MINISTRY OF PLANNING AND INVESTMENT

FINANCING VIETNAM'S RESPONSE TO CLIMATE CHANGE:
Smart Investment for a Sustainable Future

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Laying the foundation for resilient low-carbon development through the Climate Public Expenditure and Investment Review

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ABBREVIATIONS

AF	Adaptation Fund
AfD	Agence Française de Développement (French Agency for Development)
AP	Action Plan
APRF	Adaptation Prioritization Framework
ARD	Agricultural and Rural Development
ASBR	Annual State Budget Report
AusAID	Australian Agency for International Development
BAU	Business as Usual
CBDRM	Community-based Disaster Risk Management
CCA	Climate Change Adaptation
CCD	Climate Change Delivery
CCM	Climate Change Mitigation
CCR-FR	Climate Change Response Financing Report
CCVI	Climate Change Vulnerability Index
CCWG	Climate Change Working Group
CDM	Clean Development Mechanism
CIDA	Canadian International Development Agency
CIFs	Climate Investment Funds
COP	Conference of the Parties
CPEIR	Climate Public Expenditure and Investment Review
CTF	Climate Task Force
DANIDA	Danish International Development Agency
DFAT	Department of Foreign Affairs and Trade of Australia
DHMCC	Department of Meteorology, Hydrology and Climate Change
DP	Development Partner
DRRM	Disaster Risk Reduction and Management
DSENRE	Department of Science, Education, Natural Resources and Environment
EIA	Environmental Impact Assessment
EU	European Union
EVN	Electricity Vietnam
FM	Financial Mechanism
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GFSM	Government Finance Statistics Manual (IMF)

GGAP	Green Growth Action Plan
GHG	Greenhouse Gas
GoV	Government of Vietnam
ICB	Inter-Ministerial Coordination Board
IDD	Investment Decision Document
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
JICA	Japan International Cooperation Agency
K-EXIM	Korea Eximbank
KPI	Key Performance Indicators
LCOA	Low Carbon Options Assessment
LEAP	Long-range Energy Alternatives Planning
LM	Line ministry
M&E	Monitoring and Evaluation
MACC	Marginal Abatement Cost Curve
MARD	Ministry of Agriculture and Rural Development
MIE	Multilateral Implementing Entities
MOC	Ministry of Construction
MOF	Ministry of Finance
MOIT	Ministry of Industry and Trade
MONRE	Ministry of Natural Resources and Environment
MOST	Ministry of Science and Technology
MOT	Ministry of Transport
MPI	Ministry of Planning and Investment
MRV	Monitoring, Reporting and Verification
MTEF	Medium-Term Expenditure Framework
MTFF	Medium-Term Fiscal Framework
NA	National Assembly
NAMA	Nationally Appropriate Mitigation Action
NCCC	National Committee on Climate Change
NCCS	National Climate Change Strategy
NDS	National Strategy for Natural Disaster Prevention, Response and Mitigation
NFDS	National Forest Development Strategy
NIE	National Implementing Entity
NPFPD	National Plan on Forest Protection and Development
NTP	National Target Program
NTP-EE	National Target Program on Energy Efficiency and Conservation
NTP-RCC	National Target Program to Respond to Climate Change

ODA	Official Development Assistance
PEFA	Public Expenditure Financial and Accountability
PFM	Public Financial Management
PG	Policy and Governance
PM	Prime Minister
PPC	Provincial People's Committee
REDD	Reducing Emissions from Deforestation and Forest Degradation
SCCF	Special Climate Change Fund
SEA	Strategic Environmental Assessment
SEDP	Socio-Economic Development Plan
SEDS	Socio-Economic Development Strategy
SOFC	State-Owned Forestry Companies
SO	Standing Office of the National Climate Change Committee
SOE	State-Owned Enterprise
SP-RCC	Support Program to Respond to Climate Change
ST	Scientific, Technological and Societal Capacity
TABMIS	Treasury and Budget Management Information System
TCCRE	Typology of Climate Change Response Expenditure
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
VGGS	Vietnam Green Growth Strategy
VPCC	Vietnam Panel on Climate Change
WB	World Bank

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FOREWORD

Vietnam is already experiencing and will continue to confront the serious consequences of climate change, underscoring the need for further action to safeguard Vietnam's development gains. Not only highly populated urban areas and poor rural areas will be impacted; but key economic activities in agriculture, fisheries and other sectors, which represent important drivers of Vietnam's job creation and poverty reduction, are also at risk. Vietnam's rapid economic growth underpins development progress but is increasingly carbon intense, which if unmitigated puts the country on a path to become a significant emitter of greenhouse gases.

The Government of Vietnam (GoV) fully recognizes the threats of climate change as well as the significant development benefits associated with the implementation of well-structured climate change adaptation and mitigation responses. The GoV has launched a progressive policy and institutional agenda, which includes the release of National Climate Change and Green Growth Strategies and Action Plans as well as a variety of climate change programs linked, for example, to disaster risk reduction and reduced emissions from deforestation and forest degradation. To oversee and coordinate implementation of climate change action, the GoV established the National Committee on Climate Change as well as, more recently, the Vietnam Panel on Climate Change. In order to enhance the effective implementation of these strategies and mobilization of resources for climate change response and green growth, the Ministry of Planning and Investment, with support from the World Bank and the United Nations Development Program, has conducted a Climate Public Expenditure and Investment Review. The review, completed in early 2015, provides a thorough analysis of the organizational, institutional, investment, and financial structure for action on climate change, identifies achievements and challenges in Vietnam's current approaches, and recommends innovations in policy, institutions, and financing to promote further climate actions.

The CPEIR adds value to the development of the GoV's climate change and green growth resource planning and mobilization as it provides information for decision making, a model of how to use the budget process for identifying, planning and tracking climate change expenditure, and offers a basis to integrate climate change and green growth into the selection and appraisal processes for domestic and foreign investment. The CPEIR also promotes increased coherence across sector policies and programs by fostering a link between the state budget and climate change and green growth policies, which helps assess the effectiveness of the institutional framework for climate change reporting and monitoring, measuring the extent to which the GoV's institutional capability meets Vietnam's needs for successful climate change response.

The report contributes to strengthen the initial phase of the implementation of Vietnam's key climate change and green growth policies. It helps mainstream climate change response in the formulation of the five-year Socio-Economic Development Plan (SEDP) for 2016–2020, and the GoV's state budget estimate (post-2015 climate change and green growth financing response). The review also enables the GoV to better align Vietnam's goals and contributions with global targets and efforts, in support of Vietnam's emerging role as an important player in regional and global discussions on climate change.

We are pleased that this review is instrumental in informing the government's planning and financing for climate change and green growth, thereby strengthening Vietnam's resilience against the impacts of a warming world, making communities less vulnerable, and tackling the emissions challenge as Vietnam continues its journey towards a greener and more prosperous future.

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EXECUTIVE SUMMARY

Climate change impacts and a carbon-intense economy threaten Vietnam's development progress

Climate-related hazards have adverse effects on national growth and poverty reduction, affecting the poor and several sectors of the economy simultaneously. According to the Climate Change Vulnerability Index (CCVI), Vietnam is considered one of 30 "extreme risk countries" in the world. The country already experiences increased temperatures, sea level rise, intensifying storms, and more frequent floods and droughts, which cause loss of life and damages to the economy. The rural poor are at high risk given their reliance on natural resources as a livelihood, in particularly for agriculture. The Mekong River Delta and Red River Deltas already suffer from saltwater intrusion threatening agricultural productivity and the millions of people relying on these watersheds for their livelihoods. Urban populations living in informal settlements are also at risk; particularly to heat and humidity extremes, while residents living in coastal cities are adversely affected by floods and storms.

At its current rate of growth, Vietnam will become a major global greenhouse gas (GHG) emitter. While Vietnam has historically been a minor contributor to global warming, projections show a fourfold increase of total net emissions between 2010 and 2030.[1] Vietnam's emission growth is one of the highest in the world and its carbon intensity of GDP is now the second highest in the region (after China); and it is still increasing.[2] These increases are mainly driven by the projected growth in the use of coal for power generation, which is predicted to account for more than 50 percent of the energy mix by 2030.

1. SR Vietnam (2010). Vietnam's Second National Communication under the United Nations Framework Convention on Climate Change. Hanoi: Socialist Republic of Vietnam, Ministry of Natural Resources and Environment, page 56.
2. World Bank (2014). *Charting a Low Carbon Development Path for Vietnam.* WB, ESMAP and DFID.

The time is right for a review of Vietnam's climate change response to ensure ongoing progress and to safeguard development gains

The Government of Vietnam initiated the Climate Public Expenditure and Investment Review (CPEIR) to advance an understanding of the current policy and institutional architecture as well as to assess current spending on its climate change response to help guide future climate change-related expenditures and policy implementation. The report has three components: (i) a policy, institutional and methodological review; (ii) an analysis of climate change response (CC-response) spending in five line ministries and three provinces; and (iii) recommendations and an action plan. The main goal of the CPEIR is to provide an overview of the current CC-response activities and formulate recommendations for how to improve priority setting, capacity building, coordination, expenditure management, and mainstreaming of CC-response strategies into socio-economic development plans. This was done by assessing the landscape of policies, programs and initiatives and their alignment with the Socio-Economic Development Plan (SEDP) to identify potential coordination, supervision, and capacity gaps. The review also assessed the characteristics of climate spending over the past four years, in particular against its main CC-response actions under Vietnam's National Climate Change Strategy (NCCS) and the Vietnam Green Growth Strategy (VGGS). Recommendations and actions were devised to: (1) help enhance strategic policies, coherence, priority setting, and improvement of support to the National Climate Change Committee (NCCC) for informed decision-making, and (2) suggest ways to strengthen sector and fiscal policy development, increase alignment between spending and policy priorities, address gaps, and develop stronger financing mechanisms and resource mobilization across all available sources of financing. On these aspects, the report reviewed

spending by five key central government ministries, the Ministry of Agriculture and Rural Development (MARD), Ministry of Environment and Natural Resources (MONRE), Ministry of Industry and Trade (MOIT), Ministry of Construction (MOC), and Ministry of Transportation (MOT), along with spending in three selected provinces, Bac Ninh, Quang Nam, and An Giang, located in the North, Central and Southern regions of Vietnam respectively.

The CPEIR is carried out at a critical time as the Government of Vietnam prepares a new national climate change response support program and with the forthcoming development of the SEDP for 2016–2020. The review comes after the National Climate Change Action Plan and the Green Growth Action Plan (2012–2020) have been issued by the Prime Minister, and just prior to the formulation of the five-year SEDP for 2016–2020, allowing the recommendations to feed into its formulation and implementation. The review also coincides with the end of the NTP-RCC (after its second five-year phase) and the current phase of the SP-RCC, both of which are scheduled to end after 2015. As the Government of Vietnam (GoV) is preparing a new national climate change response support program to build upon and serve as a follow up to the two programs, the findings and recommendations of the CPEIR provide an important backdrop to ensure that policy, investments, capacity, and knowledge barriers for climate change and green growth are adequately addressed. In addition, the CPEIR provides the Government with an overview of its CC-response in order to set targets that are aligned with global goals and efforts, and further strengthen national CC-response systems to meet the requirements for direct access to new global climate finance such as the Green Climate Fund. The findings and recommendations of the CPEIR can also inform efforts by the GoV to build its policy and financing base and technical capacity during the intermediate period between a possible Paris UNFCCC COP_21 agreement in 2015 and the period after 2020, when Vietnam will be expected to implement its Intended Nationally Determined Contributions (INDCs) to address its post-2020 emission reduction targets.

Vietnam's climate change strategies and actions create a strong basis for a robust response, but gaps remain

The Government of Vietnam recognizes the challenges it faces with increasing climate change, and has responded strongly by pursuing development of a CC-response policy and institutional agenda that aims to address its increasing climate vulnerability and promote a low-carbon, green growth development path. In June 2013, the Central Executive Committee of the Party adopted Resolution 24/NQ-TW on *Active Response to Climate Change, Improvement of Natural Resource Management and Environmental Protection.* The Resolution declared the fight against climate change as "one of the most important tasks of the entire political system." Earlier, two strategies were introduced by the GoV: the National Climate Change Strategy (NCCS, 2011) and the Vietnam Green Growth Strategy (VGGS, 2012), each at the core of Vietnam's CC-response. While the NCCS aims to build resilience to climate change effects and includes actions to mitigate GHG emissions, the VGGS specifically addresses low-carbon development, green production, including technology innovation and restoring natural assets, and promotion of green lifestyles. Both strategies were accompanied by action plans with specific programs. Two related strategies are the National Strategy for Natural Disaster Prevention, Response and Mitigation (2007), and the National REDD+ Action Program (2012), each of which supports the development of a low-carbon and climate resilient economy.[3]

A number of other programs and initiatives have also been adopted to complement policy implementation. Two key programs are (i) the National Target Program to Respond to Climate Change (NTP-RCC), which stresses the

3. REDD: Reducing Emissions from Deforestation and Forest Degradation, 2012.

need for mainstreaming CC-response in social and economic development, and (ii) the Support Program to Respond to Climate Change (SP-RCC), a financing mechanism that enables scaling up of CC-Response and coordination of policy development and dialogue between the GoV and DPs. Other important programs include (iii) the National Target Program for Energy Efficiency (NTP-EE), (iv) the national Community-Based Disaster Risk Management Program (CBDRM), and (v) the National Scientific and Technological Program on Climate Change, which aims to complement the NTP-RCC by supporting efforts that provide scientific and technological evidence for effective CC-responses.

Combined, this policy and institutional framework make up the basic structure of Vietnam's climate change response (CC-Response). However, measures could be put in place to better monitor and evaluate how well the goals of these policies are being realized, and ensure alignment across policies and programs to work towards unified goals. Establishing a more effective CC-response will require developing more capacity, mobilizing more resources, and providing more support across national and sub-national levels of the Government and other partners.

Challenges encountered in the collection of information regarding capital and recurrent expenditures on CC-response across ministries, departments and provinces underscore the need for a consolidated tracking system. The most significant practical issue was that data on public expenditure are not accessible for ready analysis because they are held in a highly decentralized form at departmental and divisional level in both ministries and provinces. In addition, the specific climate objectives of climate change relevant projects are often not sufficiently explicit to allow a coherent assessment of their extent or nature. It also became clear that recurrent spending plays a small but significant (and likely increasingly important) role in the delivery of CC-response activities. The data analysis thus involved detailed discussions of all projects at departmental and divisional level. These discussions helped to deepen the analysis and suggested the need for continuing dialogue among GoV agencies and provinces on the most effective way to incorporate and track CC-response spending.

Implementation of national action plans address key climate change issues, but harmonization with sector and sub-national policies is necessary

Mainstreaming CC-response policies into sector policies has progressed in some cases, but remains limited in others. Efforts need to be strengthened in all sectors, but some more than others. Good progress has been made in areas such as water, energy and disaster risk reduction and management (DRRM), while the forestry sector, roads and transportation, and construction could particularly benefit from deeper integration. The planning process for the SEDP 2016–2020 provides an opportunity to make progress in mainstreaming, financing and advancing Vietnam's CC-response in all areas. Recent advances in budgeting and accounting provide significant opportunities for streamlining data management, thereby underpinning efforts to improve coordination among agencies and levels of government.

The GoV has improved its planning and fiscal management system over the past three decades, providing a good basis for climate change mainstreaming, but it is necessary to make specific improvements in the planning and budgeting process to deepen integration. Public Financial Management (PFM) has been modernized, which eases the process of making changes to ensure mainstreaming of CC-responses. Some potential entry points for improvement include strengthening of:

- Strategic and annual priority setting to address climate change issues effectively.
- Procedures for tracking and defining project objectives and performance relevant to CC-responses.
- The annual planning and budget cycle to help establish an effective climate change policy implementation framework.

Adaptation policy is considered an immediate priority and is furthest advanced in practical implementation, but more needs to be done to ensure harmonization with DRRM

Mainstreaming climate change in disaster sectors has been significant, but could be strengthened, and further integration with climate policy is necessary. The GoV has carried out a significant amount of work to establish scenarios of climate change impacts in different regions to help formulate and implement adaptation responses, but the use, uptake, and integration of the scenarios and climate risk information needs to be strengthened and taken into account when planning a CC-response. The National Strategy for Natural Disaster Prevention adopted in 2007 and its action plan (introduced in 2009) promulgated national, sector and provincial socio-economic development planning frameworks. As a result, the majority of current SEDPs at the national and provincial level, as well as sector master plans for the period 2011–2020, have included DRRM. However, it has not taken into account the potential impacts of climate change. In addition, the Law on Natural Disaster Prevention on Control (2013), which identifies natural disaster prevention and control activities, does not prioritize financing for DRRM. It is important to harmonize the implementation of this strategy with the adaptation programs and actions of the NCCS, National Action Plan on Climate Change (NAPCC) and NTP-RCC. Improving alignment can help unify and strengthen the approach to reducing vulnerability to the impacts of climate change.

Mitigation policy has become a domestic priority and the present policy framework offers specific targets for GHG mitigation, but these are often conflicting and difficult to achieve due to disincentives

Reducing GHG emissions requires overall and sector-specific target setting and mainstreaming of mitigation in many sub-sectors. The GHG emission mitigation targets across policies and programs have proven diverse (in units, baseline and time-scale), as well as partially overlapping or repetitive, and partially unrealistic. They are thus difficult to compare and need to be better aligned. For example, both the NTP-EE targets and the targets in Decision 1775/QD-TTg on the management of GHG emissions and carbon markets are not aligned with the VGGS targets. National targets should be translated into sector-specific targets, which has been done, for example, in the agriculture and rural development sector (MARD Decision 3119/QĐ-BNN-KHCN). However, delivering sub-sector targets will require mainstreaming low-carbon approaches into sub-sectors.

A strong coordinating body to manage CC-response is key to successful implementation

The GoV established the National Committee on Climate Change (NCCC) in 2012, to lead, coordinate, harmonize, and monitor climate change and green growth, but its

oversight role needs to be enhanced. Chaired by the Prime Minister, with ministers of all key ministries as members, the NCCC is responsible for coordination between ministries and oversight of the implementation of the NCCS, VGGS and other related programs and initiatives. The Ministry of Natural Resources and Environment (MONRE) supports the NCCC through the Standing Office (SO) of the NCCC and is the technical focal point for CC-response policy. The Ministry of Planning and Investment (MPI) supports the Inter-ministry Coordination Board (ICB) for the VGGS through a secretariat. The NCCC should guide the design and functioning of a comprehensive and well-coordinated climate finance mechanism in Vietnam.

A Typology of Climate Change Response Expenditure assists with tracking and monitoring spending on climate change

The CPEIR employed a Typology of Climate Change Response Expenditure (TCCRE), which offered a unifying framework to map current CC-spending in Vietnam. To assess the range of activities related to CC-spending, it was necessary to develop a TCCRE to categorize projects in groups that corresponded to (i) international classifications of CC-response spending; (ii) the policy objectives and elements included in the NCCS and VGGS; and (iii) the activities defined in current sector and provincial CC-relevant projects. The typology constitutes a *climate change program classification* that allows elements of GoV and Development Partner (DP) spending on climate change objectives to be clearly identified and tracked, and climate change outputs and outcomes evaluated relative to cost. Applying the TCCRE enabled a detailed outline of the distribution of effort, strengths and weaknesses, and the potential impact of spending by the ministries and provinces surveyed. The typology contains three hierarchical pillars: *Policy & Governance (PG), Scientific, Technological and Societal Capacity (ST), and Climate Change Delivery (CCD).*

The TCCRE is designed to assess the extent to which the climate change funded project contributes to adaptation, mitigation, or both CC-response objectives, and provides a basis for estimating CC-response spending. A four-step process was used to categorize each climate change relevant expenditure element (investment and recurrent) in the CC-response typology and then assess the proportion of CC-response expenditure and its focus on adaptation or mitigation. Assessing CC-relevance at a detailed level plays an important role in analyzing CC-responses. This process was applied to the analysis of the selected ministries and provinces and its application is further recommended for all entities involved in CC-relevant general government spending. The CC-response cannot be tracked directly from Treasury transactions data, but it can be assessed from total spending by project or recurrent spending classified as being relevant to climate change.

