of PAPs and Budget Amount in the FY 2015 GAA									
	Number of PAPS					Budget Amount ('000 PHP)			
	NGA Submi-ssion	(-)	+	QAR Ad-just	NGA Submission	(-)	+	Re-vised (+)	QAR Adjust
Total	**297**	**(42)**	**8**	**263**	**133,103,888**	**(1,094,327)**	**8,348,201**	**-**	**140,357,762**
Pillar									
Adaptation	265	(41)	7	231	122,855,301	(1,085,327)	8,148,201	-	129,918,175
Mitigation	32	(1)	1	32	10,248,587	(9,000)	200,000	-	10,439,587
Strategic Priority									
Food Security	40	(4)	4	40	4,223,567	(38,164)	7,811,870	-	11,997,273
Water Sufficiency	104	-	-	104	70,101,980	-	-	-	70,101,980
Ecological and Environmental Stability	26	(2)	2	26	11,270,328	(115,674)	155,184	-	11,309,839
Human Security	47	(10)	-	37	5,007,620	(219,673)	-	-	4,787,947
Climate-Smart Industries and Services	14	(3)	-	11	498,966	(15,868)	-	-	483,098
Sustainable Energy	25	(1)	1	25	38,692,788	(9,000)	200,000	-	38,883,788
Knowledge and Capacity Development	39	(22)	1	18	2,307,039	(695,949)	181,147	-	1,792,237
Cross-cutting	2	-	-	2	1,001,600	-	-	-	1,001,600

Quality of Identification of Climate Pillar in the FY 2015 GAA

QAR Adjusted								
NGA Submission	Number of PAPs				Budget Amount ('000 PHP)			
	Adap-tation	Mitiga-tion	Total	% mis-classified	Adaptation	Mitigation	Total	% mis-classified
Adaptation	220	4	224	2%	114,298,326	7,471,648	121,769,974	6%
Mitigation	5	26	31	16%	23,523	10,216,064	10,239,587	0%
Additions	7	1	8	n.a.	8,148,201	200,000	8,348,201	n.a.
Total	232	31	263		122,470,050	17,887,712	140,357,762	
% misclassified	5%	16%	6%		7%	43%	11%	

Number of PAPs FY 2015 GAA

QAR Adjusted										
NGA Submission	Food Security	Water Sufficiency	Ecological and Environmental Stability	Human Security	Climate-Smart Industries & Services	Sustainable Energy	Knowledge & Capacity Development	Cross-cutting	Total	% misclassified
Food Security		-	1	-	-	-	-	1	36	6%
Water Sufficiency	7		-	-	1	2	-	-	104	10%
Ecological and Environmental Stability	1	-		1	4	2	-	-	24	33%
Human Security	2	10	2		2	-	17	2	37	95%
Climate-Smart Industries and Services	-	-	-	2		-	-	2	11	36%
Sustainable Energy	3	-	-	-	-		-	-	24	13%
Knowledge and Capacity Development	1	1	1	2	3	-		2	17	59%
Cross-cutting	-	-	-	-	-	-	-		2	0%
Additions	4	-	2	-	-	1	1	-	8	
Total	52	105	22	7	17	26	25	9	263	
%misclassified	35%	10%	27%	71%	59%	19%	72%	78%		

Annex 2:

Definitions of Key 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 (PAPs) 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 PAP 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 (PAP) 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.

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.

FOREIGN-FUNDED PROJECTS:

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

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:

Projects financed out of revenue collections and domestic borrowings.

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 PAPs 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.

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