

GETTING A GRIP... on Climate Change in the Philippines

EXECUTIVE REPORT

Contributing to the foundation and ensuring the future for a low-carbon, climate resilient society through the Philippine Climate Public Expenditure and Institutional Review



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TABLE OF CONTENTS

ABBREVIATIONS	5
ACKNOWLEDGEMENTS	8
FOREWORD	9
SYNOPSIS	10
I. INTRODUCTION	19
II. SIGNIFICANCE OF THE REVIEW	22
Global climate change is taking its toll on the Philippines	22
Greenhouse gas emissions in the Philippines are increasing rapidly	25
Climate action contributes to inclusive growth and poverty reduction	25
The Philippines' climate reform agenda aims to consolidate climate policy across all levels of Government	27
Centralized institutional coordination supports the reform agenda	29
III. KEY ANALYTICAL FINDINGS: OVERCOMING BARRIERS THAT IMPEDE SUSTAINED CHANGE	31
The first phase of the climate reform agenda must be finalized in order to reach sustained low-carbon and climate-resilient development	31
Climate policy reform efforts are only partially aligned with development plan outcomes, thereby limiting effectiveness	32
Execution and coordination of climate actions are hindered by a lack of clarity in roles and responsibilities across institutions	34
Leveraging a low-carbon green-growth strategy and market-based instruments can strengthen engagement with the private sector	37
Differences in the classification of climate PAPs hinders climate budget planning and prioritization	37
Climate appropriations have been increasing relative to overall Government budgets	39
Climate appropriations have been funded largely from domestic sources, while development partner support has concentrated on flood control and management	39
Climate appropriations focus on a few large PAPs	40
Financing gaps for knowledge and capacity development may slow implementation progress	43
LGUs are action-oriented, but sources of funding are fragmented and their available amounts are limited	44
Climate appropriations have been focused on adaptation, but the share of appropriations for mitigation has been rising faster	47
Convergence of the Climate Change Adaptation and Disaster Risk Reduction and Management agendas is not reflected in budgets and plans	49
Available planning and design tools are often not mainstreamed or are overly complex	50
Public finance reforms provide opportunities to improve planning, prioritization, execution, and monitoring of climate PAPs	51
Innovative budgeting tools introduced through the PFM Reforms will enhance planning and prioritization, as well as significantly advance convergence	54
Increased budget transparency facilitates mobilization of domestic and development partner resources for climate action	55
Existing monitoring and evaluation systems have cumbersome reporting requirements, and the lack of climate indicators limits their usefulness to support the Government's climate reform agenda	56
Weak institutional capacity, including limited access to knowledge, has hindered efficient execution of the climate reforms and action	58
IV. RECOMMENDATIONS	60
Pillar 1: Strengthening the Planning, Execution, and Financing Framework for Climate Change	61
Pillar 2: Enhancing Leadership and Accountability through Monitoring, Evaluation, and Review of Climate Change Policies and Activities	63
Pillar 3: Building Capacity and Managing Change	64
REFERENCES	65
ANNEX A: STRATEGIC ACTION PLAN	66
ANNEX B: FRAMEWORK FOR ANALYSIS AND LIMITATIONS	72

TABLE OF CONTENTS:

Tables, Figures and Boxes

Figure 1. Scientific Agreement on Temperature Changes	23
Figure 2. Climate Change Vulnerability Map	23
Figure 3. Greenhouse Gas Emissions in the Philippines	25
Figure 4. From Fragmented to Comprehensive Laws and Policies.	27
Figure 5. NCCAP Priority Areas and Outcomes 2011-2028.	28
Figure 6. Linkages between Climate Adaptation Actions and DRRM.	28
Figure 7. Institutional Structure on Climate Change.	29
Figure 8. Institutional Responsibilities by Functional Stream Designated by the Climate Change Act.	34
Table 1. Comparison of Selected Major PAPs by Different Tagging Initiatives	38
Figure 9. Climate Appropriations by Classification, 2008-2013 (in Php billions)	39
Figure 10. Evolution of Climate Appropriations Based on the NCCAP Classification, 2008-2013.	40
Figure 11. Growth Rates of Climate Appropriations and Total Budget Appropriations of Departments/Agencies, 2008-2013 (in %)	40
Figure 12. Trends of Climate Appropriations by Department/Agency, 2008-2013 (on appropriation basis, in Php billions).	40
Figure 13. Composition of Expenditures and Appropriations by NCCAP Strategic Priority Area, 2008-2013 (on obligation and appropriation basis, in %)	41
Figure 14. Climate Expenditures and Appropriations by the NCCAP Thematic Priority, 2008-2013 (in Php billion).	42-43
Figure 15. Appropriations for Climate Change Initiatives of the Province of Albay, 2008-2012 (in Php billions).	45
Box 1. Contrasting Circumstances, Similar Successes: Case Studies on Makati and Albay	45
Figure 16. Spending on Climate Change Programs and Projects of Makati City, 2008-2012 (in Php billion)	46
Figure 17. Per Capita LGU Income of Provincial Governments, Ranked According to Various Hydro-meteorological Risks, 2009 (in pesos)	46
Figure 18. Key Characteristics of Local Sources of Climate Financing	47
Figure 19. Climate Appropriations by PAPs Addressing Adaptation, Mitigation, or Both 2008-2013 (in %)	48
Figure 20. Climate Appropriations for PAPs Contributing to Adaptation only by Department, 2008-2013, (in %)	49
Figure 21. Climate Appropriations for PAPs Contributing to Mitigation only by Department, 2008-2013 (in %)	49
Figure 22. The Philippine Budget Cycle: Examples of Entry Points for Integrating the Climate Agenda	52
Box 2. Secondary Tagging: Lessons from Uganda's Virtual Poverty Fund	53

ABBREVIATIONS

ADB	Asian Development Bank
AIP	Annual Investment Program
AO	Appropriations Ordinance
AUSAID	Australian Agency for International Development
BARs	Budget Accountability Reports
BMU	Bundesministerium für Umwelt, Naturschutz Und Reaktorsicherheit
BSWM	Bureau of Soils and Water Management
BUB	Bottom-Up Budgeting
CC	Climate Change
CCA	Climate Change Adaptation
CCC	Climate Change Commission
CCCC	Cabinet Cluster on Climate Change Adaptation and Mitigation
CDP	Comprehensive Development Plan
CFG	Climate Finance Group
CLUP	Comprehensive Land Use Plan
CPEIR	Climate Public Expenditure and Institutional Review
CSOs	Civil Society Organizations
DA	Department of Agriculture
DBM	Department of Budget and Management
DENR	Department of Environment and Natural Resources
DILG	Department of the Interior and Local Government
DND	Department of National Defense
DOE	Department of Energy
DOF	Department of Finance
DOH	Department of Health
DOST	Department of Science and Technology
DP	Development Partner
DPWH	Department of Public Works and Highways
DRR	Disaster Risk Reduction
DRRM	Disaster Risk Reduction Management
DRRMA	Disaster Risk Reduction Management Act
DRRMF	Disaster Risk Reduction Management Framework
DRRMP	Disaster Risk Reduction Management Plan
DSWD	Department of Social Welfare and Development
EIA	Environmental Impact Assessment
EMB	Environment Management Bureau
ENSO	El Niño/Southern Oscillation
FMB	Forest Management Bureau
GAA	General Appropriations Act
GAS	Government Accounting System
GDP	Gross Domestic Product
GHG	Greenhouse Gas

GII	Geographic Information Infrastructure
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Society for International Cooperation)
HLURB	Housing and Land Use Regulatory Board
ICC	Investment Coordinating Committee (of NEDA)
IEC	Information, Education, and Communication
ILO	International Labor Organization
IRA	Internal Revenue Allotment
IRR	Implementing Rules and Regulations
IWMP	Integrated Watershed Management Plan
JICA	Japan International Corporation Agency
KRA	Key Results Area
LCCAP	Local Climate Change Action Plan
LDF	Local Development Fund
LDRRM	Local Disaster Risk Reduction Management
LDRRMC	Local Disaster Risk Reduction and Management Council
LDRRMF	Local Disaster Risk Reduction and Management Fund
LDRRMP	Local Disaster Risk Reduction and Management Plan
LEDs	Low Emission Development Strategies
LGC	Local Government Code
LGU	Local Government Unit
MDB	Multilateral Development Bank
MDGs	Millennium Development Goals
MDG-F	Millennium Development Goal Fund
M&E	Monitoring and Evaluation
MFO	Major Final Output
MGB	Mines and Geo-science Bureau
MMDA	Metropolitan Manila Development Authority
MOU	Memorandum of Understanding
MRV	Measurable, Reportable, and Verifiable
MtCO _{2e}	Metric Tons of Carbon Dioxide Equivalent
MW	Megawatt
NAMA	Nationally Appropriate Mitigation Action
NAMRIA	National Mapping & Resource Information Authority
NCA	Notice of Cash Allocation
NCAA	Non-Cash Availment Authority
NCCAP	National Climate Change Action Plan
NCF	National Calamity Fund
NCR	National Capital Region
NDRRF	National Disaster Risk Reduction Fund
NDRRMC	National Disaster Risk Reduction and Management Council
NDRRMF	National Disaster Risk Reduction and Management Act framework
NDRRMP	National Disaster Risk Reduction and Management Act action plan
NEA	National Electrification Administration
NEDA	National Economic Development Authority

NEEDS	National Environmental, Economic and Development Study
NEP	National Expenditure Program
NFPP	National Framework for Physical Planning
NFSCC	National Framework Strategy on Climate Change
NGAs	National Government Agencies
NGOs	Non-Governmental Organizations
NGP	National Greening Program
NHA	National Housing Authority
NIA	National Irrigation Administration
NLUC	National Land Use Committee
NAMA	National Appropriated Mitigation Actions
OPIF	Organizational Performance Indicator Framework
PAMP	Protected Area Management Plan
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PAPs	Programs, Activities, and Projects
PCAARRD	Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development
PCIEERD	Philippine Council for Industry, Energy and Emerging Technology Research and Development
PCF	Performance Challenge Fund
PCHRD	Philippine Council for Health Research and Development
PCIC	Philippines Crop Insurance Corporation
PCIERD	Philippine Council for Industry and Energy Research and Development
PDAF	Priority Development Assistance Fund
PDF	Philippine Development Forum
PDP	Philippines Development Plan
PER	Public Expenditure Review
PFM	Public Financial Management
PhilRice	Philippine Rice Research Institute
Php	Philippine peso
PIP	Public Investment Program
PSF	People's Survival Fund
PSFB	People's Survival Fund Board
R&D	Research and Development
RWCSs	Rain Water Collection Systems
SAFDZ	Strategic Agriculture and Fisheries Development Zone
SEARCA	Southeast Asian Regional Center for Graduate Study and Research in Agriculture
SEER	Sectoral Effectiveness and Efficiency Review
SIADP	Sustainable Integrated Area Development Plan
SPF	Special Purpose Fund
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
VA	Vulnerability Assessment
WB	World Bank (International Bank for Reconstruction and Development)
ZBB	Zero-Based Budgeting

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FOREWORD

Climate change affects all of us. The poor, however, are usually more severely affected.

The same could be said of countries. The greatest challenge that poorer countries face today is that hard-earned development progress they have achieved in the last several decades could be reversed in a short time because of climate change.

The Philippines is the third most vulnerable country to weather-related extreme events, earthquakes, and sea level rise. The country's exposure to extreme weather conditions adversely affects people's lives, especially those in high-risk urban and coastal areas. Food security is threatened as land and nursery areas for plants, trees, and fisheries are affected by climate change. The livelihoods of poor communities that rely on natural resources are hampered and their lives and properties are further put at risk. For the Philippines to reduce poverty, accelerate economic growth, and create jobs, it is therefore necessary to address the country's vulnerabilities to climate change. This can be accomplished by reducing the exposure and improving the adaptive capacity of communities at risk.

To effectively deal with climate change, the Philippine Government enacted the Climate Change Act in 2009. This law established the Climate Change Commission (CCC) which is tasked to coordinate and guide all policies related to climate change. The CCC was mandated to formulate the National Framework Strategy on Climate Change and the National Climate Change Action Plan (NCCAP). As the Chairperson of the CCC, the President made climate change adaptation and mitigation one of five key results areas of his Social Contract with the Filipino people. The implementation of the NCCAP has begun, and the Government

is moving to establish the policies, institutions, and financing needed to scale up and mainstream climate action across all sectors and levels of government.

To assess gaps and accelerate implementation of the climate agenda, the Department of Budget and Management and the CCC sought advisory services from the World Bank to carry out a Climate Public Expenditure and Institutional Review (CPEIR). The review, carried out between February 2012 and March 2013, sought to identify innovations in policy, institutions, and financing of climate action, along with achievements, limitations, and disconnects in the current approaches to addressing climate issues and policy. It identified process reforms that could deliver desired climate results more effectively and enhance the quality of the decision-making process. The analysis, based on the rich set of data gathered by the team, provides a valuable basis for the Philippines to develop a baseline for financing climate change.

The recommendations and action plan in this report complement and reinforce the multi-faceted public finance reform agenda that the Government is currently implementing (e.g., by increasing transparency and accountability in public climate financing, operationalizing the program approach, and bottom-up budgeting). The operationalization of the People's Survival Fund can also be a catalyst—not only for putting in place systems for local climate financing, but also as a stepping stone to manage climate financing at the national level.

The report's recommendations and action plan are offered at the midpoint of the current Philippine Development Plan. They are intended to provide timely, specific suggestions for strategies and actions that can be used to strengthen the Philippines' framework for action on climate change, enhance accountability, and build capacity.

It is our hope that the report will help spur all of us into action.



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SYNOPSIS

The Philippines already experiences and will continue to face impacts from climate change. In the decades ahead, the most serious consequences will be felt in coastal and urban areas. Severe hardships are expected in agriculture and fisheries, leading to negative impacts on jobs and the economy. With these risks in mind the Philippine Government has initiated significant climate reforms, establishing a basis for transformation. To assess gaps and accelerate implementation of the climate reform agenda, in 2012 the Department of Budget and Management and the Climate Change Commission sought advisory services from the World Bank to carry out a Climate Public Expenditure and Institutional Review (CPEIR). Carried out at mid-term of the first phase of the National Climate Change Action Plan, the Philippine Development Plan (2011–2016), and the current Administration, this review comes early enough to help guide the finalization and operationalization of the first phase of the climate reform agenda.

This Executive Report summarizes the findings and recommendations of the CPEIR, including an analytical snapshot of the policies, institutions, and expenditures for undertaking climate action in the Philippines, and recommendations to contribute to a successful implementation of the Philippine climate reform agenda. The Extended Technical CPEIR Report, which provides more detailed background, analysis, and recommendations, is available online at www.worldbank.org/reference.

Global climate change will continue to cause severe impacts to global, regional, and national economies and livelihoods, unless action is taken to build adaptive capacity of communities, increase natural ecosystems' resilience to climate change, and optimize mitigation opportunities toward sustainable development. Climate model projections show that even if Parties of the United Nations Framework Convention on Climate Change (UNFCCC) comply with the emission pledges made at the Conferences of the Parties in Cancun and Copenhagen, global warming is set on a trajectory that is likely to exceed 3°C, with a possible 4°C increase as early as 2060. This will cause a non-linear path of climate-related events, leading to a wide range of impacts affecting global, regional, and national economies (World Bank 2013). Middle-income countries, which already struggle to meet sustainable development goals, will experience additional challenges as climate change halts or reverses some of their development gains and objectives.

Global climate change is taking its toll on the Philippines

As the world's third most vulnerable country to extreme weather events and sea level rise, the Philippines is already feeling the impacts of climate change (Alliance Development Works 2012).

By virtue of its location, climate, and topography, the Philippines is exposed to a range of climate-related hazards such as typhoons, floods, landslides, and droughts. Sixteen of its provinces are among the top 50 most vulnerable regions in Southeast Asia (Yusuf & Francisco 2010). Climate-related impacts are projected to increase in the coming decades, threatening in particular:

- **Coastal Populations:** In a 4°C world, sea-level rise around the East Asia and Pacific region is likely¹ to exceed 50 cm above present levels² by 2060, and 100 cm by 2090, with Manila being especially vulnerable (World Bank 2013). Climate change is expected to lead to more intense typhoons, whose storm surges will be superimposed on higher sea levels. In the Philippines, storm surges are projected to affect about 14 percent of the total population and 42 percent of the coastal population (Brecht et al 2012).
- **Urban Populations:** Informal settlements, which account for 45 percent of the Philippines' urban population, are particularly vulnerable to floods due to less secure infrastructure, reduced access to clean water, and lack of health insurance (World Bank 2013).

¹ "Likely" is defined as >66 percent chance, using the modeling approaches adopted in this report.

² 1986–2005 levels.

- **Agriculture:** Climate-related impacts are expected to reduce agricultural productivity in the Philippines. The annual damage to agriculture from typhoons, droughts, and floods has already reached Php 12 billion, equivalent to 3 percent of total agricultural production (CCC 2011). A 30 cm sea-level rise by 2040 is projected to reduce rice production in the region's major rice growing region—the Mekong River Delta—by about 2.6 million tons per year, or about 11 percent of 2011 paddy production (World Bank 2013).
- **Fisheries:** Warming oceans and ocean acidification affect coral reefs, which serve as important feeding and spawning grounds for many fish species that support the livelihoods of fisher folk (World Bank 2013). Even minor changes in ocean dynamics can cause severe impacts. For example, during the 1998 to 1999 ENSO event, the live coral cover of the Philippines decreased by half, diminishing fisheries yield by more than Php 7 billion (Center for Environmental Concerns Philippines 2011; Santos, Dickson, and Velasco 2011). The projected changes in maximum catch potential in a 4°C world range from a 50 percent decrease around the southern Philippines during the 2050s to a 6–16 percent increase around the northern Philippines (World Bank 2013).

Non-climate factors—such as fast-growing environmental deterioration, unsustainable development practices, and population growth and movement—aggravate climate vulnerability in the Philippines. For example, widespread mining and deforestation in Mindanao were blamed for recent flash floods, including those produced by Tropical Storm Sendong in 2011, which cost the lives of about 1,000 people (Iqbal 2011). The neglect of drainage systems and the lack of long-term planning and enforcement exacerbated the floods in 2012, which swamped nearly all of Manila (Macaraig 2012).

While building resilience, the Philippines must also ensure that greenhouse gas emissions remain in check. Though a minor global contributor to climate change globally, the Philippines' greenhouse gas emissions rank in the top 25 percent of low and middle income countries, with significant increases projected in the coming decades. Emissions from the energy sector are projected to quadruple by 2030, and the transport sector is expected to double its emissions. The underlying data for these projections need to be updated through the ongoing low-carbon studies and through the next National Communication to the UNFCCC.

It is imperative to fully implement climate reforms now

Given the Philippines' vulnerabilities, it is critical that the country implements the measures needed to protect itself against ever-increasing climate change and variability.

Through the Philippines Development Plan (PDP), the Philippines aims to accelerate annual economic growth to 7–8 percent. Unless it is planned and carried out with accommodation to future climate change in mind, the development plan could be locked into infrastructure development, land use changes and urbanization processes that are more vulnerable to climate risks. The process of developing institutions to implement climate reforms can be lengthy; the time to start acting is now.

Since many climate change activities are good development policies, implementing the Government's climate reform program contributes to broader development goals.

For example, reforms in the energy sector promoting renewable sources and energy efficiency contribute directly to energy security and can lower energy costs, thereby also increasing competitiveness. In agriculture, adaptation activities that conserve water and improve soil quality will enhance water resources management and help alleviate food insecurity. Similarly, significant opportunities exist to increase employment in the fields of agriculture, infrastructure, and energy. Labor-intensive activities, such as the development of small-scale sustainable and climate resilient farming activities or retrofitting infrastructure for flood control, will build resilience while increasing employment opportunities.

A reformed policy and institutional structure adds value

The Philippine Government has engaged in a comprehensive and strategic climate reform agenda focused on integrating climate change into national and local policy formulation and development. Enacted in 2009, the Climate Change Act was passed to strengthen, integrate, consolidate, and institutionalize previous specific sector-based government initiatives. The Act called for the formulation of a National Framework Strategy on Climate Change (NFSCC), which defines the overall parameters for developing a National Climate Change Action Plan (NCCAP). The NCCAP serves as the Government's road map for climate action and the lead policy document guiding the climate agenda at all levels of government.

The Government's climate change policy agenda emphasizes a shift to adaptation, as well as convergence between climate change adaptation and disaster risk reduction and management. Prior to the passage of the Climate Change Act, climate activities in the Philippines focused on mitigation. Now, six out of the seven NCCAP priority areas are directly related to adaptation. The new agenda also clearly reflects convergence on climate change adaptation and disaster risk reduction and management (DRRM), by mainstreaming DRRM and CCA in development processes. This is an important step toward focusing on prevention and protection instead of recovery and rehabilitation.

The climate change policy agenda is supported by the establishment of centralized national institutions aimed at stronger coherence and coordination. Several new institutions have been created or are at various stages of mobilization, including the Climate Change Commission (CCC), the Cabinet Cluster on Climate Change (CCCC), and the People's Survival Fund Board (PSFB). Through coordination with existing oversight agencies like the DBM and NEDA, the new institutions were placed at the center to guide, coordinate, and monitor Departments at the national level—and Local Government Units (LGUs) at the local level—with formulating and implementing climate action.

The climate reform agenda builds a foundation for consistent reforms at all levels of government, but the Philippines has much to lose if the Government fails to deliver on the reforms already begun. At the midpoint of its term, the current administration aims to finalize first-phase reforms focused on establishing readiness, and to start preparing for the second phase. While the country is moving in the right direction, effective implementation of the climate agenda is being hampered by a number of barriers and gaps. These must be addressed now to ensure successful implementation of the reforms underway.

Synergies between national/sector/local policies are key

The Government's development plans are only partially aligned with the NCCAP. Incorporating the NCCAP into national and local development planning processes is important to ensure that national climate change goals and priorities are translated into actions and implemented. The NCCAP priorities are thematic in nature, often cutting across the sector-based focus of the development plans. This hampers coordination and convergence of climate activities across Departments and between administrative levels, and renders monitoring of climate activities difficult.

- **The NCCAP and the PDP are only partially aligned.** Even though the PDP was launched as the NCCAP was still being developed, five chapters in the PDP include extensive discussions on climate change, particularly in relation to adaptation

and disaster risk reduction and management. However, some immediate NCCAP outcomes are excluded from the PDP while others lack detailed articulation of supporting activities. Since both plans are scheduled for updates in mid-2013, an opportunity exists for improved alignment.

- **NCCAP activities can be only partially linked to the Key Result Area-5 (KRA-5) programs, activities, and projects (PAPs).** This is in part because a range of the NCCAP activities are not yet funded, and in part due to a different classification system of climate PAPs used for KRA-5 and the NCCAP. PAPs have been classified under KRA 1-5 based on the primary objective and mandate of the Departments or Agencies. As a result, preference has been given to attribute the climate change related PAPs to other KRAs (e.g., poverty reduction or growth) instead of KRA-5. For instance, important adaptation measures, such as flood control projects, were tagged as KRA-3 as they were deemed intended for economic/infrastructure development and thus are not captured under KRA-5. Ideally, climate PAPs under KRA-5 should be aligned to the NCCAP. In practice, the linkage between the NCCAP and KRA-5 is not straightforward: some KRA-5 PAPs could be linked to the NCCAP activities while others are not covered by the NCCAP. Likewise, not all NCCAP activities are included under the KRA-5. Some activities could be found under other KRAs, and a range of them are not included at all as their funding has not yet been mobilized.
- **The NCCAP has not yet gained enough traction among the CCCC Department members, as a clear link with the KRA-5 is not yet established.** Departments' performance is measured and monitored against their Major Final Outputs using the Organizational Performance Indicator Framework indicators. In addition, following the introduction of the KRAs, the Departments were asked by the CCCC to prepare work programs for 2011–2016 that include funded climate PAPs and future funding needs. They were also asked by the DBM to annually identify PAPs that contribute to the KRAs. Ideally, the work programs should be used as a tool to support the implementation of the NCCAP and feed into the KRA-5. In practice, the work programs were not linked to the NCCAP outcomes and activities and have also not been used to identify climate PAPs for the KRA-5. Given these shortcomings, the Departments have focused primarily in recent years on identifying climate PAPs for the KRA-5 and have had no incentives to update their work programs to ensure a better NCCAP alignment and implementation.
- **The Climate Change Act requires LGUs to complete Local Climate Change Action Plans (LCCAPs).** Such new requirements impose significant administrative burdens and pressure on LGUs, especially when clear guidelines are not available on how to translate the NCCAP into LCCAPs. To

lighten this load, the CCC encouraged LGUs to incorporate their LCCAPs into the CDPs and CLUPs and is working toward developing supporting guidelines.

Climate change adaptation and disaster risk reduction management policies have converged at the policy level, in that both consider adaptation as a mechanism for addressing climate-related disaster risk.

The linkages between adaptation and disaster risk reduction are recognized in the conceptual convergence of the Climate Change Act and the National Disaster Risk Reduction Management (NDRRM) Acts. The NDRRM Act led to a paradigmatic shift away from disaster response to prevention. It revamped both the National and Local Calamity Funds, creating the National Disaster Risk Reduction and Management Fund (NDRRMF) and the Local Disaster Risk Reduction and Management Fund (LDRRMF), from which 70 percent of appropriations should go to disaster prevention activities and the remaining 30 percent to support the Quick Release Funds for relief and recovery programs.

Though greenhouse gas emissions reduction activities are being carried out, there is currently no common strategy to direct the roles and responsibilities of institutions in financing low-carbon development and green growth. So far, activities have been carried out on a fragmented basis by different Departments and Agencies, and to some extent by the private sector. This piecemeal approach has made it difficult to prioritize activities and maximize effectiveness.

Climate institutions need joint and consistent strategic direction

The broad scope and many responsibilities of the CCC hamper its ability to streamline implementation of the NCCAP and operationalize some of its tasks. The CCC is solely responsible for a number of key functions, such as leading climate policy making and coordinating, monitoring and evaluating climate programs and action plans. Because of its wide array of responsibilities, the CCC has not been able to divert enough resources to advocate effectively for immediate action on climate change.

The CCC is jointly responsible for several tasks with other agencies, yet its effectiveness is limited by a lack of clear or formalized roles and relationships. In particular, clarifying the relationship with the NEDA and DBM is essential to ensure effective coordination and integration of the climate change, poverty reduction and development agendas. Similarly, while the CCC provides secretariat services to the CCCC, it remains without much decision making powers, which have slowed the integration of the NCCAP at the highest level of government. The dual support

services of the DENR and the CCC have often led to a duplication of secretariat services in the CCCC, and competing demands on the CCC staff have limited their ability to provide needed support to the Cabinet. Some steps are being taken to clarify these roles, but more work is required to establish a better balance between executive agency priorities and strategic, high-level goals.

The CCC is a national agency with limited local presence, and lacks the capacity to engage with all LGUs. Several entry points have proven useful for increased coordination with LGUs. For example, the CCC can take advantage of establishing relationships to expand coordination through NEDA's board committees. The CCC's relationship with the Housing and Land Use Regulatory Board can be used to assist with integration of adaptation in local development plans.

While new institutions are being mobilized to fill the existing institutional gaps in strategic climate financing oversight and coordination, significant gaps remain. Operationalizing the PSF provides an opportunity to develop and strengthen climate financing institutions and policies while also readying the Philippines to receive climate financing. This entails developing national and local institutions that can meet fiduciary standards at the project and the portfolio levels and can effectively plan, prioritize, and implement climate action. The primary focus of the PSF Board is oversight and coordination of climate financing for adaptation at the local level. Institutional gaps remain at the sectoral and national levels for overall climate financing coordination, including mobilization of additional resources and adoption of appropriate market- and non-market-based financing instruments. The Climate Finance Group, which is currently an ad-hoc informal group, can play an important role in filling this gap to create the enabling environment for climate financing readiness at the national level.

No clear organizational model exists to execute and deliver climate results across the various Departmental structures and needs. The organizational models to address climate issues vary across Departments; the DA and the DENR are the only Departments with internal climate units. The organizational structure of Departments is an important determinant of their effectiveness in pursuing or prioritizing climate objectives.

Coordination on disaster risk reduction and climate change adaptation is difficult due to overlapping responsibilities and action plans. The LGUs are mandated to develop local disaster risk reduction management plans. The CCC and the NDRRMC are required to work with each other on their engagement with the LGUs, and the two Agencies have signed an MOU affirming their collaboration to harmonize and coordinate with each other in supporting the LGUs, and to develop a joint work plan. However, in practice there are no guidelines on how to operationalize their agreement to coordinate.

Lack of institutional capacity, knowledge generation and management, and monitoring and evaluation are key barriers

There is a great need for increased institutional capacity on climate change. Departments and Agencies that implement the Government climate agenda require knowledgeable and skilled staff. At the local level, the development of climate change plans and activities imposes significant pressure on LGUs, which are already burdened by other pressing development needs. In some cases local progress is hampered by lack of technical capacity, such as guidelines and simplified tools that can be used to transform national policies to local policies.

Knowledge generation and management are needed to complement capacity building. Insufficient access to information and knowledge has been a persistent issue across Departments and at the local level. Some information is available through Government agencies, but systems could be enhanced significantly.

Monitoring and reporting on NCCAP implementation progress has been challenging. The CCC has been assigned the responsibility of consolidated monitoring of progress on NCCAP implementation. However, there is no guidance on how progress is to be monitored. A lack of agreed-upon indicators and targets has hindered the process of monitoring the integration of the NCCAP across development plans at different levels of government and across Departments, which impedes an evaluation of results across climate PAPs. The Government has introduced a unified and integrated Results-Based Performance Management System across all Departments and Agencies within the Executive Branch to address existing shortcoming, with expected improvements in reporting and auditing systems.

Government financing of climate action has increased, with a priority for a few large-scale PAPs

Sources of financing for climate change activities stem primarily from domestic sources through the General Appropriations Act (GAA), Special Purpose Funds (SPFs), and Special Accounts in General Funds. Domestic resources have funded on average 82 percent of climate expenditures in the Departments assessed between 2008 and 2011. Other than the Department

of Public Works and Highways (DPWH), about 94 percent of the climate expenditures in Departments are financed from local sources. Most Departments are funded from the GAA, except for the Department of Energy (DOE), where a third of funding is from Special Accounts.