The share of Government financing for CC-response was constant from 2010 to 2013, while the total amount has decreased slightly

The analysis of CC-response spending allocations[4] in Vietnam in the five line ministries and three provinces from 2010–2013 offered valuable and detailed insight into the GoV's commitment to respond to climate change. Direct and indirect CC-response spending accounts for a substantial share of the budgets of the line ministries during this time period (18 percent) and remained fairly constant, though the total amount of the studied allocations experienced a slight decrease from 2010 to 2013 (by 11 percent in real terms). The rate of decline reflects an overall decrease in public spending, which is largely attributed to the government's fiscal tightening. The total amount of CC-response spending from the five line ministries accounts for 0.1 percent of the country's GDP. As a reference, the WB's 2014 *Charting a Low Carbon Development Path for Vietnam Study* found that a move from a business as usual (BAU) to a low-carbon development path would require an incremental investment cost of one percent

4. The climate change-response expenditure included in this analysis does not constitute financing directed towards the additional cost of development as a result of climate change. The costs of the CC-relevant project are accounted for as CC-response expenditure based on the criteria developed for the TCCRE in Chapter 2 (e.g., 100 percent of the project is attributed if projects explicitly state a predominant CC objective or are fully dedicated to exclusively delivering CC-related benefits, or sit within a GoV program dedicated to CC).

of annual GDP during 2010–2030 (which does not account for the additional cost of adaptation).

The GoV's CC-response allocations for the five line ministries primarily consist of investment projects that have climate resilience co-benefits. The majority of CC-response projects being implemented, 58 percent on average and 42 percent of the annual CC-response allocations, can be characterized as having "low" or "marginal" relevance to the CC-response, as classified by the TCCRE. These projects consist of activities where indirect adaptation and mitigation benefits may arise but where these are not explicitly listed in project objectives or stated results.

CC-response is focused on large-scale infrastructure projects that build resilience, but a growing budget is dedicated towards low-carbon action

The allocations largely consist of MARD and MOT projects, which in total occupy 92 percent of 2010–2012 CC-response expenditures and 2013 appropriations. The majority of these projects are directed towards large irrigation and road transport projects that have climate resilience co-benefits. While MONRE's CC-response budget is relatively small, MONRE is the lead agency for the NCCS and Action Plan as well as for the NTP-RCC, enabling it to facilitate the close coordination of policymaking and capacity building required across ministries. MOC, MOT and MOIT play an important role in mainstreaming, in particular in promulgating policies, regulations and standards that facilitate a CC-response in their respective sectors.

Given the focus on irrigation and transport projects, CC-response expenditure allocations are heavily focused on adaptation, but there is a growing amount of financing directed towards mitigation from the recurrent budget. From 2010–2013, the share of total CC-response expenditure directed toward adaptation was about 88 percent, while the share directed toward mitigation accounted for only two percent. By 2013, the mitigation budget increased to 3.9 percent, mainly due to increases in recurrent spending through the NTP-EE. Recurrent CC-response spending has also financed projects that contribute to both adaptation and mitigation objectives, totaling about 10 percent of CC-response spending.

Both ministerial level and provincial budgets have been focused on Climate Change Delivery

The bulk of spending at the ministerial level is focused on concrete climate change delivery (CCD) activities (89 percent). The large share targeted to CCD is mainly due to funding of large infrastructure development projects under MARD and MOT. The GoV's CC-response spending has provided limited finance towards some tasks that are essential for further developing Vietnam into a climate-resilient low-carbon economy. For example, saline intrusion, water quality and supply and improving resilience in fisheries and aquaculture has received little attention, and only a very small part of the budgets in the five ministries has been dedicated to concrete mitigation such as low-carbon energy generation (0.02 percent of VND 4 billion) and efficiency measures (0.45 percent of 76 billion).

Only a small proportion of CC-response expenditures have been allocated to Scientific, Technological, and Societal Capacity (ST), and Policy and Governance (PG). While ST accounts for 9 percent, PG accounts for only 2 percent of CC-response spending. Most of the work under ST and PG is carried out under MONRE's relatively small budget, with 61 percent supporting ST and nearly the remainder of the budget focused on PG, while only a very minor part is aimed at CCD tasks in water management and treatment. The heavy emphasis on CCD tasks, particularly those related to water resources, highlights the need for robust appraisal, monitoring and evaluation methodologies and for strong institutional coordination to ensure value for money spent.

All three provinces studied in the CPEIR have given primary emphasis to CC-delivery activities and have climate budgets growing at a faster pace than their total budgets. This finding is consistent with the relatively limited capacity at provincial level for ST and PG and the need for central and sector inputs on policy and scientific support. As spending from sub-national governments account for the majority of total capital spending by the GoV, this further highlights

the need for planning, budgeting, tracking, and monitoring CC-response expenditure at the local level. Building capacity in sub-national governments for applying the TCCRE to these expenditures is therefore necessary.

Financing of the recurrent budget is key as it funds mitigation response as well as Scientific, Technological and Social Capacity (ST) and Policy and Government (PG) activities

The GoV's CC-Response spending is dominated by investments (92 percent), while recurrent spending is much lower; though recurrent spending has increased as a share of overall spending in recent years. In the period from 2010 to 2013 the recurrent budget of the five line ministries saw a slight decrease, but with the overall share for mitigation tasks growing. MONRE and MARD contribute most to the recurrent budget (26 and 20 percent respectively). The recurrent budget only accounts for about 8 percent of central government expenditure. In 2011 there was a small upturn in the recurrent budget overall; however, funding has steadily dropped since then, with the share for mitigation tasks growing from 7 percent in 2010 to 22 percent in 2013. MOIT's financing—though not large—is mostly focused on mitigation, which is predominantly funded under the recurrent budget with a focus on energy efficiency activities.

Increased attention on financing for ST and PG is important as they support enabling activities that develop the capacity for delivering CC-response activities. 94 percent of financed ST activities are project and programs that develop science and technology as a foundation for policy formulation, impact assessment, and the subsequent identification of appropriate climate change adaptation and mitigation measures. The very small portion of CC-response expenditure dedicated to PG activities predominantly finances the development of action and sector plans. MONRE's financing for ST and PG is under the recurrent budget.[5]

The NTP-RCC has played a significant role in the recurrent budget. It has provided strong technical inputs to Vietnam's CC-response by supporting mostly recurrent spending (of which it accounts for about 40 percent in total) that proactively targets activities to improve the country's enabling environment and capacity to deliver CC-response investment. About 51 percent of the NTP-RCC expenditure is directed towards developing ST, and about 31 percent directed at PG.

CC-response spending is not fully aligned with NCCS and VGGS policy objectives

Tracking CC-response spending against the NCCS and VGGS policy objectives illustrates that the expenditures (in the studied line ministries and NTPs) are targeted towards food and water security (63 percent) and sustainable infrastructure (74 percent). In addition, approximately 17 percent of CC-response financing was not capable of being tagged in accordance with VGGS policy objectives, confirming that financing directed towards some resilience activities is not captured within the VGGS policy framework, whose main objective is to promote low-carbon green growth. The linkage between expenditures and NCCS and VGGS policy objectives has the potential to provide key longitudinal information in CC-response oversight. A high-level picture of expenditure against relevant policies is a useful tool to refine and strengthen Vietnam's CC-response.

5. Data on MOC recurrent expenditures is not available for the CPEIR.

Vietnam has mobilized its own resources for CC-response, but Development Partner funding also plays an important role

CC-response spending is mostly financed by domestic sources, but DPs have contributed 31 percent of total CC-response expenditures implemented by the five line ministries and through the NTP-RCC and NTP-EE. Official development assistance (ODA) for CC-response has risen strongly over the past decade and has provided substantial, although variable, support to mitigation and adaptation projects. The main emphasis has been to support CCD activities. However, both loan and grant assistance during the CPEIR's study period show a relative increase in PG activities. The NTP-RCC is an example of the influence DP funding can have on CC-response through the State Budget given its considerable emphasis to enabling activities that support mainstreaming of climate action and capacity development. Given that the ODA data analyzed in the CPEIR is derived from two sources (MPI and from the line ministries), this illustrates the need for a more streamlined and consistent CC-response reporting structure.

Development partner financing has also triggered a dedicated GoV SP-RCC Financial Mechanism (created in 2010) to finance CC-response projects. A review of the selected projects to date shows that financing has been mostly directed towards activities with an emphasis on improving the resilience of coastal areas and riverbanks. The SP-RCC financial mechanism (FM) has selected 61 projects for a planned allocation of approximately VND 17,900 billion (over the lifetime of the activities), of which the SP-RCC FM has planned to finance 80 percent and provinces the remaining 20 percent. Thus far, 16 projects (of around VND 4,400 billion) are being financed, with approximately VND 815 billion committed for 2013 and 2014. Tracking SP-RCC FM projects with national strategic climate change and green growth objectives indicates that allocations are largely covered under the NCCS strategic objective "suitable proactive response actions to sea-level rise in vulnerable areas," and are generally not captured under the VGGS as they consist of adaptation activities. Given the narrow scope of financing across the NCCS strategic objectives, and that the SP-RCC has been identified as a financing source for the implementation of the GGAP, this highlights the need to review the planning and review processes for project selection under the SP-RCC FM.

To move forward, the CPEIR recommendations offer a number of short-term and long-term initiatives across the planning and budget cycle

These recommendations are underpinned by the findings and the analyses of the review and, together with its proposed Action Plan, are based on a framework that is organized around two pillars. As described below, each pillar includes a set of components, objectives and underlying activities that will guide its implementation and help the GoV improve its CC-response across a diversity of sources. Implementation of the CPEIR recommendations, facilitated by the formulated National Action Plan, should help the GoV improve its climate change response and its ability to mobilize, allocate and use climate financing effectively across a diversity of sources (See Annex IV for a synopsis of the value added by the CPEIR). By doing so, Vietnam will boost inclusive green growth, competitiveness and poverty reduction while providing leadership and contributing to the knowledge base for addressing this global challenge.

The Socio-Economic Development Plan is a major opportunity for mainstreaming CC-response in development planning

A major effort is needed to establish CC-response as a central element of the forthcoming five-year SEDP. Improving forward planning of the national climate change frameworks through the 2016–2020 SEDP is paramount to establish a strategic direction for CC-response plans and expenditure. Mainstreaming CC-response into sector and provincial programs can have a major effect on the GoV's CC-response. It will also further uncover the CC-response potential in each of the major sectors). This will facilitate the development of detailed guidelines for each ministry and province on the approach to be taken in the preparation of action plans and CC-relevant projects and programs for the 5 year and annual plans and budget submissions. The SEDP process also provides an opportunity to review and establish joint activities to develop multi-sectoral and area-based planning and projects to address high-priority vulnerable regions and issues. To introduce CC-response most effectively in the 2016–2020 SEDP, it is critical that MPI and MONRE build on the findings of this CPEIR, particularly with regard to mainstreaming CC-response into sector and provincial programs that can have a major effect on climate change response.

The Typology of Climate Change Response Expenditure (TCCRE) can assist Vietnam with continued monitoring, budgeting and planning for CC-response

The mapping and analysis of current climate-relevant activities conducted in the context of the CPEIR demonstrate how the typology can be used to review and guide the management of CC-response policies at city, provincial and national levels. The review identifies areas that have not received climate change financing, or have received limited financing. Alongside more detailed analysis, it can highlight whether a CC-response is mainstreamed into projects that have opportunities for adaptation or mitigation delivery or climate change co-benefits. It provides opportunities to investigate some of the weaknesses and strengths of CC-response spending coverage. It is also clear that developing comprehensive mapping and monitoring of CC-response efforts from all financing sources must be improved and expanded in order to strengthen the planning and budgeting process, avoid overlaps, and encourage complementarities. The broader implementation of the TCCRE can help the GoV manage its CC-response program, establish accountabilities, and strengthen channels for financing the program.

Enhanced use and strengthening of climate reporting is necessary to progressively ensure improvement in the effectiveness of the delivery of CC-response spending

Effective and strategic reporting is essential to CC-response policy credibility. The GoV should regularly prepare and release a Climate Report to show how CC-response money has been spent, giving a broad assessment of achievement against the stated objectives. Such a report is an essential component of climate change policy implementation. The availability of regular and timely data on CC-response expenditures, through application of the TCCRE, would greatly enhance the relevance and significance of the report and would buttress political and administrative executive control and direction of the overall CC-response program. Over time, reports should become more comprehensive including assessments from all sectors and provinces to fully reflect policy developments and achievements in relation to the GoV's adaptation and mitigation goals. The Treasury and Budget Management Information System (TABMIS) can help incorporate all climate change relevant projects in the State Budget, and can use its accounting, reporting, and

bank reconciliation facilities to track spending and ensure full financial accountability of all transactions processed through the system. As such, the pilot work on channeling ODA through TABMIS that is in place for National Target Programs (NTPs) should be accelerated to all DP programs.

The GoV should review its current capacity, and speed up the development, of a CC-response linked monitoring and evaluation (M&E) system and development of strategic key performance indicators (KPIs) to assess impact. Designing an M&E system for climate change is a complex process due to the cross-cutting and mainstreamed nature of CC-response. However, a cohesive M&E system can be initiated with an early emphasis on capacity enhancements and a focus on strategically important indicators at all levels of implementation. In the long term an effective M&E system will require sustained effort, supported by MPI and MONRE. M&E on CC-response spending is currently inhibited by limited definition of project objectives, lack of verifiable KPIs, compounded by a highly decentralized management of many national CC-response programs. Effective and strategic M&E is essential to CC-response accountability and long-term planning. Combined with the further implementation of the TCCRE, progressive implementation of an M&E support system will help address these issues.

Pillar B: Climate Policy and Institutional Coordination & Strengthening

Strengthening the role of the NCCC for policy coordination and priority setting between adaptation and mitigation policies will help enhance linkages to the planning and budget cycle

The role of the NCCC will be vital in the oversight of the NCCS, VGGS and other climate-related programs to ensure that they are coordinated and their implementation is harmonized. Harmonizing priorities across key adaptation and mitigation policies and programs and linking these with the budget and planning cycle is essential for setting priorities. It will require significant strengthening of the NCCC's oversight role so it can better assist with synchronization of overall program and project priority setting mechanisms, and ensure strengthened alignment between financing mechanisms, budgeting, and mitigation and adaptation policy delivery.

Strengthening the information flow to the NCCC on achievement of policy objectives, complemented by a harmonized M&E system, can reduce the risk of fragmentation, improve targeting of resources and maximize mitigation and adaptation benefits. This will help ensure that all relevant information is provided to the key agencies. The NCCC's role should therefore be significantly strengthened. Setting up appropriate technical capacity, combined with strengthened high-level coordination, helps set priorities at a technical and evidence-based level in all program activities, as well as allow for high-level assessment of the overall balance of the CC-response program (with scientific support from the VPCC), combined with identification of technical and financial gaps. Enhancing the capacity of the NCCC's Standing Office (SO) can also make coordination more effective, and improve the provision of higher quality information for the NCCC. This could be achieved by (i) establishing a harmonized M&E system, including climate finance tracking and indicators linked to policy objectives; (ii) building capacity in the SO to collate and present information; and (iii) building the capacity of CC-response focal points in provincial entities, in order to report climate change progress, planning and constraints to the SO. It is also important to (iv) create common reporting templates to reflect progress in the NCCS, VGGS, and related strategies, programs and initiatives; and (v) develop succinct progress reports of the CC-response in sectors and provinces.

Monitoring and Evaluation (M&E) and climate reporting is necessary to enhance CC-response efforts

Developing and harmonizing an M&E system, accompanied by synchronized priority setting criteria, will improve coherence of targeting, planning, funding allocation, and reporting for CC-response. The GoV should review current capacity and initiate the development of a CC-response M&E system, including the development of strategic key performance indicators to assess the impact of

CC-responses at both the policy and program level. A unified M&E is essential to CC-response credibility and long-term planning, and will usefully support the oversight and target setting role of the NCCC. The NCCC's supervision role covers the NCCS and VGGS, but M&E and reporting by the SO should be harmonized with closely related programs on DRRM and energy efficiency. The role of the SO is vital for channeling high-quality, verified and succinct information to the NCCC, to enable the NCCC to realize its oversight, prioritization and coordination role. The SO needs to receive high-quality information, meaning that systems and capacities at focal points in ministries and provinces must also be strong.

Climate change adaptation planning, financing, and policy implementation processes need improvement to effectively respond to growing climate change risks

Harmonizing adaptation and DRRM will support a more effective response to building resilience. While a considerable amount of work has already been done to establish basic scenarios of climate change and assess vulnerabilities and risks that Vietnam's different regions and sectors face, vulnerability studies should be extended to all relevant sectors and provinces in order to identify and secure assets against climate change-related vulnerability. This process should be formalized and institutionalized to ensure that progressive resilience building is aligned to revised versions of the climate change scenarios as they are generated. Both climate-derived vulnerability and DRRM responses across a number of line ministries cover adaptation responses, but a more effective response to vulnerability should be instigated that increases alignment of adaptation and DRRM approaches both in higher-level policy objectives as well as in institutional coordination. Adaptation and DRRM teams should jointly develop more integrated vulnerability assessments and link project-level M&E systems to high-level assessment against adaptation indicators. This should lead to a more comprehensive yet practical M&E system built on international practices in a locally tailored way. Strengthening the national platform on DRRM and adaptation would improve knowledge exchange and coherence of responses, and help establish clear priorities. For example, regulations and standards for climate proofing of infrastructure can help build resilience and should be addressed in the SEDP process.

Clear targets on greenhouse gas emissions (GHG) and energy sector reform are necessary to ensure mitigation goals are reached

Mitigation policy implementation and GHG emission targets should be evidence-based and linked to global efforts. While mitigation often involves complex policy issues that need to be resolved progressively, the window of opportunity is limited and immediate actions are necessary to capture the full potential of clean technologies and to avoid inefficient infrastructure lock-ins. As a result, implementing mitigation policies will be subject to complex policy discussions, and a high degree of uncertainty will affect the type and amount of direct public expenditure that will be needed to develop effective GHG mitigation policies. The CPEIR recommends a review and consolidation of the GHG emission targets, especially for the period from 2020 in the context of UNFCCC negotiations, with clear indication of what Vietnam can contribute voluntarily and what can be achieved with international financial and technical support. For the GoV to meet its demonstrated commitment to low-carbon growth, a national Monitoring, Reporting, and Verification (MRV) system needs to be developed to identify, track, and report GHG emissions. Key tasks for implementing mitigation policy are to: (i) review current mitigation activities and develop consolidated mitigation targets for post-2020 and an implementation roadmap for low-carbon options; and (ii) establish a consistent fiscal policy framework to encourage reduction of fossil fuel use. In addition, the role of REDD+ as part of an overall coherent framework for mitigation needs to be determined.

Mitigation efforts in Vietnam cannot be achieved without energy sector reform, including phasing out indirect subsidies on fossil fuels for power generation as well as transport, accompanied by support measures for low income households and certain businesses that must cope with short-term energy price increases. These reforms will promote energy efficiency and investment in renewable energy. The bulk of energy investment and trade is executed through energy SOEs, and the CPEIR recommends increased transparency in cost structures and strengthened independent energy market regulation.

Strengthening the climate finance architecture would allow coordination and mobilization of resources for CC-response activities and identification of key policy fiscal risks and gaps

The climate financial architecture should be strengthened and unified as a result of stronger planning and budgeting, strategic M&E development, and more effective inter-ministerial coordination. The development of a climate budget, tracking of actual spending, basic M&E, and effective coordination of all these activities will provide a basis for better identifying financial gaps and overlaps. Rather than a multitude of programs and strategies competing for available funds, it should be possible to review the budget result and the Climate Report to narrow the scope of financing mechanisms to more specific targets and sources of funds. The existence of a more comprehensive mechanism will, in itself, help to attract funding sources and provide a basis for strengthening and designing suitable financing mechanisms. As such, the financing framework should be harmonized to focus clearly on adaptation and mitigation policy implementation goals and to strengthen or establish appropriate mechanisms for financing linked to these goals.

A concrete National Action Plan sets the path for strengthening Vietnam's CC-response to build a low-carbon, climate resilient future

To make the above recommendations a reality, steps need to be taken in the form of a national action plan, with emphasis on immediate actions to establish a basic CC-response platform for the next SEDP. The proposed action plan contains two main sets of activities that correspond to the Pillars articulated above, and which are proposed to be implemented in the short-, medium-, and long-term. The first component specifies activities required in the immediate future to identify strategic priorities for the SEDP and the planning, budgeting and financing cycle. The second component specifies those activities required for policy coordination and institutional strengthening to support adaptation and mitigation actions, target setting, and financing mechanisms.

The CPEIR recommends that the GoV takes eight steps to implement the CPEIR recommendations on a pilot basis (with the entities that have already been involved in the CPEIR). These steps should be initiated immediately as part of the upcoming annual and five-year 2016–2020 SEDP planning and budgeting cycle. The recommended steps are:

- Refining the TCCRE guide and training/capacity-building in line ministries and provinces
- MPI begins establishing strategic guidelines for climate change spending and mainstreaming climate change policies in the 2016–2020 SEDP
- MPI issues the revised TCCRE guide requiring climate change tags, objectives, indicators, and milestones for all climate change relevant projects
- MPI progressively generates CC-response expenditure estimates for all climate change relevant projects in pilot entities

- Preparation by the Government of a pilot draft memorandum on climate budget for the annual State Budget Report
- MOF directs all piloted line ministries and provincial finance departments to report on total spending for all CC-relevant projects
- MPI and MONRE strengthen monitoring and evaluation (M&E) processes on CC-relevant projects during project implementation
- Preparation of a pilot Climate Budget Report

Two templates are provided to assist the GoV to develop its response. The first, a *Results Framework,* highlights the expected outputs and outcomes of proposed activities to implement the CPEIR recommendations. It describes their linkages with other activities (to help identify priorities and sequencing) and the risks that need to be taken into account for effective implementation. The second template includes all of these activities in a National Action Plan, together with other ongoing CC-response activities, which will be the basis for more detailed work plans for each of the responsible agencies and units. These units will specify milestones and a timeline for completion of each activity. All activities are tagged with the TCCRE element that they will contribute to, since implementation of the CPEIR will itself be a component of Vietnam's CC-response strategy.

INTRODUCTION

Vietnam is vulnerable to the impacts of climate change—those which are already occurring and those that will only intensify in the coming decades. The country experience increases in temperature and sea levels, stronger storms, floods and droughts. For example, under an average emissions scenario, the average annual temperature will rise by about 2–3°C by the year 2100 compared to the last decades of the 20th century; sea levels will rise between 42 and 72 cm, depending on the coastal region; and the highest daily rainfall will increase by up to 150 percent in parts of the northern mountainous region.[6] Vietnam is exposed to climate-related natural hazards due to its geography and topography, and economic development and a population increase, in particular in cities in the Mekong River Delta and along the coast, are increasing exposure as well as risks, whilst climatic shocks and stresses are increasing.

Climate-related hazards will have adverse effects on growth and poverty reduction, affecting several sectors of the economy simultaneously. The agricultural sector is expected to be significantly impacted by climate change, particularly in the Mekong River Delta, which is Vietnam's most productive agricultural area and essential for food security and rice exports.[7] The Mekong River and Red River Deltas already experience saltwater intrusion, which is projected to worsen with rising sea levels. The aquaculture sector, which accounts for five percent of the country's GDP, will also be affected by increasing tropical cyclone intensity, salinity intrusion, and increasing temperatures. Capture fisheries are expected to be impacted by warmer oceans and ocean acidification associated with rising atmospheric and ocean carbon dioxide concentrations, and substantial reductions in catch potential are anticipated.[8]

The urban poor are one of the most vulnerable groups to climate change, particularly those who live in informal settlements. A significant portion of Vietnam's urban population lives in informal settlements, making them vulnerable to excessive heat and humidity stresses. Coastal cities in particular are exposed to climate change related risks, including increased tropical storm intensity, storm surges, sea-level rise, and sudden-onset river flooding. These cities encounter floods associated with a sea-level rise and also increased rainfall intensity, and face significant risks due to the lack of drainage and damage to sanitation and water supply facilities. Ho Chi Minh City is projected to be among the cities in the region most affected by a sea-level rise and increased storm surges.

At current rates of growth, Vietnam will become a major greenhouse gas (GHG) emitter. Over the last decade, Vietnam accounted for the fastest growth in GHG emissions in the region. Vietnam's emissions growth was one of highest in the world and significantly higher than other countries in the region such as China, Malaysia, Thailand, Indonesia, Cambodia, and the Philippines. Vietnam's carbon intensity of GDP is now the second highest in the region (after China) and it is still increasing.[9] Official projections of Vietnam's energy emissions show a fourfold increase between 2010 and 2030, and total net emissions will grow threefold over that period.[10] These increases are mainly driven by the projected growth in the use of coal for power generation, as its share in the power generation mix is expected to triple from 17 percent in 2010 to 58 percent in 2030. Fossil fuels for power generation and transport are comparatively low in Vietnam as a result of price controls and indirect subsidies, which partly explains the relatively high energy and carbon intensity and low investment rate in non-hydro renewable energy.[11]

A number of climate change adaptation and mitigation activities can be "no-regret" measures that promote growth while supporting poverty alleviation efforts. Adaptation measures often reduce both immediate and long-term exposure to climate related hazards and disaster risks. Independent of the exact extent of long-term climate change effects, such no-regret or low-regret measures protect lives and livelihoods. Adaptation investments often involve large capital expenditures that may be labor-intensive and thus facilitate job creation. Low-carbon measures such as renewable energy generation, improving energy efficiency, and providing sustainable transport options can strengthen Vietnam's energy security and increase competitiveness. They can also reduce local air pollutants that have substantial health costs and that often disproportionately affect the poor. Acting early to avoid investment in technology and infrastructure that will "lock

6. MONRE (2012). *Climate Change and Sea Level Rise Scenarios for Vietnam.*
7. World Bank (2010). *Economics of Adaptation to Climate Change: Vietnam.* Washington, D.C.
8. World Bank (2013). *Turn Down The Heat: Climate Extremes, Regional Impacts, and the Case for Resilience.*
9. World Bank (2014). *Charting a Low Carbon Development Path for Vietnam.* WB, ESMAP and DFID.
10. SR Vietnam (2010). *Vietnam's Second National Communication under the United Nations Framework Convention on Climate Change.* Hanoi, Socialist Republic of Vietnam, Ministry of Natural Resources and Environment, page 56.
11. UNDP (2014). *Green Growth and Fossil Fuel Fiscal Policies in Vietnam—Recommendations on a Roadmap for Policy Reform.* Hanoi, United Nations Development Programme.

in" high carbon economic structures, such as coal fired power plants, is also important.

To accelerate the climate change response (CC-response) process through the State Budget and create conditions to better mobilize other sources of funds, the Government sought advisory services from the World Bank (WB) and the United Nations Development Programme (UNDP) to conduct a Climate Public Expenditure and Investment Review (CPEIR). This review comes after the national Climate Change Action Plan and the Green Growth Action Plan (2012–2020) have been issued by the Prime Minister, and just prior to the formulation of the five-year Socio-Economic Development Plan (SEDP) for 2016–2020, allowing the recommendations to feed into its formulation and implementation. The GoV initiated the CPEIR to:

i. *Assess options for tagging and tracking climate change and green growth relevant expenditures in the budget* against existing national policy frameworks with reference to international standard typologies;

ii. *Provide analytical tables and charts showing climate change expenditure trends and focus* through the selected channels for the period 2010–2013;

iii. *Clarify alignment of recent climate change and green growth response spending* under the national budget, with government climate priorities and policies;

iv. *Review the existing climate finance architecture and some elements of the fiscal policy framework* to help improve existing capacity and consolidate the set-up and strengthening of fiduciary procedures for resource mobilization;

v. *Assess the policy, institutional and governance structures* at national and local levels to recommend steps to further integrate climate change response objectives in government planning, budgeting, monitoring and review processes; and

vi. *Suggest appropriate directions for further development in light of the Vietnam context and international experience and recommend improvements* in the planning and delivery of the Government climate change response program.

The CPEIR uses a policy-based approach and innovative tagging system to provide a unified framework that identifies the full range of activities and expenditures involved in CC-response delivery. This analysis focuses on budget and institutional practices of five line ministries (MONRE, MOIT, MARD, MOC, and MOT) and three provinces (An Giang, Bac Ninh, and Quang Nam) representing the three regions of Vietnam, which face significant exposure to climate change and different ecosystems, development, and climatic challenges. The CPEIR offers a set of analytical findings, recommendations, and an accompanying action plan to implement the recommendations.

The report consists of five chapters:

Chapter 1 offers an assessment of the current climate change policy and the institutional framework for CC-response in Vietnam.

Chapter 2 provides a summary of the CPEIR methodology and of the development of a climate change typology linked to Vietnam's CC-response policy.

Chapter 3 includes an analysis of the CC-response spending relative to policy objectives and categories of climate change activities and sources of financing.

Chapter 4 offers recommendations to incorporate climate change policy in the planning and budgeting cycle and to establish a CC-policy review.

Chapter 5 consists of a national action plan to implement the CPEIR recommendations, including through the establishment of a climate change budget and its annual review.

The report is complemented by three background notes on (i) Vietnam's climate change policies, institutions, and public financial management reforms; (ii) the CPEIR methodology and (iii) a CPEIR Typology Guide of Climate Change Response Expenditure (TCCRE) in Vietnam. The report and background notes are available on the website of the Ministry of Planning and Investment that was established to track Climate Finance Options for Vietnam (http://cfovn.mpi.gov.vn), as well as on the websites of the World Bank (www.worldbank.org/en/country/vietnam) and UNDP (www.vn.undp.org).

1. ASSESSING VIETNAM'S CLIMATE CHANGE POLICY AND INSTITUTIONAL FRAMEWORK FOR CLIMATE CHANGE RESPONSE

Key Findings from Chapter 1

1. *Vietnam has **responded strongly** to the challenges of climate change through rapid development of national, sector and sub-national policies and programs and a high-level coordinating structure (the National Climate Change Committee—NCCC).*
2. *The NCCS and VGGS and related national action plans address the key CC-response policy issues. However, along with sector and sub-national policies, their **implementation needs to be harmonized** in order to align **climate change** adaptation and mitigation objectives at national, sector and sub-national level.*
3. *Organizational strengthening is necessary to further **support the NCCC** to perform its task of oversight and coordination of CC-response policy planning, prioritization, implementation, monitoring and reporting.*
4. *Adaptation and mitigation responses raise different technical and policy challenges, but both can be improved through **strengthening technical capacities and harmonized monitoring and evaluation** (M&E) of the results of CC-response spending.*
5. *Diverse GHG mitigation targets have been issued by the GoV. **Consolidated national targets for GHG reduction for the post-2020** period must be defined and communicated to the UNFCCC.*
6. *Some progress has been made to mainstream the sector and provincial climate change response but gaps remain, particularly in policy and institutional capacities and processes. **More direction is needed in the planning, budgeting and implementation cycle.***

The primary focus of this chapter is to review Vietnam's climate change response (CC-response) policies, planning mechanisms and associated institutional set-up at the national, sector and provincial level. It outlines the development and present status of Vietnam's climate change policy framework and organizational responsibilities.[12] It first examines the main CC-response policies of the GoV, including areas for strengthening. It then focuses on key elements of the institutional framework that coordinate and support the CC-responses. The chapter then examines adaptation and mitigation policy responses. It outlines differences in technical and policy requirements in each case and the importance of reflecting achievements regularly in a harmonized and strengthened strategy, planning, budgeting and evaluation cycle. The government system of planning and budgeting is critical for developing a reliable and timely overview of the way that CC-response policy is financed and implemented at all levels of government, and key areas for strengthening this process are identified. Finally, climate change mainstreaming is considered at the sector and local level and areas in which mainstreaming can be enhanced are identified. A coordinated improvement of both procedural and organizational elements of the institutional framework is seen as essential to establishing an effective and efficient CC-response policy, leading to increased effectiveness and flows of climate financing and related expenditures.

1.1 The development of climate change policy in Vietnam

Vietnam's continuing economic progress is threatened by its exposure to climate change. Vietnam is one of the "extreme risk" countries according to the 2014 Climate Change Vulnerability Index (CCVI) of Maplecroft,[13] an index of the vulnerability to climate change over the next 30 years that evaluates exposure to extreme climate-related events, the sensitivity of populations, and the adaptive capacity of countries.

Vietnam's economic growth is carbon intensive. While Vietnam has historically been a minor contributor to global warming, official projections show a threefold increase of total net emissions between 2010 and 2030. The forestry sector is expected to become a carbon sink but emissions will rise, in particular in the energy sector.[14] Vietnam's economy is both energy intensive and intensive in GHG emissions per unit GDP in comparison with neighboring countries.[15]

Vietnam's climate change and related policies have developed strongly over the past decade. Action to initiate a national response to climate change started in the late 1990s and Vietnam's Initial Communication to the UNFCCC was published in 2003. The CC-response has developed rapidly

12. Collectively these elements comprise the broad institutional framework (the "rules of the game") in the sense applied in institutional economics following Douglass North (1992) (*Transaction Costs, Institutions, and Economic Performance*, ICEG, 1992). Specific elements of the institutional framework are identified as appropriate in the text.
13. Maplecroft (2014). *Climate Change and Environmental Risk Atlas 2014* http://maplecroft.com/portfolio/new-analysis/2013/10/30/31-global-economic-output-forecast-face-high-or-extreme-climate-change-risks-2025-maplecroft-risk-atlas/.
14. SR Vietnam (2010). *Vietnam's Second National Communication under the United Nations Framework Convention on Climate Change*.
15. World Bank (2014). *Charting a Low Carbon Development Path for Vietnam*. WB, ESMAP and DFID.

since 2008 with the National Target Program to Respond to Climate Change (NTP-RCC: Decision 158/2008/QĐ-TTg, 2008; and 1183/QĐ-TTg, 2012 for the period 2012–2015), followed by the National Climate Change Strategy (NCCS: Decision 2139/QĐ-TTg, 2011) and the Vietnam Green Growth Strategy (VGGS: Decision 1393/QĐ-TTg, 2012). These two strategies form the overarching policy frame and have been prioritized and made concrete in the National Action Plan on Climate Change (NAPCC) and the Green Growth Action Plan (GGAP), both for the period up to 2020, whereas sector and provincial CC-response and green growth action plans have either been completed or will be formulated. In addition, the National Action Program on REDD+ 2011–2020 was issued in 2012 (Decision 799/QĐ-TTg, 2012). There are also a number of other related policies, including the National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020 (2007); the Law on Natural Disaster Prevention and Control (2013); the National Forestry Development Plan 2011–2020 (2012); and the National Target Program on Energy Efficiency and Conservation (NTP-EE). The main climate change and green growth policies are discussed below and coordination through the National Climate Change Committee (NCCC) is discussed in section 1.2. Section 1.3 addresses the balance between adaptation and mitigation objectives, and section 1.4 discusses the planning, budgeting, and implementation cycle. Sector CC-responses are discussed in section 1.5.

The National Climate Change and Green Growth Policies

The NCCS aims to establish a clear structure and identify specific tasks to be accomplished to achieve CC-response objectives. Ten strategic tasks are identified in the NCCS, including adaptation and mitigation tasks. The strategic phases of the NCCS are linked to an industrialization trajectory as well as socio-economic advancement, stressing that after 2025 Vietnam will focus on reducing greenhouse gas (GHG) emissions. For the period 2011–2015, it identifies priority programs, including the NTP-RCC; the National Scientific Program on Climate Change; hydro-meteorological observation and forecasting; water resources management and climate change adaptation in the major deltas; management of GHG emission reduction activities and GHG emission inventory; CC-responses in megacities; sea dyke and river embankment reinforcement; healthcare; and community-level response. These same ten priorities are highlighted in the National Action Plan on Climate Change 2012–2020 (NAPCC; 2012), which lists 65 specific programs and projects, many of which focus on strengthening observation systems and adaptation activities.

The VGGS establishes renewable energy and energy efficiency as important parts of sustainable development and shifts the economy towards a low-carbon green trajectory. Green growth is seen as an important part of sustainable economic development. For Vietnam to avoid the "middle income trap" a shift away from labor- and resource-intensive economic activities is needed, as has been demonstrated by South Korea.[16] Further economic progress requires new, technological- and knowledge-intensive industries and more innovative and dynamic private and state-owned institutions. Green growth for middle-income countries requires increased innovation, R&D and increased output-per-unit-input.[17] Green growth also contributes to social benefits, including poverty reduction, and makes a "significant contribution to the implementation of the national climate change strategy."[18] Low-carbon development offers an opportunity for new and sustained growth in Vietnam.[19] The VGGS proposes more efficient use of natural capital, reduction of GHG emissions and an improvement in environmental quality. The Green Growth Action Plan (GGAP, 2014) presents 66 activities, which are grouped under four themes: (1) Institutional improvement and formulation of green growth action plans at the local level; (2) Reducing GHG emissions intensity and promoting the use of clean and renewable sources of energy; (3) Greening production; and (4) Greening lifestyle and promoting sustainable consumption. The priority activities for 2013–2015 include completing the institutional framework to enhance the economic restructuring process in accordance with the VGGS, and formulating the green growth financial policy framework. Most climate relevant actions in the GGAP are on mitigation of GHG emissions and climate change adaptation is not highlighted.

Financial sources for implementation of the main policies on climate change are not specified in detail. Capital resources for implementation of the NAPCC must come from the State Budget and international sources, but Decision 1474/QĐ-TTg is not more specific than that. The GGAP must be financed by "resources from the state budget in the SP-RCC" (Decision 403/QĐ-TTg, 2014). In addition, *the NCCS and the VGGS are not explicitly identified in the planning and budgeting cycle as part of an integrated Government CC-response program.*

16. Tran, Van Tho (2013). *The Middle-Income Trap: Issues for Members of the Association of Southeast Asian Nations.* ADBI Working Paper 421. Tokyo: Asian Development Bank Institute. Available: http://www.adbi.org/working-paper/2013/05/16/5667.middle.income.trap.issues.asean/.
17. Van Arkadie, Brian, et al. (2010). *Joint Country Analysis of Vietnam*. Paper for UN Vietnam.
18. Vietnam National Green Growth Strategy (2012).
19. World Bank (2014). *Charting a Low Carbon Development Path for Vietnam.* WB, ESMAP and DFID.

Present national policies explicitly link climate change to green growth in order to promote sustainable economic development. The NCCS focuses on adaptation and also includes mitigation, in particular as it will be enabled by international financing. The VGGS stresses mitigation actions, with a focus on low-carbon and green growth. The low-carbon green growth approach in the GGAP provides a potential virtuous circle, increasing access to energy for the poor, creating green jobs and boosting the economy, while reducing GHG emissions. As stated in a review of low-carbon growth in Asian countries, "low-carbon growth is not just about climate change mitigation. It also makes tremendous sense to sustainable development planning".[20] The Republic of Korea's green sector policies, including short-term macro-economic policies and longer-term industrial policies, are leading to a reduction in carbon intensity. Korea pursues green growth within a climate change umbrella, and policy commitments are supported by an allocation of two percent of GDP. Vietnam, similar to the Republic of Korea, pursues climate change mitigation within green growth activities through the VGGS and GGAP as part of a sustainable development trajectory, and the *allocation of domestic public resources to green growth appears justifiable*.

The NCCS and VGGS provide complementary as well as partially converging policy actions, which can support and drive an effective CC-response. The VGGS low-carbon development objectives are consistent with the mitigation aspects of the NCCS but are elaborated further. The VGGS also has objectives linked to green production, efficient use of natural resources and a "new rural model with lifestyles in harmony with the environment" which may support adaptation. However, the convergence of the VGGS and NCCS in terms of adaptation could be further clarified. Harmonizing the implementation of these strategies and related sector and provincial action plans would optimize climate change planning, budgeting, M&E and delivery. However, this *harmonization will need a clear definition of tasks and a strong M&E framework covering all CC-relevant activities*. Such harmonization could happen in the context of the SEDP (2016–2020) planning process.

The need for driving forward a comprehensive CC-response has recently been re-emphasized. In June 2013, the Central Executive Committee of the Party further committed to a more active response to climate change. Resolution 24-NQ/TW on "Active response to climate change, improvement of natural resource management and environmental protection" stated that the response to climate change to date was "passive and confusing" and that the CC-response was "one of the most important tasks of the entire political system." The resolution provided a suite of clear and specific objectives by 2020 in adaptation, natural resource management and environmental protection, as well as general objectives by 2050. It also reaffirms the CC-response priority from the highest level and calls for renewed efforts from all relevant entities.

Delivering Climate Change Policy through National Programs

An active CC-response has been initiated through four key programs with significant support from external donors. Key CC-response programs include: (i) the National Target Program to Respond to climate change (NTP-RCC); (ii) the Support Program to Respond to Climate Change (SP-RCC); (iii) the National Scientific and Technological Program on Climate Change aiming to support the NTP-RCC; and (iv) the National Target Program on Energy Efficiency and Conservation (NTP-EE). These ongoing programs have helped establish a CC-response policy capacity, but they need to be fully integrated into the GoV institutional structure.