Externally funded sources have played an important catalytic role as well. The bulk of aid from development partners directed to climate change supports flood control protection and is managed by DPWH, accounting on average for more than a third of the Department's total climate expenditures or for 80 percent of total development partner aid. Most other Departments have benefited by small-scale, innovative grant-funded climate projects that are often off budget. These have been instrumental in piloting initiatives and supporting investments to assist Government in developing climate action at the national and local levels. Given the range and different levels of development partner support of the Government's climate reform agenda across several sectors, the management, coordination, and mobilization of aid has been a challenge.

Climate budget appropriations have increased significantly, reflecting a heightened concern for climate change. Between 2008 and 2012, climate appropriations increased by two and a half times in real terms, from Php 12 billion to Php 35 billion, now accounting for 1.9 percent of the national budget. Over the period, climate appropriations have grown, by 26 percent annually on average in real terms, outpacing the growth of the national budget (around 6 percent). This is mirrored by faster growth of climate appropriations in absolute and relative terms across Departments in comparison to their total appropriations.

The upward trend in climate appropriations is due to increased allocations to a few major PAPs, concentrated within a few Departments and Agencies. The distribution of climate-related public resources reflects the Government's commitment to prioritize major investments for flood control protection (DPWH) in the face of more severe periodic flooding events and the upscaling of the National Greening Program managed by DENR in recent years. Other increases in budgetary allocations can be attributed to DOE's funding of the Electric Vehicle Project in 2013 and DA's appropriations in favor of a major climate PAP managed by the Philippine Rice Research Institute and a variety of smaller PAPs supporting the promotion of organic agriculture.

The trends in climate appropriations are reflected across the NCCAP priority areas, though most increases allocated to the NCCAP priority areas primarily supported activities related to *Water Sufficiency*, followed by *Ecosystem and Environmental Stability and Food Security*. Funding for all of the NCCAP priorities has been steadily rising in the past five years, with the largest growth deriving from investments to the NCCAP priority on *Water Sufficiency*, from about Php 6 billion to nearly Php 20 billion.

Financing gaps show a mixed picture of the funding adequacy of selected climate PAPs

A preliminary assessment of climate financing gaps indicates that several large climate activities identified in the PIP are either underfunded or not funded in the 2013 budget.

An assessment of four selected sectors (agriculture and fishery, water, environment and natural resources, and energy) in the PIP against the GAA revealed that appropriations for several PAPs were not mobilized in the 2013 budget. In the agriculture and fishery sector, significant funding was pledged in the PIP for the development and implementation of the National Farmers Registry System and Inventory System of Agriculture and Fishery Investments, but the respective appropriations were not secured. Similarly, in the energy sector, two major PAPs with mitigation co-benefits (Renewable Energy Project and Ocean-Thermal Energy Conservation Project) included in the PIP for 2012 and 2013 were not funded in the 2013 GAA. For the environment and natural resource sector, the Clonal Nursery project was delayed by a year and falls short by Php 400 million in the 2013 GAA compared with the respective commitments in the PIP.

Many smaller activities, including capacity development, were also underfunded or not funded in 2013. From an NCCAP priority area perspective, capacity development, which is included in the various NCCAP priorities as well as the overall NCCAP priority to fund knowledge and capacity development, remains underfunded. This needs to be monitored, considering the significant capacity development needs of the Departments and Agencies. Some evidence suggests that small-scale activities for ecosystem stability services might lack funding or might not be sufficiently funded. For instance, capacity building, training, or the mainstreaming of CCA in planning tools to be conducted at a pilot basis have not yet been scaled up. The assessment of the water sector showed that funding for water harvesting technologies or the profiling of watersheds and river basins is small and was not funded in 2013. In the case of the agriculture and fishery sector, significant opportunities to scale up include research on climate-resilient crop varieties, water conservation, establishment of field schools, and the set-up of a climate database that informs technical and planning units on location-specific climate risks at the DA.

LGUs are action-oriented, but sources of funding available are fragmented and their available amounts are limited

LGUs most vulnerable to the impacts of climate change have the greatest need for public support, yet have the least capacity to provide support under current revenue-sharing arrangements. The provinces and municipalities at greatest risk of being affected by climate hazards are on average poorer, with lower total income per capita. In the aggregate, about 70 percent of LGU income is derived from the Internal Revenue Allotment (IRA), a direct transfer of resources from the national government accounts to LGUs. The amount of the transfer to each LGU depends on its area and population and not on the level of its vulnerability. The poorer LGUs rely on the IRA for nearly 90 percent of their income.

Assessing local climate expenditures is challenging, as funding is highly fragmented due to different funding sources.

Sources of funding for Climate PAPs at the local level have different sets of rules and processes, eligibility criteria, and cost-sharing requirements, making it difficult for LGUs to plan, mobilize resources, and monitor and report on results.

Climate PAPs often compete against the many other development priorities of LGUs. The Local Government Code provides that the LDF can only be used to finance projects that are explicitly identified in the Local Development Plans (CDP and CLUP). Most LGUs are already challenged by other development needs, such as high poverty levels and environmental deterioration, which may sometimes take priority. This highlights the need to mainstream climate change in local development planning.

Climate appropriations are adaptation-focused, but mitigation funding is rising faster

Nearly three-fourths of climate budget appropriations since 2008 have been directed toward adaptation interventions, though the share of appropriations directed toward mitigation has grown faster on average. From 2008–2013, nearly 72 percent of climate appropriations have been directed to PAPs that provided adaptation benefits while about 18 percent have been directed to PAPs with mitigation benefits; the remaining 10 percent financed PAPs that support both mitigation and adaptation. Appropriations for mitigation PAPs have grown at an average annual rate of 46 percent, more than three times as fast as adaptation PAPs, which grew at an average annual rate of 15 percent. As a result, the share

of appropriations directed to adaptation has dropped to 64 percent in 2013 (from 76 percent in 2008), while the share of appropriations for PAPs with mitigation benefits rose to 30 percent.

Despite increased appropriations to the national Calamity Fund in recent years, most of the resources continue to be directed to response, recovery, and rehabilitation efforts instead of disaster prevention. Through 2013, the GAA has not included any appropriations for the NDRRMF. Instead, appropriations have continued for post-disaster relief, recovery, and reconstruction through the Calamity Fund. The Calamity Fund can support disaster prevention activities, but has rarely done so over the past years. According to the DBM, disaster prevention should be funded as part of the regular budgets of the Departments, but the Department have yet to develop systems to incentivize climate change adaptation and disaster prevention actions.

Complex tools make planning and prioritization challenging

The planning and prioritization process in Departments could be strengthened by the use of improved decision-making support tools on climate change activities. For example, vulnerability assessment (VA) tools provide useful information to support prioritization of adaptation actions at the local level. However, they are often too technical and complex for use by LGUs and need to be better integrated into disaster risk tools, which are focused primarily on current risks. Environmental impact assessments, which are used for large PAPs, are completed downstream of the decision-making process and often do not provide information early enough to influence project design. In contrast, the climate screening tool being developed by the DENR provides upfront assessment of PAPs to guide project manager decisions, but the tool is not yet widely used. While decision tools are not used systematically to assess and integrate the development co-benefits of climate action and to prioritize such action, standardizing their use could provide additional public support for them.

Innovative tools and processes introduced through the PFM reforms enhance budget planning and prioritization

Inconsistencies of climate priorities across national plans, sector strategies, and local development plans hamper the mainstreaming of climate PAPs in the budget. In recent years, there

have been increasing efforts by the Government to integrate adaptation- and mitigation-related issues into planning tools at national and subnational levels. However, challenges remain to ensure that climate actions are prepared and prioritized in budget planning.

Screening guidelines can facilitate the inclusion of climate action in budget planning at national and subnational levels.

While the recently developed screening guidelines will focus primarily on tagging climate PAPs, the tool cannot yet be used for prioritizing PAPs. Most Departments and LGUs do not yet appear to be making use of internal policies, budget calls, directives, or memorandums to promote the identification and prioritization of climate activities in the budget or to integrate climate risk considerations in infrastructure vulnerable to weather extremes.

The adoption of new budgeting tools and processes through the Government's PFM reforms offers unique opportunities to enhance climate planning and prioritization. The Program Approach promotes convergence and greater coordination of the Department's climate activities. The effectiveness of this approach will depend on the Government's ability to address some problems such as the clarity of tasks and responsibilities; the coordination between the DBM, CCC, and the eight involved Departments; and the uneven technical capacity of staff. The Bottom-up Budget (BUB) was developed to respond to the development needs of poor municipalities and the Government's poverty reduction goals, and it offers an opportunity for local communities to mobilize funding for climate-related activities. Potential challenges could arise regarding the selection of activities and the capacity of the municipalities to implement them. A closer look at the DA and the DENR showed that both face many reporting requirements and limited capacity to use reported data for strategic planning purposes. The introduction of a new Unified Account Code Structure and Results-Based Management Performance System are expected to enhance reporting of mid-year expenditures and evaluations, but this is expected to materialize in the medium term. The recently introduced Zero-Based Budget approach offers an opportunity to evaluate the implementation of major climate PAPs, though this needs to be pursued more consistently.

The Way Forward

The recommendations of the review aim to consolidate the strategic direction of the NCCAP and set the stage for scaling up climate action over the remaining two phases of the NCCAP. The goals for the remainder of the Administration's term should be to:

- i. Ensure that the enabling environment is firmly in place by completing and implementing the remaining pieces of the core climate change reforms;
- ii. Formulate, enact, and support complementary sector and local-level policy and institutional reforms;

- iii. Enhance planning, prioritization, design, and reporting of climate programs, activities, and projects to improve their effectiveness; and
- iv. Through the above reforms, increase efficiency of resource use and provide support for higher levels of financing.

These recommendations, together with the Strategic Action Plan, are anchored to the Government's climate reform agenda through a framework that includes three pillars: (1)

Strengthening the Planning, Execution, and Financing Framework for Climate Change; (2) Enhancing Accountability through Monitoring, Evaluation, and Review of Climate Change Policies and Activities; and (3) Building Capacity and Managing Change. Each of these pillars includes a set of objectives (eight in total) and underlying activities, as described below.

Pillar 1: Strengthening the Planning, Execution, and Financing Framework for Climate Change

The three objectives under this pillar aim to address a major weakness in the present policy and budget institutional framework: the lack of a mechanism that unifies all climate change activities.

- **The first objective under this pillar aims to strengthen the budget planning and execution framework to better manage climate PAPs.** This entails integrating climate change into the budget planning process, such as budget calls and MTEF; making systematic use of management tools, such as climate screening guidelines to identify and tag climate PAPs; more effectively utilizing new opportunities created by PFM reforms, such as the Program Approach; and developing and adopting new tools for prioritization of climate activities in the budget planning process. The CCC and the DBM developed climate-screening guidelines to tag PAPs aimed at climate adaptation and mitigation. The guidelines should be updated and implemented on a regular basis going forward, based on clearly defined processes. Additional activities include comprehensive and harmonized mainstreaming of climate priorities and activities in national and sector plans, strategies, and budgets, and the monitoring of ongoing reform efforts that aim to strengthen the reporting and evaluation of expenditures.
- **The second objective under this pillar would align plans and strengthen implementation to achieve climate change goals.** This entails establishing a shared climate program by aligning NCCAP priorities with national plans and policies (the PDP, PIP, KRA-5) as well as Department work programs and local plans. It also involves the development of a results-oriented operational business plan—including indicators and targets, and reflecting the shared program—for subsequent phases of NCCAP. While planned updates to the PDP and the NCCAP in 2013 provide opportunities to align these plans, there is still a need to define what should be included in the KRA-5 classification. The Department work programs can be strengthened to include NCCAP priorities in three areas: work program convergence across Departments (e.g., through the Program

Approach); sector policy reform; and improved design and execution of PAPs (e.g., establishing clear objectives and targets, improved management of risks and uncertainty, increased convergence, and increased recognition of co-benefits). The policy convergence on CCA and DRRM needs to be reflected in implementation strategies, institutional arrangements, and financing by simplifying and integrating the vulnerability and disaster risk assessment tools so that they focus on short- to long-term climate risk management; developing common indicators for monitoring progress; and standardizing reporting on climate-related disaster activities. In addition, at the local level, climate change needs to be systematically incorporated into CLUPS and CDPs as well as Annual Investment Plans, with strengthened guidance from CCC. Similarly, the formulation of a national low-emission strategy, together with the development of monitoring, reporting, and verification systems; systems for collecting data; setting baselines; and establishing regulatory institutions is essential for optimizing mitigation opportunities.

- **The third objective under this pillar aims to rationalize and harmonize climate financing instruments.** This entails establishing strategic and complementary rules and eligibility criteria for climate change financing at the local level across the different sources of financing (e.g., PSF, LDRMF, and LDF) toward improving targeting, reducing fragmentation, and increasing transparency and effectiveness of these financing instruments. The PSF Board could lead such an effort through the examples it sets in operationalizing the PSF and through the convening power resulting from its size and institutional visibility. Gaps need to be filled in the institutional arrangement for mobilizing additional resources to support mitigation and adaptation action at the national and sectoral levels, and in the development and adoption of market-based instruments. While the DOF has a powerful infrastructure to help mobilize and coordinate domestic and international resources, including for leveraging private sector resources, these need to be coordinated with CCC, NEDA, and DBM. Development Partner support for the Government's climate reform agenda could be strengthened through greater coordination and use of the programmatic approach orchestrated through the Philippine Development Forum.

Pillar 2: Enhancing Leadership and Accountability through Monitoring, Evaluation, and Review of Climate Change Policies and Activities

The second pillar aims to strengthen leadership and accountability across the CCC, oversight Agencies, and Departments. Clearly defined institutional roles and responsibilities are essential for fostering leadership that effectively facilitates the translation of policies into actions and results. In this context, good use can be made of effective champions of climate change policy and practice.

- **The first objective under this pillar is to enhance the CCC's leadership role in monitoring and communicating climate change performance by strengthening the annual CCC**

review of climate change implementation. The CCC's monitoring and reporting of NCCAP implementation could be improved in three areas: First, the annual implementation progress report needs to include desired goals of the coming year, assess the achievements relative to the goals for the prior year, summarize key issues leading to performance shortfalls, and recommend actions to overcome them. Second, the CCA/ DRRM agenda remains uncoordinated but could be improved if the CCC consolidated its reporting of all climate-related disaster prevention to provide a comprehensive picture. Third, the CCC needs to establish a system to review LCCAPs and their integration into local development plans, as well as to generate lessons learned that can be used to improve local planning.

- **The second objective under this pillar aims to strengthen coordination between the CCC and Oversight Agencies and Departments by convening a Champions' Group; operationalizing the terms of reference for the CCC Advisory Board members; and strengthening coordination between the CCC, national and local DRRM councils, and the PSF Board.** A key step in facilitating greater coordination between the Agencies (CCC, NEDA, DBM and DOF) responsible for overseeing implementation of the most critical policy instruments affecting climate change is convening a Champions' Group consisting of these Agencies to lead by example. The Champions would work together based on a terms of reference that includes clear enforceable targets, roles and responsibilities, and accountabilities that could establish the norms for climate change governance. Areas where the relationship between the NEDA and the CCC could be clarified include (a) setting entry points for updating the PDP and the NCCAP to ensure consistency, and (b) establishing review criteria for the PSF consistent with updated ICC review criteria that reflect climate considerations. With respect to the CCC and the DBM, areas for coordination include updates of the climate screening guidelines and integrating the CCC inputs into the budget process. Similarly, in relation to the DOF, the role of the CCC in identifying financing needs and the role of the DOF in mobilizing financing need to be clarified. The CCC also needs to strengthen coordination with national and local DRRM Councils and the PSF Board.
- **The third objective under this pillar is to strengthen monitoring in the Departments and the LGUs.** The development of a consistent set of climate performance indicators, supported by measurable targets to monitor progress, will further enable activities across the government to be clearly focused and aligned. The CCC could support the Departments to develop such indicators and support their inclusion in the currently developed RBPMS in consultation with DBM, which is leading the integration effort on the various monitoring and accounting systems. At the local level, climate activities could be reported by the LGUs in their Annual State of the Local Governance Report.

Pillar 3: Building Capacity and Managing Change

The third pillar is focused on ensuring that the CCC, Oversight Agencies, Departments, LGUs, and the public are informed and have the capacity to undertake climate action proactively.

- **The first objective under this pillar is focused on building staff skills through training, incentivizing knowledge generation and sharing, and facilitating access to knowledge to overcome the significant capacity gap in Oversight Agencies, Departments, and LGUs.** Staff training to raise capacities would speed implementation of the climate reform agenda. Government agencies, in consultation with the CCC, should develop staff training programs in climate change technology and administration, and adapt business processes to incorporate these skills. Staff training needs to be complemented with efforts to incentivize knowledge generation and facilitate knowledge sharing. Programs, activities, and projects under implementation can provide powerful lessons and data to all areas of government that are involved in climate activities. Incentives should be provided to help staff extract lessons, categorize and organize information, and synthesize lessons learned to improve dissemination. Internal knowledge can be complemented with other sources of knowledge, such as through a virtual network of practitioners or through the establishment of Centers of Excellence. Both internal and external knowledge need to be updated regularly in information portals or knowledge repositories, and staff accessibility improved to enable informed decision making.
- **The second objective under this pillar is to raise public awareness on climate change and strengthen support for the climate reform agenda.** The majority of Filipino people are already knowledgeable about climate change, and are personally taking actions to address climate change risks or reduce emissions. Raising public awareness through a targeted information, education, and communication campaign can increase the adaptive capacity of the most vulnerable populations. Civil Society Organizations (CSOs) serve a particularly important role in ensuring implementation of the climate change agenda by raising awareness of the issue, building trust in communities, and exerting pressure for increased transparency. This helps garner the necessary popular support for climate change programs and the current reform agenda. The quality of CSO participation can be strengthened by providing easy access to knowledge repositories and information portals.



I. INTRODUCTION

Climate change is occurring now and will intensify in the next few decades, threatening in particular developing nations, with the Philippines being one of the most vulnerable countries in the world. The global mean temperature and sea levels have increased gradually since pre-industrial times, with the largest changes occurring in the past few decades. The frequency of heavy precipitation events has increased over most land areas, along with more intense and longer droughts, leading to severe impacts on human lives as

well as global, regional, and local economies. The Philippines is already experiencing temperature increases; sea-level rise; stronger storms, floods and droughts; and ocean acidification, all of which will intensify and affect subsistence livelihoods as well as urban and coastal areas. These impacts will put pressure on jobs and the economy, increasing the social vulnerability of poor communities. Models project that global average temperatures may very likely increase by as much as 4°C within this century, which will lead to non-linear and unpredictable weather patterns. While it may

be technically possible to hold warming below 2°C, doing so will require a commitment by all governments to set their countries on a low-carbon, green-growth development path. Yet, even a 2°C increase will require significant action to build resilience against climate impacts.

Climate-related impacts will put additional pressure on development, and may halt and in some cases reverse gains from development activities. The Philippines' ambitious development goals are at risk unless significant measures are taken to increase climate resilience. Many development activities implemented in the past few decades may not have taken climate change into consideration. For example, water management and agricultural activities designed only with past or current climate conditions in mind may fail to meet food security and water supply goals in the event of increased droughts. Some coastal infrastructure and settlements may not have taken into account the threats from sea-level rise, and efforts to protect coral reefs from pollution may be hampered by the effects of ocean acidification.

Climate change and development are interconnected and should be addressed symbiotically; most activities to address climate change also advance the development agenda. Responding to the risks from climate change creates opportunities that benefit the Philippine economy and society. Many of the measures that could be taken to adapt to climate impacts are also good development practices, increasing the resilience of communities and vulnerable populations to current weather-related disasters and bringing significant benefits to agriculture and urban and coastal areas. Similarly, the prospect of growth in the transport and energy sectors could create opportunities for the development of renewable energy and the implementation of energy-efficient technologies, which can increase energy independence and reduce costs.

Recognizing the challenges posed and opportunities created by climate change, the Philippine Government has put forward a comprehensive and strategic climate reform agenda. Carried out through three six-year phases from 2011–2028, the climate change agenda focuses on transforming the climate policies and the institutions that support it to better plan, prioritize, execute, monitor, and report on climate change expenditures and activities, thereby achieving sustained goals. The first phase focuses on creating an enabling environment and readiness, with climate change recognized as one of five key results areas in the Government social contract. Through the Climate Change Act, the country has enacted a set of climate-specific laws complemented by the creation of climate-specific institutions. These

institutions aim to integrate and coordinate climate change at all levels of government—national, regional, and local—to improve financing, prioritization, and planning. The Philippines has made considerable progress in implementing the reforms, but important elements are still missing.

To assess gaps and accelerate implementation of the climate agenda, the Department of Budget and Management and the Climate Change Commission sought advisory services from the World Bank to carry out a Climate Public Expenditure and Institutional Review (CPEIR). The review is being carried out at the mid-term of the current administration, which coincides with the mid-term of the first six-year phase of the National Climate Change Action Plan (NCCAP) as well as the Philippine Development Plan. It has occurred early enough to provide recommendations for finalizing the first phase of the NCCAP, and creates a firm baseline of results for the second phase of the NCCAP. It offers specific recommendations to make the reforms more effective; to facilitate and develop a coherent, transparent, and effective system for mobilizing and utilizing climate financing; and to better align policies, institutions, and public spending with the country's climate change agenda. The CPEIR builds on methods used in traditional and environmental public expenditure reviews to identify:

- i. Innovations in policy, institutions, and financing of climate action;
- ii. Achievements, limitations, and disconnects in the current approaches to addressing climate issues; and
- iii. Policy and process reforms to more effectively deliver desired climate results and enhance quality of the decision-making process.

The CPEIR, carried out from February 2012 to March 2013, is a qualitative and quantitative examination of factors that determine the ability of public institutions, policies, processes, and financing to translate the climate agenda into desired results. The CPEIR uses a policy-based approach to identifying climate expenditures, focusing on budget and institutional practices of five government Departments and their attached Agencies as well as two local government units. It is used to identify ways to increase the efficiency and effectiveness of implementation, and helps guide longer-term Government-led stakeholder dialogues on climate change. It offers a rich set of findings and analysis to inform the climate change dialogue in the Philippines, and should be useful for carrying out similar exercises in other countries.

This publication is an Executive Report of the CPEIR, excerpted from the CPEIR Extended Technical Report, which consists of six parts:

- i. **Part I:** Analyzing the physical science and underlying socioeconomic basis of the challenges and opportunities posed by climate change to the Philippines.
- ii. **Part II:** Reviewing the national, sectoral, and local policy environment relevant to the climate agenda, and the institutions that support these policies, for effective and efficient implementation of the policy and financial agenda.
- iii. **Part III:** Providing a snapshot of the country's public expenditure on climate change, including the strategic allocation of resources to the country's climate agenda and priorities at the national, Departmental, and local levels.
- iv. **Part IV:** Providing a set of recommendations for the development of an action plan.
- v. **Part V:** Annexes providing a summary of the key findings; the methodology; the framework of the three-year work plan.
- vi. **Part VI:** A collection of data used, and a list of programs, activities, and projects as a separate addendum.

The Extended Technical Report is available online at www.worldbank.org/reference.

This Executive Report provides a detailed overview of the key elements from the Extended Technical Report. It offers decision makers (as well as stakeholders not directly involved in the review) with a summary of the key analytical findings, lessons learned, and recommendations. It begins with a synopsis of the overall report, followed by background on the climate science and its development impacts, and a review of the current policy and institutional system to address climate change in the Philippines. It then offers an analytical assessment of the main findings and major barriers in the policy and institutional systems, identifying areas where action is needed to ensure full and effective implementation of the climate agenda. This assessment includes a public expenditure review of climate financing in the Philippines, and an assessment of the public finance management. The key recommendations, which correspond to a strategic action plan, are summarized in Annex A of this report. This plan is established to guide the Government in the development of a work plan for the next three years. Finally, the framework of analysis used in the CPEIR is summarized in Annex B.



II. SIGNIFICANCE of the Review

Global climate change is taking its toll on the Philippines

Climate scientists concur that global climate change is happening and will gain strength in the coming decades, requiring immediate action to prevent further warming and

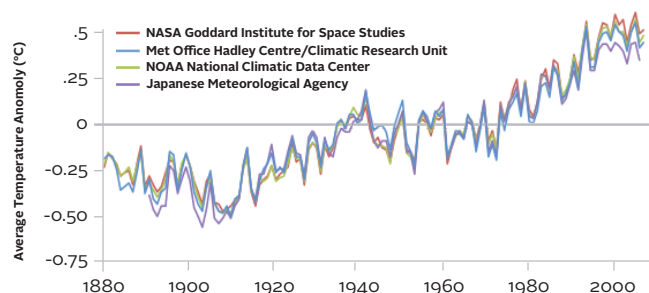
to adapt to the impacts of a changing climate (Figure 1). For most of the past 650,000 years, carbon dioxide in the atmosphere has remained at or below 300 parts per million, yet current levels are above 400 parts per million. Primarily as a result of rising concentrations of greenhouse gases in the atmosphere, the global mean temperature has increased by 0.8°C above pre-industrial levels. Most warming has occurred since 1970, with the rate of warming in the past decade being nearly double that of the past century. All 12 years to date in the 21st century (2001–2012)

Climate change is already underway and further warming is virtually certain—even if emissions are reduced.

rank among the 14 warmest in the past 133 years. Temperature increases of 1.8–2.2°C are virtually certain both globally and locally during the 21st century. Even if Parties of the United Nations Framework Convention on Climate Change (UNFCCC) comply with

the emission pledges made at the Conference of the Parties in Cancun and Copenhagen, warming is set on a trajectory that may likely exceed 3°C, with a possible 4°C increase as early as 2060, causing a non-linear path of unforeseen climate events affecting global, regional, and national economies (World Bank 2012a).

Figure 1. Scientific Agreement on Temperature Changes
Source: NASA Earth Observatory



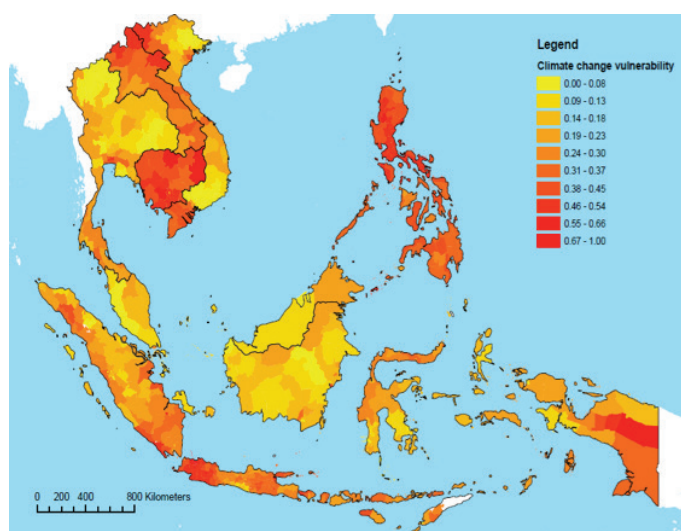
Gradual changes in global temperature patterns have already led to and will continue to result in severe impacts worldwide. Since 1950, oceans have warmed by 0.09°C. While this may seem like a minor change, it takes very little to cause severe disturbances in ecosystems. Warming oceans, along with ocean acidification, already impact coral reefs worldwide, which serve as important feeding and spawning grounds for many fish species that support the livelihoods of fisher folk. Extreme climate-related events have increased worldwide, with a greater frequency of prolonged droughts, intense rains and flooding, and intensifying and more deadly storms. In the coming years, all nations will be affected by climate change, which already causes detrimental impacts to global, regional, and local economies (World Bank 2013). The burden on developing countries is expected to be the greatest, as they contain large poor populations, often living in densely populated areas, whose livelihoods are at severe risk.

As the third most vulnerable country in the world to weather-related extreme events, earthquakes, and sea level rise³ (Alliance Development Works 2012), the Philippines is already feeling the consequences of climate change (World Bank 2013). Absent of land barriers, the Philippines is exposed directly to multiple climate-related hazards such as typhoons (in the northern and eastern parts), floods (in central Luzon and southern Min-

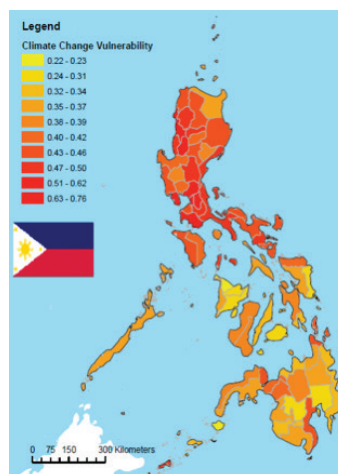
danao), landslides (based on terrain), and droughts, making the Philippines more vulnerable to climate risks than other Southeast Asian countries (Figure 2). Sixteen provinces in the Philippines are among the 50 most vulnerable regions in Southeast Asia (Yusuf & Francisco 2010).⁴ The southern Philippine islands are projected to see the strongest increase in frequency and intensity of extremes, with all summer months experiencing unprecedented heat extremes (World Bank 2013). By the end of this century, tropical cyclones are expected to intensify, with a projected increase in the average instantaneous maximum wind velocity at the Philippine coast.

The Philippines is increasingly exposed to climatic hazards of climate change, from gradual changes such as sea level rise, coral bleaching, and salinity intrusion to extreme events such as typhoons, floods, and droughts.

Figure 2. Climate Change Vulnerability Map
Source: Yusuf & Francisco 2010



A. Southeast Asia (above), B. Philippines (below)



³ This ranking is based on the 2012 WorldRiskIndex, which was developed by the United Nations Institute for Environment (UNU-EHS) in cooperation with the Alliance Development Works. The WorldRiskIndex assesses a country's disaster risk by combining four components: exposure to natural hazards (i.e., earthquakes, storms, floods, droughts and sea level rise), susceptibility, coping capacity, and adaptive capacity.

⁴ Yusuf & Francisco (2010) derive their vulnerability index for each sub-national area by factoring in its exposure to bioclimate-related hazards, human and ecological sensitivity to exposure (through population density and biodiversity information as proxies, respectively), and adaptive capacity.

Sea-level rise within this century will affect a larger percentage of the Philippine coastline compared with that of other developing countries in the region. By the end of this century, sea levels in the region are expected to rise by about 125 centimeters, exceeding the global average by 10–15 percent (World Bank 2013). Even assuming the sea level in the region rises at the global average rate of about 100 cm, about 14 percent of the Philippines' total population and 42 percent of its total coastal population will be affected by intensifying storm surges resulting from more intense typhoons (Brecht et al. 2012). In the Philippines, the impacts of storm surges associated with sea level rise and more intense storms are particularly significant in terms of the percentage of affected coastal land area, population, and gross domestic product (GDP) (Dasgupta et al. 2009). From 1990 to 2006, the country experienced record weather-related disasters, including the strongest typhoon, the most destructive typhoons, the deadliest storm, and the typhoon with the highest 24-hour rainfall on record (NDRRMC). These events are projected to continue to intensify, requiring the Philippines to improve its climate resilience and develop its adaptive capacity to alleviate the risk of catastrophic economic and humanitarian impacts.