The NTP-RCC (Decision 158/2008/QĐ-TTg) is a 15-year, three-phase program, which stresses the need for mainstreaming CC-responses into social and economic development, while pursuing broader sustainable development and taking into account gender equality and poverty reduction. The NTP-RCC, approved in 2008, highlights that responding to climate change is a task of the whole institutional system, all sectors, provinces and people. The first phase of the NTP-RCC (2009–2010) focused on scientific analysis and initial planning, the second (2011–2015) on further analysis, detailed planning, capacity building and development of (sector and provincial) action plans. The institutional, legislative and resource constraints included weak monitoring and reporting, limited program implementation in line ministries and limited available resources. As a National Target Program an actual budget is allocated—in the case of the NTP-RCC from domestic sources (mainly loans from the SP-RCC, discussed below) and grant money from Denmark. The focus of the NTP-RCC is on adaptation (e.g. hydro-meteorological infrastructure and provincial climate change action plans) rather than mitigation. *The next phase of the NTP-RCC (2016 onwards) would benefit from a greater focus on prioritized tasks under the (sector and provincial) action plans and greater use of climate change scenarios into adaptation planning. However, M&E of the*

20. ADB-ADBI (2012). *Study on Climate Change and Green Asia: Policies and Practices for Low-Carbon Green Growth in Asia*.

current program and a review of the contextual progression in CC-response is needed to support this shift (see Chapter 3).

The Support Program to Respond to Climate Change (SP-RCC) is a financing mechanism that enables scaling up CC-responses, for example financing of the NTP-RCC (mainly soft loans). It was also set up to serve as a platform for coordinated CC-policy development and dialogue between the Government and international development partners. Through annual cycles, DPs (including JICA, AfD, WB, CIDA, AusAID, and Korea EXIM Bank) and the Government agree on climate change related policy actions, which upon delivery trigger budget transfers to Vietnam. Most of these transfers are subsequently allocated to climate relevant actions. The SP-RCC's institutional structure was initially linked to that of the NTP-RCC but later created its own Program Coordination Unit based in the Department of Hydro-Meteorology and Climate Change (DHMCC) in MONRE. The SP-RCC has played a role in harmonization and coordination between the international community and the Government through discussions on the policy matrix, which usually also includes DPs who do not fund the SP-RCC. The SP-RCC process and impacts have been reviewed. The findings show that it has been effective at bringing together DPs and line ministries, and that policy dialogues and coordination have improved over the years but that these can be enhanced. SP-RCC funds go into central budget support, and although most funds are allocated to climate change actions, some believe that the link between policy actions and disbursement of SP-RCC funds should be strengthened.

In 2010, the Government approved a climate change Financial Mechanism (FM) funded by public funds and particularly targeting the fiscal space provided by the SP-RCC (Instruction 8981/VPCP-QHQT, 10/12/2010). Based on this instruction, MONRE, in coordination with MOF and MPI, led an inter-ministerial process to develop project selection criteria for financing from the SP-RCC, as approved in Decision 1719/QĐ-TTg (2011). The application of these criteria in the context of a call for proposals to line ministries and provinces led by MONRE resulted in the selection of 63 projects. However, the number of projects subsequently had to be limited to 16 priority projects, due to limited fund availability. Funds have been allocated in the 2013 and 2014 budget, as a result of the joint (MPI, MOF and MONRE) circular on "guiding implementation of the Financing Mechanism" (Joint Circular TTLB-BT-NMT-BTC-BKHDT of 5/3/2013). To make the Financial Mechanism (FM) more strategic within the overall climate financing architecture there is a need to improve technical and budget planning in relation to project selection, the selection criteria should be revised, including the co-financing ratio, and monitoring and reporting should be improved. The GGAP (Decision 403/QĐ-TTg, 2014) states that it will be funded partly from the SP-RCC funds, which offers an opportunity to bring together the climate change response and the green growth agendas.

The National Scientific and Technological Program on Climate Change aiming to support the NTP-RCC provides scientific and technological evidence on which to base adaptation and mitigation responses and to integrate climate change into strategic plans and implementation procedures. The program was set up in 2011 in response to one action in Decision 1244/QĐ-TTg on major directions in science and technology, i.e. "research into climate change response solutions and technologies for early warning and forecast of natural disasters; new technologies for environmental protection and natural disaster prevention and control." The outcomes of the program focus on the technological measures across climate change projections, adaptation and GHG emissions reduction, as well as mainstreaming climate change into socio-economic development. From 2011 to 2013 nearly 50 projects have been approved, many relating to CC adaptation in the food security sector. The program is mainly funded by the NTP-RCC, is directed to support the NTP-RCC and is administered by MONRE instead of the Ministry of Science & Technology (MOST), which has overall responsibility for Decision 1244/QĐ-TTg.

The National Target Program on Energy Efficiency and Conservation (NTP-EE) was the first national energy saving and conservation effort. However, its overall energy targets are not harmonized with VGGS targets. The NTP-EE (also called the Vietnam National Energy Efficiency Program, VNEEP) for the period 2006–2015 was approved in 2006 (Decision 79/2006/QĐ-TTg). The NTP-EE was the first to call for coordinated efforts to improve energy efficiency, reduce energy losses, and to conserve energy across all sectors of the economy. The program is now implementing phase two (2011–2015; Decision 2406/QĐ-TTg), aiming to save five to eight percent of total energy consumption in 2012–2015 compared to projected increases in national electricity demand. To achieve this target, a number of energy efficiency and conservation actions are proposed as well as a reduction per unit output in selected industries (steel, cement and textile). The energy saving target is not fully aligned with the VGGS target of reducing GHG emissions by eight to 10 percent compared to BAU (2011–2020), but it does make a major contribution

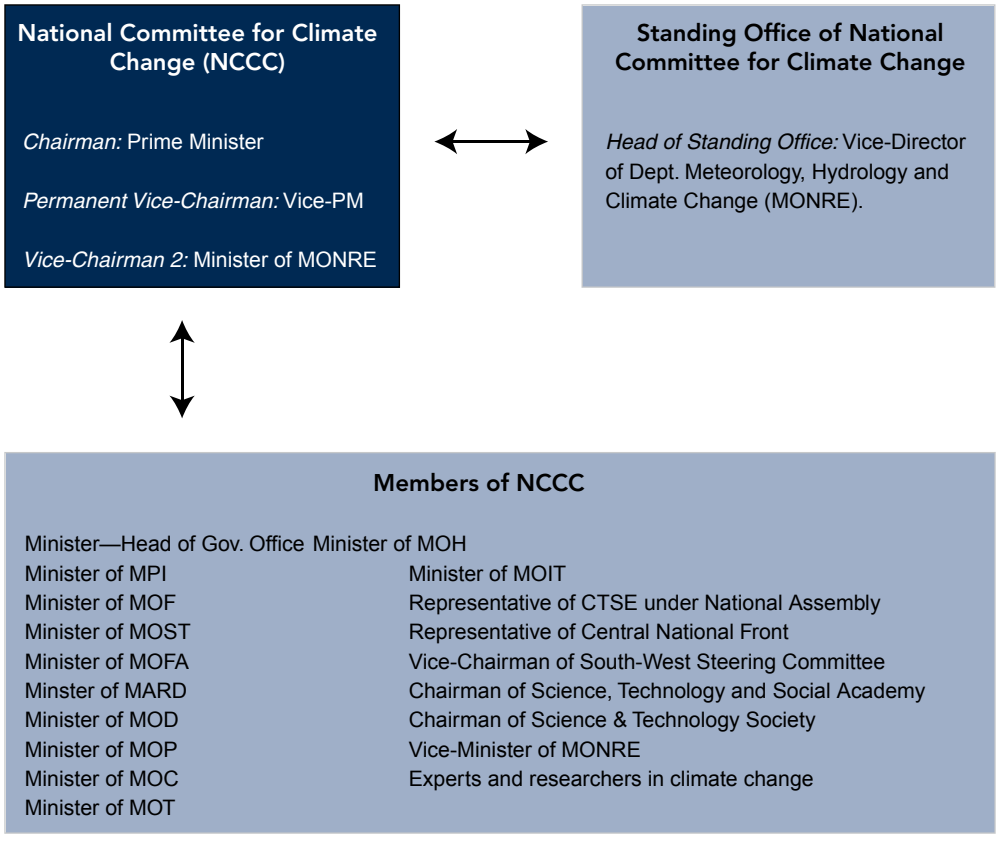
to achieving the VGGS target. However, the targets have different time horizons, indicators (total energy/GHG), and baselines (projected energy demand compared to BAU), which is posing challenges for M&E.

1.2 Coordination of climate change responses: The ministerial coordinating architecture

Central Government Coordination: The NCCC and Line Ministries

The mission of the National Committee on Climate Change (NCCC) is to lead, coordinate, harmonize and monitor climate change and green growth program implementation, including international co-operation. The NCCC is the highest-level inter-ministerial body on climate change and was created by Decision 43/QĐ-TTg (2012). The NCCC Chair is the Prime Minister, with a Deputy Prime Minister and the Minister of MONRE as first and second Vice Chairs. Members include several Ministers (from MPI, MOF, MARD, MOC, MOT and MOIT) and experts (the full list is shown in Figure 1.1). Members of the NCCC have clearly defined responsibilities, as promulgated in Decision 25/QĐ-UBQGBĐKH (2012). Line ministries, provinces and implementing bodies must provide a report every six months to analyze, assess and synthesize the management and implementation of strategies, and to analyze objective and subjective reasons affecting the implementations of strategies. These reports are consolidated into six-monthly and annual reports by the Standing Office (SO) for submission to the NCCC. The SO of the NCCC within MONRE is also tasked to develop and implement programs, to lead and cooperate with line ministries and activities on climate change, and to review and monitor the implementation of the national strategy and action plan on climate change, the NTP-RCC, as well as other strategies, programs, and projects related to climate change. In addition, the VGGS will be coordinated by the Inter-Ministerial Coordinating Board (ICB) which falls under the NCCC, although the exact nature of this interlinkage is currently not defined. The ICB will be supported by a standing office which is managed by MPI (see Decision 1393/QĐ-TTg, 2012). The first activity of the GGAP is to formulate and approve the operation charter and working plans for the ICB. The NCCS, ICB and their standing offices should

Figure 1.1. Membership of the National Committee for Climate Change (NCCC) and the Standing Office[21]



21. From Priambodo et al. (2013). *Status of Climate Finance in Vietnam: country assessment report*. GIZ, Castlerock & Adelphi.

consider consistent reporting formats for the NCCS and VGGS and pursue joint reporting on converging policy objectives between the NCCS, VGGS and related programs and actions.

The NCCC was active in 2013 but predominantly in support of ongoing activities; as such it is too early to assess the NCCC's impact. The NCCC developed a work plan for 2013 and met, including in a joint SP-RCC review meeting in October 2013. The work plan for 2013 included 19 tasks, of which 10 were led by MONRE, such as continuation of implementation of the NCCS and NAPCC, implementation of the Vietnam—Netherlands Strategic Partnership, the promotion of DP's involvement, the NTP-RCC, and formulating the revised policy matrix for the SP-RCC. The annual NCCC report provides a description of the activities as well as various comments. It also provides recommendations to the NCCC. Although program development is well reported, due to the general nature of the report there is a lack of climate change related expenditure data and lack of detail on progress towards particular policy objectives. Also, lessons learned that can inform new initiatives are largely missing. This lack of a systematic review of expenditure and policy delivery is possibly due to the lack of data in the submissions from the reporting line ministries, project implementers and localities. Thus *the architecture and function of the NCCC and Standing Office has been determined, and it has the potential to support and further align the responses to climate change. However, the effectiveness and success of the NCCC will be largely predicated on effective reporting from the Standing Office to the NCCC, which requires inputs from provinces and line ministries*.

Strengthening the information flow to the NCCC on achievement of policy objectives, including climate change planning and budgeting processes and CC-response impacts, in a harmonized M&E system can reduce the risk of fragmentation, improve targeting of resources and maximize mitigation and adaptation benefits. The effectiveness of NCCC oversight and specifically of targeting is largely defined by the quality of the information that flows to it from the climate change focal points in line ministries and provinces and which is collated by the SO. Such information requires good M&E and reporting to the SO, as well as adequate capacity within the SO for collation and presentation of information to the NCCC. The SO must develop, lead, coordinate, review and monitor CC-responses and capacity needs for strategic assessments, sector and social vulnerability/impact assessments and appraisals, as well as technical skills in CC-response activities. In addition, the focal points, localities and project implementers must also have the capacity to report relevant information. While the structures exist, effectiveness can be enhanced through (i) establishment of a synchronized and harmonized M&E system that includes climate finance tracking as well as verifiable indicators linked to policy objectives; (ii) building capacity in the NCCC's SO on strategic management of the information, appraisal of the CC-response, and implementing high-level climate change related M&E; and (iii) building capacity of climate change focal points in line ministries to track CC-responses through the planning, budgeting, delivery and outcome cycle and thereafter reporting that to the NCCC's SO. Other measures include (iv) building the capacity of CC-response focal points in the Department of Natural Resources and Environment, the Department of Industry and Trade, the Department of Agriculture and Rural Development and other relevant provincial entities to report on climate change progress, planning and constraints in an effective manner; (v) creating common reporting templates which provide a harmonized CC-response overview related to NCCS and VGGS and related strategies, programs and initiatives; and (vi) strengthening SO capacities to develop an overview of the overall CC-response and progression in sectors and provincial portfolios, for submission to the NCCC. *Effective information delivery to the NCCC can help improve the delivery of NCCS, VGGS and related CC-responses, between sectors and across provinces. This is essential for improved targeting.*

National and Provincial Coordination: Functional Definition and Capacity Building

Decentralization policies since the turn of the century have covered an ever broader range of activities and require local capacity strengthening. Decentralization policies reach into seven major areas, including planning, public investment, state budget, land and natural resources, state-owned enterprises (SOEs), public services, and administrative organization and personnel. However, constraints related to the nature of the decentralization process and its governance and coordination as well as local capacity constraints have limited delivery on many of the intended objectives. There is often a lack of clear definition of the functions of lower level authorities relative to the line ministries. Decentralization has created challenges for provincial authorities responsible for local planning and implementation of a very broad range of national priorities (for example separate climate change, disaster risk reduction and management (DRRM) and Green Growth Action Plans). Moreover, line ministries still maintain a significant portfolio of CC-related activities, and specifically with regard to infrastructure investment the central Government has not yet decentralized many of the

key functions to the provinces or large cities.[22] Provincial Coordination Committees have been established to coordinate development of provincial level action plans on climate change, and most provinces have also established an office for climate change that is officially linked to the PPC, but usually based in the Department of Natural Resources and Environment (DONRE). The provincial authorities play an important role in investment project formulation, planning and budget allocation processes and therefore in the mainstreaming of climate change. The connection between these provincial coordination offices, the provincial People's Committees responsible for certain projects and the NCCC's SO is vital for comprehensive M&E and reporting on the national CC-response. However, the 2013 NCCC report provides only a top-down view of the main policies and programs and includes minimal synthesis of provincial CC-responses (except 11 projects under SP-RCC). *M&E and reporting on the provincial response (including action planning and budgeting on climate change, green growth, energy efficiency and DRRM); project design, implementation and delivery, including mainstreaming of climate change across provincial sectors; progress according to key CC-response indicators; implementation challenges; and lessons learnt can be improved by strengthening capacities of the local structures and focal points*. With 63 provinces this is a substantial task. It may therefore be beneficial to develop a number of capacity "nodes" in selected provinces that can then be supported to consistently extend the capacity, improving reporting and M&E in other provinces.

1.3 Adaptation and mitigation objectives: Focus and balance in Vietnam's climate change institutional framework

Climate change adaptation and mitigation policy objectives have been identified, but opportunities remain for harmonization of budget planning and M&E. Resolution 24, the NCCS and VGGS provide the overall CC-response policy framework, covering both adaptation and mitigation actions. However, adaptation and mitigation requirements differ in terms of both technical tools and priority-setting processes. These differences and the best way of linking adaptation and mitigation objectives and actions to the planning and budgeting cycle have not yet been fully articulated. Priority has been given to adaptation, which can be promoted in particular through resilient infrastructure. Mitigation actions are diverse and include specific investments in the energy sector and broad policy action in the forestry sector. Given this diversity, it is important to establish harmonized CC-response reporting linked to the planning and budgeting cycle, especially to monitor whether set priorities are indeed being pursued. A planning and budgeting cycle that reflects priorities from the NCCS and VGGS (and related national action plans) should also be linked to a harmonized M&E process.

Defining the Scope of Adaptation Policy Implementation

Adaptation and availability of climate information will continue to be a very high priority for Vietnam's CC-response. It is important to channel resources toward the most vulnerable regions and sectors. A considerable amount of work has already been done to establish scenarios of the effects of climate change in different regions of Vietnam. Based on national and international studies MONRE published an official scenario in 2009, which was updated in 2012.[23] The climate change scenarios should guide ministries, sectors, provinces and cities to formulate and implement their climate change responses. MONRE is planning regular updates as a basis for national and sub-national planning on climate change. However, use and uptake of the climate change scenarios can be strengthened through (i) better links between climate risks and probable impacts, and guidance on how to apply the climate change scenarios to project and budget planning; (ii) building capacity in sectors and especially provinces, for mainstreaming the use of climate change scenarios; and (iii) officially requiring the use of the climate change scenarios for mainstreaming actions in provincial socio-economic and sector plans.

Approaches to disaster risk reduction and management (DRRM) have been implemented well but further integration with the CC-response strategies can help unify and strengthen the approach to reducing vulnerabilities. The DRRM policy framework has been set through a range of initiatives. In June 2013 the Law on Natural Disaster Prevention and Control was adopted (Order 07/2013/L-CTN). The National Strategy on Disaster Prevention, Response and

22. See Vu Thanh Tu Anh (2012). *Decentralization of Economic Management in Vietnam from the Institutional Perspectives*. http://www.fetp.edu.vn/en/policy-papers/discussion-papers/decentralization-of-economic-management-in-Vietnam-from-the-institutional-perspectives/.

23. MONRE (2009 and 2012). *Climate Change: Sea Level Rise Scenarios for Vietnam*, MONRE, Hanoi.

Mitigation to 2020 (Decision 172/2007/QĐ-TTg) promulgated mainstreaming and integration of disaster risk reduction (DRR) within national, sector and provincial socio-economic development planning frameworks. Relevant line ministries that are represented in the Central Steering Committee for Flood and Storm Control developed action plans for the integration of DRRM within their sectors. In addition, all 63 provinces have developed DRRM action plans. Harmonization of DRRM and climate change adaptation actions, as well as strengthened coordination (especially between MARD and MONRE), can help build a less fragmented and more effective response to reducing vulnerability to climatic hazards. There are significant linkages and convergent policy objectives between the CC-response and DRRM, such as in the areas of forecasting and early warning.[24] The coordination and mainstreaming of DRRM has improved and links to climate change are strengthening. The recent DRRM and climate change adaptation (CCA) coordination forum in October 2013 was a positive step but the coordination approach needs to be institutionalized in order to harmonize policy objectives and projects/interventions as well as improve M&E. Strengthening the link between the CCA-response and DRRM is possible, for example through: (i) more systematic use of climate change scenarios and other hydrological and meteorological data, for example in climate change impact and disaster risk assessments; (ii) identification of priority geographical areas, hazards and sectors for both climate change adaptation (CCA) and disaster risk reduction and management; and (iii) increase in the capacity to develop and implement projects that reduce the social dimensions of vulnerability.

Strategic and efficient ways of increasing resilience often require integrated regional programs, including central and provincial activities. The Mekong Delta area, for instance, is a highly populated area that is highly vulnerable to sea-level rise and associated saline water intrusion, but addressing these issues requires coordinated efforts by multiple central government sectors and across provincial boundaries. An Giang province (see Chapter 3) has established a provincial action plan to implement national strategies on climate disaster preparedness and community-based DRRM. Ideally, these should be coordinated with sector policies and other Mekong Delta provinces. In addition, regional structures such as the South West Steering Committee could have a stronger role in cross-provincial initiatives if they have sufficient capacity. *The lack of a strategic overview of regional aspects of climate change policy may impede efficient use of resources for climate change adaptation. A regional component in the reporting and M&E system of CC-responses will increase the effectiveness of progress tracking.*

Strengthening adaptation planning and project selection can be improved and prioritized to provide a stronger focus on poverty reduction and related co-benefits. Recognizing that adaptation investment is a priority, MPI has taken steps toward strengthening priority-setting by beginning to integrate the use of the Adaptation Prioritization Framework (APRF) in the SEDP process.[25] The APRF is designed to incorporate relevant climate change adaptation actions into the normal project design and appraisal procedures of the SEDP in a relatively simple and practical way. *The SEDP and annual planning and budget processes need to use the APRF effectively. Other financing mechanisms need to ensure that poverty co-benefits of the CC-response are prioritized through appropriate appraisal and selection processes.*

Climate change relevant projects are not clearly identified or linked to specific climate change objectives under the present planning and budgeting system. While the majority of climate change relevant investments are adaptation, others contribute to mitigation or to both objectives. The current process does not clearly identify those projects to enable tracking of spending. *The lack of a clear system for identifying and classifying climate change projects is a barrier to making links between CC-response policy and the planning and budgeting cycle.* (See also Chapter 2.)

The regulatory environment can play a critical role in adaptation and mitigation. Setting standards or appropriately raising these, for example infrastructure and housing design standards, in order to meet adaptation and mitigation objectives will often require modifying official regulations to ensure compliance by private and public sector actors. There was little opportunity for the CPEIR to investigate existing regulations, but a review of regulatory frameworks, including design standards from a climate change perspective, should be undertaken.

Mitigation Policy: From Targets to Delivery

Targets for reducing GHG emissions need to be reconsidered, especially after 2020. Mitigation of GHG emissions requires overall and sector-specific target setting and mainstreaming of mitigation in many sub-

24. Mitchell, T. & van Aalst, M. (2008). *Convergence of Disaster Risk Reduction and Climate Change Adaptation*, DFID.

25. MPI (2013). *Adaptation Prioritization Framework for Socio-Economic Development*, MPI, Hanoi.

sectors. The GoV has set overall mitigation targets in the VGGS. The intensity of GHG emissions should be reduced by eight to 10 percent by 2020, as compared to the 2010 level, and there should be a one to 1.5 percent reduction in energy consumption per unit of GDP per year. A significant instrument for achieving this is the NTP-EE (Decision 1427/QĐ-TTg, phase 2012–2015) which identifies a five to eight percent reduction of the total energy consumption by 2015, compared to projected energy demand increases as per the National Power Development Plan 2011–2020, and a 10 percent reduction per unit output in the steel, cement and textiles sectors by 2015. The GoV has also addressed the mitigation challenge in the "Plan for GHG emission management—management of carbon trading activities for the world market" (Decision 1775/QĐ-TTG, 2012). This includes targets for 2020 for energy and transport (eight percent GHG emission reduction compared to 2005); agriculture, including livestock (20 percent GHG emissions reduction compared to 2005); forestry (20 percent increase in absorption of GHG compared to 2005) and the waste sector (five percent GHG emission reduction compared to 2005). The VGGS also provides targets for the period after 2020. These targets are diverse and in several cases difficult to compare, partially overlapping or repetitive, and partially unrealistic. Monitoring and reporting on climate change mitigation is thus complex. In addition, in the context of UNFCCC negotiations Vietnam needs to know what its emissions reduction targets are for the period from 2020 onwards. A *review is therefore needed, especially for post 2020 GHG emission targets, with clear indication of what Vietnam can do with domestic means and what can only be achieved with international financial and technical support*. Furthermore, national targets should be translated into sector-specific targets, which has been done in for example the agriculture and rural development sector (MARD Decision 3119/QĐ-BNN-KHCN). Delivering *sub-sector targets will require mainstreaming low-carbon approaches into many areas of activity. The specific mitigation aspects and achievements must be reported back into the climate change coordination system for this to lead to policy adjustments at a later date*.

NAMAs (Nationally Appropriate Mitigation Actions) may offer opportunities for technology transfer and partial financing under the UNFCCC and are being developed in Vietnam, requiring major efforts on monitoring and reporting on emissions. Decision 1775 is geared towards participation in (international) carbon markets and development of off-set mechanisms, aiming to support technology and financial transfers, especially to local enterprises. Formulation of NAMAs and systems for monitoring, reporting and verification (MRV) of emissions is being supported by several international DPs. This work and the transfer of information from provincial authorities and line ministries to the national GHG inventory is vital to assess progress made towards national mitigation targets as well as targets in specific NAMAs. It is also important for making future policy adjustments as a result of monitoring. Monitoring of GHG emissions is also a core element in the National Communications and biannual update reports by Vietnam to the UNFCCC.

Indirect subsidies on the use of fossil fuels for power production and transport and the absence of a substantial price on carbon makes it very difficult to achieve mitigation targets and affects the fiscal space available for both adaptation and mitigation actions. The VGGS and the GGAP commit to the phase-out of fossil fuel subsidies, but this is very challenging. In 2010, the GoV introduced an environmental protection tax, but it took substantial time to be operationalized and tax rates are very low. Indirect subsidies are estimated to be several percent of annual GDP, and act as disincentives for investments in energy efficiency and low-carbon technologies, including non-hydro renewable power generation. Subsidies on fossil fuels include any government intervention that reduces the cost of fossil fuels below what it would be without that intervention, according to an internationally accepted definition. Indirect subsidies occur as energy prices are controlled and inputs such as coal, land and credit into for example power production are below international prices. These subsidies result in foregone government revenue and the building up of debt. There are many advantages of reforming fossil fuel fiscal policies, apart from increased government revenue, including enhanced national energy security, improved supply to customers, additional GDP growth (over the medium term), increased social equality (because subsidies benefit the better off more than the poor), and reduced GHG emissions and local pollution. Increased energy prices for electricity and coal are unpopular with consumers and businesses. However, as subsidies would be phased out and a price on carbon would be imposed, several measures are proposed to support energy consumption by poor households and energy efficiency measures in certain businesses, taking advantage of the additional fiscal space.[26] Reform of the energy sector, including SOEs, is both

26. UNDP (2012). *Fossil Fuel Fiscal Policies and Greenhouse Gas Emissions in Vietnam: Subsidies and Taxes in Vietnam's Energy Sector, and Their Effects on Economic Development and Income Distribution in the Context of Responding to Climate Change*. Hanoi, United Nations Development Programme. UNDP (2014). *Green Growth and Fossil Fuel Fiscal Policies in Vietnam—Recommendations on a Roadmap for Policy Reform.* Hanoi, United Nations Development Programme.

critical and challenging, and recommendations to this effect include in particular the *need for increased transparency in cost structures and strengthened independent energy market regulation*. The NCCS includes studies on appropriate systems for energy pricing to promote energy efficiency and renewable energy production, as well as the establishment of a new energy pricing system by 2015. Due to time limitations it seems unlikely that the NCCS will be able to deliver this within the timeframe, and the commitment is not reinforced in the NAPCC. Moreover, the management of the various mitigation actions, indirect subsidies and the environmental tax are carried out by different agencies and lack a consistent fiscal policy framework to ensure that activities are mutually supportive. Nevertheless, in order to help deliver the "Plan for GHG emissions management" (Decision 1775) Vietnam has started work to prepare to apply market-based instruments to selected sectors, leading towards development of a broader-based carbon pricing system over time.[27] The question of mitigation thus raises a series of issues that go beyond management of public expenditures and which require an examination of very complex policy issues and institutional responsibilities. *The possibility of reducing the indirect subsidies on fossil fuels and introducing a carbon price should be part of the Government's economic reform strategy and different options should be examined.*

Vietnam has progressed with REDD+ preparations and implementation, and is sharing its experiences with other countries. Harmonization with both forestry sector and mitigation policy and targets can help to improve reporting on REDD+ and increase its effectiveness. REDD+ in Vietnam is governed by the National Action Program on REDD+ 2011–2020 (Decision 799/QĐ-TTg, 2012). Broad guidance on REDD+ preparedness and implementation in Vietnam is given by the NCCC. Internationally-supported activities have led to lessons learnt on for example the role of free, prior and informed consent, a results-oriented benefit distribution system and participatory carbon monitoring.[28] Potential international financial flows from developed to developing countries for full REDD+ implementation fall under the UNFCCC and may become as high as USD 30 billion per year. Benefits can accrue to Vietnam through policy actions across the forestry sector as well as specific actions on for example sustainable forest management. REDD+ requires meeting international results-based criteria and capacities at the central as well as local levels for implementation of a wide range of actions and for MRV. However, coordination with actions under the National Forest Development Strategy 2006–2020 (NFDS) and the National Plan on Forest Protection and Development (NPFPD) could improve. For example, the approach of payments for ecological services to local forest managers is a mechanism to deliver the NFDS and NPFPD objective of income generation and sustainable livelihoods in the forestry sector, and is very similar to some of the approaches under the international and national REDD+ efforts. REDD+ should be considered as part of the drive to achieve the objectives of the NFDS, as well as a component of the overall mitigation portfolio of Vietnam, rather than a separate and isolated undertaking. *REDD+ should not be undertaken in isolation of other national mitigation initiatives but be harmonized and coordinated, and should also feed into a common M&E system to help inform mitigation progress (and in some cases adaptation co-benefits).*

27. ADB (2014). *Market Readiness Proposal for the Government of Vietnam*. Prepared by Get2c, EcoTawa, Grutter Consulting and Teta for ADB.
28. UN-REDD (2012). *Lessons learned: Vietnam UN-REDD programme*. From: http://www.un-redd.org/AsiaPacific_Technicalreports/tabid/106605/Default.aspx#Vietnam.

1.4 The planning, budgeting, and implementation cycle: Progress and key areas to be strengthened

Key Aspects of Planning and Budgeting

The basis for policies and strategic priorities are set over long-term horizons and implemented through a well-defined, annual investment and recurrent planning and budget cycle with some explicit reference to climate action. Vietnam applies a system of five-year planning within a 10-year strategic horizon. The current framework includes the Socio-Economic Development Strategy (SEDS) 2011–2020 and Socio-Economic Development Plan (SEDP) 2011–2015. They cover structural reforms, environmental sustainability, regional development, social equity, and emerging issues of macro-economic stability. The current strategic framework is based on three pillars: (i) strengthening Vietnam's **competitiveness** in the regional and global economy, (ii) enhancing the **sustainability** of its development, and (iii) broadening access to social and economic **opportunity.** There are also three cross-cutting themes: (i) strengthening governance, (ii) promoting gender equality, and (iii) improving resilience in the face of external economic shocks, natural hazards and the impact of climate change.

The GoV has steadily improved its planning and fiscal management system over the past three decades, providing a good basis for climate change mainstreaming. Decentralization of management processes has been

a feature since *Doi Moi* reform efforts in 1986, impacting public financial management (PFM).[29] The GoV has modernized its PFM system and brought many elements in line with international good practices. In August 2013, the GoV completed a Public Expenditure Financial and Accountability (PEFA) assessment of its PFM system.[30] Also in 2013, the WB completed a fiscal transparency review on progress made by Vietnam toward improving fiscal transparency and public access to fiscal information. These reports demonstrate that significant progress has been made in improving PFM. Further strengthening of PFM processes and defining the roles of key agencies more clearly will support mainstreaming climate change policy in wider development.

A range of basic and feasible improvements of the planning and budgeting process can help to improve climate change policy mainstreaming. The PFM modernization that has occurred in Vietnam means that additional changes of relevance to climate change will not need to be very radical. In the following sub-sections some changes are reviewed that are expected to be feasible and that could strengthen climate change policy implementation. This section looks first at the need to strengthen planning procedures and fiscal reporting processes, primarily by focusing on better project definition and appraisal, and ensuring that all CC-relevant projects at all levels of government are included. Secondly, it emphasizes the role that comprehensive climate change spending data shared by all levels of government can play in improving coordination between national and local levels. This section also looks at the need to use Vietnam's modernized budgeting and accounting system more effectively to capture ODA-financed projects and to identify financing gaps. Finally, the section examines issues relating to longer-term development of PFM toward integrated planning and budgeting and full transparency and accountability.[31]

Strengthening Climate Change Policy Implementation: SEDP 2016–2020

Strategic and annual priority setting needs to change to address climate change issues effectively. The forthcoming formulation of the SEDP 2016–20 offers opportunities for the Government and especially MPI and MONRE to review climate change related priorities, and could lead to stronger mainstreaming of climate change in sector and provincial plans. Some opportunities are outlined below.

- **Enhanced implementation of strategic priorities and policies included in the SEDP will require further strengthening of climate change project reporting in the annual planning and budgeting process.** A major strength in terms of tracking public spending has been the establishment of TABMIS, which is a tool to control, monitor, and review expenditure by all climate change related programs. Strengthening financial reporting at project level is vital to better management of projects, including those of CC-relevance. (See Chapter 4.)
- **Strengthening annual planning and budgeting procedures can facilitate harmonization and delivery of the CC-response framework.** A CC-response affects all agencies that are concerned with energy production or use, or are involved in design or recovery efforts against the effects of climate change, and is not the responsibility of a single agency. Thus, *consideration of CC-relevance needs to be addressed during the annual planning and budgeting cycle.* (See Chapter 2, which outlines both a classification of CC-relevant expenditures and procedures to assess CC-relevance.)
- **Procedures for defining climate change project objectives and tracking performance need strengthening.** Modern, policy-based planning and budgeting requires that agencies (i) define their programs and activities in relation to clearly defined objectives and outcomes, and (ii) they establish verifiable progress indicators (see international examples in Annex II). Vietnam has initiated work along these lines in National Target Programs (NTPs) in partnership with DPs. However, CC-relevant projects examined during this review[32] through their investment decision documents (IDDs), and that were admitted to the annual SEDP/budget appraisal process, do not have clearly defined objectives or expected outputs and outcomes/milestones against which progress can be monitored and evaluated in relation to climate change. Establishing a climate policy M&E and reporting system will require strengthening project appraisal, design procedures and mainstreaming climate change into the project document/IDDs. (See Chapters 2 and 4.)

29. Vu Thanh Tu Anh (2012). *Decentralization of Economic Management in Vietnam from the Institutional Perspectives.*
30. The report was initiated as a self-assessment under the guidance of the PEFA Secretariat and with the support of the World Bank and development partners. The self-assessment was reviewed by a team led by the World Bank and subject to quality review by the PEFA Secretariat and by peer reviewers appointed by the World Bank, and discussed at a workshop with the principal Vietnamese stakeholders in July 2013.
31. These issues are discussed in the context of climate change, but many have more general applicability to development planning and fiscal policy as a whole.
32. See discussion of data collection and compilation in Chapter 3.

Strengthening National and Provincial Coordination: Data Sharing and Capacity Building

Different levels of the Government need to share spending information to effectively coordinate and implement climate change policies. The present system of planning, budgeting and reporting is decentralized and central line ministries are not kept informed of the level of investment at sub-national level in relevant sectors. This impedes coordination between central departments and provinces except in selected integrated projects. As a consequence, resources are likely to be applied inefficiently by both levels of government. Addressing the need for a clearer definition of responsibilities of line ministries and provinces with respect to climate change and development of regional strategies and projects involves both planning/budgeting reforms as indicated above and public administration reforms. Data sharing can be expanded by improving project reporting on budget and spending by line ministries and provincial finance departments. Improved data availability enhances policy discussions between line ministries and provinces in the annual planning and budget cycle. Timely and reliable information covering all levels of the Government and sources of financing would also enhance coordination. (See Chapter 4.) There is a need to strengthen capacities of a range of actors across the national and provincial financial and CC-response systems to deliver policy objectives and also to provide a progressive CC-response through feedback and review processes. Particular areas for strengthening include the application of climate change scenarios to budgeting and planning; increasing the understanding of intervention potential in various sectors, including climate change mainstreaming; the identification and classification of different climate change related expenditures; and M&E of the CC-response. Such institutional strengthening needs to be tailored to selected targets. For example, in an expenditure climate tracking system the identification, classification and other codings of climate change related projects by technical project officers at the national and provincial level is a pre-requisite for effective collation of all governmental CC-responses across the nation. Specific areas for institutional strengthening are outlined in Chapter 5 and the associated action plan.

Opportunities for Strengthening the Annual Planning and Budgeting Cycle

Strengthening planning and budgeting will be critical to establishing an effective climate change policy implementation framework. As described above, the planning and budgeting framework can be strengthened within the mandates of MPI and MOF to establish a more complete and unified CC-response expenditure allocation, tracking and monitoring system. Based on the findings in the preceding paragraphs, Figure 1.2 illustrates the annual planning and budgeting cycle[33] and the areas that need to be addressed to provide a stronger basis for implementing climate change policies by line ministries and provinces. Addressing these areas will provide a strong foundation for improving the management of climate change financing and for longer-term strengthening of the PFM system that will benefit overall fiscal policy management as well as CC-response policy.

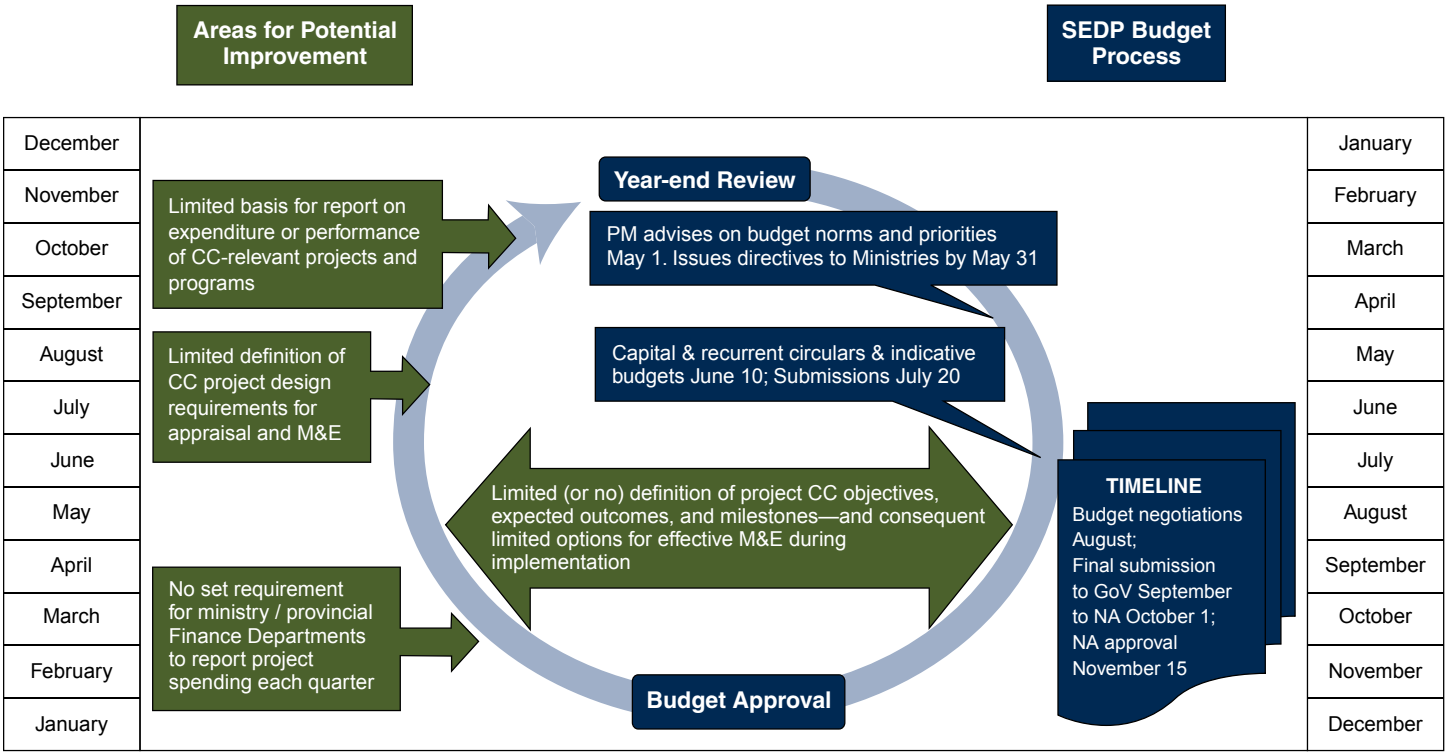
Country Management Systems and International Climate Finance

A well-defined PFM system will help to channel available climate change finance[34] to Vietnam and encourage DPs and global climate finance to use the country system.[35] The TABMIS is an advanced government financial management information system, which can incorporate all CC-relevant projects in the State Budget, and can use its accounting, reporting, and bank reconciliation facilities to track spending and ensure full financial accountability of all transactions processed through the system. DPs will require assurance, however, that fiduciary risks are low and that the overall planning and budgeting system can establish *both* financial and performance accountability with respect to climate change (and indeed for all development objectives). The WB did preliminary work on its general portfolio to investigate likely financial management risk at provincial level.[36] While risks were seen as moderate to substantial, it was recommended that the GoV, with DP assistance, undertake pilot work to establish that TABMIS is capable of tracking and accounting for ODA funds and this work is now underway.