The urban poor in informal settlements are one of the most vulnerable groups to climate-related impacts, due in part to the additional pressures on urban systems and livelihoods created by rapidly increasing population growth. Four Philippine cities (San Jose, Manila, Roxas, and Cotabato) are among the top 10 most vulnerable cities in the East Asia and Pacific region to sea level rise and intensified storm surges (Dasgupta et al. 2009). The urban population is growing faster in the Philippines than in similar Southeast Asian countries such as Indonesia, Thailand, and Vietnam. The urban poor in informal settlements account for 45 percent of the total Philippines' urban population, and are particularly vulnerable to floods associated with intensified storm surges and sea-level rise due to less secure infrastructure, reduced access to clean water, and lack of health insurance. (World Bank 2013).

Climate change will have significant impacts on communities dependent on subsistence livelihoods. Farmers and fisher folk, who are among the poorest population categories in the Philippines with poverty incidences of 45 percent and 50 percent, respectively, will be affected most severely because of their high dependence on resources that rely on a stable climate. They are less equipped to adapt to climate-related disasters and weather variations (Peralta 2008; NAST; NEDA 2011). Increases in local temperatures, extreme weather events, droughts, and floods will lead to reduced crop yields (Schlenker and Lobell 2010; Schlenker and Roberts 2009). With limited access to sustainable, alternative livelihoods and economic means, the capacity of poor people to adapt to climate variability and extremes is low (Butardo-Toribio 2011). Food insecurity and loss of livelihood are likely to be further exacerbated by the loss of cultivated land and nursery areas for fisheries due to inundation and coastal erosion in low-lying areas (Cruz et al. 2007).

Climate-related impacts will reduce cultivatable land, which will decrease agricultural productivity and increase food insecurity. Because of unpredictable climate patterns (e.g., high temperature and periodic rains and drizzles) and extreme weather events, the country's agricultural productivity is projected to continue to decline (CCC 2011; DENR 2009; PAGASA 2011). The annual damage to agriculture from typhoons, droughts, and floods

Climate change will have significant impacts on the economy, and in particular the livelihoods of the poor in high-risk urban and coastal areas.

has already reached Php 12 billion, constituting 3 percent of total agricultural production (CCC 2011). Global warming is likely to further reduce rice yield by up to 75 percent in the Philippines by 2100 compared with 1990 (Asian Development Bank [ADB] 2009). According to Balisacan, Skoufias, and Piza (2012), negative rainfall shocks, defined as less-than-usual precipitation, reduce rural household consumption.

The impact of the negative shocks varies according to regions, and the most affected regions include Ilocos and Western Visayas Islands. In these regions, a negative shock decreases household consumption by 9 percent. Households with less access to the highway and the market suffer greater impact of negative rainfall shocks than those with more access.

Fisheries in particular will suffer as a result of loss or degradation of ecosystem services, which are projected to accelerate as a consequence of growing species extinctions, declining species abundance, or widespread shifts in species and biome distributions (World Bank 2012a). The degradation of coral reefs from ocean acidification will accelerate as the atmospheric concentration of carbon dioxide increases, affecting coastal protection, fisheries, and tourism (Hoegh-Guldberg et al. 2007). The live coral cover of the Philippines decreased by half after the 1998 to 1999 ENSO-inducing coral bleaching, and fisheries yield diminished by more than Php 7 billion (Center for Environmental Concerns Philippines 2011; Santos, Dickson, and Velasco 2011). In a 4°C warmer world, the projected changes in maximum catch potential range from a 50 percent decrease around the southern Philippines to a 6–16 percent increase around the northern Philippines. Such shifts in catch potential are likely to place additional challenges on coastal livelihoods in affected regions (World Bank 2013).

Non-climate factors, such as fast-growing environmental deterioration and unsustainable development practices, aggravate climate vulnerability in the Philippines. For example, widespread mining and deforestation in Mindanao were blamed for recent flash floods, including those produced by Tropical Storm Sendong in 2011, which cost the lives of about 1,000 people (Iqbal 2011). The neglect of drainage systems and the lack of long-term

Climate change impacts are aggravated by rapid environmental deterioration and unsustainable development practices.

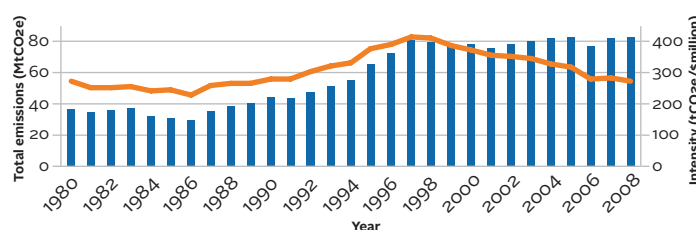
planning and enforcement exacerbated the floods in 2012, which swamped nearly all of Manila (Macaraig 2012). Meanwhile, water scarcity, already felt in many areas of the country at certain seasons, is aggravated by the deterioration of water quality due to pollution from untreated domestic sewage, industrial wastewater, agricultural runoffs, and urban runoffs (CCC 2011).

Greenhouse gas emissions in the Philippines are increasing rapidly

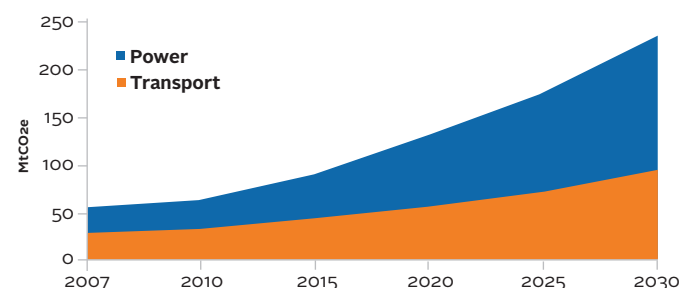
The Philippines has been a minor contributor to global warming, though among low- to medium-income countries its annual greenhouse gas emissions rank in the top 25 percent. The country ranks 43rd in terms of global greenhouse gas emissions, and 112th in terms of emissions intensity, accounting for only 0.3 percent of global emissions. Among the 128 low- and middle-income countries that are the members of the World Bank, the Philippines' greenhouse gas emissions and emissions intensity are 24th (in top 25%) and 71st (in top 75%), respectively. The country's total greenhouse gas emissions, excluding land use change and forestry, have hovered around 80 million metric tons of CO₂ equivalent (MtCO₂e) since the late 1990s.

Greenhouse gas emissions in the Philippines are very likely to increase significantly due to its growing economy, urbanization, and motorization. The country's principal emission sources are the energy and transport sectors, accounting for 36 percent and 32 percent of total greenhouse gas emissions in 2005, respectively (Transport and Traffic Planners Inc. 2010). By 2030, under a business as usual scenario, the emissions from the energy sector are estimated to quadruple. Under this scenario, the dependence on coal for power generation and the carbon intensity of electricity production would increase; similarly, the transport sector is expected to double its emissions, exacerbating current severe traffic congestion. The underlying data for these assumptions must be updated through the next National Communication to the UNFCCC and through the ongoing low-carbon studies.

Figure 3. Greenhouse Gas Emissions in the Philippines



(a) Greenhouse gas emissions and emissions intensity per GDP (excluding land use changes and forestry). Source: World Resources Institute 2012.



(b) Projected greenhouse gas emissions from energy and transport sectors. Source: Transport and Traffic Planners Inc. 2010.

Climate action contributes to inclusive growth and poverty reduction

Implementing climate change activities is good development policy, as both adaptation and mitigation measures also support sustainable development goals and provide opportunities for increasing employment. Climate change activities yield benefits even in the absence of climate change through a host of co-development benefits. For example, many climate change activities also reduce poverty and help generate jobs, particularly in vulnerable urban and coastal areas. Adaptation measures will make the Philippine society more resilient to climate impacts by helping to achieve development objectives set by the Philippine Development Plan (PDP) and/or the Millennium Development Goals (MDGs). Similarly, mitigation activities, which often call for the use of new clean technologies, will drive innovation and promote economic growth. The implementation of these actions constitutes a very efficient first step in a long-term climate change strategy. Climate action can also offer employment growth benefits across the agriculture, energy, and construction sectors.

Adaptation measures help build assets and strengthen the resilience of communities, especially in poor areas. Hard adaptation measures, such as the use of technologies that involve large capital expenditures, can include the enhancement of flood control and storm protection through the construction or strengthening of dikes and embankments, which lowers risks from floods

and storm surges (World Bank 2012b). Soft adaptation measures typically include knowledge development, capacity building, and policy and strategy formulation, which help reduce vulnerabilities and improve resilience to the effects of climate change. In the Philippines, such measures can include the establishment or improvement of flood-warning systems (ADB 2009). In urban areas, using vulnerability mapping, land-use planning, and zoning plans to restrict future development in hazardous locations and to retire key infrastructure and vulnerable buildings would reduce the costs of damage (World Bank 2010). In the agricultural sector, soft adaptation measures are commonly used and include adjustment in cropping calendars and patterns, changes in management and farming techniques, use of heat-resistant varieties, diversified farming, intercropping, and crop rotation (ADB 2009).

Low-carbon measures that increase renewable energy generation and improve energy efficiency also decrease local pollution. Energy efficiency programs, many of which have negative abatement costs, would contribute greatly toward reducing

Measures to reduce greenhouse gas emissions also improve air quality and public health, increase energy security, and reduce energy costs.

fossil energy use, and therefore greenhouse gas emissions from buildings, industry, and municipal services. Wind and hydropower are particularly promising options for reducing greenhouse gas emissions in the Philippines, as they offer lowest abatement costs, significantly reduce dependence on imported oil for energy supply, and improve energy self-sufficiency. In addition,

implementation of energy efficiency and renewable energy would improve the competitiveness and profitability of the Philippine industry by lowering energy costs, which are currently the second highest in the region after Singapore and the ninth highest out of 44 international markets (Visconti 2012).

Climate action, especially in the fields of agriculture, infrastructure, and energy, can create employment opportunities. This will help satisfy the Government's priority to create opportunities for inclusive growth to increase the quality and quantity of jobs, coupled with addressing climate change and disaster risk. Institutional changes that redirect climate resilience financing and its prioritization at the local level toward the most vulnerable areas and people could generate programs that are more participatory and labor-intensive in nature, thereby facilitating job creation.

- **Small-scale sustainable and climate resilient farming and forest management** have great potential to create jobs globally (UNEP 2008). While there is a lack of publicly available official statistics regarding the number of jobs to

be created in the Philippines, a shift from traditional chemical-based farming to organic agriculture is likely to have a positive impact on the country's employment because of its labor-intensive nature (Strietska-Ilina et al. 2011).

- **Enhancing flood control and storm protection, including retrofitting infrastructure and buildings** would provide significant job opportunities. Large-scale investments in multi-hazard retrofitting and reconstruction enhance the capacity of the engineering and construction industries and create local jobs (Strietska-Ilina et al. 2011).
- **Scaling up of the renewable energy market and expanding energy efficiency programs, including retrofitting buildings** would create new jobs. Clean technology development is still an expanding market, with plenty of opportunities for training engineers, building managers, and a host of other alternative livelihoods to those that may be lost because of climate change.

By acting now to develop its adaptive capacity and employ a sustainable green growth strategy expanding on mitigation opportunities, the Philippines will avoid substantial economic and humanitarian costs that could arise from the impacts of climate change.

The development benefits from implementing the climate agenda—and the potential costs of failing to do so—make it imperative to act now.

The country has already shown its capability to benefit from adaptation. In Guagua, Philippines, adaptation activities implemented since 1991 have reduced flooding by 77 percent, thereby increasing resilience. This has reduced the damages to household and infrastructure in both the public and the private sector (Pulhin, Tapia, & Perez, 2010). Greenhouse gas mitigation activities

bring additional benefits, such as reductions in local air pollutant emissions that contribute to negative health effects, particularly in poorer communities. The global community is taking action to implement adaptation and mitigation activities to ensure sustained economic growth in a climate-resilient and low-carbon society. The Philippines could take advantage of similar opportunities, which would improve its competitive advantage. Countries that build resilience in their industries and economy by focusing on R&D and the development of new technologies will be at the forefront of innovation, helping to drive sustained growth and the expansion of the economy.

The Philippines' climate reform agenda aims to consolidate climate policy across all levels of Government

Recognizing the urgency of addressing its vulnerability to climate change, the Philippines embarked on a reform agenda consisting of a comprehensive set of policy changes aimed at strengthening, integrating, and institutionalizing government initiatives to address climate change in the context of growth and sustainable development.

The Philippines is one of 23 developing countries that have enacted climate-specific laws (Globe International 2013).

The Philippines has gradually expanded the scope of its climate-related policies. Between 1997 and 2008, a series of stand-alone laws designed to address climate change in different segments of the economy was enacted (Figure 4). In 2009, the Climate Change Act was passed to strengthen, integrate, consolidate, and institutionalize government initiatives

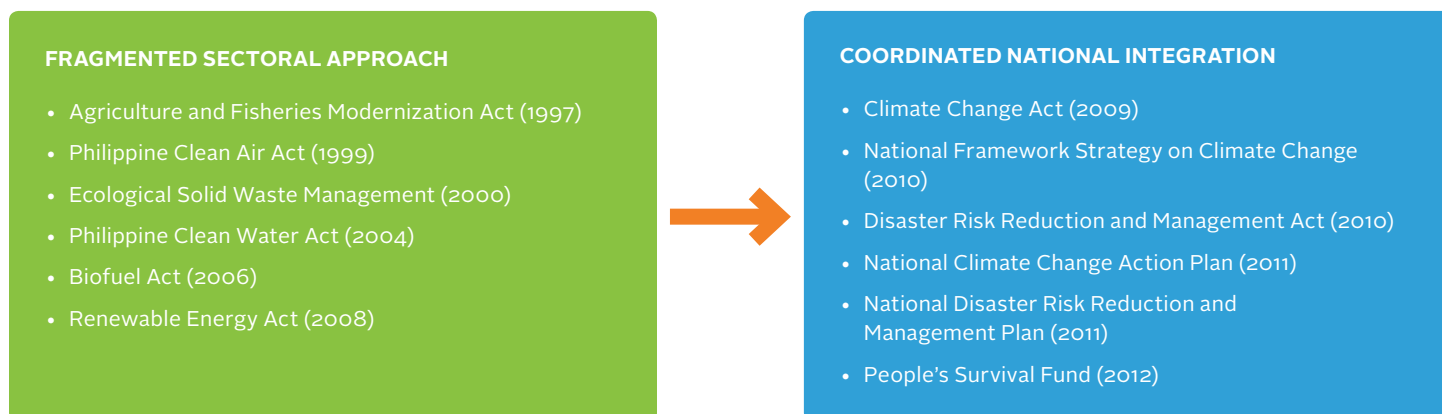
addressing climate change, and to coordinate their implementation. It calls for the systematic integration of climate change in various phases of policy formulation, development plans, poverty reduction strategies, and other development tools used by all agencies and departments. The Climate Change Act declares as state policy the systematic integration of climate change in various phases of policy formulation, development plans, poverty reduction strategies, and other development tools and techniques by all agencies and instrumentalities of the government.

The National Framework Strategy on Climate Change (NFSCC), developed on a foundation of available scientific evidence, was formulated with clearly defined overall objectives and the broad parameters for developing a climate action plan.

The framework was developed in relation to the country's socioeconomic conditions, envisioning a climate risk-resilient Philippines with healthy, safe, prosperous, and self-reliant communities and thriving ecosystems. It includes two pillars—adaptation and mitigation—with an emphasis on adaptation as the anchor strategy. Disaster risk reduction management (DRRM) is explicitly recognized as one of goals under the adaptation pillar. The NFSCC is expected to guide the national and subnational development planning processes. It recognizes capacity development, knowledge management; information, education, and communication (IEC) advocacy; gender mainstreaming; research and development; and technology transfer as important issues that cut across pillars. The NFSCC was crafted in close collaboration with Government agencies, nongovernmental organizations (NGOs), and academia. The means of implementing the NFSCC include multi-stakeholder partnerships, financing, valuation, and policy planning and mainstreaming.

The National Climate Change Action Plan (NCCAP) strategically established the Philippines' first long-term climate agenda from 2011–2028, divided into three six-year phases, corresponding to the terms of the Philippine Development Plan (PDP) and the Philippines' electoral and planning cycles. The first phase of the agenda is focused on building an enabling environment, while the subsequent phases will focus on scaling up climate action. The NCAAP is formulated around seven thematic priorities aimed at two ultimate outcomes: (1) enhance adaptive capacity of communities, resilience of natural ecosystems, and sustainability of built environment to climate change; and (2) achieve a successful transition to climate-smart development (see Figure 5). The seven thematic priority areas include: *Food Security, Water Sufficiency, Ecological and Environmental Stability, Human Security, Climate-Smart Industries and Services, Sustainable Energy, and Knowledge and Capacity Development*. The NCCAP provides a detailed results matrix that includes 92 activities (supported by 328 sub-activities) in 41 output areas aimed at achieving 19 im-

Figure 4. From Fragmented to Comprehensive Laws and Policies



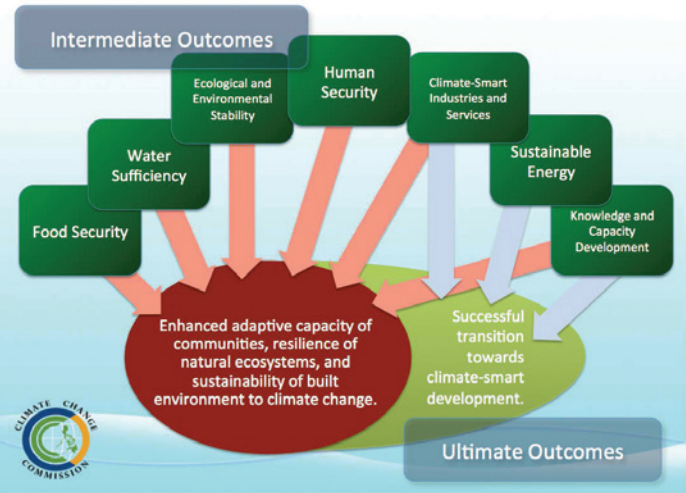
mediate outcomes, albeit without specific targets for most areas. The agenda is highly ambitious, with over 90 percent of activities expected to begin during the first phase, of which three-fifths are to be completed. The NCCAP activities also include many sectoral policy reforms, indicating the desire to be transformative and the importance of acting at the sectoral level under a coordinated national approach.

The climate change policy agenda under the Climate Change Act and NCCAP provides a strong focus on, and shift to, adaptation, representing a clear evolution of priorities from mitigation to adaptation. Prior to the passage of the Climate Change Act, climate activities in the Philippines Development Plans focused explicitly on mitigation (e.g., in the Philippine Development Plan 2004–2010), even though they contained some adaptation actions; now six out of the seven NCCAP priority areas are related directly to adaptation, indicating a clear shift in concern. The NCCAP envisions that public financing prioritize adaptation to reduce vulnerability and risks for communities, while creating an enabling environment encouraging private sector participation to optimize mitigation opportunities for sustainable development.

The People’s Survival Fund (PSF) Act was established to provide dedicated financing for adaptation at the local levels. The Act establishes the People’s Survival Fund, an annual one-billion peso replenishable fund to finance PAPs based on the NFSCC. The Final Implementing Rules and Regulations reconfirm the scope of activities that are to be funded by the Act, which is narrower—with support only for adaptation activities of the local government units (LGUs) and communities—than the NFSCC or the NCCAP.⁵

⁵ The PSF Act provides an illustrative list of activities that would be supported, which includes the following: (a) adaptation activities in the areas of water resources management, land management, agriculture and fisheries, health, infrastructure development, natural ecosystems including mountainous and coastal ecosystems; (b) improvement of the monitoring of vector-borne diseases triggered by climate change, and in this context improving disease control and prevention; (c) forecasting and early warning systems as part of preparedness for climate-related hazards; (d) institutional development, for the LGUs, in partnership with local communities and NGOs, for preventive measures, planning, preparedness and management of impacts relating to climate change, including contingency planning, in particular, for droughts and floods in areas prone to extreme climate events; and (e) strengthening or establishing regional centres and information networks to support CCA initiatives and projects. Interestingly, the fund may also serve as a guarantee for risk insurance needs for farmers, agricultural workers, and other stakeholders.

Figure 5. NCCAP Priority Areas and Outcomes 2011-2028
Source: Climate Change Commission



Policies on climate change adaptation have converged at the policy level with those on disaster risk reduction and management, in that both consider climate adaptation as an appropriate mechanism for addressing climate-related disaster risk. Adaptation actions aimed at increasing the resilience of people and their assets to climate change also make them less vulnerable to current weather-related disasters. Similarly, climate disaster risk reduction efforts need to increase the resilience of people to future medium- and longer-term changes in climate (Figure 6). These linkages are recognized in the conceptual convergence of the Climate Change Act and the National Disaster Risk Reduction Management (NDRRM) Acts. Climate related disaster prevention is one of the priorities under the NCCAP. Similarly, the NDRRMA represents a paradigmatic shift in the way disaster risks are managed away from disaster response and toward prevention, with climate adaptation considered an appropriate mechanism for disaster prevention. Accordingly, the CCA and the NDRRMA require the CCC and the NDRRMC to jointly undertake certain activities (e.g., community-based and scientific DRRM/CCA assessment, mapping, analysis, and monitoring) at the local level.

Figure 6. Linkages between Climate Adaptation Actions and DRRM

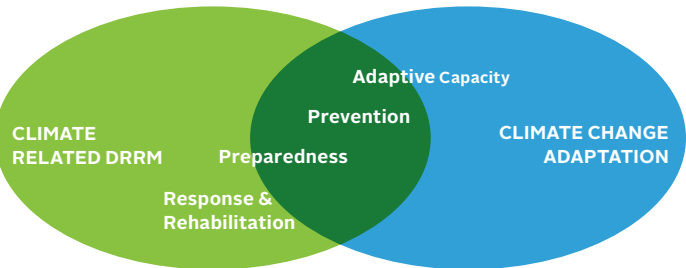
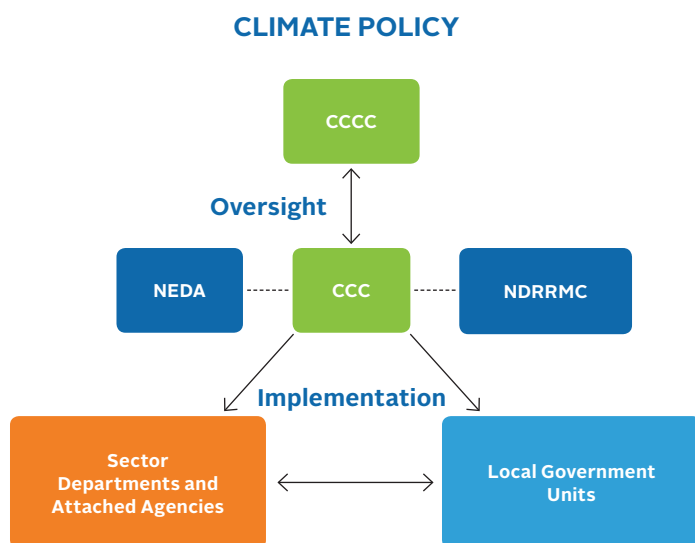
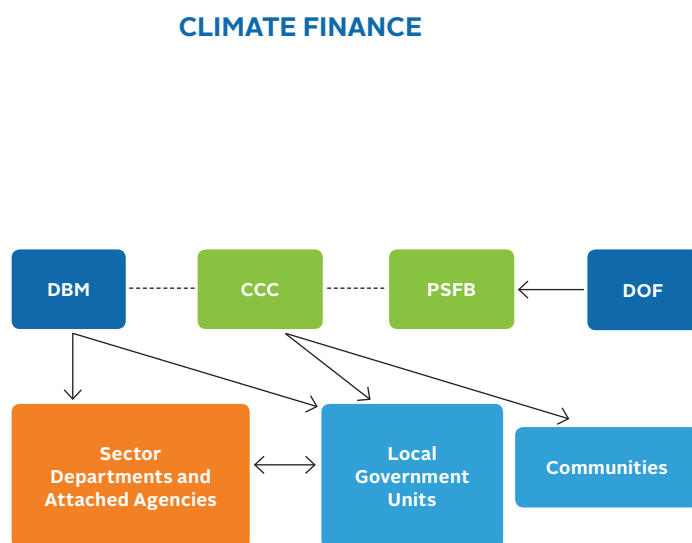


Figure 7. Institutional Structure on Climate Change



CCC: Climate Change Commission
 CCCC: Cabinet Cluster on Climate Change
 NEDA: National Economic & Development Authority
 NDRRMC: National Disaster Risk Reduction and Management Council



DBM: Department of Budget & Management
 DOF: Department of Finance
 PSFB: People's Survival Fund Board

Centralized institutional coordination supports the reform agenda

The Philippines has reformed its institutional structure by establishing centralized national institutions aimed at stronger coherence and horizontal and vertical coordination of a joint climate change agenda, filling a critical gap in support of effective and efficient climate policy and financing. Several new institutions have been created or are at various stages of mobilization, including the Climate Change Commission (CCC), the Cabinet Cluster on Climate Change (CCCC), and the PSF Board (PSFB). The CCC is at the center of the new arrangement, coordinating across the oversight agencies

Centralized coordination in climate change policy making fills a critical gap while coordination on climate financing has begun.

and with the implementing agencies on all aspects of climate policies. Existing Departments/Agencies and the LGUs were assigned with the responsibility of planning and implementing climate action. As such, coordination between the new institutions and existing Departments and the LGUs is an important determinant of implementation progress. The key institutions and linkages in the new structure are shown in Figure 7, illustrated separately

from a policy and a finance perspective (left and right sides of the figure, respectively). Within each perspective, the policy making/oversight function is shown in the top half and the implementation/execution function is in the bottom half.

The CCC was established as the lead policymaking body tasked to coordinate, monitor, and evaluate the government programs and action plans related to climate change, and to ensure the mainstreaming of climate change into national, sector, and local development plans and programs. The CCC serves as secretariat to the Cabinet Cluster on Climate Change (CCCC), which was created to strengthen delivery of results in Key Result Area 5 (KRA-5), one of the five key result areas identified in the President's Social Contract corresponding to the integrity of the environment and climate change adaptation and mitigation. The CCCC meets monthly to consider agenda items introduced by its members, which have been dictated by the concerns raised by individual Departments rather than by any long-term program. In its capacity as secretariat of the CCCC, the CCC coordinates the policy discourse within the cabinet cluster.

On the finance side, the People's Survival Fund (PSF) Board is designed to guide coordination and mobilization of resources. The PSF Board was created with responsibilities to promulgate policies, provide strategic guidance to the CCC on the management and use of the PSF, and to provide final approval for projects to be funded. The CCC is to constitute an interim secretariat in the climate change office of the CCC to support the PSF Board, providing the CCC a strong role in developing

the operations manual for the PSF Board. The CCC supports the Department of Budget and Management (DBM) in its efforts to improve utilization and effectiveness of climate resources at the national level, and assists LGUs in their efforts to better integrate climate objectives into their programs.

The Climate Finance Group (CFG) remains an ad-hoc group to support climate financing needs. The CFG was conceived during a discussion between the DOF, the DBM, the National Economic Development Authority (NEDA), and the CCC for mobilizing financial resources to respond to technical and human capacity needs for sustaining efforts to reduce and/or mitigate the impacts of climate variability and change. The legal basis for its creation was not pursued, and CFG remains an ad-hoc group.

At the local level, LGUs are the frontline Agencies in formulating, planning, and implementing climate action. The Philippine Congress passed the Local Government Code (LGC), a key decentralization measure, in 1991, transferring responsibility for delivering many of the basic services and resources to LGUs in the form of an Internal Revenue Allotment. LGUs are responsible for many of the basic services affected by climate change. Municipalities are generally responsible for the delivery of frontline basic services such as primary health care, construction, and maintenance of public elementary schools. The LGC mandates that LGUs develop Comprehensive Development Plans (CDPs) and Comprehensive Land Use Plans (CLUPs), which correspond to the PDP and the NFPP at the national level.

The Climate Change Act requires the national government to provide technical and financial assistance to the LGUs.

When the CLUP is enacted into a zoning ordinance, it becomes a statutory plan. As such, it is a powerful instrument that the LGUs use to align land allocations between competing and often conflicting uses, including climate adaptation. The Climate Change Act requires LGUs to

develop Local Climate Change Action Plans, which can be integrated into the CLUP, CDP, Local Disaster Reduction Management Plan, Annual Investment Plan, Annual Operation Plan, and Physical Framework Plan. The national government is required to provide technical and financial assistance to LGUs in formulating and implementing their local action plans.⁶ The NEDA and the Department of the Interior and Local Government (DILG) have been providing direct assistance to LGUs in this regard, with the DILG spearheading efforts to streamline planning processes in the LGUs' planning processes, and to integrate climate change into the CDPs and the CLUPs (in lieu of developing a stand-alone climate/disaster plan). The implementing rules and regulations create an LGU coordination unit within the Climate Change Office of the CCC, and encourage LGUs to create their climate change focal units.

⁶ "It shall be the responsibility of the national government to extend technical and financial assistance to LGUs for the accomplishment of their Local Climate Change Action Plans." (Climate Change Act 2009, Section 14).



III. KEY ANALYTICAL FINDINGS: Overcoming Barriers That Impede Sustained Change

The first phase of the climate reform agenda must be finalized in order to reach sustained low-carbon and climate-resilient development

The Philippines' new comprehensive climate agenda builds a foundation for consistent reforms at all levels of government, but it has much to lose if it fails to deliver on the climate reforms that have begun. The current administration, with a six-year term, rightly aims to finalize first-phase reforms focused on establishing readiness and to commence execution of the full agenda and operationalizing it at the sector and local levels to prepare for the second phase. However, though the country is moving in the right direction to ensure solid integration of climate change into

New climate policies build a foundation for consistent reforms at all levels of government.

development plans, there are several pieces missing, which need to be addressed to ensure successful implementation and execution. If it fails to address these issues, the Philippines may experience challenges in achieving its overall development goals.