Strengthening climate change related budgeting and planning will lead to a more effective and strategic

33. The steps in the planning and budgeting cycle apply to the national and provincial levels. Directives on the SEDP and State Budget are issued by the PM in May, and these directives are guided in detail by MPI and MOF, respectively, throughout the process. With some specific local differences for provinces, the process is followed by both line ministries and provinces.
34. For estimates of global cost and sources of finance see: World Bank (2009): *World Development Report 2010* http://siteresources.worldbank.org/INTWDR2010/Resources/5287678-1226014527953/WDR10.
35. Global Forum Summary (2013). *Using Country Systems to Manage Climate Change Finance: A Global Forum Facilitated by the Partnership for Action on Climate Change Finance and Effective Development Co-operation*. Incheon, Republic of Korea.
36. World Bank (2013). *Vietnam: Assessment of PFM Arrangements at Provincial Level*, June 2013.

Figure 1.2. Annual SEDP Process



CC-response and, coupled with general improvements to financial and performance accountability, will help target and facilitate access to various climate financing mechanisms. Reports that cover all central and provincial projects can ensure that overlaps between DP and GoV initiatives are identified and minimized. Establishing clear evidence of the low fiduciary and performance risks of using TABMIS as the vehicle for managing climate change projects should be linked to actions to strengthen the planning and budgeting cycle.[37] Moreover, successful reforms would help to establish Vietnamese entities for accreditation to access several channels for additional global climate finance. The Global Environment Facility (GEF, an operating entity of the UNFCCC's financing mechanism) has been the largest funder of projects to improve the global environment under the mandate of the Rio Conventions. To date it has allocated USD 11.5 billion grants, supplemented by USD 57 billion in co-financing, part of this is on climate change. Other funds include the Special Climate Change Fund (SCCF: USD 220 million), the Adaptation Fund (AF, under the Kyoto Protocol: 34 approved projects for a grant volume of USD 226 million) and the Climate Investment Funds (CIFs: total pledges ~USD 7.6 billion).

The Green Climate Fund (GCF) is a new operating entity of the financial mechanism under Article 11 of the UNFCCC, and is expected to provide country-led access. The purpose of the GCF is to make a significant and ambitious contribution to the global efforts towards attaining the objective of the UNFCCC. The GCF has been established and is ready for capitalization. Vietnam will be able to access the GCF through multilateral implementing entities, relying on their robust fiduciary standards and proven project oversight functions. Alternatively, it can designate one or a number of bodies as a national implementing entity (NIE) and apply for accreditation with the GCF, which is an established procedure for the Adaptation Fund (AF). If Vietnam proceeds with the designation and accreditation of a NIE to the GCF then it will need to upgrade certain institutional capacities regarding fiduciary processes, financial transparency, project management and oversight, results-based management and M&E capacity.

Development of a financing architecture has started under the NCCC. A comprehensive country system for managing international climate finance needs to be

37. This is taken up in Chapter 4 and 5.

built, guided and monitored by the NCCC. A financial mechanism for the SPRCC has been developed (see above). Other international climate finance (grants or loans) comes from bilateral donors and also multilateral funds, including GEF and GCF, AF and the CIFs. Vietnam has established national procedures for accessing the GEF, but access to other international funds is fragmented and much international climate finance is "off budget" and not (clearly) linked to or integrated in domestic budgeting and investment processes. The NCCC has discussed international finance from the GCF and for example channeling funds for full implementation of REDD+ in Vietnam, and MPI and MARD have been allocated roles in these two aspects. MPI and MONRE have received support from UNDP and the WB for development of a Vietnam version of the Climate Finance Options platform.[38] MPI has established a Climate Finance Task Force (Decision 505/QĐ-BKHDT, 2012) to develop mechanisms to mobilize financial sources. The CTF must provide regular updates on the status of climate finance (including current climate finance flows and their impact); identify potential mechanisms and sources of financing for the CC-response; explore innovative financing mechanisms; and identify options for combining climate finance with government-owned investment programs. The Department of Science, Education, Natural Resources and Environment (DSENRE) of MPI leads the CTF and acts as chair and secretariat. The goal is to fully reflect climate change policies into the planning and budget mechanism, while also supporting the development of a green fiscal and investment framework that will enable the country to maintain high growth while limiting the environmental impacts. These recent actions amount to the beginnings of a coherent national architecture to access and strategically use the available international climate finance. This is needed as the current climate financing landscape is extremely complex. *The NCCC should guide the design and functioning of a comprehensive and well-coordinated climate finance mechanism in Vietnam. Further international support is needed, especially for building capacities in different units and agencies that relate to climate finance management.*

Longer-Term PFM Issues: Policy-Based Budgeting and Performance Accountability in Support of Climate Action

Addressing the basic areas of improvement will provide a base for longer-term reforms of the PFM system needed to scale up and sustain climate action. Initial steps taken to strengthen the PFM cycle will help to establish a basis for longer-term reform and improve coordination between planning and budgeting at all levels of government. An important PFM issue is to ensure that assets created through the investment budget should have sufficient operation and maintenance provisions in the recurrent budget once the investment is completed. In addition, budgeting should be designed around a medium-term fiscal framework to ensure that fiscal resources are prioritized in line with available fiscal space.[39] Steps toward establishing a program-based classification to help address these issues could also be considered as part of the long-term PFM reform efforts.

1.5 Progress in mainstreaming the climate change response

The NCCS and VGGS are instrumental in the process of developing climate change policy in specific sectors. Good progress has been made in mainstreaming climate change into areas such as water management, energy and DRRM. To ensure that CC-response policies are incorporated fully into sector development and social policies and programs is not always straightforward. It involves a systematic effort to: (i) formally identify CC-response objectives within sector and provincial plans and change sector policies and plans accordingly; (ii) give clear agency responsibilities for planning and implementing such policies; (iii) establish effective tracking of achievement against milestones and delivery of outputs and outcomes during implementation; and (iv) regular evaluation of accomplishments against policy objectives.

Links between socio-economic development and a CC-response are stated in policy and strategy documents and opportunities exist to promulgate this through the

38. CFO: http://www.climatefinanceoptions.org/cfo/.

39. The concept of fiscal space has become a central concept in modern macroeconomic management. Very simply it aims to describe the resources available to government to apply to new state policies within the limits of fiscal prudence. In this broad sense it can be applied to all forms of fiscal management. In advanced economies and increasingly in emerging market economies it is estimated formally as an element of a medium-term fiscal framework (MTFF). Fiscal space is estimated from two elements of the fiscal environment: (i) the aggregate resource envelope, which can be estimated using economic models to project (a) overall expected tax and non-tax revenues available under existing tax and charging policies, and (b) prudent levels of new net borrowing consistent with rigorous debt sustainability analysis; and (ii) the continuing costs of government under its existing expenditure policies. The latter is estimated in advanced economies by establishing a system of forward budget estimates that maintain data on costs of ongoing government activities under clearly defined price and policy assumptions (these are sometimes called existing policy estimates). The difference between these two elements constitutes fiscal space—or the resources available to finance new policy proposals under the existing tax and charging regime.

SEDP process. The SEDP translates at country, sector, and local levels.[40] Improved mainstreaming of climate change in the SEDP (2016–2020) and the (annual) processes would strengthen the CC-response and progress climate change related policy objectives. This can be combined with strengthening the legislative framework in relation to climate change. For example, in the new Law on Environmental Protection approved by the National Assembly in June 2014, a climate change chapter is included, and its provisions must now be reflected in a range of national, sector and provincial policies and regulations.

Mainstreaming has progressed in several aspects, but many opportunities exist to extend climate change mainstreaming more comprehensively across sectors. Progress and challenges for climate change mainstreaming in sectors and at provincial level are outlined in the table below. Key areas where climate change policy mainstreaming and implementation are encouraged are in policy, governance/administration and scientific and technological development.

40. The SEDP (2011–2015) identifies climate change mainly in terms of adaptation and links it to extreme weather events and environment. This is a narrower focus than the NCCS, which does not just focus on extremes. Clear CC objectives by sector are not spelled out.

Sector	Key Points: Mainstreaming Progress
Water resource management	Climate change has been addressed in recent legislative and strategy documents in the water sector, most notably the Law on Water Resources (2012) and the "National Action Plan on enhancing the efficiency of management, protection and use of water resources" (2013), which includes climate change in the objectives. Three regional irrigation master plans (north, south, and centre) all capture the climate change issues. The irrigation master plans provide evidence of the systematic use of the MONRE climate change scenario by MARD (as per Directive 809/CT-BNN-KHCN of 2011) to mainstream climate change. However, enforcement of policies and regulations is sometimes weak. For example, the 2006 "National Strategy for Water Resources towards 2020" (Decision No.81/2006/QĐ-TTg) proposes water management master plans at local levels but progress is limited. In addition, the institutional set-up in the water sector is complicated with a number of line ministries involved, including MONRE (overall water resources management and water in the environment), MARD (which manages reservoirs in connection with irrigation and water provision), and MOIT (which manages reservoirs in connection with hydro-power). PPCs also manage some reservoirs, as well as MOT (in connection with water transport). A coordinated CC-response across the water sector is critical and will provide major benefits.
Agriculture and rural development	MARD has led a progressive response to climate change in the agricultural and rural development sector. MARD's first action plan on climate change was in 2008, and in 2011 it issued Decision 543/QĐ-BNN-KHCN on the action plan to respond to climate change in the agriculture and rural development (ARD) sector 2011–2015 with a vision to 2050; as well as Directive 809/CT-BNN-KHCN on plans, programs and projects in the ARD sector. MARD has also set a GHG reduction target of 20 percent by 2020 compared to 2010 (Decision 3119/QĐ-BNN-KHCN, 2010). Significant GHG emissions are from the agricultural sector (43 percent of total GHG emissions based on 2000 baseline figures[41]). There are significant opportunities for mitigation in the ARD sector, which is also demonstrated by a recent climate change technology needs assessment.[42]
Forestry (For a further discussion on mainstreaming the CC-response in this sector, see Annex I)	The forestry sector is seen as high priority for mitigation through sequestration of CO_2. Vietnam is proceeding to implement REDD+ and targets to increase forest cover from 40 percent to 45 percent (Resolution 24-NQ/TW). The National Action Program on REDD+ (2011–2020) aims to reduce emissions and increase GHG sequestration, thus contributing to MARD's 20 percent GHG reduction by 2020. The challenge for the forestry sector is to integrate policy instruments for development of the sector (e.g. the Law on Forest Protection and Development (2004) and the National Strategy on Forestry Development 2006–2020) with the CC-response through REDD+, but also through adaptation benefits from afforestation, sustainable forest management and plantation management. The forestry sector includes small-scale, natural resource-dependent, rural dwellers, as well as large commercial entities (SOEs or private). The mainstreaming of climate change through the development of the forestry sector must consider these diverse interests, but M&E and feedback to strengthen policy and planning should be unified and consistent across the sector. Strengthening the linkages between the NFDS, NPFPD and climate change related policies will help to deliver both forest development and climate change benefits.

41. MONRE (2010). *Vietnam's Second National Communication to UNFCCC.* Hanoi, 2010.
42. Quang, Q.T., Van Anh, N., & Hai, N.T. (2012). *Vietnam Technology Needs Assessment for Climate Change.* Department of Meteorology, Hydrology & CC, GoV; UNEP, GEF, AIT.

Sector	Key Points: Mainstreaming Progress
Energy	Although GHG emissions from the energy sector are rapidly increasing, the sector has the potential to make significant mitigation gains. MOIT developed an Action Plan to Respond to Climate Change (Decision 4103/QĐ-BCT), which is focused on pre-existing programs (e.g. the NTP-Energy Efficiency, Decision 1427/QĐ-TTg, 2012) and modernization of technology. The action plan has generated some successes. However, it does not address the challenges of indirect fossil fuel subsidies and a carbon price. UNDP, the WB, as well as other DPs have analyzed low-carbon energy options. The analysis shows that there is a range of low-cost, affordable options across a variety of sectors in Vietnam to reduce GHG emissions. However, these options are strongly determined by energy price levels, which are very low in Vietnam by international comparison as a result of price controls and indirect subsidies. In addition, there is a need for improved GHG data collection, compilation and publication, improved institutional capacities and enhanced ministerial coordination in the energy/green growth/GHG emissions area. The updated NTP-Energy Efficiency outlines a range of projects to be supported over the period to 2015. The targets in key sectors demonstrate an increase in the aspiration and penetration of energy efficiency when compared to the Decision of 2006 (79/2006/QĐ-TTg), which only sets overall energy consumption targets. Renewable energy has been supported in a range of laws and in later versions of the electricity master plan. For instance, the Power Development Plan for 2011–2020 and vision to 2030 (Decision 1208/QĐ-TTg, 21/07/2011) targets the total power from renewable sources to rise from 3.5 percent in 2010 to 4.5 percent in 2020 and six percent in 2030. Non-hydro renewable energy development is behind this schedule, largely because investors' interest is low given the prevailing power prices. However, the potential for wind power and solar power is substantial, especially in the southern central and coastal regions of Vietnam.
Construction	National construction standards for buildings, transport infrastructure and rural infrastructure such as dykes must increasingly be modified as climate change effects become more pronounced. This will require technical capacity building in MOC, MARD, MOT and other ministries and agencies. In some cases (e.g. dykes and irrigation) there is a discrepancy between construction standards for domestic-funded projects and ODA-funded projects, suggesting that uptake of global best practice is not yet happening. Discussion with officials indicated awareness of the problem and the need for undertaking a comprehensive review of standards in relation to climate change risks.[43] There is a need for construction standards, linked to the MONRE climate change scenario, to be used in governmental, public and commercial works. This may require strengthening of the legal framework. MOC has developed a climate change action plan (March 2014) which includes improving the incorporation of climate effects into construction activities, increasing the capacity to respond to climate change and promoting energy efficiency and green construction. MOC is also working towards a green building strategy, is mainstreaming climate change and sea level rise in urban development planning (especially urban areas in the central coast region and in the Mekong Delta), and is enhancing solid waste planning and management. This is likely to help align MOC's CC-response with the VGGS.
Roads and transport	Existing roads and transport policies, standards and guidelines at the national level are not comprehensively addressing climate change resilience of rural infrastructure, especially roads. Most damage estimates for Vietnam's roads fall between USD 4 billion and USD 9 billion, mostly from the effects of flooding.[44] The predicted changes in temperature, precipitation and flooding present additional threats to Vietnam's roads. Road standards, determined by meteorological information as well as location, include the Technical Standard for Roads (issued in 2005), standards for urban roads (TCXDVN104-2007), standards for the delta region (e.g. TCVN4054-2005) and bridge standards (22TCN-05). A review of a number of MOT projects in road construction demonstrated that planning and design of road projects do not explicitly mention climate change or the use of climate change scenarios in their planning. However, road design standards were set using the latest meteorological data (last 10–30 years). Building climate change effects into road standards and building practices will require use of the MONRE climate change scenarios to assess the future climate within the lifetime of the road project and then assess the requirements for a durable design. Development of appropriate regulations and establishment of a climate assessment tool will help increase road resilience to projected climate change. There are similar requirements for including future climate scenarios in the planning of all transport investments and mainstreaming climate change across the various elements of transport planning, infrastructure and management, both in rural and urban areas.

43. This point, which relates to both MOT and MOC, accounts for the relatively low level of CC-projects submitted by either ministry for the CPEIR. See further discussion in Chapter 3.
44. Chinowsky, P.S. et al. (2012). *Road Infrastructure and Climate Change in Vietnam.* UN University—World Institute for Development Economics Research; Working Paper No. 2012/80.

Sector	Key Points: Mainstreaming Progress
Disaster risk management (DRRM)	Mainstreaming climate change in the disaster sector has been significant and extensive. The National Strategy on Disaster Prevention, Response and Mitigation to 2020 (Decision 172/2007/QĐ-TTg) promulgated mainstreaming of disaster risk reduction in national, sector and provincial socio-economic development planning frameworks. The majority of current SEDPs at the national and provincial levels, as well as sector master plans for the period 2011–2020, have included DRRM. All ministries represented in the Central Steering Committee for Flood and Storm Control have developed action plans for the integration of DRRM within their sectors. All 63 provinces in the country have now also developed DRRM action plans. Some elements of progress status are provided in the first DRRM strategy implementation report issued in April 2013. In June 2013 the Law on Natural Disaster Prevention and Control (Order 07/2013/L-CTN) was adopted. This law identifies natural disaster prevention and control activities, and the rights and obligations of agencies, organizations, households and individuals engaged in natural disaster prevention and control activities. However, financing for disaster risk reduction does not seem to be prioritized. The use of the MONRE climate change scenarios is not mentioned, even in Article 17 on assessment and zoning of risks, suggesting that the link between climate change and DRRM is yet to be fully achieved. Coordination between the joint technical lead of DRRM in MARD with the climate change structures in MONRE, and how the NCCC Standing Office ensures and monitors coordination, are critical factors to ensure further strengthening of a coordinated DRRM and CC-response.

Mainstreaming at the provincial level has progressed but it is not systematic across all provinces and is constrained by capacity limitations. About 45 provinces have been supported by the NTP-RCC to develop action plans in response to the NCCS. A survey of these plans shows a substantial list of proposed interventions but with minimal appraisal or prioritization. For each of their 36 proposed projects, the An Giang climate change action plans usefully included a budget and possible source of funds which helps link the climate change projects with the available financial mechanisms. The proposed projects were mainly projects in which adaptation and mitigation were mainstreamed as opposed to completely climate change focused projects, and covered a number of sectors (natural resources, agriculture, construction and transportation). This suggests that An Giang province already perceives the main CC-response as a mainstreamed activity rather than a standalone activity. In contrast, the climate change action plan for Quang Nam province identifies a range of specific objectives, which are mainly precursors to CC-response (and precursors to the type of projects proposed in An Giang), including assessing impacts of a sea-level rise, assessing vulnerability and developing a list of plans and projects. This suggests that Quang Nam has not yet fully formulated the CC-response and mainstreamed it across activities, but is still at the stage of creating the evidence base and formulating the policy/strategy response framework. Extending the action plans across all provinces, assuring consistent quality of Action Plans and establishing funding mechanisms for proposed interventions remain a priority. CC-response capacity and data sets at the local level are weak. At present, the scope for more integrated consideration of provincial issues by sector and across provincial boundaries is limited both by local capacity and lack of access to provincial data. Limited guidance and understanding of climate change has reduced the impact of CC-relevant activities at provincial level. There needs to be a consolidated capacity upgrade, closer integration with national level bodies and financial mechanisms and harmonization of policies to provide a clearer road map for provincial authorities.

Climate change mainstreaming can be further strengthened as an integral part of the policy, planning, budgeting and implementation cycle. One important aim of this CPEIR is to provide an overview of how resources have been directed towards achievement of stated government climate change goals and identified tasks in the last four years. The expenditure review shows features that can be strengthened in future planning cycles. These areas include: (i) wider coverage of priority climate change policy dimensions; (ii) further developed processes to ensure clear formulation and implementation of sector and provincial climate change policies; (iii) harmonization and formalization of CC-relevance, objectives, expected outputs and outcomes through policy and program reform, and planning; and (iv) stronger analytical M&E and refining of weak, year-end feedback and review processes. Methodological measures to help address these issues and support climate change delivery (CCD) are elaborated on in Chapter 2.

2. CPEIR METHODOLOGY AND CLIMATE CHANGE TYPOLOGY DEVELOPMENT

Key Findings from Chapter 2

1. *The decentralized nature of project recordkeeping and reporting causes substantial delays in obtaining data and applying the TCCRE and CC-relevance methodology.*
2. *The lack of consistent reporting on project expenditure outturns has made it difficult to give reliable comparisons between CC-response allocations (or ODA commitments) and actual expenditures.*
3. *IDDs do not, most of the time, clarify the nature of project objectives and expected outputs sufficiently for M&E of climate change project and program effectiveness.*

The methodology used for the CPEIR is applied across a range of countries but is adapted to meet specific country requirements.[45] In line with the climate change policy and institutional analysis in Chapter 1, this chapter outlines the approach and methodology for collecting, processing, and interpreting the climate change expenditure data currently available in Vietnam. To ensure an accurate representation of climate change expenditure/investment, it was necessary to review the climate change expenditure data available, assess their limitations, and develop processes to compile and analyze it. As indicated in Chapter 1, this review incorporated elements of institutional analysis that points to ways of strengthening the GoV's CC-response. In the work to develop and apply the typology to Vietnam's climate change expenditures there are two key elements to be aware of. First, the CPEIR clusters the classification of expenditures judged to be relevant to climate change into groups. This supports the analysis of the direction and effectiveness of CC-response resource allocation relative to the GoV's policies. Second, the review has developed a methodology for assessing the quantitative relevance of climate change expenditures in each group to either or both adaptation and mitigation objectives. Section 2.1 looks at the scope of the CPEIR methodology applied in Vietnam; Section 2.2 reviews the classification approach to linking expenditures to current CC-response policy; Section 2.3 discusses issues relating to assessing CC-relevance; and section 2.4 discusses the link between the expenditure classification and policy objectives.