With the already high level of vulnerability in the Philippines, it is critical that the country adequately implements measures needed to protect against ever-increasing climate change and variability. Through the PDP, the Philippines aims to accelerate annual economic growth to 7–8 percent toward meeting its MDG goal of halving the poverty rate by 2015 and creating one million new jobs annually through large investments in infrastructure in roads, water, and energy, as well as in productive sectors (agriculture). The Philippines has a lot to lose by not acting expeditiously to address climate change. While it is evident from recent typhoons such as Ondoy, a single climate-related event can result in damages amounting to 2–3 percent of GDP, wiping out much of the economic gains with significant impacts on the poor, addressing slow-onset events is just as important. Land use plans can be set to provide proper incentives to locate people and assets away from high-risk areas at low cost, but will be costly to protect or relocate in the future under harsher climate conditions. The processes of building capacity and institutions to enact and implement reforms are inherently slow, and failure to act now can lead to urbanization processes that are much more vulnerable to climate risks.

Implementing the Government's climate reform program contributes to the broad development goals through several channels. For example, the reform supports the development of a workforce that understands and is able to quickly respond to climate events, whether those events are slow-onset or fast-moving. Further, the reforms support improved targeting of resources toward the poor and the most vulnerable through reliance on evidence-based decision-making. The climate change agenda and these reforms should go hand in hand to ensure that the development agenda considers the present and future impacts of climate change, and vice versa.

Climate policy reform efforts are only partially aligned with development plan outcomes, thereby limiting effectiveness

The national, Departmental, and local development plans and policies are only partially aligned with the NCCAP. The NCCAP priorities are thematic in nature, often cutting across

The lack of alignment among the thematic priorities of the National Climate Change Action Plan and development plans at the sector and local levels requires improved coordination across sectors in planning and policy development.

the sector-based focus of the PDP;⁷ Key Result Area 5 (KRA-5), the Department Work Programs, and local development plans. As such, outputs, outcomes, and goals are not always similar, and what constitutes a climate change activity under one plan/policy may not be considered a climate change activity under another. Such differences lead to difficulties in monitoring climate activities; they also hamper coordination and convergence across Departments and between levels of government.

To ensure consistency and good structured coordination, the NCCAP should be aligned with plans and policies at the national (PDP, KRA-5, and the PIP), sector (Departments), and local (CLUPs and CDPs) levels.

At the national level, the NCCAP and the PDP are only partially aligned with each other in terms of climate-related outcomes and outputs. Even though the PDP was launched as the NCCAP was still being developed, five chapters in the PDP include extensive discussions on climate change, particularly in relation to adaptation and disaster risk reduction and management, which are discussed in the agriculture and fisheries chapter, and the chapters in industry and services, infrastructure, and social development as well as the environment and natural resources. Mitigation is discussed only in the context of the chapter on ecosystem degradation and deforestation. Some immediate NCCAP outcomes are excluded from the PDP (e.g., climate risk responsive health delivery systems), while others lack detailed articulation of supporting activities. For instance, the immediate NCCAP outcomes on sustainable water supply and knowledge and capacity

⁷ The PDP aims to (1) attain sustained economic growth that provides productive employment opportunities; (2) equalize access to development opportunities across different geographic, income, and social spectra; and (3) formulate and implement effective and responsive social safety nets.

building in the water sector are presented without any reference to climate change, as is the case in other chapters. Since both plans are scheduled to be updated in mid-2013, an opportunity exists for improved alignment. The NEDA's Effectiveness and Efficiency Review process provides an opportunity to fill many of these gaps, as do the CCC climate screening guidelines, which help identify a comprehensive set of PAPs based on the NCCAP.

Comparison of the NCCAP and KRA-5 outcomes indicates that the two are only partially aligned. While outcomes and outputs for the KRAs are not clearly defined in a policy document, each of the PDP outcomes are mapped to one or more KRAs in the PDP results matrix, providing a first cut at defining potential KRA-5 outcomes. The PDP results matrix identifies objectives, sectoral and intermediate outcomes, as well as indicators, baseline values, and targets to monitor progress. While the PDP results matrix is not mapped to NCCAP outcomes, a simple comparison indicates that increasing sector resilience to climate change in agriculture and fisheries and environment and natural resources is an outcome common to both the NCCAP and KRA-5, which is supported by intermediate outcomes, outputs, and indicators. However, the alignment breaks down for key infrastructure subsectors (energy, water, transport). While improving climate resilience in infrastructure is a KRA-5 sectoral outcome, it is not supported by underlying outcomes, outputs, or measurable indicators related to climate resilience, which only include those for quality, adequacy, and accessibility of service. Instead, the sectoral outcome for infrastructure refers to subsector outcomes on improving resilience to climate change, which are yet to be defined.

The NCCAP has not yet gained traction among the CCCC Department members, due to lack of incentives to focus on KRA-5 and limited guidance on the inclusion of NCCAP in strategies and work programs. The performance of Departments is measured and monitored against their Major Final Outputs using the Organizational Performance Indicator Framework indicators, which have been mapped to the KRAs, but not to NCCAP. As such, Departments have incentives to align their climate strategies and work programs with the KRA-5. Moreover, toward supporting the KRA-5 outputs, the CCCC asked Departments to identify their climate activities in their work programs for the 2011–2016 period, and the DBM has asked Departments to report on their activities supporting the different KRAs, including those on KRA-5. While the CCCC request was a one-time exercise carried out with limited guidance on the appropriate criteria to be used, the DBM guidance for reporting for KRA-5 has varied over the years, and was not related to the NCCAP. In contrast, the Departments have not been provided guidance or incentives to align their strategies and work programs to the NCCAP. In part, this reflects the finalization and dissemination of the NCCAP only after the KRAs had been established.

Mainstreaming the NCCAP in the Departments' plans and work programs requires the adoption of a common approach to tagging climate PAPs and the establishment of indicators and targets. To address the first shortcoming, the CCC and the DBM have recently developed climate screening guidelines for use in budget preparation beginning in FY 2014, based on the NCCAP. Upon its operationalization, climate PAPs supporting the NCCAP will be clearly identified in the budget across the Government, providing the ability to monitor against the NCCAP. However, this still does not provide Departments with strong incentives to prioritize PAPs that support NCCAP. Accountability of Departments can be ascertained only if the NCCAP includes indicators and targets to measure implementation progress. While the NCCAP includes indicators for each output, it does not provide specific targets nor assign them to specific Departments. As a result, the size and scope of specific NCCAP programs in the Departments currently depend on each Department's goals and MFOs. While in a few cases these may be well aligned with NCCAP outcomes (e.g. DA's MFO on increasing sector climate resilience with NCCAP outcome on food security), most Departments do not have MFOs related to NCCAP outcomes. Establishing targets for the NCCAP indicators and aligning them with established Departmental goals and outputs would incentivize Departments to fully mainstream NCCAP into their strategies and work programs.

Despite the mandate for LGUs to develop and integrate Local Climate Change Action Plans (LCCAPs) and Local Disaster Risk Reduction and Management Plans (LDRRMPs) into the CLUP and CDP, few have been developed. New requirements to develop the LCCAPs and the LDRRMPs impose significant administrative burdens and pressure on the LGUs, as they already must produce many development plans that correspond to central government plans. To lighten this load, the CCC encouraged LGUs to incorporate their LDRRMP and LCCAPs into the CDPs and CLUPs instead of preparing separate, stand-alone LCCAPs and LDRRMPs. Both LGUs studied in the CPEIR, the Province of Albay and Makati City, have proactively led on the climate agenda, specifically in mainstreaming climate change policies and action in their respective areas, highlighting the importance of plan integration (see Box 1); however, they do not represent the norm across LGUs.

Execution and coordination of climate actions are hindered by a lack of clarity in roles and responsibilities across institutions

Leadership and accountability in implementation of the climate agenda is hindered by the broad scope of roles and responsibilities of the CCC as well as lack of effective coordination among stakeholders, including: (1) between oversight agencies, (2) between Departments, (3) within Departments, (4) vertically from the CCC to the LGU level, and (5) between LGUs at the local level.

The CCC’s key challenges in streamlining NCCAP implementation are to operationalize the many tasks for which it has joint responsibilities and to set priorities among all of its responsibilities (Figure 8). The CCC is solely responsible for a broad spectrum of responsibilities that include leading climate policymaking, coordinating, monitoring, and evaluating

The Climate Change Commission must set priorities and streamline its coordination role to be effective in its primary responsibility as a policy-making and coordinating body.

climate change programs. In addition, the CCC is jointly responsible for many other tasks, including coordinating sector policy, implying a need to consult and reach an agreement with the Departments and Agencies before the tasks can be carried out. Failure to reach an agreement and the lack of full accountability for these tasks risks their completion. A lack of prioritization of the roles and joint responsibilities of the CCC has hindered its ability to fulfill all of its tasks.

The CCC staff is dispersed across the spectrum of functions, with only a few staff assigned exclusively to the strategic policy-making and coordination roles. As a result of its wide array of responsibilities, the CCC has not been able to divert enough resources to strongly advocate for immediate action on climate change. Some of the CCC’s focus has been on implementing projects. Coordination is impeded across Departments and with

Figure 8. Institutional Responsibilities by Functional Stream Designated by the Climate Change Act



the private sector because the CCC has not yet successfully linked them together, and thus it has not yet succeeded in creating the necessary enabling environment to entice the private sector. Despite its many roles, the CCC still must overcome the resource strain that another significant expansion of providing secretariat services to the PSFB may create. The CCC has started to consolidate and delegate some of its tasks to other agencies so it can refocus on its strategic policymaking role.

The roles of and relationships between the CCC and the other oversight agencies are not yet formalized, prioritized, or streamlined, which can limit the CCC's effectiveness as a policy coordinating body. In particular, it is a very high priority to clarify the relationship between the CCC and the NEDA, as well as the DBM, with regard to climate change and the development and use of the Monitoring and Evaluation (M&E) framework. The CCC has a mandate to manage, review, and guide the Government's climate change initiatives, whereas NEDA and DBM

Formalized institutional collaboration between the Climate Change Commission and key Departments and Agencies is an important, required next step.

have more general developmental responsibilities. Since the NEDA oversees the implementation of the PDP, improved alignment with NCCAP could take place if coordination between the two agencies increased. However, there are still no standardized mechanisms for aligning the NCCAP outcomes and activities in national and sector plans.

In the absence of standardized processes for carrying out updates in consideration of climate change, the NEDA has no additional guidance on climate change beyond what is currently in the PDP. In the program budgeting process, it is often difficult to reconcile the strategic function of oversight agencies managing specific programs (like the CCC) versus the line management responsibilities of oversight agencies of the Government (like the DBM). If the scope for effective strategic review and redirection of priorities is limited, the general objectives of line agencies tend to prevail over high-level strategic goals. Some steps are being taken to clarify these roles, but more work is required to establish a better balance between oversight agency priorities and strategic, high level goals.

Coordination between Departments on the climate change agenda is facilitated by the CCCC to ensure needed harmonization and coordination at the highest level of government; however, the CCCC has not yet been fully effective in carrying out the climate agenda due to limited decision making opportunities and fragmented support. Decision-making, monitoring, reporting, and advocacy on climate change at the highest level of government are not fully informed, and the CCCC has no decision-making powers in the cabinet. Moreover, the CCCC

is often hampered by the failure of many principals to attend meetings. Most attendees at the cluster meetings, except the Chair and the head of the Secretariat, are Department Undersecretaries, Assistant Secretaries, or Bureau Directors with no decision-making power. Furthermore, the dual support services of the DENR and the CCC have often led to a duplication of secretariat services in the CCCC and competing demands on the CCC staff have sometimes limited their ability to provide needed support to the Cabinet. The DENR Climate Change Office has backstopped the CCCC leadership, both in technical and administrative terms in these instances.

Departments employ different approaches to develop their climate portfolio, in accordance with their organizational needs, which highlights the need for flexibility in program planning. A diversity of Departmental needs and capacities may require flexible approaches and an integration of systems in a phased manner. For example, the DA used a strategic planning approach to develop a comprehensive climate change action plan, giving climate change adaptation an organizational mandate. It is being mainstreamed across all of the DA units (through an Office

The different approaches used by each Department in developing its climate portfolio require flexibility in coordination."

of the Secretary Administrative Order). The resulting climate change actions have an organizational mandate and are well distributed across the DA. In contrast, the DENR does not have a comprehensive climate change action plan and its climate change initiatives are a cumulative pattern of actions that are

only rationalized retrospectively. Its practices are based on past mitigation experiences at the program level rather than the entire Department level, resulting in an uneven distribution of resources (Forest Management Bureau, Environment Management Bureau, Mines and Geo-science Bureau). Its preferred course of action is evolutionary, incremental, system-conserving, and based on the ongoing flow of available information.

The organizational models to address climate issues have varied across Departments based on the existing Departmental structures and needs, with the DA and the DENR the only Departments that have internal climate units. The DA created the Climate Change Program Office within its Planning & Policy Department in 2011 to serve the entire department. As a centralized unit, it has struggled to coordinate the execution of the Department's climate initiatives. In contrast, the DENR created a Climate Change Office in 2009 to service a joint DENR-GIZ climate change adaptation program, which has also provided support, on an as-needed basis, to the remainder of the Department. It is staffed by personnel from the different DENR offices and contractual employees, and thus has a greater outreach than a

stand-alone unit would. An important accomplishment of the unit was the development of the Climate Change Adaptation Framework, which has contributed to reorienting the DENR's focus from mitigation to adaptation. Meanwhile, the DPWH does not have a separate climate unit but is expected to create a cross-Departmental cooperation scheme. The internal organizational structure of Departments could be an important determinant of their effectiveness in pursuing or prioritizing climate objectives.

While Departments and Agencies use several different modes of service delivery to support LGUs, some are more appropriate than others in specific circumstances. This highlights the need for vertical convergence of activities for effective execution at the local level. The delivery modes include:

- a. **Co-management** of an activity by an LGU and Department is the simplest form of vertical coordination and entails a partnership between an LGU and Departments at the national level to execute a program through shared responsibilities and the injection of Departmental resources to the LGUs. The LGUs are often better able to implement and manage specific local tasks due to their proximity and local knowledge.
- b. **Regional offices** can be a bridging mechanism that coordinates intra-Departmental services to LGUs, but a lack of functional integration often hampers service delivery. Most Departments have a “hub-and-spokes” management setup: the DA, the DENR, the Department of Science and Technology, and the DPWH have field offices in all Philippine regions.⁸ To support the devolution of basic service delivery to the LGUs, many central Departments have redirected LGU support functions to their regional offices.
- c. **Service convergence** is when multiple government units use the same medium or network facility at the LGU level to improve vertical intergovernmental coordination.

The CCC is a national agency with limited local presence, and does not have the capacity to engage with all of the LGUs as the NEDA and its sub-committees do. Still, it can take advantage of establishing relationships to increase coordination on and convergence of the climate policy agenda. For example, the CCC's relationship with the Housing and Land Use Regulatory Board is an entry point to assist with integration of adaptation in local development plans. In addition, coordination and convergence of the adaptation agenda at the local level has been successful through Climate Field Schools and Integrated Ecosystem Management.

On DRRM/CCA, despite the convergence at the policy level, coordination has been difficult because of overlapping responsibilities, action plans, and tools, and limited monitoring and reporting requirements for climate adaptation and climate related disaster prevention. The LGUs are mandated to develop LDRRMPs that are to be integrated into the CDPs and the CLUPs. Both the CCC and the NDRRMC are required to coordinate with each other on their engagement with the LGUs, and the two Agencies have signed a memorandum

Policy convergence on addressing climate-related disaster management has not led to corresponding convergence on institutional and financing arrangements.

of understanding (MOU) affirming their collaboration to harmonize and coordinate with each other in supporting the LGUs and to develop a joint work plan. However, in practice, there are no guidelines on how to operationalize the MOU leading to limited coordination and collaboration between the two agencies. The DRRM and CCA are not viewed within a sustainable development framework by most Agencies

and communities. Few LGUs have DRRM plans and strategies, and most have been developed following a disaster, which increases the chance that some CCA/DRRM plans may arrive too late for many LGUs. The DILG has been mobilized to supply DRR/CCA protocols in cities and municipalities and to issue an ISO-type “seal of disaster preparedness” for high performing LGUs.

Implementation of the Ecotowns approach is an effective method of coordination from the national level to the LGU level, and can help facilitate increased coordination between LGUs. Ecotowns are implemented by the CCC on a pilot basis and involve the establishment of ecologically stable and economically resilient towns at the LGU level on a demonstration basis. Ecotowns attempt to blend sustainable development, natural resource management, and climate action through sustainable financing mechanisms, which are based on the payment for ecosystem services and supplemented conditional cash transfers for poverty alleviation.⁹ The President has ordered the scaling up of the Ecotown project across various regions, increasing the responsibilities based on preliminary results and demand from LGUs. However, successful implementation typically requires bringing multiple LGUs on board; as a fairly new agency, the CCC has faced challenges in implementation as it does not have a supporting regional or local network. Effective partnerships with Departments with strong vertical structures that reach down to local levels can help alleviate some of these challenges, while at the same time freeing up staff resources to engage on the policy and coordination functions of these programs.

⁸ The DOE is probably the only Department with very few regional offices, but then it is focused more on climate change mitigation.

⁹ The CCC has piloted Ecotowns in twelve LGUs across the country.

Community participation through Civil Society Organizations (CSOs) increases transparency of the climate policy agenda and can help guide the climate resource allocation process. NGOs have provided critical support for the climate reform agenda, and maintaining the momentum for the reform will require their continued support. NGOs were active in the formulation of both the NFSCC and the NCCAP, strengthening

Civil Society has played an important role in the development of the climate agenda, helped increase transparency, and can help keep the momentum for reform going.

the mandate for the climate agenda. They have participated in climate change steering committees or task forces as members institutionalizing consensus-based climate policy-making. Continued avenues for NGO participation include the PSF Board, the CCC Advisory Body, and the PDF. As a pressure group, they monitor UNFCCC negotiations and the implementation of the Climate Change Act. Civil

society and NGO participation increases transparency and builds trust in communities. NGOs have improved public awareness and helped garner the necessary popular support for climate change and for the current reform program. They were instrumental in the push for creating the PSF, and their continued participation in the policymaking process will not only help policies and programs remain responsive to community needs, but also strengthen the decision making process.

Leveraging a low-carbon green-growth strategy and market-based instruments can strengthen engagement with the private sector

Though mitigation activities are being carried out, there is currently no common strategy dictating roles and responsibilities on low-carbon development and green growth. Efforts to develop low-carbon, green growth policies need strong coordination under a comprehensive national low-carbon development plan. In the Philippines, different Departments have developed an assortment of low carbon initiatives based on their interests and needs, but activities have been carried out on an uncoordinated basis. The CCC is currently spearheading several projects with key government Agencies to establish a national system for the preparation of GHG emission inventories, to formulate National Appropriate Mitigation Actions and Low Emission Development Strategies, and to develop Monitoring Reporting Verification systems to support implementation and evaluation of mitigation actions. Development

partners—including the European Union, the governments of Germany (BMU) and Australia (Ausaid), the United Nations Development Programme (UNDP), and the U.S. Government—have supported and complemented these efforts. However, the piecemeal approach by which these programs have been developed and their fragmentation across sectors may create difficulties in prioritizing activities. A more comprehensive approach, backed by a common policy, would not only facilitate prioritization and coherence to better manage trade-offs, but also provides the necessary signal to promote greater private sector engagement.

While some sector policies have promoted Market Based Instruments and private sector engagement, their scope remains limited to a few sectors. As mentioned, the climate agenda calls on the private sector to finance mitigation activities, while the government remains responsible for building the enabling environment, making collaboration highly important. Increased engagement of the private sector in the renewable energy and energy efficiency programs is achievable with the support of energy sector reforms, which is already evident following the deregulation, restructuring, and privatization of government companies and agencies. The deregulation of the power sector has provided many incentives and has brought in private resources and players to support mitigation efforts. Some of these programs include tax holidays for carbon credits, renewable portfolio standards, financial incentives for wind geothermal and mini-hydro development, tax exemptions for biofuels, building and equipment standards, cleaner production technology, efficient lighting, eco-labeling, and the sustainable consumption program.

Differences in the classification of climate PAPs hinders climate budget planning and prioritization

The different approaches to classifying climate PAPs results in a three-fold variation in the level of climate expenditures.

The various approaches to defining what constitutes a climate change activity have led to inconsistencies in classifying and defining the level of funding budgeted for climate PAPs. To assess climate PAPs, the CPEIR used four different approaches that have either classified current PAPs in the budget, or provide criteria/

activities to identify climate PAPs in the budget. These include the NCCAP, KRA-5, the Department's work programs, and PAPs based on the climate financing classification system developed by several multilateral development banks (MDBs). These initiatives

Table 1. Comparison of Selected Major PAPs by Different Tagging Initiative

Selected Major PAPs	KRA-5 ¹	Departments' Work Programs ²	NCCAP ³	Classification System of MDBs ⁴
Flood Control (DPWH)	Excluded	Included	Included	Included
Quick Response Fund	Included	Excluded	Excluded	Excluded
Calamity Fund	Excluded	Excluded	Excluded	Excluded
Disaster-related Rehabilitation (DPWH)	Excluded	Included	Excluded	Excluded
PAPs financed by Special Accounts	Excluded	Excluded	Included	Included

¹ Based on selections by the DBM and sector Departments/Agencies.

² Based on selections by sector Departments/Agencies.

³ Based on selections by the CCC and sector Departments/Agencies.

⁴ Based on selections by MDBs. (Note: Based on the MDBs' criteria, all PAPs contributing to mitigation and all PAPs that indicate in the title a link to climate change/adaptation/DRRM were tagged.)

have, however, used different definitions for climate PAPs resulting in different classifications. For instance, flood control projects were classified as an adaptation activity by the NCCAP, the Departments' work program, and the MDBs, but not included under KRA-5 (Table 1). On the other hand, some post-disaster related investments were tagged under KRA-5 and the Departments' work programs but not included by the others. Likewise, climate PAPs funded through DOE's Special Accounts were not consistently classified by all initiatives, and only included under the NCCAP's and MDBs' classification. A particular case constitutes the work program of the DA, which includes entire programs such as the National Rice Program, the National Corn Program, and the Bureau of Agricultural Research, even though only a few activities within these programs address climate change. In contrast, all other initiatives have tagged only a selected number of small climate PAPs managed by the DA, which are largely considered to address climate change (such as the promotion of organic agriculture). On the whole, given the general formulation of NCCAP outcomes and activities, the largest number of climate PAPs included in the budget were identified under the NCCAP classification (Table 1).

While efforts have been made by DBM to strengthen the classification of climate PAPs under KRA-5 for 2013, there is still insufficient clarity and guidelines on the selection of activities, Departments, and Agencies included under KRA-5.

Under KRA-5, the identification of climate PAPs is not confined to the major programs, and PAPs of all members of the CCCC were included under KRA-5. However some inconsistencies remain that render the tracking of climate PAPs over the past three years difficult. First, PAPs from different Departments and Agencies were tagged for different years, and not all of the Departments or Agencies tagging PAPs are part of the CCCC (e.g., the Department of Health, NEDA, Department of Social Welfare and Development, or the Land Bank of the Philippines). Second, different Departments tag similar activities differently. For example, the DA tagged the Quick Response Fund in 2012 but the DPWH did not tag the Disaster Rehabilitation Project in

KRA-5 2013. There is a need for guidance and application of consistent criteria to ensure that similar climate PAPs can be tracked over the years.

Departments' work programs 2011–2016 have reflected an effort to identify available resources and estimated funding needs for climate PAPs. Departments were requested by the CCCC to prepare a work program for 2011–2016 that included funded and planned climate-related PAPs. Departments were requested to identify PAPs and not subcomponents (specific activities). While the initial plans were to update the work programs annually, such updates have not been conducted. Analysis of the initial work programs shows that:

- The Departments that are within the scope of the CPEIR account for the bulk of the funding reported in the work programs (on average, 90 percent) over the period 2011–2016, with the main funding proposals being derived from DA and DPWH.
- The inclusion of total appropriations for a PAP, even though only some activities embodied in the PAP address climate change, overstates the reported climate appropriations.
- The Departments' work programs for 2011–2016 are only partially aligned with the NCCAP activities, because the latter were being drafted as the work programs were prepared.
- The estimated funding needs are significantly higher than the actual appropriations in the Departments within the CPEIR scope.

Climate appropriations have been increasing relative to overall Government budgets

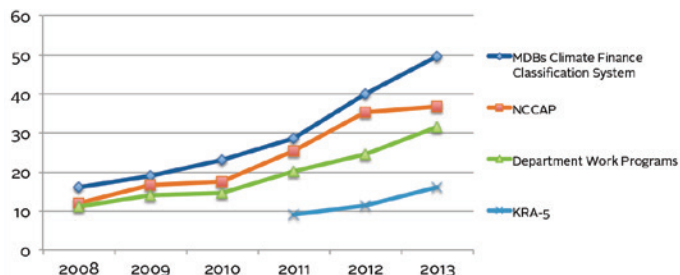
Climate appropriations have been increasing steadily in the past five years across the budgets of all Departments and Agencies, regardless of the classification approach used. As indicated in Figure 9, climate appropriations supporting the NC-CAP have increased by nearly two and a half times in real terms over the past five years, from Php 12 billion in 2008 to Php 35 billion in 2012. The Department work programs have followed the NCCAP trend quite closely.

Climate budget appropriations have been increasing indicating increased leadership and growing awareness.

Climate appropriations tagged under KRA-5 increased from Php 9 billion in 2011 to Php 16 billion in 2013, an increase of 66 percent in real terms. Despite this increase, KRA-5 accounts for, on average, only 1 percent of the total sum of KRAs between 2011 and 2013.

This is, however, associated with the fact that PAPs were tagged according to Agencies' mandates under the KRAs (1-5), which means that they are not excluded from the total national budget, but just not captured in the current system of KRA tagging. The MDB classification identifies a total budget for climate PAPs of Php 50 billion in 2013 that has increased significantly over the past years, from Php 16 billion in 2008. The MDB classification accounts for the highest amount of climate appropriations among the four approaches, as it covers major PAPs (notably flood control protection and traffic decongestion) that represent two-thirds of its climate appropriations in 2013.

Figure 9. Climate Appropriations by Classification, 2008-2013 (in Php billions)¹



¹ The DA's 2008 and 2013 budget figures are excluded, 2009–2011 figures are based on GAA Budget, 2012 figures are proposed NEP. For all other Departments, 2008–2012 figures are based on GAA Budget, 2013 figures are proposed NEP.

Multiple approaches used for classifying climate activities across the Government make budget planning and prioritizing for climate PAPs difficult and result in a three-fold variation in climate appropriations.

Climate appropriations have been funded largely from domestic sources, while development partner support has concentrated on flood control and management

Sources of funding for climate change activities stem primarily from government sources through the General Appropriations Act, Special Purpose Funds (SPFs), and Special Account in General Funds. Domestic resources have funded on average 82 percent of climate expenditures in the four selected Departments (DPWH, DENR, DOE, PAGASA) between 2008 and

The effectiveness and efficiency of systems for planning, executing, and reporting on climate PAPs is the key to delivering climate results.

2010. However, development partner support is very concentrated, with Department of Public Works and Highways accounting for 80 percent of the total development partner support (most of which is focused on flood protection). About 94 percent of the climate expenditures in the remaining Departments are financed from domestic sources. Development partner

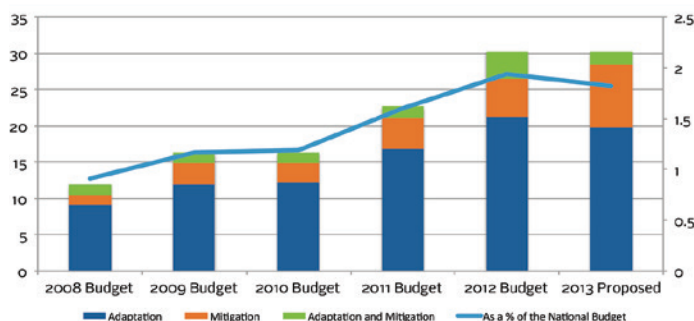
support has also played an important catalytic role in financing pilot activities, providing global knowledge, and developing lessons learned. While most of the domestic funding stems from the GAA, Special Accounts provide a third of the funding for the Department of Energy. While Special Accounts clearly offer some flexibility in managing resources, they can weaken accountability for the use and absorption of funds.

Climate appropriations focus on a few large PAPs¹⁰

Climate appropriations represent a small part of the national budget, but have grown faster than the total budget appropriations for each of the Departments included in the CPEIR.

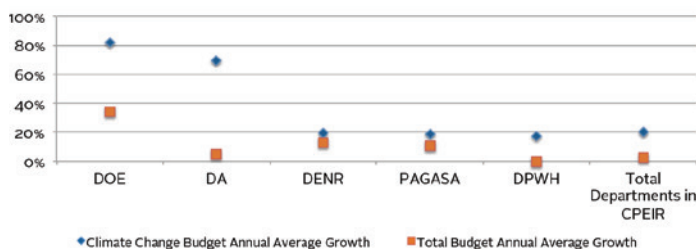
The total climate appropriations have increased from 0.9 percent in 2008 to about 1.9 percent of the national budget in 2012. This corresponds to about 0.3 percent of GDP, which falls below the Stern review recommendations that countries should expend at least 2 percent of GDP to implement climate change action. Given the level of vulnerability in the Philippines, it seems important for the Government to reassess allocations in the budget across Departments to finance climate action. Climate appropriations have been increasing in magnitude, and rose at a faster average annual rate (26 percent) than the national budget (6 percent) between 2008 and 2012. This is mirrored by faster growth of climate budgets in absolute and relative terms across Departments in comparison to their total appropriations (Figure 11).

Figure 10. Evolution of Climate Appropriations Based on the NCCAP Classification, 2008–2013 (on appropriation basis, in Php billions)¹
Source: DBM, DA, DOST [PCIEERD, PCAARD, PCHRD].



¹ The DA's 2008 and 2013 budget figures are excluded, 2009–2011 figures are based on GAA Budget, 2012 figures are proposed NEP. For all other Departments, 2008–2012 figures are based on GAA Budget, 2013 figures are proposed NEP.

Figure 11. Growth Rates of Climate Appropriations and Total Budget Appropriations of Departments/Agencies, 2008–2013 (in %)^{1,2}
Source: DBM, DA, DOST [PCIEERD, PCAARD, PCHRD].



¹ The DA's 2008 and 2013 budget figures are excluded, 2009–2011 figures are based on GAA Budget, 2012 figures are proposed NEP. For all other Departments, 2008–2012 figures are based on GAA Budget, 2013 figures are proposed NEP.

² For the DA, 2009–2012 average annual growth rates are included.

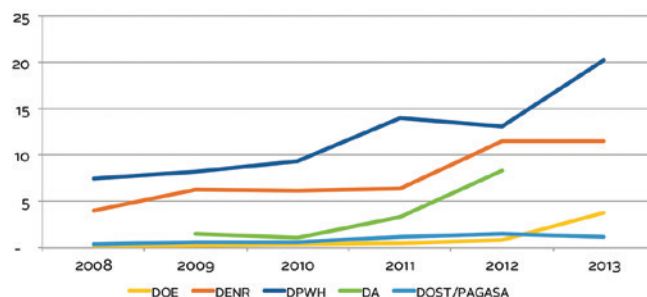
Climate appropriations are concentrated in a few Departments, with a few major PAPs accounting for a large share of the total climate appropriations. The DPWH commands the lion's share of total climate appropriations (52 percent), yet climate change appropriations account for only about 10 percent of its total budget.

The increase in climate appropriations results from the significant expansion of a small number of major climate PAPs.

It is followed by the DENR and DA, which account for 33 percent and 9 percent of the total climate appropriations, respectively (Figure 12). The distribution of funding across the Departments reflects the Government's commitment to prioritize investments for flood control protection (DPWH) in the face of periodic flooding events in the recent past, and

the National Greening Program (NGP) by DENR. Increases in appropriations for the Philippine energy efficiency project since 2010 and the creation of Electric Vehicle Project in 2013 have resulted in spike in DOE's funding. Similarly, funding for DA has increased due to several projects managed by the Philippine Rice Research Institute and the Tamang Abono Program.

Figure 12. Trends of Climate Appropriations by Department/Agency, 2008–2013 (on appropriation basis, in Php billions)¹
Source: DBM, DA, DOST [PCIEERD, PCAARD, PCHRD].



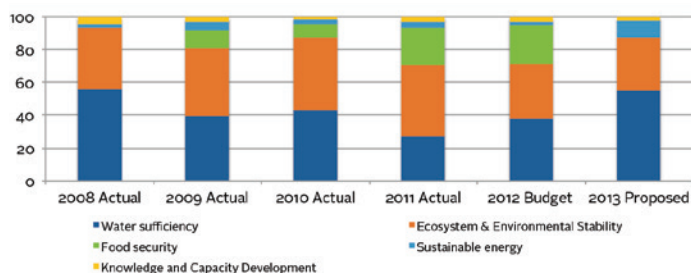
¹ The DA's 2008 and 2013 budget figures are excluded, 2009–2011 figures are based on GAA Budget, 2012 figures are proposed NEP. For all other Departments, 2008–2012 figures are based on GAA Budget, 2013 figures are proposed NEP.

Most of the climate expenditures and appropriations in the Departments reviewed by the CPEIR fall under the NCCAP priority on *Water Sufficiency*, followed by *Ecosystem and Environmental Stability*, and *Food Security*. While funding for some NCCAP priority areas, such as Food Security, are covered largely by one Department, funding for other NCCAP priorities are spread across several Departments. Funding for NCCAP priorities has been steadily rising in the past five years, with the largest growth arising from appropriations for NCCAP priority on *Water Sufficiency* (from about Php 6 billion to about Php 20 billion). Budgetary appropriations in support of the NCCAP priority on Food Security increased by more than 140 percent in real terms since 2011, from Php 3.3 billion to Php 8.3 billion in 2012 (Figure

¹⁰ The NCCAP classification system is used for the remainder of the analysis of the report, as it provides the best estimate based on the Government's climate policies.

13).¹¹ This upward trend coincides with the DA's efforts in 2011 and 2012 to mainstream climate change aspects in budget planning, including the reinforcement of some ongoing activities (e.g., education and training on climate change resilience or activities related to weather-based insurance) and the development of new climate change-related activities (e.g., the composting or the adaptation and mitigation projects managed by PhilRice). Finally, PAPs supporting the NCCAP Priority on Ecosystem and Environmental Sustainability have also supported the upward trend, increasing from Php 3 billion to nearly Php 10 billion owing to large-scale investments in the NGP.

Figure 13. Composition of Expenditures and Appropriations by NCCAP Strategic Priority Area, 2008-2013 (on obligation and appropriation basis, in %)¹
Source: DBM, DA, DOST [PCIEERD, PCAARD, PCHRD].



¹ The DA's 2008 and 2013 budget figures are excluded, 2009–2011 figures are based on GAA Budget, 2012 figures are proposed NEP. For all other Departments, 2008–2012 figures are based on GAA Budget, 2013 figures are proposed NEP

Expenditures and appropriations supporting the NCCAP priority on Water Sufficiency are concentrated on improving water governance, primarily through flood control protection, and are higher than the targets reflected in the PIP. Nearly all of the expenditures and appropriations are allocated to the

Flood control protection is the largest PAP, accounting for at least 40 percent of climate appropriations each year.

flood control protection PAPs to rehabilitate and protect watersheds and river basins in support of the NCCAP output “CCA and vulnerability reduction measures implemented.” The government’s strong commitment to address flooding, drainage, and shore protection is shown by budgetary allocations in the 2013 budget (Php

20 billion) that exceed pledges made in the PIP (Php 14 billion) and the DPWH’s work program (Php 13 billion). Many of these activities primarily address the “rehabilitation and protection of watersheds and river basins” in direct support of perennial

¹¹ The selection of climate appropriations for the DA made use of information at the sub-PAP level, which was prepared by the DA during the 2012 NEP review and based on a special request by the Senate. The exercise focused on attributing DA’s budget (including its attached agencies) with its strategic sector goal “sector resilience to climate risks increased.” This goal is part of the DA’s commitment inscribed in the PDP together with two other sector goals related to “improved food security and increased rural incomes” and “enhanced policy environment and governance.” This exercise did not include the 2008 budget figures, and only captured at the time 2013 budget figures based on the Department and Agencies estimates. A similar exercise for 2008 and 2013 NEP data could not be conducted due to time constraints.

flooding in outlying areas and cities. While not always documented separately, other activities have also been funded, such as the use of bioengineering technologies to strengthen the resilience of infrastructure, upgrading flood control and road drainage standards, provisioning underground detention tanks, establishing retarding basins, desilting rivers, and installing flood monitoring and warning systems. Appropriations in favor of the NCCAP output to improve water supply and demand are either small (rainwater collectors) or could not be identified (localized water systems), or are implemented by the National Septage and Sewage Program (“implement the Clean water Act and the National Septage and Sewage program”), which was only recently launched on a pilot basis.¹² Another NCCAP activity, the improvement of “water quality of surface and ground water,” is partially supported by DENR’s budget through the implementation of the operational plan for the Manila Bay Coastal Management Strategy and EMB’s budget (under water quality management); however, the appropriations are not reported separately in the budget and instead merged with other budget items.

The majority of funding for the NCCAP priority on Ecosystem and Environmental Stability has in recent years supported the “development and implementation of mitigation and adaptation strategies for key ecosystems.” The DENR accounts for 90 percent of all budget appropriations under this priority. However, the alignment is not straightforward because the PAPs also contribute to activities under other NCCAP outputs (e.g., “implement the National REDD-Plus Strategy”). The identification of funding activities related to the management and conservation of protected areas and biodiversity areas, performed under the Protected Area & Wildlife Service PAP, is more clear-cut. Forest management (such as the NGP) together with land management-related activities (e.g., land services) accounted for 84 percent of total appropriations in 2012. This suggests a clear priority toward high-scale investments, raising some questions about sufficient funding in capacity building, research, and broader ecosystem management (Figure 14c). The NGP is a national priority program, managed by the DENR Office of the Secretary. It is a large forest rehabilitation program focusing mainly on plantation development, such as seedlings produced, area planted, jobs generated, and contracts issued. While many NGP activities provide multiple benefits, including poverty reduction, enhancing food security, environmental stability and biodiversity conservation, and carbon sequestration, the program is tagged as providing mitigation benefits.

The DA’s climate appropriations to food security are spread across 86 PAPs, though the bulk of funding is focused on a few major PAPs. Most of the DA’s climate appropriations (93 percent in 2012) fall under its first two climate sector strategies addressing “the reduction of climate change-related risks and the vulnerability

¹² The level of adequacy of funding is difficult to judge for two reasons: (1) most PAPs included in the PIP were not included in the 2012 budget exercise conducted by the DA, and (2) the bureaus and agencies included in the PIP are different from those included in the 2012 budget exercise conducted by the DA.

of natural ecosystems and biodiversity” (72 percent) and “increase the resilience of agriculture communities” (22 percent). However, 67 percent of this total account for three projects managed by PhilRice, the Tamang Abono Program (composting activities), the small-scale irrigation projects managed by the Bureau of Soils and Water Management (BSWM), and activities covered by the Regional Field Unit 1. Budgetary allocations in favor of risk-reducing mechanisms have been decreasing in real terms between 2009 and 2011. A challenge remains to ensure that climate vulnerabilities are reflected in the premium for which a new insurance weather index still needs to be established. In contrast, allocations to strengthen the capacity of communities and conduct vulnerability assessments are quite modest, representing 6 percent and 3 percent of total climate change related budget allocations, respectively. (Figure 14).

Mirroring the large expansion of the DOE climate appropriations, the appropriations and expenditures for NCCAP Sustainable Energy priority grew from around Php 0.2 billion in 2008 to about Php 3.8 billion in 2013. With the exception

Energy efficiency and conservation account for the vast majority of spending under the Sustainable Energy Thematic priority.

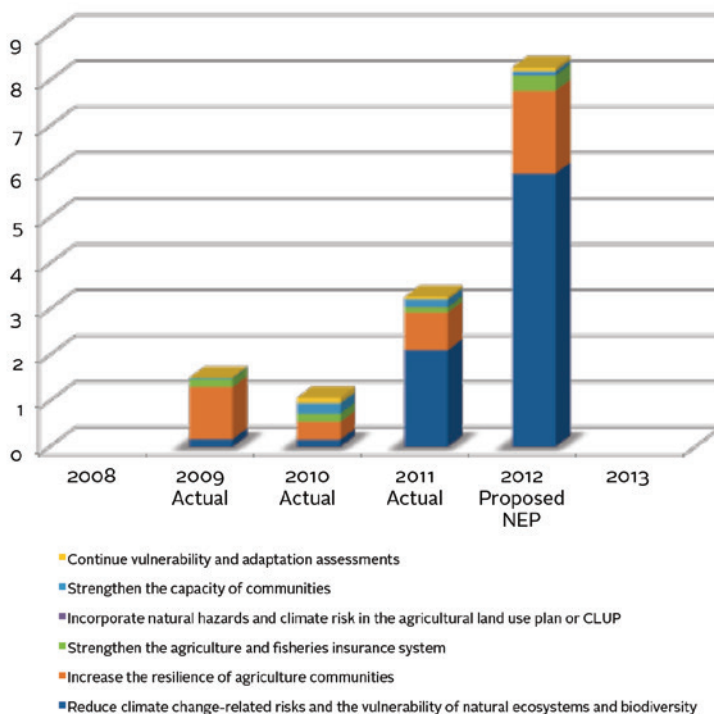
of 2009, the budget increased steadily by 117 percent in real terms from 2008–2011, but experienced a large boost from 2012–2013 due to the funding of the Electric Vehicle Project. On average, promotion of energy efficiency and conservation accounts for 71 percent of total climate appropriations and obligations, whereas appropriations and obligations

on environmentally sustainable transport and renewable energy are low in both relative and absolute terms. Future funding needs will need to focus mainly on the implementation of the Government’s Energy Management Program and the renewable energy roadmap for which the DOE is carrying out an initial resources assessment (Figure 14d).

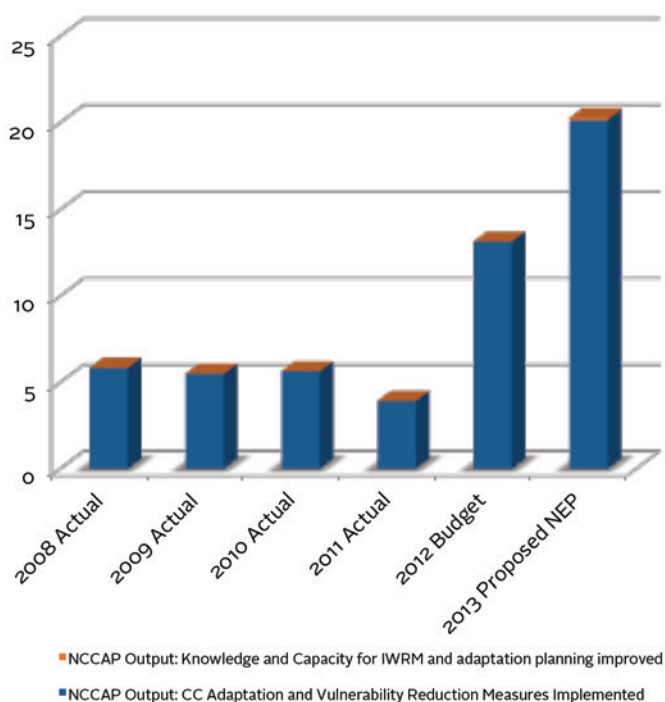
The rise in appropriations has not been matched by corresponding increases in obligations, suggesting potential opportunities to increase impacts by strengthening financial efficiency. The impact of public spending depends on the financial efficiency with which the allocated resources are managed. While the lack of comparability of obligations and appropriations data makes it difficult to obtain an accurate picture of budget execution rates, the limited data available suggest that budget execution rates for the four Departments (DPWH, DOE, PAGASA, and DENR) assessed have varied over the years, ranging between 64 and 104 percent. Three of the four Departments have budget execution rates below 40 percent for at least one of the four years assessed. More telling is the difference in the increase in obligations for the four Departments, which have risen by 38 percent between 2008 and 2011 compared with increases in appropriations for these four Departments of 213 percent.

Figure 14. Climate Expenditures and Appropriations by the NCCAP Thematic Priority, 2008–2013 (in Php billion)

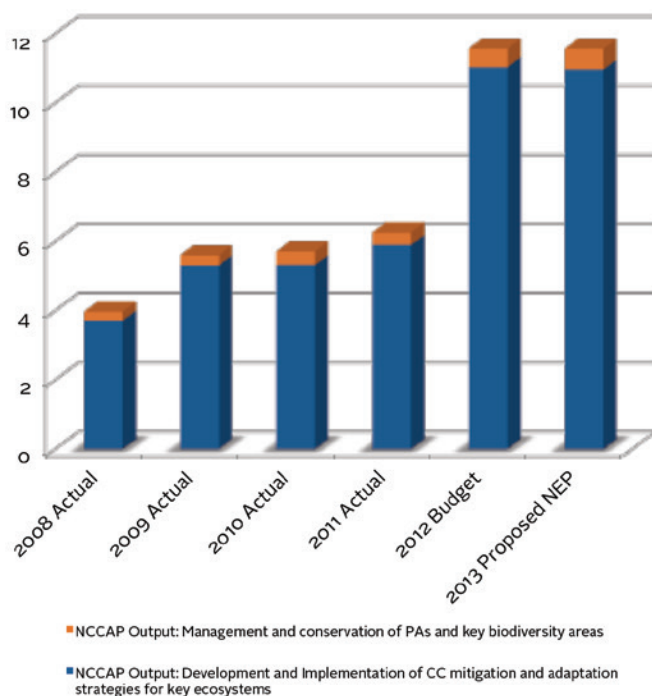
A) Department of Agriculture



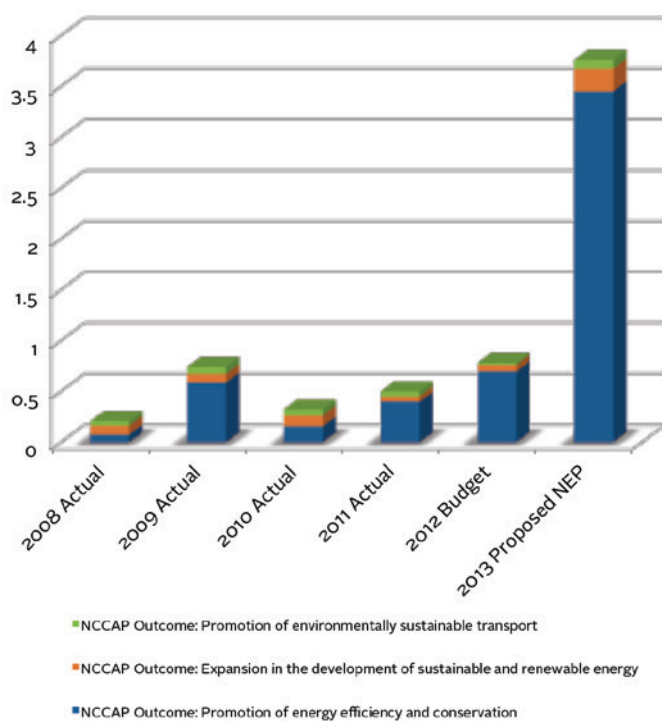
B) Water Sufficiency



C) Ecosystem and Environmental Stability



D) Sustainable Energy¹



¹ The DA's 2008 and 2013 budget figures are excluded, 2009–2011 figures are based on GAA Budget, and 2012 figures are proposed NEP. For all other Departments, 2008–2012 figures are based on GAA Budget, and 2013 figures are proposed NEP.

Financing gaps for knowledge and capacity development may slow implementation progress

While the PIP includes some major activities that support NCCAP goals, their contribution to these goals are difficult to determine and require further review. The PIP aims to prioritize PAPs that contribute to the attainment of PDP goals. While the PIP is not focused on NCCAP activities or goals, it includes PAPs that support NCCAP goals included in the PDP such as flood protection, the NGP, and integrated coastal resource management and the renewable energy project. The extent to which these programs contribute to NCCAP goals is difficult to assess due to the lack of climate indicators and monitoring.

In comparing funding needs—as expressed in the Departments' work programs and the PIP—with the budget, some climate PAPs suggest being adequately funded while others remain underfunded or not funded at all. Based on an assessment of four selected sectors (agriculture & fishery, water, environment & natural resources, and energy) in the PIP, several findings could be drawn from the analysis:

- **Agriculture & fishery sector¹³:** Despite significant funding planned for the development and implementation of the National Farmers Registry System and the Inventory System of Agriculture and Fishery Investments in the PIP, respective appropriations were not mobilized under the 2013 budget. Similar, the DA has not yet pursued activities related to research on climate-resilient crop varieties, water conservation, establishment of field schools, and the setup of a climate database that informs technical and planning units on location-specific climate risks.
- **Environment & natural resource sector:** The Clonal Nursery project has been delayed by a year and falls short by Php 400 million in comparison to the commitments in the PIP for 2013. Some evidence suggests that small-scale activities for ecosystem stability services might lack funding or might not be sufficiently funded. For instance, funding for the ground water resource assessment has not yet been mobilized in the budget.

¹³ The level of adequacy of funding is difficult to judge as most PAPs included in the PIP were not included in the 2012 budget exercise conducted by DA; similar bureaus and agencies

- **Energy sector:** The funding for alternative fuels for transport program, the biofuel program, and the National Energy Efficiency and Conservation Program were delayed compared with commitments in the PIP, and resources were only allocated in the 2013 budget. Funding for the clean fleet program and the adoption of the integrated land use and transport planning process were not secured in the 2013 budget.
- **Water sector:** Funding for water harvesting technologies or the profiling of watersheds and river basins is small. For others (notably related to water supply and weather forecasting), more work is needed to understand the adequacy of funding and potential funding gaps.

Capacity development, which is included in the various NCCAP priorities as well as the overall NCCAP priority to fund knowledge and capacity development, is largely underfunded. Overall the NCCAP priority on Knowledge and Capacity Development accounts for a very minor part of climate appropriations (Figure 13). Capacity building and research under the Ecosystem and Environmental Stability priority appears to be underfunded. Under the Food Security priority, allocations to “strengthen the capacity of communities” and “conducting vulnerability assessments” represents only 6 percent and 3 percent of total climate change related budget allocations, respectively. In the Water Sufficiency priority, the DENR is responsible for the implementation of several capacity building projects (on IWRM and adaptation planning) and studies (water and supply demand analysis), the Department has not been able to secure respective funds in the 2013 budget.

Some NCCAP priorities and sub-activities were not fully identifiable in the budget and could be either underfunded or not funded. Three outputs under the *Ecosystem and Environmental Stability* priority seem to be unfunded: the strict implementation of environmental laws, the institutionalization of natural resource accounting, and the enhancement for integrated ecosystem-based management approach in protected areas and key biodiversity areas. Furthermore, as the NDRRMC is the only agency with a mandate to carry out activities under the Human Security priority, the level of funding for this priority could be subject to discussions. Finally, funding for activities under the *Climate-Smart Industries and Services* are either at an initial stage or are mainstreamed under the Government Accounting System and through support to operations. This weak level of funding or ability to identify activities could very well be tied closely to the lack of coherent roles and responsibilities for carrying out climate action.

While several NCCAP priorities seem to be covered by only a few major PAPs, there are significant opportunities to scale up many key activities. The DA has not yet pursued activities related to research on climate-resilient crop varieties, water conservation, establishment of field schools, and the setup of a climate database that informs technical and planning units on location-specific climate risks. In addition, funding for remote sensing as well as for the expansion of the web-enabled Geograph-

ic Information Infrastructure in Agriculture and Fisheries was not secured under the 2013 budget, but could be implemented. Similarly, several tools related to capacity building, training, or the mainstreaming of climate change adaptation in planning are conducted at a pilot basis only and could be expanded upon.

LGUs are action-oriented, but sources of funding are fragmented and their available amounts are limited

Capacity development accounts for a very small share of all Departments' budget appropriations.

At the local level, the Makati City and Albay Province case studies indicate success in integrating climate change in development plans (CDPs, CLUPs, and MDPs). The two case studies carried out through the CPEIR indicate that they expend a greater share of their budget on climate change pro-

grams than the national government, reflecting strong leadership, commitment, and concern. At 761 Php million, Albay has appropriated about 15 percent of its budget for climate change/DRRM programs, while Makati City's expenditures accounted for more than 8 percent at a total of Php 5.9 billion. These amounts may include expenditures on disaster response, recovery, and preparedness, so overstate the climate expenditures. Nevertheless, compared with the 2 percent average at the national level, these commitments are five to nine times higher as a share of the total budget.

The CPEIR indicates that climate appropriations at the local level are directed toward the primary concerns of the LGUs. The province of Albay is much more vulnerable than the municipality of Makati, which is reflected in the way their

Mainstreaming climate change in land-use planning and the presence of supportive local policies have contributed to the relative success in funding climate action at the local level.

climate expenditures are appropriated (see Box 1). Climate appropriations in Albay are focused almost entirely on climate change adaptation, which accounts for more than 97 percent of the total climate change spending from 2008–2012 (Figure 15). About 30 percent is mainly for infrastructure outlays in support of the redirection of development toward less hazardous, lower-risk areas,

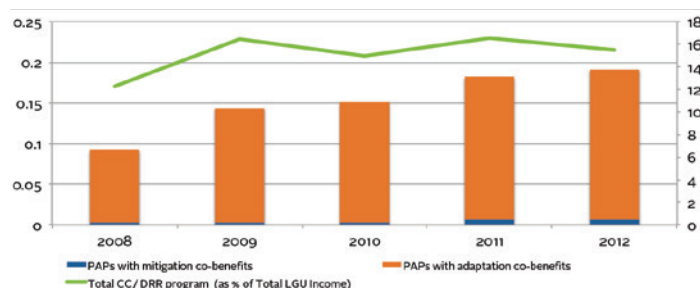
and mainstreaming climate change adaptation in the Provincial Development Plan, while the remaining 70 percent is directed toward addressing disaster risk mostly for recovery, rehabilita-

tion, and preparedness. In contrast, Makati City spends about 55 percent of climate appropriations on adaptation, with most of it going to support flood control, and 45 percent on emissions mitigation activities. This is consistent with the city's focus on promoting itself as a green and livable city. While its climate mitigation expenditures have fluctuated from year to year, they peaked at 5.3 percent of total expenditures in 2012. The city's spending on GHG emissions mitigation is focused on transport sector interventions (about 64 percent) that are intended to reduce GHG emissions by reducing vehicular traffic,¹⁴ along with the promotion of energy efficiency (about 34 percent) (Figure 16).

¹⁴ These include road improvement projects and the construction of more walkways connecting different buildings in the central business district. The city's transport strategy also includes the adoption of the e-jeepney, and the anti-smoke belching campaign.

Figure 15. Appropriations for Climate Change Initiatives of the Province of Albay, 2008-2012 (in Php billions)

Source: Status of Appropriations, Allotments and Obligations of Provincial Government of Albay, various years



Box 1. Contrasting Circumstances, Similar Successes: Case Studies on Makati and Albay

While the province of Albay and the city of Makati have led proactively on the climate agenda, their circumstances are quite different, presenting contrasting case studies of local leadership on the climate agenda. Both LGUs have led the mainstreaming of climate change policies and actions in their respective areas by incorporating climate change issues in development and land-use plans, enacting complementary

Proactive mainstreaming of climate action, coupled with strong leadership, global knowledge, and supportive local policies, have contributed to the relative success of Makati and Albay in funding and implementing climate PAPs.

local policies, financing climate action from their own budgets, and mobilizing additional external resources. They present contrasting case studies due to differences in their exposure to climate hazards, specific vulnerabilities, per capita income levels, and incidence of poverty.

The level of vulnerability, fiscal capacity and poverty incidence have clearly guided both Albay and Makati in their climate planning process. Albay is a highly vulnerable LGU with a high poverty incidence and low fiscal capacity, which have guided its focus on CCA and DRRM. The province is highly exposed to climate- and weather-related hazards, experiencing three to five typhoons annually, and has been identified by the NDRRMC

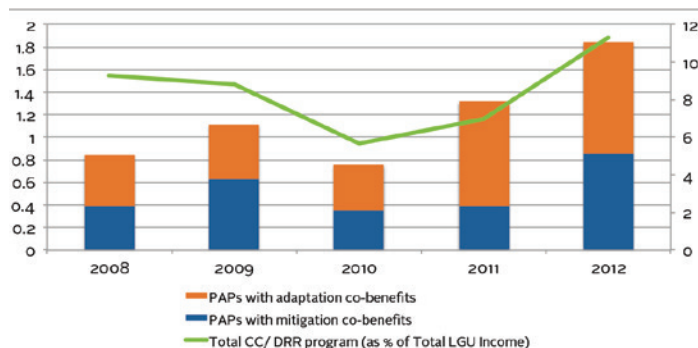
as being at high or very high risk for temperature and precipitation changes, as well as typhoons. The provincial government of Albay is one of the poorest in the country, with a per capita income of 837 pesos in 2009, less than half the national average. The incidence of poverty in Albay has remained high at roughly 43 percent, which is significantly higher than the national average of 25–26.5 percent in 2003–2009. In contrast, Makati City is a less vulnerable LGU with a low poverty incidence and high

fiscal capacity, highlighting the local competitive advantages of engaging in climate action. The city is less exposed to climate and weather-related hazards compared with the rest of country, but it has experienced flooding in some of the barangays along the Pasig River. It had the lowest poverty incidence (1.4 percent) among all Philippine cities in 2009.

Cognizant of the adverse impact of climate and weather-related hazards on poverty reduction and the achievement of the MDGs, the provincial government of Albay has proactively enacted policies and programs that have facilitated the financing of climate action, despite its relatively weak fiscal capacity. The Albay Provincial Government started to mainstream CCA and DRRM in its provincial development plan even prior to the enactment of the Climate Change Act and the DRRM Act. For instance, in 2007, the Government proclaimed CCA as provincial policy in 2007, funded the Albay Action for Climate Change program in its budget, and reorganized the PLUC and CLUP Technical Working Group. In 2009, the Provincial Development Council approved the 2011–2016 Provincial Development and Physical Framework Plan, explicitly recognizing climate change action and disaster risk reduction as essential to the attainment of the province's overall development goal of achieving the MDGs. Its development plan ordains the concentration of high-regret investments and developments in landscapes that are less exposed to hazards and which are not environmentally constrained.

The Makati City Government has proactively enacted policies and implemented programs to address environmental concerns, including those raised by climate change. Formulated in 2000, the latest CLUP recognizes the need to address existing environmental concerns for preserving the city's predominant status as the center of finance and commerce in the country. In line with this, the city's legislative body has passed several ordinances on environmental management and the city has developed PAPs (e.g. solid waste management, urban greening, and vehicular emission control) aimed at improving livability while reducing GHG emissions. In recent years, the city has been actively participating in various global networks of cities on benchmarking and capacity-building activities related to CC and DRM. While the impacts of climate and weather-related impacts are less severe than other parts of the country, the city continues to undertake measures to reduce flooding risks in low-lying areas. A revised CLUP is about to be approved.

Figure 16. Spending on Climate Change Programs and Projects of Makati City, 2008-2012 (in Php billion)
Source: Makati City Government



Beyond the two case studies, LGUs most vulnerable to the impacts of climate change have the greatest need for public support yet have the least capacity to provide support under the current revenue sharing arrangements. Provinces have

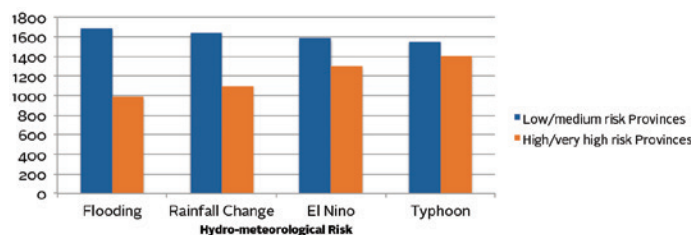
been classified for their risk of experiencing four weather-related hazards—flooding, rainfall change, El Niño, and typhoons—in a 2010 Global Facility for Disaster Risk Reduction study. The

Poorer LGUs have lower fiscal capacity and are often also the most vulnerable to climate risk.

provinces and municipalities at high or very high risk of being affected by these hazards also have higher poverty incidence, hence the greatest need to provide public support. However, these LGUs are on average poorer, with lower total income per capita (Figure 17). In the

aggregate, about 70 percent of LGU income is derived from the Internal Revenue Allotment (IRA), a direct transfer of resources from the national government accounts to LGUs. The amount of the transfer to each LGU depends on its area and population and not on the level of its vulnerability. While LGUs can also generate income from their own sources, the poorer LGUs have limited capacity to do so, relying on the IRA for nearly 90 percent of their income. Among LGUs, the average per capita income of cities is more than twice the average per capita income of provincial and municipal governments, reflecting their greater capacity to mobilize own resources.

Figure 17. Per Capita LGU Income of Provincial Governments, Ranked According to Various Hydro-meteorological Risks, 2009 (in Php)^{1,2}



¹ List of provinces subject to high/ very high risk for flooding, rainfall change, El Niño, typhoons obtained from GFDRR (2010).