45. See Background Note II.

2.1 The scope of the CPEIR and the wider application of its methodology

The CPEIR is limited to selected ministries and provinces. The climate change expenditure analysis, which is summarized in Chapter 3, provides a comprehensive overview of climate change investment spending and relevant recurrent spending in five key ministries and three provinces. Since an estimated 70 percent of total investment spending is done at provincial level, this analysis does not represent the totality of Vietnam's CC-response efforts. However, the analysis provides a substantive insight into CC-response spending in the five ministries, which represent the main governmental CC-response bodies at the central level. It also provides significant insight into provincial level spending in three target provinces. However, the provincial level analysis does not represent an adequate sample from which to extrapolate generalities to the 60 other provinces and municipalities.

The frame of the CPEIR expenditure data was as follows:

- Five line ministries: MONRE, MARD, MOIT, MOC and MOT
- Three provinces: An Giang, Quang Nam and Bac Ninh
- Data type: Recurrent (including three sources for economic, environment, and science and technology activities) and investment expenditures
- Data coverage: All potential CC-relevant investments by selected general government entities (see Box 2.1)
- Data granularity: At the individual investment project level
- Time period: 2010–2013

The CPEIR methodology addresses several data and procedural limitations in Vietnam. The CPEIR aimed to validate the methodology and to obtain procedural insights to support CPEIR findings and recommendations. As indicated in Chapter 3, ex-post project data is currently held by individual line ministries and provincial departments, and records are in many cases incomplete, particularly with

Box 2.1. Coverage and Tracking of CC-Response Expenditure Data: Treatment of SOEs and the Role of MOF

Two features of the CC-response expenditure data that have been compiled for this CPEIR are of critical importance to understanding the scope of the CPEIR and how these data can be applied government-wide:

a. The data relates to *general government* operations only, *not* to the operations of either SOEs or private sector enterprises; and

b. A CC-response is most often associated with projects that serve many purposes, including economic development, poverty reduction, or other sector objectives. They generally cannot be associated with specific transactions. CC-relevance is thus in most cases an *assessed value*, not a transaction-based accounting value.

General government and SOEs in the CPEIR

The scope of the CPEIR is restricted to general government (as defined in the IMF Government Finance Statistics Manual (GFSM 2001)). While both state-owned and private enterprises undertake investments in energy use or production and distribution, their primary purpose is to do so in an economically viable way within the existing price and cost regime. Investment in clean or efficient energy by enterprises is therefore highly dependent on the price/costs of fossil fuels relative to other sources. The main way that government policy can impact these decisions is through its policies and regulatory mechanisms as well as subsidy or taxation policies.

Enterprises themselves will implement CC-response policies if the additional costs of doing so are covered by the Government or emission costs are embodied in their cost and profit structure. Sometimes, however, SOEs are required to finance these activities from their own balance sheets, including borrowing or providing fuels or electricity below cost. This type of activity is described in the IMF Manual of Fiscal Transparency (2007) as quasi-fiscal. Essentially, government is requiring its enterprises to use its resources for fiscal policy purposes (in this case CC-response policy).

It is also sometimes the case that SOEs have not been set up as true enterprises, but are more akin to statutory bodies, largely supported by government subvention and expected to implement some aspects of government policy. Expenditure recorded in the budget and in treasury accounts for the State Budget in these instances does not necessarily represent actual spending, but rather a transfer to the entities. In principle, all such governmental activities by these entities should be included for fiscal control purposes as part of general government. The entities, correspondingly, should have a clear arrangement to report to government on performance of assigned tasks. In Vietnam, different types of enterprises may be included in this category. The forestry sector, for instance, implements CC-response policies by transferring funds to forest sector enterprises or financing through payments from forest-using enterprises to execute government policy. These forms of support are not clearly indicated in the budget or accounts, nor is there any clear agreement on enterprise performance. The effectiveness of the CPEIR methodology and monitoring of CC-response implementation would be greatly enhanced if transfers to enterprises could be identified in the expenditure data and if agreements with the enterprises related to the CC-response are put in place.

Budgeting and tracking assessed expenditures

Because the data is based on CC-relevance assessments of investment projects and recurrent spending, actual CC-response budget and payment transactions can be recorded in the accounting system only for those elements that are assessed as being wholly dedicated to climate change. The TABMIS of MOF will therefore *not be expected to generate budget execution reports showing actual CC-response spending relative to the original or revised budget*. MPI and MONRE, however, who will be guiding the application of the TCCRE and the CC-relevance assessments, will be able to supply MOF with a complete list of all CC-relevant *projects* admitted to the annual investment budget each year. On the basis of this list, MOF should be able to: (i) enter a *memorandum*-level budget allocation against each project (which will be the basis for the annual memorandum-level climate investment budget); and (ii) supply MPI and MONRE with biannual reports on actual *total* spending by these projects. These data can then be used to generate reports on the level of actual spending on CC-response from the annual climate budget.

Similar principles will apply to budgeting and monitoring the climate *recurrent budget*. Since it is directly responsible for the recurrent budget, MOF could be more directly involved in assessing the CC-relevance of elements of the recurrent budget submitted by line ministries and provinces. MOF could possibly engage directly in the assessment process and participate in MPI/MONRE/MOF specialist teams to assess and direct overall CC-response efforts by line ministries and provinces. Although MOF would not be required to track CC-relevance at a transactions level, it could in this way act jointly with MPI and MONRE to coordinate recurrent and investment budget efforts to assess and direct overall CC-response efforts of the GoV.

regard to their CC-relevance. Data available in most line ministries (other than MARD and MONRE) is difficult to access. This difficulty in access was mainly due to following appropriate administrative processes and the dispersed and diverse storage of project information across line ministries requiring many connections and communications to be made. The information obtained was largely limited to project titles and budget allocation for the period 2010–2013. However, project titles are not always sufficient to identify project objectives and CC-relevance clearly. In addition, not all actual spending data were available for line ministries (other than MARD) or provinces and project codes and location codes were sometime difficult to determine. As discussed in Box 2.1, CC-response data coverage should not include SOEs that operate on commercial principles. Clear performance-related arrangements should be made with non-commercial SOEs, and MOF should report only total transactions of CC-relevant projects, not assessed CC-response spending.

The CPEIR methodology can be further refined and applied by the GoV to establish a comprehensive CC-response expenditure analysis. The present data limitations can be addressed by the GoV by reforming its project appraisal process. Reforms are already underway, but others are needed (further elaborated in Chapters 4 and 5). Further refinement of the typology used in this study will be critical input to these reforms. This will be a continuing process to be taken up by the GoV and there will also be a need for capacity-building to carry out this task. The development of the typology is discussed in more detail below and in Background Note II.[46]

2.2 Development of a typology linked to Vietnam's climate change response policy

Developing a typology of CC-related investments is essential to allow categorization of the various CC-related activities undertaken by the target line ministries and provinces. The typology identifies the full range of activities, which could be considered as CC-response in Vietnam and allows investments to be placed into a number of sub-categories. Breaking down all CC-related investment into specific categories allows a detailed analysis of the investments. Each category must, in turn, be linked to the GoV's CC policies. The advantages of developing a typology include:

- Systematic coverage of all CC-responses and easy collation of all activities under each classification type.
- Longitudinal analysis of budgetary changes in certain response areas through tracking CC-response spending over time.
- Linkage of CC-response to policy objectives provides improved appraisal of policy implementation and feedback to reform processes.

The existing CC-response policy frameworks, in particular the NCCS and VGGS as described in Chapter 1, were seen as the critical starting point for establishing the typology. Individual categories and tasks, however, were also drawn from groups/categories that are used internationally in climate change work. Most notable in this respect was the typology of activities with climate co-benefits compiled by the WB.[47] Case studies on South Korea's approach to CC-response management and the tracking and evaluation of expenditures contributing to France's climate change policy are contained in Annex II.

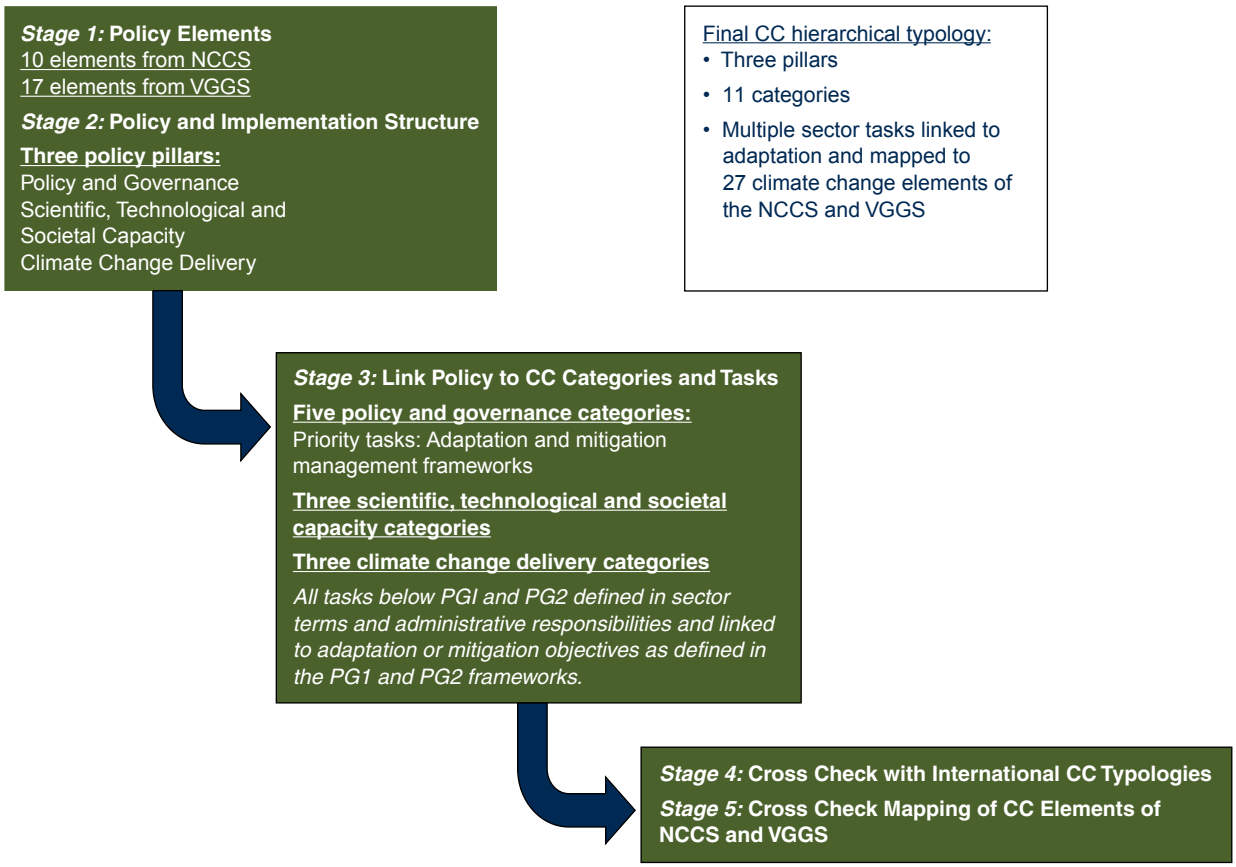
The CPEIR typology was refined through several consultations with relevant government agencies. A workshop was held in which the evolving typology was discussed with representatives from relevant government bodies and international agencies. In addition, after trialing investment data classification in the typology and pilot data interpretation, the typology was further refined following consultations with relevant line ministries. The process of development is illustrated in Figure 2.1.

The typology aims to provide a unifying framework for the full range of activities involved in CC-response delivery. The TCCRE has been developed in a hierarchy, allowing data analysis at various levels of detail. The three hierarchical levels are (i) *Pillars*—the cornerstones of the CC-response; (ii) *Categories*—the main themes involved in CC-response within each pillar; and (iii) *Tasks*—the sectors or identifiable groups of CC-response activities within each category. The task level represents the full range of recognizable activities of the CC-response at the line ministry and provincial level. The

46. Background notes are available on the website of the Ministry of Planning and Investment established to track Climate Finance Options for Vietnam (http://cfovn.mpi.gov.vn), as well as on the websites of the World Bank (www.worldbank.org/en/country/vietnam) and UNDP (www.vn.undp.org).

47. World Bank (2011). *Typology of Activities with Climate Co-Benefits by WB Sector.*

Figure 2.1. Mapping Policies to Climate Change Expenditures and Organizational Responsibilities



final CPEIR typology has three pillars: Policy & Governance (PG), Scientific, Technological and Societal Capacity (ST), and Climate Change Delivery (CCD). Each pillar has between three and five categories. An important distinction within the pillars is that between PG and ST on the one hand and CCD on the other. The former can be designated as *enabling* activities. They are not directly creating a CC-response, but they provide essential administrative and technical infrastructure for line ministries and provinces to deliver responses. The full TCCRE is presented in Background Note III.[48]

The final climate change typology can be linked to the main climate change policies of Vietnam. There is a clear link between the NCCS, VGGS and NDS (National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020; adopted 2007) and the TCCRE, with the task level of the TCCRE tracking policy elements of the NCCS, VGGS and NDS (see Annex III.2). All typology tasks track onto policy elements of the NCCS. All VGGS policy elements track onto the typology, but not all tasks track onto the VGGS, demonstrating that while the VGGS is closely associated with a CC-response it does not cover the entire range of CC-response tasks. Most of the NDS policy elements tracks onto tasks of the typology (except for the disaster response element), but the NDS does not cover many of the typology tasks. This illustrates the systematic linkage between the NCCS and the typology tasks, and also the policy convergence of a CC-response with green growth and disaster strategies. To assist line ministries and provinces assign groups of projects (and linked organizational responsibility) under each of the proposed tasks and sector activities within these tasks, a more extensive list of possible sub-sector tasks drawn from a combination of the detailed analysis of climate expenditure in Vietnam is provided (see Annex III.3).

The TCCRE provides a classification that can be applied to all CC-relevant expenditures in Vietnam. The TCCRE represents the main policy dimensions as set out in the NCCS, VGGS and NDS, international groupings of CC-response which are relevant to Vietnam, as well as key areas in which activities are presently undertaken or there is perceived to be a need for activity. It constitutes a *climate change*

48. Background notes are available on the website of the Ministry of Planning and Investment established to track Climate Finance Options for Vietnam (http://cfovn.mpi.gov.vn), as well as on the websites of the World Bank (www.worldbank.org/en/country/vietnam) and UNDP (www.vn.undp.org).

program classification that allows elements of GoV and DP spending on climate change objectives to be clearly identified, tracked, and climate change outputs and outcomes evaluated relative to cost. Its implementation is necessary to show the distribution of effort, strengths and weaknesses, and the potential impact of spending by the CPEIR ministries and provinces surveyed. Broader implementation of the TCCRE should provide multiple benefits to management of the overall CC-response program. It will: (i) provide a comprehensive overview of the distribution of total spending on CC-response, including alignment with country climate change and green growth strategies; (ii) facilitate closer cooperation between levels of government and between the GoV and DPs (particularly as DPs' use of country systems for plan, budget, accounts, and reporting is established); (iii) establish accountability for use of funds and achievement of results relative to objectives; and, as a result, iv) strengthen channels for financing the program and guide resource mobilization.[49] The typology, moreover, is not a closed system. As new CC-relevant projects and categories emerge, these can be added. *The CPEIR recommends that the TCCRE be applied (and progressively refined) by MPI and MONRE to all CC-relevant expenditures in the State Budget to estimate the level of climate-relevant spending by all line ministries and provinces. MOF should ensure that all climate change related projects are tracked by the relevant finance departments.*

2.3 Applying the TCCRE and assessing climate change relevance

Assessment of CC-relevance is an important part of the CPEIR methodology. The TCCRE allows all CC-relevant expenditures to be classified against different elements of climate change policy. The extent to which each project addresses CC-response must also be assessed. A process for classifying and assessing relevance was developed as part of the CPEIR. This process has been tested and has demonstrated its practicability. The methodology should be applied by the relevant government bodies to institutionalize a national CC-response tracking system. Further refinement will be needed (see Chapters 4 and 5), but this depends on a clear decision to apply the TCCRE, and to apply clear rules for determining the extent of CC-relevance in each project selected.

Four Steps to Assess the CC-relevance of Projects

A four-step process has been designed for treatment of any investment or financial entity which on initial consideration could be related to climate change. The process was designed to use pre-determined criteria to help make decisions; applying discipline to decisions that involve judgment of multiple factors and helping to ensure consistency in outcomes. As discussed in Chapter 1, mainstreaming of climate change activities should be strengthened in key line ministries to ensure that all CC-relevant projects are considered in this process. The four steps are shown in Figure 3.1 in the Background Note III containing the Typology Guide.[50]

The first step should ensure: (i) that all projects with potential CC-relevance are considered; and (ii) that all expenditures considered for inclusion are climate change related. The first part of this step requires that a workable but robust definition of a climate change related expenditure is used. The definition used assumes that all CC-relevant expenditures have aspects of adaptation or mitigation. Thus, CC-relevant expenditures aim either to: (i) improve resistance or resilience to present and forecast climate change by protecting against negative effects on people, resources and infrastructure or taking action against projected future adverse effects, or (ii) reduce resource inputs and GHG emissions per unit output though technological change, substitution and carbon sequestration. This could involve reducing GHG emissions directly (such as reduced use of fossil fuels in transport, renewable energy generation, energy conservation and efficiency) or through capturing of carbon (e.g. carbon sequestration). Some investment may aim to provide both adaptation and mitigation benefits and these are also included as CC-relevant expenditures. Ensuring that all expenditures in the annual budget and planning process are CC-relevant requires establishment, as far as possible, during the formulation of the five-year SEDP and in preliminary policy discussions during the annual planning and budget cycle;

49. Reviewers have observed that CC-response is not the only type of spending that would be amenable to application of a program classification and results-oriented budgeting (such as Program-Based Budgeting). That is certainly the case, but this CPEIR is concerned only with the application of this methodology to CC-response management. CC-response policies are recognized as being of critical importance by the GoV, and the application of the methodology to the CPEIR entities included in the study demonstrates its practicability. It should also be noted that, while TABMIS is an advanced Fiscal Management Information System, no other work on program-based budgeting is underway at present. Application of the TCCRE may point the way to similar applications in other sectors, but such applications are beyond the scope of this CPEIR.

50. Background notes are available on the website of the Ministry of Planning and Investment established to track Climate Finance Options for Vietnam (http://cfovn.mpi.gov.vn), as well as on the websites of the World Bank (www.worldbank.org/en/country/vietnam) and UNDP (www.vn.undp.org).

the strategic foundation to encourage mainstreaming of CC-response into BAU sector and provincial policies.

A thorough policy discussion will help ensure that all high-priority CC-relevant projects are included in the annual plan and budget appraisal process. This policy discussion needs to take place between MONRE, MPI and MOF and the proposing line ministries or provincial administrations to ensure the CC-relevance of the proposed expenditure. Some projects may, however, not be sufficiently well prepared or justified in terms of CC-relevance. Their links with national CC-response policy should be examined, either in terms of correspondence to the NCCS and climate change elements of the VGGS and NDS, or other climate-related sectors covered by the TCCRE though not specified in NCCS, VGGS or NDS. All climate change related investments should be shown to contribute either to resistance or resilience to the present and forecast climate, to reduce resource inputs and GHG emissions per unit output, or both. Activities include preparatory work, such as capacity development, policy strengthening or piloting technical advancements, as well as more direct response actions. Formal discussion of these issues during the appraisal/negotiation stage of the annual planning and budget cycle will ensure that the CC-relevance of projects and related recurrent spending is progressively well defined in the planning and budgeting process—and climate change mainstreaming is thereby made more effective.

The second step is to classify expenditures in the appropriate pillar, category and task of the TCCRE. Each investment is positioned at the pillar, category and then task level of the TCCRE. If activities in the investments cover more than one task, then the investment is placed in the task to which the more significant budget is allocated, but CC-relevance would be assessed in terms of total CC-response contribution. If the investment cannot be placed in a task category then either the investment is not actually climate change related[51] and the answer in step one should be reviewed, or the investment is CC related but the TCCRE is inadequate. In the latter case an addition should be made to the TCCRE.