² Similar disparities exist for municipalities, even though the differences are somewhat smaller for them compared with provinces.

Funding of climate PAPs at the local level is highly fragmented, making it difficult for LGUs to plan effectively (Figure 18). The LDRRMF and the LDF are the primary potential

sources of funding for climate change related activities at the local level. In turn, both of these funds are sourced from the General Fund income of LGUs, which, as mentioned above, varies across LGUs. The LDRRMF, aimed to finance DRRM, accounts for 5 percent of the regular General Fund income, and the LDF, aimed to finance development (which includes adaptation and DRRM), accounts for 20 percent of the IRA. The LGC further provides that the LDF can only be used to finance projects that are explicitly identified in the Local Development Plan. Given the fairly large fiscal autonomy granted to LGUs and the many development priorities that they have, climate change adaptation and mitigation programs and projects often have to compete against the demand for funding from other development priorities. This highlights the need to mainstream climate change in local development planning. On top of their regular General Fund income, LGUs may also tap into other sources of financing, including categorical or conditional grants from the national government (e.g., PCF, PDAF, BUB, PSF and grants from DPs). LGUs can also receive direct funding from national government agencies for climate PAPs that previously were the responsibility of the national government. NG-LGU cost sharing schemes are meant to leverage national government resources and to induce LGUs to provide greater funding for the specified service or program. Each source of financing has its own set of rules complicating access, but they play a significant role in ensuring sufficient financing for lower-income LGUs such as Albay. Total financial assistance received from Agencies and various DPs in Albay from 2008–2012 was equal to about 82 percent of what the provincial government spent on its own, allowing the province to implement a host of climate change activities; however, this is a unique example as most LGUs have weak capacity to mobilize such resources.

The PSF, which represents a dedicated source of funding at the local level, is aimed at adaptation but has gaps in coverage and is not yet operational. As currently structured, only the

LGUs and communities can submit proposals for consideration by the PSF Board. Given the size of the PSF, this selectivity may be appropriate. However, this seems to preclude the funding of adaptation activities undertaken by other regional entities or the Agencies that directly support multiple LGUs and local communities through a number of important programs, such as forecasting and early warning systems and the strengthening and establishment of regional information networks. Such programs will need to be funded by the National Agencies as part of their regular budget, so it is important that they have adequate incentive for prioritizing them in their work program. The modalities of how such inter-LGU or multi-LGU programs can be funded and the incentives for individual local governments to propose such programs with large spillover benefits outside of their own jurisdiction is not indicated. Moreover, the IRR exempts PSF

Figure 18. Key Characteristics of Local Sources of Climate Financing



projects from ICC review and approval processes, resulting in a more streamlined but fragmented process. In addition, mechanisms to help prioritization for the proposals in a transparent manner are not yet available. Such issues must be considered by the PSF Board in establishing its operational guidelines and when operationalizing the fund. The operationalization of the PSF can not only serve as a catalyst for local climate financing but also can be a stepping stone for preparing the institutions and processes to accept international finance that might be available from the Green Climate Fund or other private sources.

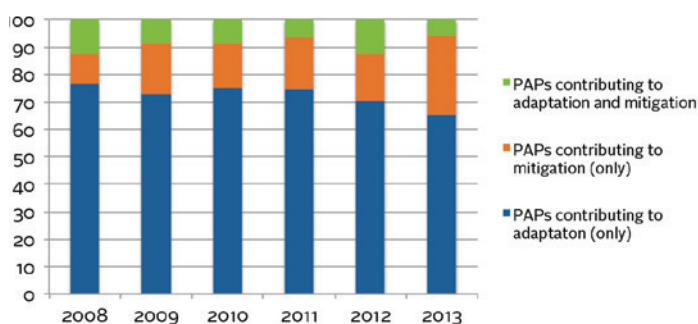
Climate appropriations have been focused on adaptation, but the share of appropriations for mitigation funding has been rising faster

Nearly three-fourths of climate appropriations have been directed toward adaptation intervention over the 2008–2013 periods, though the share of appropriations directed toward mitigation has grown faster on average. The PAPs addressing climate change are classified based on a simplification of the MDB classification system into:

- i. Adaptation only
- ii. Mitigation only
- iii. Adaptation and mitigation

In 2008, about 76 percent of climate appropriations were directed to PAPs that provided adaptation benefits, while about 11 percent were directed to PAPs with mitigation benefits (Figure 19). Appropriations for mitigation PAPs have grown at an average annual rate of 46 percent, more than twice as fast as PAPs providing only adaptation benefits, which grew at an average annual rate of 17 percent. As a result, in these five years, the share of appropriations directed to adaptation has dropped to 65 percent while appropriations for PAPs with mitigation benefits rose to nearly 29 percent. The rapid increase in mitigation appropriations in the last five years comes primarily from the expansion of the NGP, the Electric Vehicle project, and the Tamang Abono Program. Furthermore, these results do not include several PAPs financed by Special Accounts that address mitigation, which likely result in an underestimation of the share of climate expenditures directed toward mitigation. Of note, 65 percent for adaptation is actually on the low side compared with allocations by other countries in the region, where the breakdown of funding is 70–80% for adaptation and 20–30% for mitigation (UNDP and CDDE, 2012). With several major mitigation PAPs being expanded, new opportunities present themselves for further scaling up adaptation through the co-benefits of such PAPs. For example, a redesign and improved targeting of the NGP can deliver its full carbon sequestration potential while also making the participating poor communities and their livelihoods more resilient to climate hazards.

Figure 19. Climate Appropriations by PAPs Addressing Adaptation, Mitigation, or Both 2008-2013 (in %)¹
Source: DBM, DA, DOST [PCIEERD, PCAARD, PCHRD]



¹ The DA's 2008 and 2013 budget figures are excluded, 2009-2011 figures are based on GAA Budget, 2012 figures are proposed NEP. For all other Departments, 2008-2012 figures are based on GAA Budget, 2013 figures are proposed NEP

The shift toward adaptation is taking place in some of the Departments, but is happening at varying rates, with the DOE continuing to focus on mitigation consistent with its mandates and the DENR and DA experiencing win-win opportunities through adaptation and mitigation co-benefits. The DPWH accounts for about 72 percent of appropriations for adaptation, followed by the DENR (15 percent), and the DA (12 percent). (Figure 20). On the mitigation side, the DENR accounts for

Flood control protection accounts for about three-fourths of the appropriation directed at climate adaptation.

nearly 75 percent of mitigation appropriations followed by DOE (15 percent) and the DA (10 percent) (Figure 21). About 13 percent of DENR's climate appropriations in 2012 target measures that include both adaptation and mitigation benefits. For instance, strengthening the adaptive capacity of forests also allows for terrestrial

carbon sequestration. It also offers significant development co-benefits through protected area management, soil conservation, and watershed management. Similarly, the DA also manages projects that have adaptation and mitigation co-benefits (e.g., mangrove planting or PhilRice's project to develop mitigation and adaptation technologies and strategies).

- Nearly all climate appropriations under the **DPWH** envelope are directed to providing adaptation benefits, and are almost entirely aimed at flood control protection projects. Budgetary allocations to flood control protection increased by 124 percent in real terms, from Php 7.5 billion in 2008 to Php 20.2 billion in 2013.
- The **DENR** is very clearly focusing on mitigation, as appropriations in this area have increased by 380 percent in real terms, from Php 1 billion in 2008 to almost Php 7 billion in 2013, mostly directed toward the NGP. Discussions with the DENR show that, in recent years, climate variability has been taken into greater account in the choice of locations for planting or

research than before, so some adaptation is considered. Still, only about a third of appropriations have direct adaptation co-benefits. Well-designed forestry programs can provide significant adaptation as well as carbon sequestration benefits; however the design and the targeting of the NGP have not focused on these, limiting its potential to deliver climate results.

- About three-quarters of the **DA's** total climate appropriations is for adaptation, composed primarily of funding for PhilRice, the Tamang Abono program, and for a range of small-scale projects related to organic and conservation agriculture. Though these projects' main purpose is to enhance production resilience, they also provide significant mitigation co-benefits, which explains the increase under mitigation.
- **DOST's** small-scale attached Agencies¹⁵ mainly support adaptation activities, with most of the budget going for PAGASA's weather, flood forecasting, and research services. This represents about six percent of the total climate appropriations for adaptation. **PAGASA's** funding makes an important contribution to building adaptation and disaster risk prevention capacity (notably related to understanding and monitoring hazards, i.e., hazard identification, mapping, and forecasting). Efforts to prioritize more resources to such *ex ante* disaster investments have been called for, but the level of funding remains very modest.¹⁶
- The spike in the **DOE's** climate appropriations envelope from Php 157 million in 2008 to Php 3.8 billion in 2013 is driven by the Philippine energy efficiency project since 2010 and the new Electric Vehicle Project (replacing petrol-fuelled tricycles with electric models), which is included in the 2013 budget. Actual spending could be significantly higher, due to the Department's high reliance on SPFs.¹⁷ Despite its clear focus on mitigation (given its mandate), the DOE recognizes the importance of adapting energy systems to climatic changes, but these activities are more difficult to identify in the budget and remains at an initial stage.¹⁸ It is noteworthy that adaptation-related investments is suggested to be primarily funded

¹⁵ PAGASA, Philippine Council for Industry and Energy Research and Development (PCIEERD), Philippine Council for Agriculture, Aquatic, and Natural Resources Research and Development (PCAARRD), and Philippine Council for Health Research and Development (PCHRD).

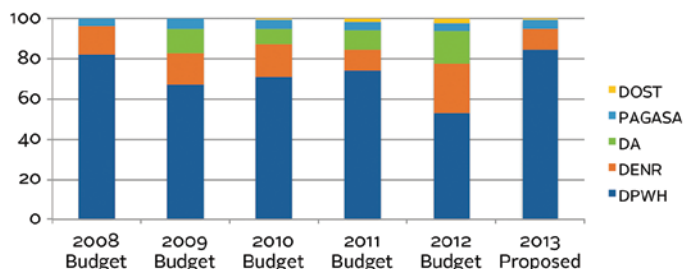
¹⁶ The recent DRR study that reviewed DRR budget allocations in the national budget concluded that funding for understanding hazards (mainly funded by PAGASA and NAMRIA) accounted for Php 1 billion in 2010 (less than 5 percent of the total DRR budget) (Understanding Existing Methodologies for Allocating and Tracking National Government Budget for Disaster Risk Reduction (DRR) in the Philippines, 2012).

¹⁷ See section below on special purpose funds for more details.

¹⁸ DOE considers programs that address the country's self-sufficiency needs in energy (promotion of energy efficiency or further exploring renewable energy potentials) as a adaptation intervention. The CPEIR methodology considered a program to have adaptation co-benefits if it takes into account climate change aspects in planning and design of the energy supply, demand side management to respond to climate change by reducing energy consumption, or increasing energy efficiency and climate-related regulatory support aimed at improving energy efficiency such as norms, building codes, etc.

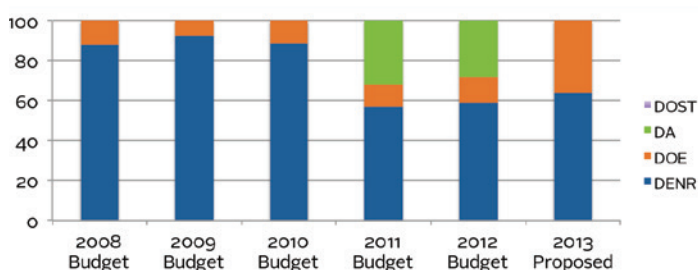
by the National Grid Cooperation or other private electricity corporations, including the strengthening of power transmissions and distribution systems, the laying of underground cables for power distribution systems, or the protection of energy facilities along coastal defense walls.

Figure 20. Climate Appropriations for PAPs Contributing to Adaptation only by Department, 2008-2013, (in %)¹
Source: DBM, DA, DOST [PCIEERD, PCAARD, PCHRD]



¹ The DA's 2008 and 2013 budget figures are excluded, 2009-2011 figures are based on GAA Budget, 2012 figures are proposed NEP. For all other Departments, 2008-2012 figures are based on GAA Budget, 2013 figures are proposed NEP.

Figure 21. Climate Appropriations for PAPs Contributing to Mitigation only by Department, 2008-2013, (in %)¹
Source: DBM, DA, DOST [PCIEERD, PCAARD, PCHRD]



¹ The DA's 2008 and 2013 budget figures are excluded, 2009-2011 figures are based on GAA Budget, 2012 figures are proposed NEP. For all other Departments, 2008-2012 figures are based on GAA Budget, 2013 figures are proposed NEP.

Convergence of the Climate Change Adaptation and Disaster Risk Reduction and Management agendas is not reflected in budgets and plans

In line with the paradigmatic shift toward disaster prevention, the NDRRM Act introduced changes in the allocation criteria. The NDRRM Act revamped both the National and Local Calamity Funds, creating the National Disaster Risk Reduction and Management Fund (NDRRMF) and the Local Disaster Risk Reduction and Management Fund (LDRRMF) from which 70 percent of the amounts appropriated should go to disaster prevention activities, with the remaining 30 percent to support the Quick Release Funds for relief and recovery programs. While the

Despite successful convergence of the climate adaptation and disaster risk reduction and management policy agendas, funding is still directed primarily toward recovery and rehabilitation.

NDRRMF is funded annually in the GAA, LGUs are required to appropriate 5 percent of their regular General income for the LDRRMF. Between 2008 and 2012 the total resources directed to the LDRRMF rose from Php 11.5 billion to Php 15.8 billion. Unutilized LDRRMF resources accrue to a special trust fund to address DRRM issues for five years, after which they revert back to the General Fund. The new provisions allow Departments and LGUs to

better address emergencies and hazards by mitigating their effects and preparing communities for future climate-related disasters, as well as strengthening communication and early warning devices.

At the national level, despite increased funding of the national Calamity Fund in recent years, most of the resources continue to be directed to response, recovery, and rehabilitation efforts. Through 2013, the GAA has not included any appropriations for the NDRRMF. Instead, appropriations have continued for disaster relief, recovery, and reconstruction through the Calamity Fund.¹⁹ The Calamity Fund can support disaster prevention activities, but has rarely done so over the past years. This can be explained in part by increased funding needs for post-disaster activities, reflected in increased budgetary allocations for the Calamity Fund from Php 5 billion in 2011 to Php 7.5 billion in 2012 and 2013.

The DBM is of the opinion that disaster prevention should be funded as part of the regular budgets of the Departments to reduce implementation delays, but has yet to develop systems to incentivize climate change adaptation and disaster prevention actions by Departments. According to DBM, funding disaster prevention under the Departments' regular budgets would better facilitate the execution of cost-intensive investments, such as seawalls, which are not undertaken normally under SPFs. Operationally, funding disaster prevention measures out of the NDRRMF, a special-purpose lump sum fund, would entail Departments submitting proposals for funding to DBM, followed by an evaluation and approval of such proposals during the budget year. The need to evaluate individual proposals would likely delay implementation of these activities. However, the current arrangement does not allow the DBM to incentivize Departments in undertaking disaster prevention activities from the resources that are to be set aside for such activities under the NDRRMF. Systems to

¹⁹ The Calamity Fund can be used to fund relief, reconstruction, and rehabilitation activities (including pre-disaster activities such as preparation of relocation sites, and disaster management training) related to the occurrence of natural calamities, epidemics, crises resulting from armed conflicts, and other catastrophes.

improve monitoring and tracking of such expenditure in Department budgets could begin to address the current shortcomings. Further, the funds disbursement process of the Calamity Fund is cumbersome, resulting in long delays. As a result, Agencies have been more hesitant to apply for funds. Similar procedures under the NDRRMF could affect incentives to apply for funds.

Tracking the utilization of climate resources at the local level is difficult, and evidence indicates that funding is still channeled toward recovery and rehabilitation. While the NDRRM Act focuses on the transparent utilization of disaster funds, requiring monthly reporting from the Departments, a challenge remains in the physical verification of the funded activities. Guidelines have been issued by the DILG and NDRRMC on the use of resources earmarked under the LDRRMFs, with a long list of eligible equipment, goods, and services. However, it is difficult to track the utilization of LDRRMF's resources given the purchase of relief goods reported as Maintenance & Other Operating Expenditures. Additionally, the LDRRMF is off budget, making activities more difficult to track. However, significant funding for prevention was channelled through the Performance Challenge Fund, where 395 LGUs were able to access Php 524 million to fund a total of 629 projects related to CCA and DRRM.

Some LGUs have raised concerns about the LDRRMF as an infringement on their autonomy. While some LGUs consider the LDRRMF resources essential for their disaster preparation and welcome the setup of a fund to protect the use of the resources,²⁰ other LGUs are less prepared to make effective use of the resources for disaster preparedness. The use of the LDRRM funds at the local level is being questioned by some LGUs, which consider the preset use of the funds as an infringement on their autonomy.

Available planning and design tools are often not mainstreamed or are overly complex

Tools to support planning and prioritization are often not mainstreamed and too complex to use.

Most tools in use in the Philippines need to be improved and made more accessible, while other tools still need to be developed and operationalized. The planning and prioritization processes in Departments already have

a variety of tools to support decision making on climate change activities, including climate vulnerability and disaster risk

assessments, environmental impact assessments, and climate screening tools, but these tools are often too technical to be useful to Department staff.

Vulnerability assessments (VAs) are used for different purposes at different geographic scales, but are often too technical and use fragmented approaches. VAs are the first step in understanding the impacts of climate change. In the Philippines, VA tools are being developed sporadically, with much of the current practice focused on disaster-related risks. All of the available instruments, including guidelines from IPCC, the Disaster Risk Exposure and Assessment for Mitigation tool, climate-proofing instruments developed by the University of the Philippines, and tools being developed by local scientists for DA's Climate Field Schools, have been reported to be too technical for use by Agency technical personnel. This calls for a review to assess how these instruments can be simplified and potentially better streamlined.

While standardization is not essential, a common VA framework would be useful in prioritizing climate action. There are no universally accepted approaches to VAs because of variations in thresholds, tipping points and hotspots, diversity in local knowledge and adaptability, and differences in time and space scales at which the climate change processes operate. Nevertheless, policy coherence and effective use of financial resources, avoidance of duplication, and unnecessary competition among VA tools are at stake. These could be achieved only if a common framework is used. Such a framework might include a comprehensive set of physical indicators of climate vulnerability, identification of target vulnerable groups that are a priority for adaptation policy, a "mapping" of the pathways of present vulnerability, and how these might change in the future (using PAGASA scenarios).

The climate-screening tool, which is being developed by the DENR, provides upfront assessment of PAPs to identify design changes needed to account for climate change risks and opportunities.²¹ Its use can improve the ability of project managers to understand and integrate climate change factors into project planning, particularly at the early stages of project preparation. The screening process assesses the vulnerability of a project concept to climate change. In particular, it provides information on climate-related risks on specific sectors or project activities. The tool's application should guide project manager decision making about the need to incorporate climate-change-related factors in the design of their projects, the appropriate level of effort to be used to address these concerns and tools available for supporting the choice among adaptation options. At present, implementation of the tool is not yet well applied, calling for scaling-up.

²⁰ In the past, these resources had been set aside on an annual basis and frequently were used at the end of the fiscal year for other purposes, such as Christmas bonuses

²¹ This is different from the Climate Screening Guidelines piloted by the CCC and adopted by the DBM in 2014 budget call which is focused on tagging PAPs in the budget.

The Philippines already has a comprehensive framework in place that mainstreams climate change impacts into existing Environmental Impact Assessments (EIA), but the processes are reported to have technical shortcomings and experience time delays, limiting effectiveness. The mainstreaming effort

Environmental Impact Assessments are often carried out late in the project approval process, after significant expenditures have been incurred, and provide limited space for redesigning the PAP.

does not imply a separate and added layer of data and work requirements over and above the existing procedure, but is merely designed to enhance and improve analyses of adaptive capabilities of the project vis-a-vis the environment in which it will function. Technical shortcomings include the poor quality of many EIA reports, the limited utility of generic mitigation and management measures, and the relevance of reports for decision-making. The EIA

is often undertaken downstream of the decision-making process. Effectiveness is further limited by complicated procedures, including inconsistencies in interpretations at various levels, lack of EIA professionals steeped in CCA/DRR, localization of the EIA process, and monitoring of compliance.

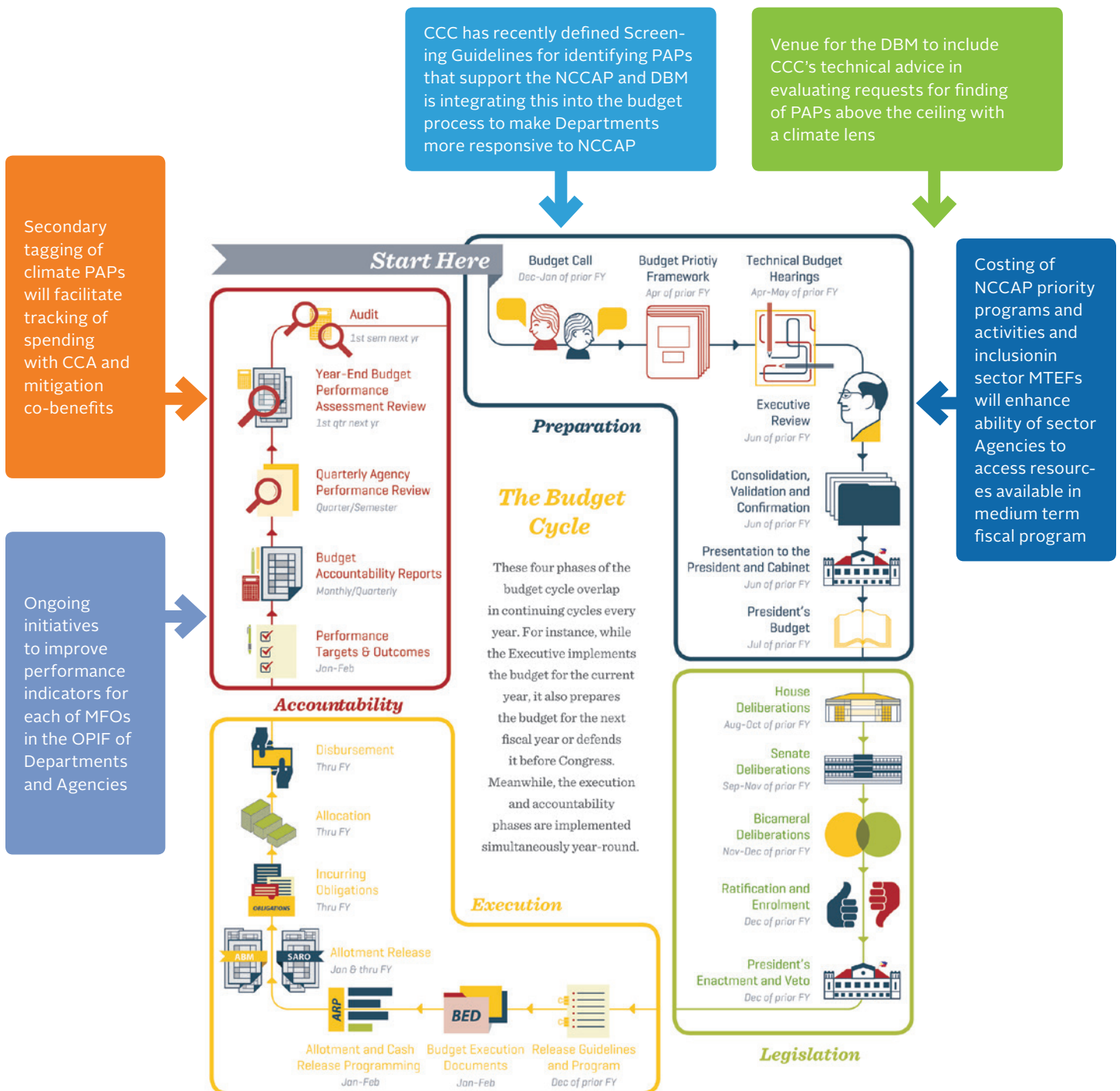
Though the climate agenda includes provisions that vulnerable population groups and communities should be included in the consideration of climate PAPs, there is currently no tool accessible to help identify their specific needs. The NCCAP envisions building up the adaptive capacity of women and men in their communities guided by the principles that adaptation measures should be based on equity and in accordance with differentiated responsibility, and accord special attention for the protection of the poor, women, children, and other vulnerable groups. Tools to include poverty and social assessments in the design of PAPs have been used in a wide range of areas that assess the impacts of policies and programs on targeted segments of the population, including the poor, women, and socially vulnerable groups. Given the poverty levels and significant vulnerability of many poor groups in the Philippines, there is a need to ensure the availability of tools that assess such issues when planning and prioritizing for the climate agenda.

Public finance reforms provide opportunities to improve planning, prioritization, execution, and monitoring of climate PAPs

The inconsistency across national climate plans, sector strategies, and local development plans hampers the mainstreaming of climate PAPs in the budget. In recent years, there have been increasing efforts by the Government to integrate adaptation- and mitigation-related issues into planning tools (such as the PDP, NCCAP, sector strategies and plans, CDPs and CLUPs) at national and subnational levels. At the level of policies, plans, and strategies, climate change priorities have been mainstreamed in several of the PDP's core chapters, and a range of sector strategies and plans have been or are currently being updated by including climate change considerations. However, despite a range of planning tools and climate-friendly strategies and plans, challenges remain at the national and subnational level to ensure climate actions are prepared for and prioritized in budget planning. The NCCAP provides the strategic framework for government's climate action prioritization, but it has not been used by Agencies to feed into the Departments' budget planning and resource allocation. A main challenge for the Departments and Agencies remains the use of the NCCAP to integrate climate change concerns into their sector plans and identify activities for their respective budgets. Recognizing the need to make the NCCAP a more operational tool for the Departments, the CCC launched a series of initiatives in 2012 to update the document, including a review of the alignment between the NCCAP priorities and the budget, and the preparation of a results-based monitoring framework to allow better identification and tracking of the NCCAP activities.

The budget serves as the instrument by which resources are allocated to PAPs, with the budget process providing entry points for mobilizing finance for climate action. Given fiscal constraints and competing development priorities, it has been a challenge for the government to mobilize additional resources for climate change activities. It is therefore important to understand the budgeting process and allocation of resources among Departments to examine constraints and opportunities to finance climate PAPs. Through its four phases—budget preparation; budget legislation; budget execution; budget accountability—the budget process offers several entry points for integrating the climate agenda (Figure 22).

Figure 22. The Philippine Budget Cycle: Examples of Entry Points for Integrating the Climate Agenda
Source: DBM



Box 2. Secondary Tagging: Lessons from Uganda's Virtual Poverty Fund

- Virtual Poverty Fund (VPF). VPF uses the existing budget classification system for tagging and tracking the performance of specific poverty-reduction expenditure in the budget. A number of budget codes are identified that label a portion of government expenditures as poverty-reducing. In principle, a well-designed VPF would allow for (1) maintaining the integrity of budget management and systemic reforms, (2) adapting the existing budget classification system to “tag” pro-poor programs (hence “virtual” poverty fund), (3) linking specific (e.g., HIPC) resources to these budget allocations, (4) protecting budget disbursements to these programs, and (5) monitoring of performance of these expenditures.
- Uganda's Experience with its VPF. In response to the need to ensure budget expenditures are oriented toward poverty reduction, the Government of Uganda introduced the Poverty Action Fund (PAF) in 1998. The setup of the PAF was simple and did not require additional institutional arrangements. The PAF has been successful in (1) re-orienting Uganda's budget allocations toward pro-poor service delivery by ensuring additional resources were channeled to specific priority programs of Uganda's Poverty Eradication Action Plan (as a result, allocation to PAF programs increased rapidly, with

the main beneficiary being local governments); (2) mobilizing development partner resources and harmonizing conditions by organizing more sector-specific development partner resources and supporting development partners' shift from project to budget support; and (3) improving budget predictability, transparency, and accountability.

- Some Key Lessons. The PAF experience in Uganda has demonstrated a number of key lessons on how to establish VPFs as mechanisms for tracking and monitoring poverty reducing expenditures: A VPF should be simple, regarded as a mechanism to identify priority expenditures in the budget classification system in alignment with the Poverty Reduction Strategy Paper. The definition of the programs included in the VPF should be reviewed regularly. Tracking of performance of the expenditures should be within a transparent budget-wide reporting and review system. A VPF should also support rather than replace the implementation of a country's public expenditures management reforms. A key element of VPFs, the protection of VPF expenditures, should be linked to a system of controlling overspending in other parts of the budget to limit the shocks to unprotected sectors.

Source: T Williamson and S. Canagarajah. Is there a place for virtual poverty funds in pro-poor public spending reforms? Lessons from Uganda's PAF 2003

While climate screening guidelines do serve to facilitate the inclusion of climate action in budget planning at national and subnational levels, prioritization requires additional tools and decision support processes.

The recently developed climate screening guidelines focus primarily on identifying climate PAPs, the tool cannot yet be used for prioritizing PAPs. In addition to a database of geographic and sector vulnerability, prioritization requires a decision support system that translates NCCAP priorities into fundable activities, the adoption of targets

Prioritization tools need to be developed to supplement screening guidelines.

that are to be achieved, indicators to measure these targets, and a decision support process that accounts for the multiple benefits that result from climate action and the cost of inaction, recognizing the inherent uncertainties surrounding potential climate impacts and the benefits of actions taken (Box 2).

On the whole, it seems that most Departments and LGUs have not yet made use of internal policies, budget calls, directives, or memorandums to promote the identification and budgeting of priority climate activities or to integrate climate risk considerations in infrastructure vulnerable to weather extremes. For instance, only DENR and DPWH have adopted a Medium Term Expenditure Framework (MTEF) in their internal planning and budgeting. The Fiscal Planning Bureau is planning

Only a few Departments and Local Government Units experiment with and use screening and other budget tools to facilitate mainstreaming of climate change in budget planning.

to standardize the development of MTEFs and roll this out for use by departments. Likewise, other potential entry points at the level of investment appraisal have not yet been fully explored, such as the integration of climate considerations in the ICC's investment appraisal criteria. The application of a climate lens to infrastructure standards or building codes is also still at an initial stage, and will

require careful selection of investment PAPs due to its possible high budget implications.

Well-intentioned Government programs designed for one purpose can have perverse effects with unintended consequences, inadvertently increasing vulnerability or increasing carbon emissions. The Philippines' Government does not provide a subsidy for fossil fuel consumption in the form of low, regulated prices or tax levels. While environmental taxes on fossil fuel energy consumption are currently under discussion, the price signals from the market are strong as the country has the second-highest energy costs in Asia after Japan. These costs should incentivize companies and households to undertake energy

efficiency and conservation efforts. However a number of direct or indirect subsidies incentivize increasing vulnerability or reduce sequestration of carbon, such as those that promote the location of infrastructure or people in higher risk areas or those that encourage land conversion from forest and watershed to other uses, as well as those that encourage conversion of prime agricultural land to commercial, residential, and industrial uses.

Innovative budgeting tools introduced through the PFM reforms will enhance planning and prioritization, as well as significantly advance convergence

The adoption of new budgeting tools such as the Program Approach and the Bottom-Up Budgeting approach offers unique opportunities to enhance climate outcomes, increase convergence, reduce duplications, and leverage additional resources.

The Government's 2011 PFM reforms, particularly the Program Approach and Bottom-Up Budgeting, can reinforce and boost effectiveness in the implementation of climate action.

In an effort to strengthen the reflection of policies and priorities in the budget as laid out in the social contract and the five KRAs, the Government introduced a number of budget procedures, such as the adoption of the Program Approach and the Bottom-Up Budgeting approach, to promote the focus on critical program targets underlying the five KRAs and to converge with the development needs of poor/focus cities and municipalities. Given the multi-sectoral nature of climate

change, these budget procedures provide opportunities to enhance the effectiveness of NCCAP implementation and mainstream climate change considerations in bottom-up planning approaches.

The Program Approach offers a unique opportunity for the Philippines Climate Change Agenda to bring about convergence and greater coordination in the related activities of several Departments, thereby helping to enhance the effectiveness of the selected programs, reduce duplication of interventions, and leverage additional resources from the Departments' budgets. To support the accomplishment of the key performance targets under the five KRAs, the Government committed to use its fiscal space or uncommitted resources for the five key programs managed by each of the Clusters based on

a holistic program approach. For the CCCC, all eight Departments contributing to the Climate cluster were asked to identify their main activities that contribute to the Cluster's key program, "managing risk of communities within the 18 major river basins vulnerable to critical geological and hydro meteorological hazards through enhancing local adaptive capacity and strengthening natural ecosystems' resilience to climate change and disasters."²² The total appropriations for this program amount to Php 13.6 billion, with the bulk of the funding coming from DENR (Php 9 billion, of which 73 percent of the funds are allocated to watershed and river basin management activities, 17 percent to Namira's large-scale topographic base mapping, and the remaining 10 percent to various other items). However, the effectiveness of this approach will depend on the Government's ability to address some emerging problems, including:

- a. The need for increased consultations between the DBM and the CCC when implementing the Program Approach. Lacking consultations early on often requires changes in the scope of the program later on in the process, and thereby slows down program implementation.
- b. The improvement of coordination, planning, and implementation, which has been difficult as the approach involves eight Departments and more than nine attached Agencies.
- c. Adequate technical capacity of staff, which is critical for tasks such as the identification of appropriate targets and indicators, and subsequent monitoring of them, which varies and is often lacking.
- d. The limited incentives that Departments have to coordinate among each other in formulating and executing the Program Approach.

While the Program Approach was established as a first step to draw on uncommitted resources or leveraging additional funds from existing budgets of the agencies, such potential for resource mobilization has not yet been fully exploited. To this point, the DA and the CCC have benefited mainly from increased budget appropriations. However, the Program Approach has not yet resulted in leveraging reallocations (towards the program) from existing budgets of agencies. Incentives and arrangements are yet not in place to allow the program to attract additional funding from any fiscal space or reallocations.

BUB offers an opportunity for local communities to better plan and prioritize their activities, as well as to increase collaboration with CSOs. The programmed appropriation for all BUB projects in 2013 was Php 8 billion. The approach is being piloted by the Human Development and Poverty Reduction Cluster and the Good Governance Corruption Cluster to respond to the development needs of poor municipalities and move toward

²² The participating Departments are DA, DENR, DILG, DND, DOH, DOST, DPWH, and MMDA, and nine Agencies attached to them.

satisfying the Government's goal to reduce poverty from 26.5 percent in 2009 to 16.6 percent by 2015. Under the approach, 595 poor municipalities, including several cities with high poverty concentration, prepare their Local Poverty Reduction Action Plan in a participatory manner with the help of CSOs, of which 61 partnerships have been formed so far. The major output of this planning exercise is the identification of projects from a menu of programs that are already being undertaken by selected Agencies, and for which target LGUs want to secure funding from said Agencies. The participating Agencies under the BUB (DA, DENR, DOE, and DOH, among others) were asked to earmark 10 percent of their total budget, on a notional basis, for programs and projects for the funding requests of the target LGUs, but only DA reached this limit.

While the BUB approach is also laudable, the details of the design and implementation are under review based on recent experience. The BUB Executive Committee is the approving authority for the Local Poverty Reduction Action Plans. Communities have submitted about 1,500 draft proposals pertaining to "environment and natural resources" directly to the DENR. The lack of adequate guidelines for selecting the projects and the specific role that RDCs can or should play in the selection process are the main issues that remain unresolved. To increase the effectiveness of the BUB, the Government may want to strengthen the linkages between poverty and CCA and mitigation in project selection and review.

Increased budget transparency facilitates mobilization of domestic and development partner resources for climate action

Transparency in the mobilization and use of climate resources is essential for increasing the efficiency of resource utilization and for attracting additional new resources. A key part of such transparency is clear and agreed-upon definitions and criteria for what constitutes climate expenditures, with public access to information. Accountability and transparency can also be increased by using the national panel of technical experts in the processes of project appraisal, monitoring, and evaluation.

The fragmentation of resources often results in piecemeal approaches with higher transaction costs and lower effectiveness. Climate action has been funded mainly from the GAA, from external sources, or through internal resource mobilization by the LGUs, often on a project-specific basis. The creation of the PSF and the ability of the CCC to directly mobilize a specific pot of resources provide new additional, innovative, and dedicated

sources of financing. However, the further fragmentation of resources could result in piecemeal approaches if systems are not put in place to plan, coordinate, and assess across financing sources. Another possible risk is "double dipping," in which local project proponents successfully avail of different, uncoordinated funding windows for the same programs. A key in making new funds more effective is improved access at low transaction costs. Some of the policy barriers that need to be addressed by the PSF Board include the complexity of climate scenarios, transaction costs to comply with bureaucratic requirements, and widespread support for high-carbon alternatives. There are also limitations of the LGU support capacity as well as the limited capacity of local implementers.

There remains an important institutional gap in coordinating the mobilization of additional resources to support national programs and in devising appropriate financing instruments to reduce fragmentation. While the PSF Board is focused on local adaptation financing, no such institution exists for addressing climate financing at the national and sectoral level. Conceptually, the CFG could be constituted as a powerful group for carrying out such a task, but it remains informal group. This shortcoming can be addressed by either augmenting the role of the PSFB or by providing some legal basis for the CFG to undertake this role.

Development partners' funding plays an important role in global knowledge transfer, piloting new initiatives, and supporting investments to assist the Government in developing climate action at the central and local levels. More than 10 development partners support the Philippine Climate Change Agenda, including the United Nations Development Program, the

Development Partner support plays an important role in sharing and generating knowledge, and in dedicating additional resources to support investments and capacity development that can boost climate action at the central and local levels.

Asian Development Bank, the World Bank, the Japan International Corporation Agency, the Australian Agency for International Development, Euro-peaid, the French Development Agency, GIZ, the U.S. Agency for International Development, and the British Embassy. Most development partner-supported initiatives have focused on climate-related disasters and disaster recovery interventions in the infrastructure, energy, and environment sector, with a particular focus on capacity building, policy advocacy,

and awareness-raising and technology adoption, notably at the local level. Development partner funding has been, and remains, an important source of financing for flood control under DPWH.

The Climate Change Working Group of the Philippine Development Forum (PDF) provides a venue for development partners to share information, developments, and priorities, but has not yet led to significant strategic harmonization. The Climate Change Working Group of the PDF meets quarterly, primarily to share information. While the working group has not developed a coordinated program of support, efforts are underway to develop a joint CCA and DRRM working group in line with the policy convergence on this issue.

Existing monitoring and evaluation systems have cumbersome reporting requirements, and the lack of climate indicators limits their usefulness to support the Government's climate reform agenda

Monitoring and reporting on NCCAP implementation progress has been challenging, as systems are not in place to collect and integrate results from various National Government Agencies. The NCCAP assigns the CCC overall responsibility for monitoring, reporting, and evaluating the progress of the NCCAP implementation. The results framework includes a detailed

Monitoring and evaluation systems are needed to ensure efficiency and increase the accountability and transparency of institutions implementing climate change activities.

structured articulation of the overall vision, intermediate and immediate outcomes, and a list of priority activities that are to be carried out during the three six-year phases of the NCCAP. It also assigns the specific responsibility of leading and supporting each of the listed activities to specific Agencies. It does not, however, specify how the progress of implementation on specific tasks is to be monitored and where the responsibility for monitoring

lies. While Departments and Agencies do report on the PAPs that they are implementing, they do not necessarily collect or provide information on their climate results. Further, there are no guidelines to ensure that the collected information can be aggregated across the PAPs to provide higher-level results.

M&E systems are indispensable for evaluating the performance of climate PAPs with respect to their objectives, to test the accuracy of ex ante projections of climate vulnerabilities or projects' impacts on the respective vulnerabilities, and to incorporate lessons learned about the adoption and mainstreaming of new and effective adaptation and mitigation interventions.

The monitoring and evaluation of climate PAPs in Departments is sporadic and has been primarily focused on mitigation. The DOE has long been monitoring the supply and utilization of biofuels. Along with the DENR, it is involved in GHG accounting and monitoring. There is little evidence of any Departments setting adequate adaptation outcomes or any processes for evaluating the effectiveness of their plans, policies, and programs.

A lack of agreed-upon indicators and targets has hindered the progress of implementing the NCCAP. Though the NCCAP provides a detailed results matrix including outcomes, outputs, activities, and outputs indicators, systems have not been put in place to adapt existing systems to monitor based on these indicators. The CCC requires Agencies to submit through the CCCC their existing climate change related activities and programs. The NCCAP does not include agreed-upon indicators and targets for reporting to the CCCC on Departmental climate PAPs to measure against climate results. Thus, there is no mechanism to aggregate these submissions across Departments to report on a consolidated progress report. While LGUs are required to submit their LCCAPs to the CCC, no systems are in place to receive, monitor, or review them. As a result, the CCC accomplishments report provides a narrative highlighting significant achievements on climate change, but does not report against the NCCAP results matrix. Specifically, it lacks basic information essential for assessing effectiveness of the overall program, including the resources that are directed to the NCCAP objectives and outputs and the results that they have delivered.

Establishing targets for the NCCAP indicators and aligning them with established Departmental Goals and outputs, such as in the OPIF, would provide greater incentive for NCCAP implementation. Department incentives to undertake activities that support NCCAP outcomes depend strongly on the degree of alignment between the Departmental goals and the NCCAP goals, and on the incentives that Departments have established for meeting their performance goals. While efforts have been made to enact some reforms included in the NCCAP, many others have yet to begin or are at the initial stages of discussion. Other outputs are in conflict or overlap with existing mandates, hindering their implementation. The adoption of OPIF has shifted the focus of M&E systems away from inputs or activities to MFOs delivered to clients.²³ None of the Departments have climate-related MFOs; however, the DA's OPIF logical framework includes increasing

²³ Through OPIF, DBM seeks to focus on three key outcomes: fiscal discipline—living within the means or resources available to the government; allocation efficiency—spending money on the right priorities; and operational efficiency—obtaining the best value for the money or resources available.

The lack of appropriate quantifiable indicators has limited the extent to which climate change is incorporated into OPIF.

climate resilience as one of its goals. While this supports the integration of climate change activities in the DA's programs, the absence of an MFO on climate limits its effectiveness. The DENR and DPWH are reviewing their OPIF logical frameworks. The lack of capacity to develop appropriate quantifiable indicators has limited

the extent to which climate change is incorporated in OPIF. The creation of climate units in DENR and the DA may provide some capacity to develop M&E indicators.

Department M&E systems are overburdened by reporting requirements, affecting managers' ability to use reports for planning purposes. An assessment of practices and their implications for the M&E of climate PAPs of two Departments (DENR and DA) showed a number of challenges affecting planning, monitoring, and evaluation of all Departments' PAPs, including the climate PAPs. During the fiscal year, DENR and DA have to comply with many reporting requirements and respond to ad hoc requests from oversight Agencies. According to DA, its M&E unit prepares one to four reports on a daily basis. Regional offices often fail to submit timely financial and physical information, which in turn affects the quality of mid-year reporting (notably the monthly and quarterly reports). As a result, the Departments' senior management is unable to use the information for its strategic resource allocation planning, which in turn affects planning and funding of climate PAPs. The assessment's further findings include:

- The most important PAPs of DENR are climate-related PAPs (notably the NGP) that are captured through DENR's M&E system; efforts to closely monitor this presidential program have resulted in the creation of a **separate information system**, raising questions about DENR's effective management of two separate reporting systems.
- Efforts have been made by DENR to introduce **results-based monitoring** and to develop performance indicators, but the Department has not yet been able to fully capitalize on this. In 2011, DENR began to roll out on a pilot basis a results-based M&E system (with the Operation Manual developed with help of the WB). While the system is being rolled out to the regions, a current challenge is the lack of trained staff on M&E validations, survey mapping, and planning.

Challenges in establishing a joint database at the regional and provincial levels can affect the monitoring of climate PAPs in the future. Similarly, different information systems at the regional and provincial levels affect DA's ability to monitor PAPs. While some lessons could be learned from the WB-funded rice program implemented in Milano, in terms of providing incentives

to subnational governments in setting up a joint database, this approach has not yet been pursued. A few initiatives reflect efforts by DA's staff to introduce impact evaluations, but these have remained one-time efforts. The last comprehensive impact assessment of DA's programs dates was undertaken in 1997. Since then, the Planning and Monitoring Unit has faced staff and resource shortages that have hindered its ability to conduct thorough impact evaluations.

The new Results-Based Performance Management System (RBPMS) could provide a powerful opportunity to incorporate climate change indicators to monitor progress on the climate change agenda. The Government is introducing a unified and integrated Results-Based Performance Management System across all Departments and agencies within the Executive Branch, with expected improvements in reporting and auditing systems. This system will enhance the mid-year and year-end M&E of climate PAPs. With a goal of strengthening the overall M&E system, the President created an inter-agency task force (AO25) to align, unify, streamline and simplify all existing monitoring and reporting requirements in government agencies relative to the National Leadership's Agenda, the PDP 2011–2016, agency mandates, commitments, and targets. The RBPMS uses the five KRAs set by the President, the OPIF of the DBM, and the PDP-Results Matrix of the NEDA as underlying frameworks. The RBPMS will incorporate a common performance scorecard, and at the same time create an accurate, accessible, and up-to-date government-wide, sector, and organizational performance information system. For FY 2012, the AO25 task force required each Agency to incorporate a "transparency seal" that categorizes major programs along the five KRAs' program/projects beneficiaries, as identified in the applicable special provisions, as well as the status of implementation and program/project evaluation and/or assessment reports. Each Agency's delivery unit should include it as a performance indicator. One component of the RBPMS, the Performance Based Incentive System, became operational in 2012. In FY 2013, Departments will be expected to submit an improved set of performance targets and indicators to satisfy the RBPMS.

At the local level, the Community-Based Monitoring Program and the DILG's Local Government Performance Management System (LGPMS) serve as starting points for developing a systematic M&E system. An assessment of the horizontal M&E systems (e.g., community-based monitoring system [CBMS] and or LGPMS) and vertical M&E systems linking local level M&Es to national levels (e.g., MDG monitoring by the NEDA) will also be performed. The CBMS, launched in 2002, serves as a tool for local governance and complements the national poverty monitoring system. The CBMS also facilitates the implementation of targeted poverty reduction programs, with its household and individual-level data as well as the M&E of these poverty reduction programs. The LGPMS is a self-assessment development management tool for provinces, cities, and municipalities that

provides information on the capacities and limitations of LGUs in the delivery of essential public services. Its major output, called the Annual State of Local Governance Report, provides strategic information concerning LGU performance in governance along the areas of administration, social services, economic development, environmental management, and valuing the fundamentals of governance. Both CBMS and LGPMS could be used both for service convergence and for vertical coordination. Meanwhile, the DILG has developed DRR/CCA protocols to issue an ISO-type “seal of disaster preparedness” for high-performing LGUs.

Weak institutional capacity, including limited access to knowledge, has hindered efficient execution of the climate reforms and action

Departments that implement the climate change agenda require knowledgeable and skilled staff in all aspects of climate policy, financing, and institutions. Capacity building remains significantly underfunded in the Department budgets, though it is one of the NCCAP priorities. Departments largely do not have, and are unable to recruit, experts to enhance their capacities on a

Execution of the policy agenda is hampered by a lack of institutional capacity and climate knowledge at the national and local level.

permanent basis due to a lack of knowledgeable experts. As discussed earlier, the CCC does not have the capacity to engage with all LGUs because of its limited local presence. Furthermore, capacity is often limited due to high staff turnover: skilled middle-level technicians are scarce, and often leave for other Departments. While the capacity to address climate issues is inadequate, it is higher

in Departments where climate change is likely to affect many policy objectives directly. Departments’ limited capacity in using data for strategic planning purposes further affects their ability to effectively monitor and evaluate their PAPs. Integrating climate change concerns into the planning and design of DRRM projects has also been difficult because of inadequate data and information. Departments also do not have the tools necessary to prioritize and sequence climate PAPs on the basis of their climate benefits, potentially leading to foregone opportunities.

Understaffing and a lack of capacity at the regional and national levels have contributed to weak and invalidated budget reports. Delayed reporting and the many formal and ad-hoc reporting requirements have also weakened budget reports. Likewise at the central level, the preparation of numerous reports does not leave time for staff to verify and validate data. Furthermore, there is insufficient software support and the planning unit lacks tools to prioritize data assessment, and senior management does not use the information for its strategic resource allocation planning,

The capacity and knowledge base of LGUs to identify, design, and carry out climate reforms remains low, as the information available to LGUs to deal with localized climate risks is generally lacking or not in an easy-to-use format. A recent assessment of the technical capacity of LGUs to undertake climate change adaptation interventions indicated key gaps. Specifically, the LGUs lack knowledge and access to information about climate change risks, biophysical features, climate impacts on key economic sectors and ecosystems, adaptation options appropriate to local conditions, and funding mechanisms that can support climate change adaptation at the local level (Regional Resource Centre for Asia and the Pacific 2012). Downscaled climate projections at the municipal level as well as climate trends covering 30 years for LGUs’ respective areas of responsibility are necessary. More context-specific research data are also required on how projected changes in climate parameters can affect major economic sectors and ecosystems, such as farming, fishing, water resources, marine resources, local biodiversity, infrastructure, and human health. As at the Departmental level, there is a significant lack of staffing capacity at the LGU level. Areas with gaps in capacity include the ability for LGUs:

- To design programs, develop indicators and targets, and monitor and report these programs;
- To incorporate vulnerability assessments into the CDPs, CLUPs, and AIPs; and
- Assist communities in identifying and preparing PAPs for funding through the BUB, PSF, LDRRMF, and other sources of funding.

Knowledge gaps and the lack of a knowledge management system have been key barriers for scaling up climate action in Departments and LGUs. Knowledge and information gaps lead to a lack of risk awareness, as well as discrepancies and uncertainty about the robustness of plans and decisions. The CCC has developed a Philippine Research and Development Agenda on Climate Change based on multi-stakeholder consultations. This Agenda identifies the gaps and priorities in climate-relevant research that could facilitate implementation of the NCCAP, and is envisioned to serve as the guiding document for the country's research, science, and academic institutions. The key challenge at the local level has been the capacity to generate and capture useful, actionable knowledge. Data collection methodologies are not synchronized to support planning and budgeting of key programs and projects. In addition, mechanisms that allow consistent updating and harmonization of raw data are not in place to share such data among the relevant stakeholders, project developers, and key policymakers. Comprehensive and accessible information management systems necessary to ensure coordinated planning and implementation across the many climate-relevant sectors are not available. The DENR, together with specialized agencies, is responsible for setting up information collection systems that can be used by other agencies in support for their own activities.

Insufficient information is a persistent issue across Departments and climate change stakeholders, and it is essential to scale up the provision of information services by supporting agencies that provide these services and making their information available more broadly. Examples of information that is already available and in use include hazard maps (e.g., the Philippine Institute for Volcanology and Seismology [PHI-VOLCS], MGB) used in screening processes, and climate change projections from PAGASA. The main agencies that provide such support include PAGASA, NAMRIA, DOST, PCAARRD, Philippine Council for Industry and Energy Research and Development, and the Klima Climate Center. In addition, data portals such as the Southeast Asian Regional Center for Graduate Study and Research in Agriculture provide valuable and highly relevant information. In some cases, climate-related information generated by academic institutions, specialized agencies, and civil society organizations is not made available to outside users. This issue has contributed to the lack of access to timely information that has hindered Departments and LGUs from effectively integrating climate action into their plans. The generation of knowledge and the ability to access key information and data are both essential in ensuring successful implementation of NCCAP.



IV. RECOMMENDATIONS

Carried out at the midterm of the current Administration, of the Philippine Development Plan 2011–2016, and of the first six-year phase of the National Climate Change Action Plan, the recommendations of this CPEIR aim to support the Government’s climate reform agenda. The recommendations aim to consolidate the strategic direction of the NCCAP and set the stage for scaling up actions over the next two phases. The goals for the remainder of the Administration’s term should be to:

- i. Ensure that the enabling environment is firmly in place by completing and implementing the remaining pieces of the core climate change reforms;
- ii. Formulate, enact, and support complementary sector and local-level policy and institutional reforms;
- iii. Enhance planning, prioritization, design, and reporting of climate programs, activities, and projects to improve their effectiveness; and
- iv. Through the above reforms, increase efficiency of resource use and provide support for higher levels of financing.

The recommendations and the Strategic Action Plan are anchored to the Government's climate reform agenda through a framework that includes three pillars. The framework identifies the major objectives and the specific activities needed to achieve these objectives within each pillar, providing a basis for assessing critical linkages between the objectives and activities, prioritizing and sequencing of activities, and assigning clear responsibilities to agencies for achieving the climate change goals. The three pillars of the framework are: (1) Strengthening the Planning, Execution, and Financing Framework for Climate Change; (2) Enhancing Accountability through Monitoring, Evaluation, and Review of Climate Change Policies and Activities; and (3) Building Capacity and Managing Change. Each activity in the framework is assessed in terms of priority and risk to enable its sequencing as part of the Strategic Action Plan.

Pillar 1: Strengthening the Planning Execution, and Financing Framework for Climate Change

A major weakness in the present policy and budget institutional framework is that no single mechanism unifies all climate change activities. Considerable efforts are being made to strengthen budget coordination and establish a comprehensive results-oriented budget system. The success of these efforts is critical to aligning the NCCAP with the PDP, Departmental work programs, local development plans, and the KRA-5. Effective use of budget and policy planning tools that are either in use or being developed is essential to ensure that climate change activities of the Government—whether funded by the Government or by Development Partners—are assessed, coordinated, and evaluated against the NCCAP goals, and that these goals are reviewed effectively in light of the implementation experience.

Objective I: Strengthen the Budget Planning and Execution Framework for Managing Climate Programs, Activities, and Projects

Implement and update climate screening guidelines to provide a common reference point for budget planning and management. In the context of the CPEIR, the CCC and the DBM developed climate screening guidelines to tag PAPs aimed at climate adaptation and mitigation. These were included as part of DBM's FY 2014 budget memorandum. The results of the tagging should be used to identify climate PAPs in the budget planning and management process throughout the Government. The guidelines should be implemented and updated on a regular basis going forward, based on clearly defined processes. In addition, support needs to be provided to develop off-line systems

to enable selected Departments (e.g., DA) that have integrated climate action into their PAPs to more effectively tag and report climate expenditures.

Strengthen the identification, convergence, and funding of climate PAPs by making systematic use of budget processes and tools, including new opportunities created by PFM reforms.

A variety of tools (e.g., budget calls, MTEF) already are available to improve the identification, development, and selection of climate PAPs in the Departments' budget planning and managing decisions. New opportunities introduced as part of broader PFM reforms (e.g., Zero-Based Budgeting, the Program Approach, Bottom-up Budgeting, and the Results-based Performance Management System), when applied to climate PAPs, provide additional opportunities to improve convergence, effectiveness, and efficiency of the outcomes of the Government's climate reform agenda. DBM needs to provide Departments with guidance for more effective use of these tools as well as provide participation incentives, for instance to offset likely higher cost to Departments for design and coordination in the Program Approach.

Develop and adopt climate prioritization tools for use in the budget planning process. In a fiscally constrained environment and facing a broad set of issues, DBM needs to not only identify climate PAPs, it also need to prioritize and sequence them. Departments need support in balancing the need to satisfy their respective mandates while delivering on their climate change related responsibilities. Similar tools should be developed to support LGUs in prioritizing climate action in their Annual Investment Plans.

Establish comprehensive coverage of climate PAPs in national and sector plans, strategies, and budgets, and strengthen reporting of mid-year and end-year implementation. Budget transparency is impeded by the lack of a separate identification of climate change in the economic and functional classification of the budget, multiple sources of the appropriation structure, in-year re-alignments, and off-budget expenditure (e.g., Development Partner funds, Special Accounts, and SPFs). While some of these issues are addressed through the current PFM reforms (e.g., appropriations will be limited to one year), others will remain and should be closely monitored through off-line methods. The DBM is committed to capturing the full spectrum of climate activities through secondary coding of the budget to support strategic planning and reporting. In addition, it is important to continue strengthening the reporting of budget execution of climate PAPs at mid-year and end-year to identify the sources of financial inefficiency on climate expenditures.

Objective II: Align Plans and Strengthen Implementation to Achieve Climate Change Goals

Establish a shared climate program across Government by aligning the National Climate Change Action Plan with the Philippine Development Plan, Department work programs,

local development plans, and KRA-5. The NCCAP provides a reference point for the Government's climate change agenda, but is not explicitly linked to the climate outcomes and outputs of the national plans (PDP, PIP, KRA-5), Department work programs, and local development plans. Planned updates to the PDP and the NCCAP in 2013 provide an opportunity to ensure a coherent set of climate outcomes and outputs among these plans. While the climate screening guidelines provide a common reference point for NCCAP activities, there is still a need to define what should be included in the KRA-5 classification to reduce confusion. Department work programs can be aligned with NCCAP priorities by: (1) increased convergence across Department work programs (e.g., through the Program Approach), (2) reformed sector policy, and (3) improved design, execution, and monitoring of PAPs. At the local level, incorporating CCC should provide guidelines on formulating and incorporating LCCAPs into CLUPs and CDPs, which in turn provide the basis for LGU resource allocation decisions in the Annual Investment Plan. Accountability for the shared climate program can be increased through the formulation of an operational business plan that identifies specific measurable targets by institution, in particular in preparation for phase 2 of the NCCAP.

Formulate, enact, and implement complementary sector policy reform to enable transformative climate action. The Government has already enacted some sector reforms (e.g., renewable portfolio standard, privatization of power generation), and the NCCAP identifies the need for additional reforms in key sectors (e.g., water sector governance, introduction of risk transfer mechanisms). Complementary sector reforms are essential to bring about larger-scale climate results, including through the mobilization of the private sector.

Reform the design of climate PAPs to strengthen relevance to country climate priorities and maximize benefits. The effectiveness of PAPs, in particular the major ones highlighted in this review, in delivering climate results can be improved by enhancing their design in four areas: (1) establishing clear climate objectives and targets reflecting the notion of "intent," (2) improving management of risks and uncertainty, (3) increasing convergence across sectors when relevant, and (4) recognizing and valuing co-benefits. PAP designs that explicitly include NCCAP objectives and that measure their outcomes against the NCCAP targets will strengthen support for effective climate action. The application of climate screening tools and Environmental Impact Assessment also contribute to enhancement of PAP design. This also applies to project design criteria for the PSF and the ICC review criteria. In the context of the Government's large infrastructure development agenda, a robust decision-making framework in support of the design of large PAPs would help address uncertainty and disagreements about the likely effects of alternative climate plans and policies. In addition, the Program Approach can also be used to improve coherence and convergence of climate PAPs at the design stage, resulting in reduced overlap and increased synergy and focus

on priority areas. Finally, greater recognition of the development of co-benefits, in particular those related to poverty alleviation, of climate PAPs can strengthen the design of climate action.

Converge CCA and DRRM agendas at the national and local levels. The policy convergence on CCA and DRRM needs to be reflected in implementation strategies, institutional arrangements, and financing. A first step in operationalizing this convergence at the national and local levels would be to simplify and integrate the vulnerability and disaster risk assessment tools so that they focus on short- to long-term climate risk management; to develop common indicators for monitoring progress; and to standardize reporting on climate-related disaster activities. In addition, at the local level it also entails the integration of CCA/DRRM into LDPs on the policy front, building implementation capacity of the LDRRMCs and LDRRMOs on the institutional front, and the harmonization of LDRRMF and PSF rules that ensure equitable access and cost-sharing agreements to reflect vulnerability and needs on the financing front.

Adopt approaches to optimize mitigation opportunities.

The CCC, the DBM, the NEDA, the DENR, and the DOE have taken steps to identify mitigation opportunities to support the implementation of mitigation action. However, neither the NCCAP nor the development plans (PDP and Department work programs) have formulated an overall national low-carbon and low-emission strategy that optimizes mitigation opportunities or identifies national and sector-specific priorities for reducing GHG emissions in the form of marginal abatement curves. Formulation of such a national strategy can leverage some of the existing initiatives. In addition, strategy implementation would be facilitated by the development of an MRV system, which is essential to reduce uncertainties and to leverage private financing, and by the establishment of data collection systems, baselines, and regulatory institutions. The participation of the private sector could also be strengthened by establishing a national carbon price to provide greater certainty about the value of mitigation activities.

Objective III: Rationalize and Harmonize Climate Financing Instruments

Clarify and streamline rules, as well as the eligibility criteria for climate financing at the local level. Establishing strategic and complementary eligibility criteria, scope, and the level and sources of co-financing—including information on how to leverage funding—across the different sources of financing (e.g., PSF, LDRRMF, and LDF) will improve targeting and increase effectiveness of these financing instruments. For instance, clear rules should be established to preclude financing from multiple sources for the same activity. This streamlining contributes to the convergence on CCA/DRRM. The PSF Board could lead such an effort through the examples it sets in operationalizing the PSF and through the convening power it has due to its size and institutional visibility.

Establish the Climate Finance Group to coordinate climate financing. Financing the climate agenda remains a challenge for mitigation and for national and regional adaptation PAPs. The DOF is in a powerful position to help mobilize and coordinate domestic and international resources, incentivize market-based instruments, and leverage private sector resources to address medium- to longer-term financing gaps. For instance, facilitating the broader use of risk sharing and risk transfer instruments, which can be appropriate for addressing large risks (e.g., catastrophic losses from large-scale flooding or damages from typhoons), requires tools that appropriately measure risks, set affordable premiums, can ascertain quickly whether a risk event has occurred, and can make payouts quickly. Such coordination requires the engagement of CCC, NEDA, DBM, and DOF, and can be facilitated by providing some form of legal basis for the Climate Finance Group.

Improve harmonization, alignment, and coordination of Development Partner financing as part of programmatic support to the Government's climate reform agenda. The Philippine Development Forum Climate Change working group should be made more effective in providing more strategic support for the Government's climate reform agenda. A more programmatic approach that reduces duplication of activities and increases coherence and transparency could strengthen support for the Government's climate reform agenda.

Pillar 2: Enhancing Leadership and Accountability through Monitoring, Evaluation, and Review of Climate Change Policies and Activities

Effective leadership can drive climate change to the top of the policy agenda; systems to monitor results will improve accountability. Clearly defined institutional roles and responsibilities are essential for fostering leadership that can effectively facilitate the translation of policies into action and results. In this context, good use can be made of effective champions of climate change policy and practice. Agency experience can be used in a climate change communication policy.

Objective I: Enhance CCC's leadership role in reviewing and communicating climate change performance

Strengthen the annual CCC review of climate change policy implementation to increase accountability, and generate lessons learned for best practices. Monitoring and reporting of NCCAP implementation by CCC could be improved in three areas. First, the CCC's annual implementation progress report, while

recapping past implementation, does not include desired goals for the coming year, an assessment of the achievements relative to the goals for the prior year, or a summary of key issues leading to performance shortfalls and recommend actions to overcome them. In essence, while there is reporting, there are few suggestions for improvements. Second, the CCA/DRRM agenda remains uncoordinated, but could be improved if the CCC consolidated reporting of all climate-related disaster prevention. Finally, the CCC needs to establish a system to review the LCCAPs and their integration into the Comprehensive Development Plan and the Comprehensive Land Use Plans to generate necessary lessons learned.

Objective II: Strengthen Coordination between CCC and Oversight Agencies and Departments

Create a champion group to establish coordination between the CCC and oversight Agencies. Improved coordination and shared vision are essential for ensuring effective implementation of the Government's climate reform agenda. A key step in facilitating greater coordination between CCC, NEDA, DBM, and DOF is convening a Champions' Group consisting of these Agencies, to lead by example. The Champions would work together based on agreed priorities and strategic directions that include clear enforceable targets, roles and responsibilities, and accountabilities that would establish guidance and reference points for effective climate change governance. Areas where relationships could be clarified include setting entry points for updating the PDP and the NCCAP to ensure consistency, updating the ICC review criteria to reflect climate considerations, establishing review criteria for the PSF (CCC and NEDA), updating climate screening guidelines or enhancing participation in the budget process (CCC and DBM), and identifying financing needs and strategic resource mobilization plans (DOF and CCC and DBM).

Establish coordination between the CCC and the national and local DRRM Councils, and the PSF Board. The MOU between the NDRRMC and the CCC is not fully effective, and will need to be revised and expanded to include operational guidelines that better reflect the policy convergence with a clear focus on the specific responsibilities on climate-related disaster risk prevention. The CCC does not have a local presence, so the role of the LDRRM Councils could be expanded to formulate and implement both DRRM and CCA activities. The PSF Act already defines the broad contours of the relationship between the PSF Board and the CCC, which is mandated to provide technical support to the PSF Board with regard to developing criteria for project selection and prioritization, and in the review of projects. The Implementing Rules and Regulations designate the CCC as interim secretariat to the PSF, adding to the responsibilities of the CCC and making coordination between the PSF Board and the CCC essential for the success of the PSF. The CCC will be in a position to develop the operations manual and develop the review criteria for PSF projects, which are exempted from ICC reviews.

Objective III: Strengthen Monitoring in the Departments and LGUs

Reform existing M&E systems to link with the NCCAP across all levels of Government. The development of a consistent set of climate performance indicators, supported by measurable targets to monitor progress, will further enable activities across the Government to be clearly focused and aligned. The CCC could lead the effort to identify and include climate performance indicators and major final outputs as part of the Government's current efforts to refine them and in establishing the RBPMS across Departments and Agencies. At the local level, climate activities could be reported by the LGUs in their Annual State of the Local Governance Report. A major long-term effort is required to address capacity issues and integrate Departmental M&E systems into climate change policies and goals. Departments are faced with many reporting requirements and limited capacity to use the data for strategic planning purposes, impeding the effective M&E of all Departments' PAPs, including the climate PAPs. Similarly, the newly introduced RBPMS offers the ability to identify entry points for tracking and evaluating climate action, which helps establish a plan and identify priorities.

Adopt tools to document and inform about the co-benefits of climate action and integrate them into the climate prioritization tool. Tools to inform about the co-benefits of climate programs, activities, and projects would strengthen support for prioritizing them in the budget planning process. They would also enable public reporting on NCCAP's gender-related ultimate goal, raising awareness about climate change among the general populace.

Pillar 3: Building Capacity and Managing Change

Weak institutional capacity and low public awareness of the impacts of climate change can limit the effectiveness of climate programs, actions, and projects. Prioritizing capacity building efforts and developing a climate knowledgebase at all levels of Government will pay dividends through a more successful mainstreaming of climate change into policy, budgets, and financing. Formalizing systems and networks to facilitate knowledge sharing is essential to support implementation.

Objective I: Build Skills and Knowledge-base on Climate Change

Develop staff capacity through training programs, throughout the Government. Implementation of the climate reform agenda requires knowledgeable and skilled staff throughout Government. Staff training to raise capacities to carry out these tasks would streamline implementation of the climate reform agenda, and would help significantly with raising institutional memory. Government agencies, in consultation with the CCC, should develop programs to train staff in climate change technology and administration and to adapt business processes to incorporate these skills.

Incentivize generation of knowledge, and facilitate the sharing of knowledge to overcome the significant capacity gap in oversight agencies, throughout Departments, and at the LGU level. PAPs under implementation can provide powerful lessons and data to all areas of government that are involved in climate activities. This points to the need to develop systems for identifying lessons learned from climate PAPs at national and local levels, incentivize staff to extract lessons, use content management systems to help categorize and organize information, and synthesize lessons learned to improve dissemination. To complement the development of internal knowledge, efforts must be taken to establish a strong network with external key players in climate change by supporting the development of a virtual network of practitioners, and through the establishment of Centers of Excellence. The internal and external knowledge need to be made readily accessible to staff to enable them to make informed decisions. The DENR, the lead designated agency for effective dissemination of information at various levels, has an online Climate Change Resource Center that was established to improve science-based knowledge on climate change. At present, the website offers very limited resources on climate change; most of the information available consists of old news articles, suggesting that the website is not regularly updated. This needs to be strengthened and updated with linkages to information portals and repositories, which could help gather the knowledge created by academia or specialized agencies as well as to collect lessons learned from the implementation of programs.

Objective II: Raise Public Awareness of Climate Change

Raise Public awareness of climate change to guide private actions. The majority of Filipino people are already knowledgeable about climate change and are personally taking actions to address climate change risks or reduce emissions. However, the poor and the less educated, who are often the most vulnerable, are also the least knowledgeable about climate change. Raising public awareness through a targeted information education and communication campaign can increase the adaptive capacity of the most vulnerable populations.

Strengthen public support for climate reform through enhanced and informed civil society participation in climate change policy and review. Civil Society Organizations (CSOs) serve a particularly important role in ensuring implementation of the climate change agenda by raising awareness of the issue, building trust in communities, and exerting pressure for increased transparency. This helps garner the necessary popular support for climate change programs and the current reform agenda. The continued participation of CSOs in institutions (the CCC Advisory Board; the PDF, NDRRMC, and LDRRMC proceedings; and the PSF Board) and their input on policies will not only help ensure responsiveness to community needs but also strengthen decisions. The quality of participation by CSOs can be strengthened by providing easy access to knowledge repositories and information portals.

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ANNEX A: Strategic Action Plan

Pillar 1: Strengthening the Planning, Execution, and Financing Framework for Climate Change							
Pillars/Objectives/Activities	Observations on Current Status	Key Linkages	Priority	Risks and Risk Management	Lead Agency	Supporting Agency	
1.1 Strengthen the Budget and Accounting Framework for Managing Climate PAPs							
1.1.1	Integrate climate change into budget planning and management tools.	Reforms underway aim to tag all CC-related spending in budget based on climate screening guidelines); ongoing PFM reforms provide opportunity to strengthen identification, convergence, and funding of climate PAPs.	Link with 1.2.3	VHP1: ²⁵ Use of planning tools underpins all climate change activities.	LR2: ²⁶ Screening Guidelines have been tested with departments, but capacity and institutional issues may impede progress. PFM reforms are already in place.	DBM	CCC, NEDA
1.1.2	Establish comprehensive coverage of all climate PAPs in national and sectoral plans, strategies and budgets.	Budget allocations, special purpose funds, development partner funds are currently partially or not included in climate change monitoring and review.	Link with 1.3.4	HP: but long-term requires systematic institutional change beyond climate PAPs.	HR: Broader set of stakeholders will create constrain progress.	DBM	NEDA , CCC
1.1.3	Strengthen reporting of climate PAPs to cover mid-year and end-of-year implementation.	Financial management and reporting systems are currently not integrated. DBM has begun to implement an integrated financial management system (GIFMIS) on a pilot basis, which is expected to be fully operational in several years.	Link with 1.1.1; ultimately, budget management of climate PAPs depends on tracking actual spending and outcomes.	VHP: Essential for PFM and program budgeting.	HR: PH's decentralized system and the long-term nature of GIFMIS implementation. Administrative strengthening can be useful in short term.	DBM	DOF
1.2 Align Plans and Strengthen Implementation to Achieve Climate Change Goals							
1.2.1	Establish a shared climate program.	NCCAP does not include all climate change activities in Department work programs. PDP does not include all NC-CAP outcomes and outputs. Update PDP, sectoral, and local plans and NCCAP to align outcome. Plans need to be developed based on common economic and climate projections.	Link with 1.1.2, 1.2.2, 1.2.3, 1,2,5	HP: Increased alignment is important to ensure the risks and opportunities to development programs are adequately recognized in the planning stages.	MR: Necessary, but success dependent on comprehensive coverage.	CCC, NEDA	Departments, LGUs

²⁵ VHP = Very High Priority, HP = High Priority, MP = Medium Priority

²⁶ LR = Low Risk, MR = Medium Risk, HR = High Risk

1.2.2	Adopt complementary sectoral reforms.	Departments are responsible for implementing the NCCAP. Transformative impacts on climate change will require sectoral reforms in programs of key Departments: energy, transport, agriculture, infrastructure, and environment.	Link with 2.2.1, 2.2.2; Depends on coordinated leadership from CCC/DBM/NEDA.	VHP: Will be driving force for transformative change in next phases of NCCAP.	HR: Lack of incentive for more effective coordination and program formulation among lead agencies.	Key Departments	CCC
1.2.3	Reform design and execution of climate PAPs.	Most PAPs have not been designed with a climate lens, resulting in lost opportunities. The ICC criteria were last revised in 2005 and do not include climate change considerations. Revisions to the criteria including robust decision-making frameworks would make investments more resilient.	Link with 3.2.1 Can strengthen ties between appropriations and implementation performance. Adds depth and aids design of climate PAPs.	VHP: Increasing efficiency and effectiveness of is essential for generating support for the climate agenda.	MR: Lack of traction of the CCC with the Departments, and NEDA will remain the biggest risk.	NEDA, CCC	Departments
1.2.4	Converge climate change adaptation and climate-related DRRM.	CCA/DDRM policy convergence has converged on adaptation as appropriate way address climate related disaster prevention, but policy has not been operationalized. Thus far only draft guidelines have been issued on integrated assessment of vulnerability to climate change, particularly at provincial and local level.	Link to 1.1.1 screening guidelines, and 2.2.2 coordination between CCC and DRRM council.	VHP: Paradigmatic shift away from disaster response to disaster prevention is cost effective and essential for sustainable development.	MR: Depends critically on progress in uniformly tagging climate PAPs in national and local government. Limited incentives for coordination.	CCC DBM	NDRRMC
1.2.5	Adopt tools and processes to optimize mitigation opportunities.	Current policy is focused primarily on adaptation measures, but significant increases in mitigation including on REDD+ are being implemented. In addition, steps are being taken to develop MRV systems and low carbon strategies for specific sectors. Establishing a notional price for GHG emissions could support the low emission strategies by signaling to private investors.	Links to 1.3.3 and 1.3.4.	HP: Will improve Philippines profile internationally and potentially attract financing. Provides development co-benefits.	HR: CSO and public have been outspoken on the need for international financing for mitigation, carbon prices can't be perceived as imposing costs.	CCC	NEDA, Departments

1.3 Rationalize and Harmonize Climate Financing Instruments

1.3.1	Streamline rules and eligibility criteria for local climate change financing.	Sources of local climate financing are fragmented with different eligibility criteria, cost sharing arrangements. Strategic and complementary eligibility criteria, including information on how to leverage funding, will increase targeting and effectiveness of financing instruments and contribute to operationalizing a joint Climate Change Adaptation-Disaster Risk Reduction and Management framework.	Link with 2.2.3; Operationalization of the PSF provides an opportunity to harmonize across sources of financing.	HP: Reducing fragmentation of sources of financing increases accessibility of funds and improves efficiency.	HR/MR: LGU capacity Limited incentive for harmonization across sources of financing.	DOF	CCC
1.3.2	Adopt reform of selected fiscal instruments after reviewing their climate change impact.	Taxes and subsidies applied for other purposes may have unintended consequences. PH has no fuel subsidy, but other tax and spending instruments should be reviewed.	Ensures consistency across fiscal policies.	MP: A limited number of such programs have been introduced recently.	MR: Divergent stakeholder interests.	DOF	DBM, CCC, Departments
1.3.3	Establish the Climate Finance Group to coordinate climate financing.	The CFG remains an adhoc group. The DOF, directly or through the formal creation of the CFG, needs to develop a plan that identifies financing needs, develops appropriate instruments to address risk-sharing, and mobilizes needed resources. DOF is already engaged in catastrophic risk finance.	Link to 2.2.1, 2.2.2	VHP: NCCAP identifies climate financing as an implementation challenge. Significant gaps exist in the approaches to be used for financing mitigation at all levels and coordination of adaptation at the national and regional levels.	MR: International climate financing, esp. for climate risk, is a new complex area.	DOF	CCC
1.3.4	Strengthen development partner support for Government's climate reform agenda.	The climate change Working Group of the PDF had been established to share information among development partners. This forum should be used more effectively to establish joint support for the programmatic approach to climate change planning, financing and M&E.	Link to 1.3.2, 1.3.3, 1.1.1, 1.12,	HP: Coordinated support can be a catalyst for change.	MR: Risks mainly relate to making the Working Group effective.	DOF	CCC, development partners

Pillar 2: Enhancing Accountability through Monitoring, Evaluation, and Review

	Pillars/Objectives/ Activities	Observations on Current Status	Key Linkages	Priority	Risks and Risk Management	Lead Agency	Supporting Agency
2.1 Enhance CCC's role in reviewing and communicating climate change performance							
2.1.1	Strengthen the annual CCC review of climate change policy implementation	The CCC is required to submit an annual progress report on progress in implementing NCCAP. The reports would be more effective if they include the desired goals of the coming year together with an assessment of the achievements relative to the goals for the prior year and a consolidated reporting of all climate disaster prevention activities.	Links climate change review more effectively to budget policies and review processes.	VHP: Establishing effective influence of CCC on policy formulation and implementation oversight is critical to long-term success	MR: Lack of traction of the CCC with the bureaucracy.	CCC	NEDA, DBM, NDRRMC
2.2 Strengthen Coordination between CCC and Oversight Agencies and Departments							
2.2.1	Develop terms of Reference for all CCC Advisory Board members	Based on the experience of the past few years, coordination between CCC and executive agencies (most are Board members) can be streamlined and formal processes established to reduce transaction cost and effectiveness.	All climate change reforms depend critically on coordination between CCC and key NGAs.	VHP: Critical for reform. Most agencies are represented in the CCC Advisory Board.	MR NGAs continue to prioritize core executive functions..	CCC	CCC Board Agencies
2.2.2	Convene a Champions Group	The CCC, NEDA, DBM and DOF are mandated to oversee the implementation of the NCCAP, PDP, Budget Management Memoranda and the Philippine Investment Plan, key elements of climate change governance and public expenditure.	Link with 2.1.1, 2.2.1	VHP: Leadership by the four agencies would enable other Departments to conceptualize and operationalize their own climate change action.	MR: Bureaucratic boundaries need to be clarified and possibly adjusted.	CCC, NEDA, DBM, DOF	
2.2.3	Strengthen CCC coordination with the national and local DRRM Councils	The CCC does not have a local presence, so the role of the LDRRM Councils could be expanded to formulate and implement both DRRM actions and adaptation activities.	Link with 2.1.1, and 1.2.4	HP: A necessary clarification of CCC functions to strengthen focus on areas of comparative advantage.	HR Bureaucratic boundaries need to be clarified. Current MOU between NDRRMC and CCC does not have sufficient operational detail.	CCC	NDRRMC

2.2.4	Operationalize CCC responsibilities relative to the PSF Board	The CCC is mandated to support the PSF, including identifying criteria for projection, review projects for approval by the board	A necessary refinement of CCC duties	VHP: Operationalizing the PSF is important for fiscally constrained LGU, but also establishing country systems for climate financing.	MR: the limited resources compared to the large LGU needs make it critical to define clear and transparent criteria for project selection	CCC, PSF	
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2.3 Strengthening Monitoring in the Departments and the LGUs

2.3.1	Review Departmental M&E systems and link to climate change M&E requirements	Departments are faced with numerous reporting requirements and have limited capacity to use the data for strategic planning purposes; Few climate indicators and targets are in place	Linked to activities 2.2.1 and 2.1.1 Essential for long-run improvement in climate change M&E.	HP: M&E systems are the key to increasing accountability	MR Department capacity constraints	CCC	NEDA DBM
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Pillar 3: Building Capacity and Managing Change

	Pillars/Objectives/ Activities	Observations on Current Status	Key Linkages	Priority	Risks and Risk Management	Lead Agency	Supporting Agency
3.1 Build Skills and Knowledge-base on Climate Change							
3.1.1	Establish a climate change database and learning system.	Systems to identify and disseminate best practices are limited.	Link to 1.2.3, 3.1.2; also cross-cutting—all aspects of the climate change program.	VHP: The efficiency and effectiveness of climate PAPs can be improved from lessons learned from current experiences.	MR: 1) Department capacity constraints. 2) Availability of appropriately skilled practitioners that can capture lessons.	Departments	
3.1.2	Develop climate change training programs.	Mainstreaming of climate change is new for all Departments and Agencies. All Agencies need to identify skill gaps and training needs, CCC needs to liaise with the NGAs and facilitate a consolidated training program.	Cross-cutting—all aspects of the climate change program.	VHP: Knowledgeable staff is essential to implement climate reform agenda.	MR: Trainees need to be used effectively.	CCC	NGAs LGAs

3.1.3	Create a virtual network of practitioners.	The technical panel of experts has yet to be formally established and activated. Currently the CCC works with a few experts on an individual basis.	Cross-cutting—all aspects of the climate change program.	HP: CC capacity can be greatly expanded by establishing a virtual network of practitioners that can be galvanized through the organization of symposiums, South-South exchange, or similar events.	MR: 1) CCC capacity constraints, and 2) availability of appropriately skilled practitioners.	CCC	
3.1.4	Establish Centers of Excellence on Climate Science.	The NCCAP identifies the creation of Centers of Excellence on Climate Science. Plan needs to be devised to select and develop terms of reference for the centers. The scope should be expanded to provide linkages to development.	Link to 3.1.2; also cross-cutting all aspects of the climate change program.	HP: natural opportunities exist to showcase innovations in climate action that facilitates leadership.	MR: 1) CCC capacity constraints, and 2) availability of appropriately skilled practitioners.	CCC	
3.1.5	Establish an information portal on climate change.	The DENR, the lead agency designate for IEC, has an online Climate Change Resource Center (CCRC) to disseminate information at various levels. The website has not been regularly updated.	Link with 3.2.1; but also cross-cutting—all aspects of the climate change program.	HP: Engages the public and generates demand for climate action.	MR: Limited Department capacity, willingness of Departments to collect and share best practices.	DENR	CCC, Departments
3.2 Raise Public Awareness of Climate Change							
3.2.1	Raise public awareness of climate change	Majority of Filipinos are aware of climate changes. Knowledgeable citizens are taking actions on climate	Cross-cutting	HP: Engages the public and reduces need for more expensive public actions.	LR:	CCC	
3.2.2	Strengthen public support for climate reform agenda through enhanced civil society participation.	CSO were instrumental in the formulation of the CCA, NFSCC, NCCAP, and the PSF. They have a representative in the CCC advisory board, the PSF Board, and in the national and local DRRM Councils.	Cross-cutting: CSOs provide essential support to all aspects of the climate change policy and implementation.	HP: Active CSO engagement is important for the continued public support of the climate reform agenda.	LR: CSOs are already quite engaged.	CCC	NDRRMC

ANNEX B: Framework for Analysis and Limitations

A CPEIR is a systematic examination of the factors that determine the ability of public institutions, policies, financing, and related processes in a country to translate its climate agenda into desired climate results efficiently and effectively. It consists of a quantitative and qualitative assessment of public expenditures and financial management, and a qualitative assessment of climate policies and institutional arrangements. A more detailed framework is included in Part V of the Extended Technical Report.

Data sources: The CPEIR draws upon a) primary data collected from the DBM, CCC, NEDA, selected Departments, Agencies, and LGUs; b) documentation available in the sectors (e.g., sector strategies, plans, reporting documents, and analytical work); and c) interviews and consultations were carried out with the respective agencies at national and local levels through workshops and technical meetings.

Conceptual challenges that prior CPEIRs have identified include the absence of climate change function in the classification of the Functions of Government (COFOG), difficulties in identifying the incremental cost of an adaptation intervention (e.g., upgrading of public infrastructure), and difficulties attributing adaptation and mitigation co-benefits to expenditures within a program/project.

Scope

Policy review: laws, strategies, and policies related to environment and climate change enacted since 1999, with a specific focus on those enacted and implemented since the adoption of the Climate Change Act of 2009.

Institutional review: Processes, approaches, tools, capacity, and institutional arrangements and coordination in selected Coordinating bodies (CCC, NDRRMC, and CCCC) and oversight bodies (DBM, DOF, and NEDA), implementing line Departments (DA, DENR, DOE, DOST, and DPWH), and LGUs (Albay and Makati).

Public expenditure review: Climate change appropriations and obligations by Department and NCCAP priority, departmental implementation capacity, sources of financing, financing gap of five Departments (DA, DENR, DOE, DOST, DPWH), some attached agencies, and two LGUs (Makati and Albay). See Figure 1 for Departments tagged under KRA-5 and CPEIR. Timeframe: 2008–2013 national level; (Makati and Albay 2008–2012).

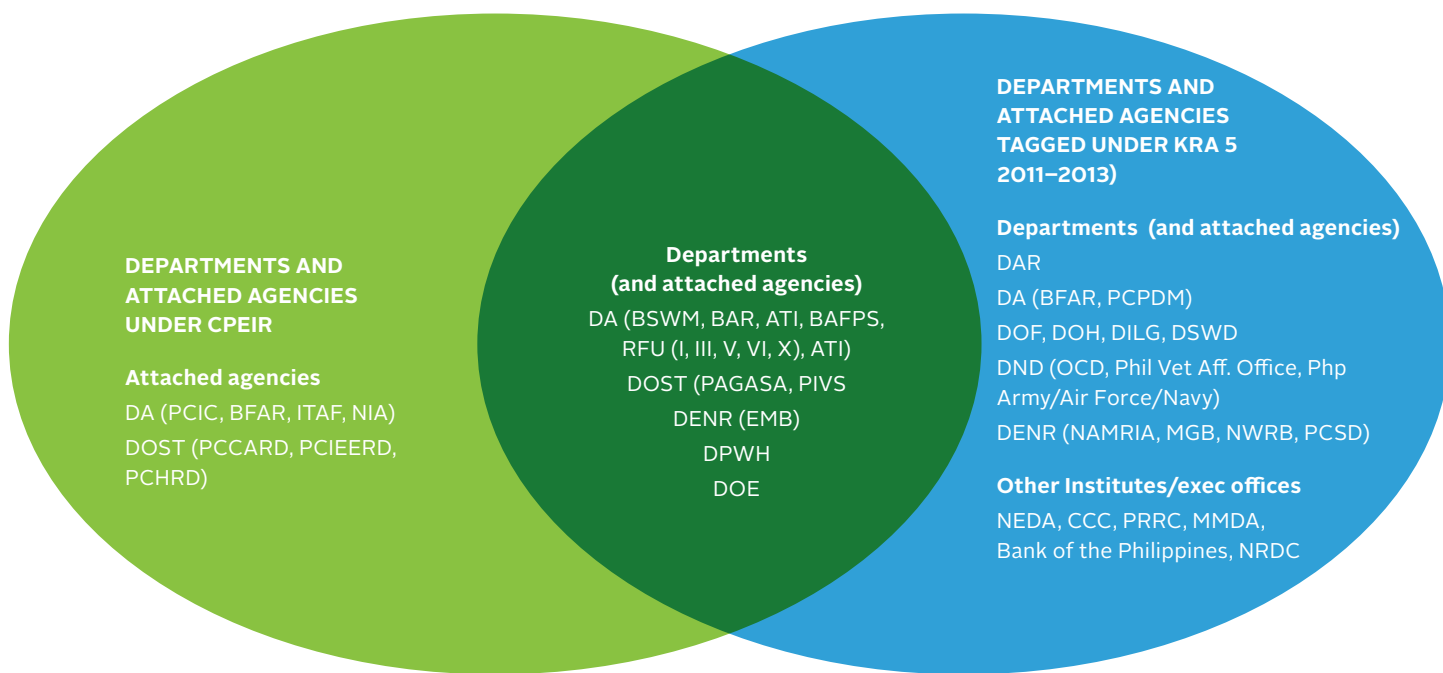
The CPEIR is based on a policy-based identification of climate expenditures. The scope of government expenditures is confined to the national budget, excluding extra-budgetary spending and fiscal support. The analysis is limited to expenditures categorized under operations (excluding support to operations) and inscribed under the OSEC budget plus selected special accounts (e.g., Fund “151,”). Financing of donor projects and programs integrated in the national budget are covered in the CPEIR, but not projects that are funded directly by external donors and managed outside the national budget. At the subnational level, the scope of the assessment is confined to the inclusion of appropriations in the LDPs and AIPs.

Public Finance Management: budget planning and process (integration of Climate actions into budget proposals), use of strategic planning and screening tools (NCCAP, MTEF, PIP, work programs, guidelines), the decision-making process (budget call, stakeholder engagement, budget hearings), and procedures (programmatic approach), budget transparency and execution.

Establishing the climate change classification required the development of a list of PAPs with the related appropriations, allotments, and obligations for 2011–2013 (and when available for 2008–2010). They were identified based on the tagging of PAPs under KRA 5 in 2011–2013 and the tagging of climate-related programs and projects by the Departments in their 2011–2016 work programs (see Box 1). The list was revised and further updated based on the identification of NCCAP activities in the budget and in consultation with the CCC and Departments. As a result, a final consolidated list was prepared covering activities in the NCCAP, the KRA-5, and the Departments’ work programs.

The climate change classification categorizes PAPs at central and local level based on whether they contribute to adaptation or mitigation. Using the Rio Marker on Climate Change as a reference, an activity was considered in support of (1) climate change mitigation if it reduces GHG emissions into the atmosphere or enhances GHG absorption from the atmosphere or (2) climate change adaptation if it reduces the vulnerability of human or natural systems to the impacts of climate change and risks related to climate variability by maintaining or increasing adaptive capacity and resilience. In the case of an activity contributing to both adaptation and mitigation, the respective projects or programs were documented separately to avoid double counting.

Figure 1. Tagged Departments and attached agencies under KRA 5 and CPEIR



Box 1: Climate Change Classification Initiatives

Philippine Development Plan (PDP). In the context of preparing the 2011–2016 PDP, NEDA identified climate actions in several of the PDP's chapters (agriculture and fishery, infrastructure development, and natural resource and environment sectors), which led to the integration of 61 climate-related projects in the PIP.

Key Results Area 5, DBM identified in the 2011, 2012, and 2013 national budget programs and projects that support the KRA 5 objectives (promoting sustainable natural resource utilization and CCA and mitigation strategies).

Departments' work programs 2011–2016. Based on the request of the CCCC, the Departments pertaining to the cluster identified CC-related programs and projects in the GAA 2011 and NEP 2012 and prepared budget proposals for existing programs and projects as well as planned activities for 2012–2016. Out of the 10 Cluster Departments, 5 are part of the CPEIR.

Multilateral Development Bank Classification system. In order to improve tracking and reporting of climate finance–related commitments and investments, several MDBs have developed a joint approach to establish a practical, harmonized climate finance classification system.

Limitations:

- Detail of activities often not available in GAA. A number of NCCAP activities are merged with several other activities in the same budget line (e.g., activities related to capacity building or climate research are included with similar activities). Similarly, it is not possible to distinguish the incremental component related to adaptation within a PIP (e.g., the additional construction costs of irrigation systems or water infrastructure to render the investment more climate resilient) as these costs are not documented in separate budget lines and, in most cases, are included only in a few projects and programs.
- Identifying climate appropriations in DA's budget as only a few activities are documented separately while for most others detailed information about the program/project's components are missing
- Incomplete data set on (appropriations and obligations), financing needs for CC-related activities and for some Departments limiting assessment of budget execution.
- Simple categorization of PAPs into adaptation and mitigation supporting PAPs not based on concept of "climate finance additionality."
- Lack of alignment to establish linkages between PIP, Department Work programs and budgets
- Limited documentation to allow separate identification of small-scale activities
- Short history and less that comprehensive coverage resulting in the omission of irrigation and transportation PAPs at DOTC.

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