The third step is to identify whether the activity's climate change objectives are primarily related to adaptation or mitigation. All related investments that pass through step one should either improve resistance or resilience to present and forecast climate effects (i.e. adaptation) or reduce GHG emissions by lowering emissions or increasing sequestration (i.e. mitigation). Some investments, however, may have elements of both adaptation and mitigation, in which case several options are possible: (i) such projects can be grouped as a separate adaptation/mitigation (A/M) category; (ii) projects can be assigned to either A or M depending on the objective assessed as being most important; or (iii) the relevance category can be divided between the two objectives according to relative importance. For the CPEIR study, the first of these options has been taken because option ii detracts from the hybrid nature of some projects and also establishes the possibility of double accounting, and option iii would be difficult to do robustly when information on climate change is so scant. A significant number of projects fall into this A/M category. In applying the methodology to all State Budget projects, the third option would be preferred and should be the long-term objective to get the best idea of the relative amount of effort being made toward each objective through budget allocations. Finally, it is important to assess how much of the overall activity expenditure is climate change related. As indicated at the outset, it is rarely possible to link specific elements of project spending to specific CC-response outputs and outcomes and thereby identify the climate relevance in percent of the activity. Where this can be done, it should be part of the process, but for the most part, CC-relevance can only be determined by relatively broad criteria. Investments are divided into five categories based on the estimated percentage of the overall investment budget which is linked to a climate change response. Project management and administrative costs related to project delivery of climate change related activities should be included as they are necessary for delivery of the climate change components. If a project seems to fit into multiple categories then it is the highest percent category of climate change-related expenditure into which it fits in which it is recorded. Table 2.1 shows the criteria for the five categories of proportional climate change spending.

51. This result should not occur if the first step is properly applied. During the actual review of the CPEIR line ministries and provinces a number of projects submitted for review were subsequently judged to not be CC-related. This result, however, was a consequence of the lack of initial clear definition of CC-relevant projects. These issues may well recur in early general application, but should not generally be seen as part of the process. A high emphasis should be given therefore to clear policy directions on what is or is not CC-relevant in step one.

Table 2.1. Criteria for the Five Categories of CC-Response Spending

Category	Climate Change Related Expenditure	Criteria
Complete relevance	100% expenditure	*Projects which either (i) explicitly state a predominant climate change objective, or (ii) are fully dedicated to exclusively delivering climate change related benefits, or (iii) sit within a governmental program dedicated to climate change (e.g. NTP-RCC). Projects may satisfy one or more criteria to qualify.*
High relevance	75%–99% expenditure	*Projects which have (i) one or more of the primary objectives to improve climate resilience or mitigation, or (ii) deliver significant and specific results/outcomes that improve climate resilience or contribute to mitigation. Projects may satisfy one or both criteria to qualify.*
Medium relevance	50%–74% expenditure	*Projects which either (i) have secondary objectives related to building climate resilience or contributing to mitigation, or (ii) some results/outcomes of the project are related to building climate resilience or contributing to mitigation, or (iii) mixed programs with a range of activities that are not easily separated but include at least some that promote climate resilience or mitigation. Projects may satisfy one or more criteria to qualify.*
Low relevance	25%–49% expenditure	*Projects that include activities that display attributes where indirect adaptation and mitigation benefits may arise but climate change benefits are not explicitly listed in project objectives or the stated results/outcomes.*
Marginal relevance	1%–24% expenditure	*Projects that include activities that have indirect and theoretical links to climate resilience, although climate change benefits are not explicitly listed in project objectives or the stated results/outcomes.*

Assessment of CC-relevance at a detailed level plays a critical role in reviewing implementation of CC-response policy. The process described above has been implemented as an integral part of the CPEIR assessment of trends in CC-response spending and reflected in the CPEIR guide mentioned above. *The CPEIR recommends that MPI and MONRE add this method of assessing the CC-relevance of all CC-response projects by strengthening the annual planning and budgeting cycle through the inclusion of the CC-relevance of all investments.*

Data coverage and quality have been challenging in a number of cases. The data sought corresponded to the CPEIR frame as follows:

a. The list of project names and corresponding planned and actual figures **for each individual project** funded by development investment from the State Budget and by government bonds for calendar years 2010, 2011 and 2012, and the planned figures for Calendar year 2013.

b. The list of project names and corresponding key activities, planned and actual figures of **each individual project** and key activity funded by ODA for calendar years 2010, 2011 and 2012, and planned figures for calendar year 2013.

c. The list of project names, planned and actual figures for **each individual project** in the NTP-RCC for calendar years 2010, 2011 and 2012, and planned figures for calendar year 2013.

d. **IDD**s for selected projects to help clarify the nature of project objectives and expected outputs.

e. For **recurrent data**, the list of key activities named in the CC-relevant sectors such as science and technology, environmental protection, the economic sector, and corresponding planned and actual figures **for individual activities** funded by all kind of resources (from the State Budget, ODA and NTP) for calendar years 2010, 2011 and 2012, and the planned figures for calendar year 2013.

The decentralized nature of record keeping and reporting makes it difficult to identify climate change related spending. Data are available at each line ministry and province but scattered at various levels. The most detailed data is at the spending unit at the budget's lowest level. The official requirement in the financing system in Vietnam is that the financing department (upper level) only needs aggregate data, not detailed data. The CPEIR requires detailed data for each activity, and it thus takes time to collect this from the spending unit. *Including climate change related information in*

project documents would increase the ease and efficiency of confirming and tracking climate expenditure. During the CPEIR analysis the CC-relevance was determined in a post-hoc manner—after the project has been designed and sometimes after the project had been completed. This means that the inclusion of climate change components in the project and/or the proportion of CC-relevance was difficult to determine in some cases. This situation was alleviated by discussion with technical officers about the project(s) and/or reading of the IDD and thus inferring the climate change components.

It would be critical to improve this situation in a regular climate tracking process. It was recognized during these discussions that the project management and technical officers in the ministries were the individuals with the best knowledge and awareness of the project design and climate change related objectives. Thus, the most tractable solution would be to add a climate change related section in the project documents and IDDs which identify the climate change related objectives, categorize the project into the task level of the typology, note the nature of the CC-response (A, M or A/M) and identify the proportional climate change related expenditure. This information could then easily be collated for all projects in a climate tracking database, which in combination with MOF budget outputs, would permit the climate tracking data to be collated in an efficient manner. Embedding this structural addition into the project documents and IDDs requires a systematic revision of all relevant document types across ministries and across budget types (e.g. investment, recurrent, ODA) to allow this information to be detailed at source and during project design. This project-based climate change related information is the raw data which enters a climate tracking process so its importance cannot be over emphasized.

Reporting on expenditure outturns is not always consistent, which makes it difficult to give fully reliable comparisons between CC-response allocations (or ODA commitments) and actual expenditures. In any budgeting system, original allocations invariably differ from outturns. Sometimes original allocations are exceeded because of virements or supplementary appropriations and very often plans are not executed fully. Details of these processes for Vietnam are given in the 2013 PEFA. However, there needs to be a year-end explanation for variation between allocation and outturn to be able to track climate change spending and its impacts. As highlighted in Chapter 1, it would be essential that all CC-relevant project data be reported by relevant finance departments at line ministry and provincial level. This will not record CC-relevant transactions as such, but the CC-response assessment applied to each project will give the best available estimate of CC-response expenditure. It was not possible to apply such calculations to ex-post data available to the CPEIR team, in part because TABMIS was not fully rolled out, but more importantly because finance departments in many cases did not provide outturn data for all CC-relevant projects. When measures are taken to establish both project level reporting by finance departments and general application of a CC-relevance assessment by MPI and MONRE, these issues should be well addressed. For the CPEIR, all data and CC-relevance assessments have been thoroughly discussed with the relevant line ministry and provincial officials and are as reliable as possible in the present circumstances.

2.4 Linking expenditures in the TCCRE typology to policy objectives

The TCCRE is based on identifying expenditure at task level, but data can be reformulated to show spending related to higher-level policy objectives. The TCCRE methodology links an expenditure to one particular task. These expenditures can then be collated by task and presented to show climate change related expenditure in relation to tasks (see Chapter 3). The TCCRE task level represents the domain of activity types that are undertaken and thus tracks onto the type of climate change related activities in the various governmental bodies. This makes it easier for the project-to-task linkage to be made at the ministry and provincial bodies. However, Chapter 1 has identified the need for linking expenditures to higher-level policy objectives such as those stipulated in the NCCS, VGGS and NDS. Because the typology was developed partly from a policy basis, the task-level expenditure information can be re-formulated in relation to policy objectives. This permits the direct linkage between climate change related expenditure and higher-level policy objectives to be determined.

Task level codes can be recoded to policy objectives in a semi-automated way so that expenditure for each policy objective can be determined. The link between the tasks of the TCCRE typology and policy objectives is illustrated in Annex III-2. Recoding of the data at task level can be carried out so that task codes are modified into policy objective codes. For example, using the NCCS, task PG1.1 becomes CC6. As each task is re-coded to the related climate change policy objective, previous differently coded tasks collate together (for

example, PG1.1, PG1.2 and PG1.3 are all recoded to CC6). For most policy objectives this can be done in mass through simple spread-sheet manipulation. Some tasks are related to more than one policy objective. In this case, recoding needs to be done on an individual expenditure basis, based on the project-specific nature of the task. However, in some cases bulk coding could be done for all expenditures for particular ministries if all specific project activities are linked to one particular policy objective, rather than mixed between the two. Once all tasks are recoded to policy objectives, then the expenditure in relation to each policy objective can be determined (see examples in Chapter 3).

Linking climate change related expenditures to the NCCS, VGGS and NDS, or their respective action plans, can be a powerful tool. Connecting spending to the respective plans can help manage the progression in CC-response budgeting or aid in an M&E system. The link between NCCS and climate change related expenditure can be determined in this fashion to show the portfolio of expenditure in relation to the NCCS policy objectives. The expenditure data can also be reformulated to link to the VGGS as there is policy convergence in relation to the tasks (see Table 2.1). However, for the VGGS the outcome of the recoding will show the climate change related expenditure that is relevant to these policy objectives. There may be other expenditure related to these strategies which is not climate change related, and which therefore cannot be entered in the TCCRE. A similar approach can be used to link expenditure to the action plans of these policies, or even climate change action plans at a provincial level. Being able to directly link expenditure with policy objectives has significant benefits for oversight of the distribution of climate change related resources across the array of policy objectives. In addition, data from a number of years can track changes in the distribution of expenditure across policy objectives over annual cycles. Such insight could show, for example, the effect of changing planning and budgeting procedures or of modifying project selection criteria.

Box 2.2. Recommendations from Chapter 2

1. *The TCCRE needs to be progressively refined by MPI and MONRE and applied by line ministries and provinces to all CC-relevant expenditures in the State Budget to estimate the level of climate-relevant spending by all line ministries and provinces. The MOF should ensure that all climate change related projects are tracked by the relevant finance departments.*
2. *MPI and MONRE should develop and apply the CPEIR method of assessing CC-relevance of all CC-response projects included in the annual planning and budgeting cycle.*

3. CLIMATE CHANGE EXPENDITURE: Trends Relative to Policy Objectives, Categories, and Tasks

Key Findings from Chapter 3

1. *The budgeted CC-response amount accounts for a substantial share of the total budgets of the studied line ministries (18 percent), reflecting an existing large platform to take action to address the climate challenge in Vietnam.*
2. *Central government CC-response financing is mainly directed towards climate resilience activities (88 percent) through large-scale infrastructure projects from MARD and MOT, with an emphasis on improving resilience of irrigation systems and building transport systems that offer climate co-benefits. Limited finance from the five ministries was provided towards some tasks that are essential for further developing Vietnam into a climate-resilient low-carbon economy.*
3. *The majority of surveyed CC-response projects (58 percent) can be characterized as having "low" or "marginal" relevance to CC-response, with, at most, activities that display attributes where indirect adaptation and mitigation benefits may arise but where these are not explicitly listed in project objectives or stated results or outcomes.*
4. *The bulk of CC-response spending from the central government studied has targeted direct climate change delivery (CCD) activities (88 percent), while a relatively small proportion has been directed towards science and technology development (ST—9 percent) and policy and governance (PG—3 percent).*
5. *CC-response spending is dominated by investment (accounting for 92 percent of the CPEIR national government expenditures), but climate change recurrent spending, while much lower, is important to map and track because of its key role in enabling activities and providing administrative, institutional and technical support in managing climate change investments.*
6. *The majority of expenditures on climate change are targeted towards the NCCS and VGGS policy objectives of food and water security (63 percent) and sustainable infrastructure (74 percent), indicating there may be a need for robust planning and budgeting guidelines for CC-response expenditures to maximize value for money in investments.*
7. *The Government has already significantly mobilized its own resources for climate action, accounting for more than half (69 percent) of the CC-response financing studied in the CPEIR. ODA towards the CC-response is significant and has mainly been in the form of loans for investment projects, with an initial focus on CCD and an increasing emphasis on PG activities.*
8. *The NTP-RCC serves as an example of the influence on CC-response by a program catalyzed with DP funding through the State Budget as it has given considerable emphasis to enabling activities to support the mainstreaming of climate action and capacity development.*
9. *While the examination of provincial spending data does not allow quantitative inferences to be drawn about the totality of provincial allocations, the CC-response spending from the three studied provinces has given primary emphasis to CCD adaptation activities and have climate budgets growing at a faster pace than their total budgets.*

By applying the methodology (the TCCRE) developed in Chapter 2, the CPEIR provides a comprehensive and detailed analysis of climate change expenditure[52] in five key line ministries (which represent the bulk of the central government's CC-response spending) and three provinces. Allocation among projects and recurrent spending data with relevance to climate change were analyzed by applying the TCCRE discussed in Chapter 2. While the CPEIR does not contain the majority of CC-response spending from provincial governments, this chapter illustrates how the CPEIR methodology can aid analysis and management of CC-response policies at entity, provincial and central levels. Its principal benefit is providing multiple views of the way that resources (both investment and recurrent spending) are being allocated. Specifically, this chapter attempts to answer a number of strategic and analytical questions pertaining to the CC-response expenditures covered in this review. These include:

1. What is the magnitude of the GoV's CC-response spending and share from the total budgets of CC-response spending for the five line ministries (including NTP-RCC and NTP-EE financing) and three selected provinces?
2. What are the levels of CC-response spending directed towards programs, activities, and projects that address adaptation and/or mitigation?
3. What type of tasks is CC-response financing directed to and what gaps exist (using the TCCRE)?

52. The climate change-response expenditure included in this analysis do not constitute financing directed towards the additional cost of development as a result of climate change, and should not be seen as a measure or indicator of outcomes directly related to climate resilience or mitigation. The costs of the CC-relevant projects are accounted for as CC-response expenditure based on the criteria developed for the TCCRE in Chapter 2 (e.g. 100 percent of the project is attributed if projects explicitly state a predominant CC objective or are fully dedicated to exclusively delivering CC-related benefits, or sit within a GoV program dedicated to CC).

4. How is the GoV's CC-response financing (from the five line ministries, NTP-RCC, NTP-EE, and SP-RCC Financial Mechanism) aligned with the strategic objectives and solutions of the NCCS and VGGS?
5. What are the shares of domestic and ODA sources of CC-response financing and what types of projects and programs do each address?
6. What types of activities are financed through the NTP-RCC and do these activities correspond with the spirit of the program?
7. What types of projects (and in what locations) has CC-response spending from the Financial Mechanism of the SP-RCC been directed to?
8. How does the representative sample of provinces currently finance CC-response activities?

Tagging and tracking spending from the State Budget gives an indication of the relative distribution and importance of the spending, identifies responsibilities for performance and uncovers potential planning and financing gaps between Vietnam's strategic climate priorities and spending. The following sections of this chapter analyze trends in central and provincial climate change spending as well as ODA support for CC-response spending (some of which occurs outside the frame of the State Budget). A broader view of CC-response policy management is given in Chapters 1 and 4, particularly with reference to organizational aspects and use of other fiscal instruments. Developing a more comprehensive set of these data would provide a strong foundation for the GoV's overview of CC-response policy.

3.1 Central government climate change response expenditure analysis

Central Government Climate Change Response Spending by Five Line Ministries, NTP-RCC, and NTP-EE

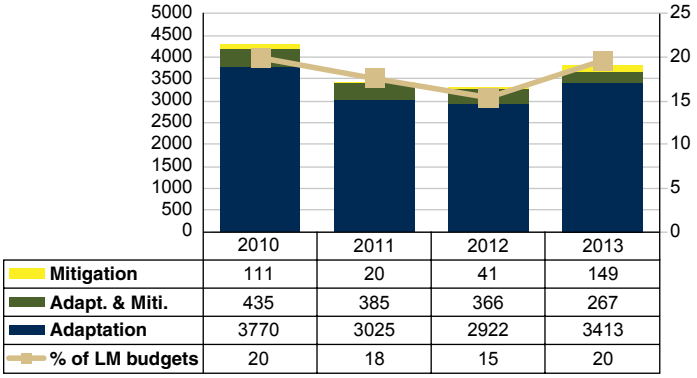
This section assesses the total level of investment and recurrent CC-response spending by the five line ministries (including through the NTP-RCC and NTP-EE). In particular, the section attempts to address:

a. The amount of central government CC-response spending in the scope of the CPEIR;
b. The total share of CC-response spending out of the line ministries' total budgets;
c. The rate of growth (or decline) of this CC-response spending;
d. The main drivers behind the spending;
e. The spending level for each of the line ministries towards climate change and what this says about their roles in Vietnam's climate change dialogue;
f. The share of CC-response spending directed towards providing adaptation and/or mitigation co-benefits; and
g. The CC-relevance level of the projects. (Do the projects articulate climate change adaptation or mitigation in their objectives or results and desired outcomes? Is there some indication that climate change is being mainstreamed in the studied line ministries' programs, and to what level? Are the majority of projects only indirectly providing climate change co-benefits?)

The share of CC-response spending from the total budgets of the five line ministries is significant (18 percent) and has remained fairly constant from 2010 to 2013, while the total amount of the studied allocations has decreased by 11 percent in real terms. As indicated in Figure 3.1, climate appropriations from the budgets of the five line ministries have decreased during this time period from around VND 4,300 billion in 2010 to around VND 3,800 billion in 2013 (in constant 2010 VND). This decline can be largely attributed to a government policy (Decree 1792/CT-TTg, 5/10/2011) that required tightening of public investments and an enhanced focus on priority projects to raise the effectiveness of public investment. The share of ministerial budget financing (of the five studied line ministries) that has been directed towards activities that explicitly address climate change or those with climate change co-benefits has decreased slightly from 19.9 percent in 2010 to 19.6 percent in 2013.[53] However, both the total size and share of the budgeted amount towards CC-response spending have oscillated during the four year period, experiencing a decrease from 2010 to 2012 and an increase in 2013 almost back to 2010 levels. In total, climate budgets for the five line ministries have decreased at around the same pace as the ministries' total budgets from 2010–2013 (at a compounded average annual

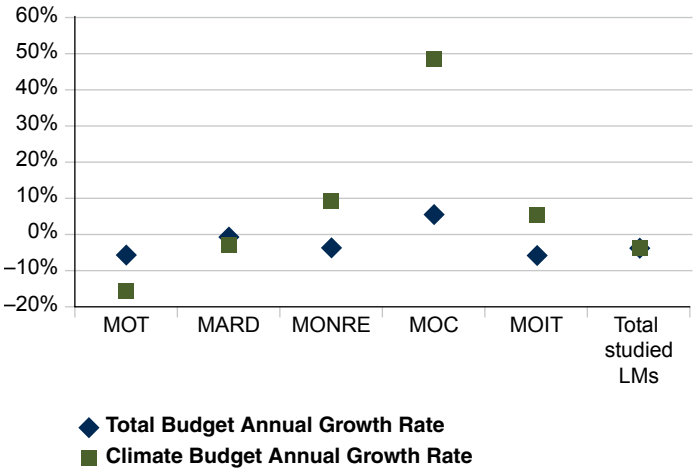
53. The national CC-response budget in the scope of the CPEIR accounts for 0.5 percent of the total government budget.

Figure 3.1. Total Climate Change Appropriations (investment and recurrent) for Five Line Ministries, NTP-RCC, and NTP-EE, 2010–2013 (left Y axis: constant price 2010 VND billion; right Y axis: percent)



	2010	2011	2012	2013
Mitigation	111	20	41	149
Adapt. & Miti.	435	385	366	267
Adaptation	3770	3025	2922	3413
% of LM budgets	20	18	15	20

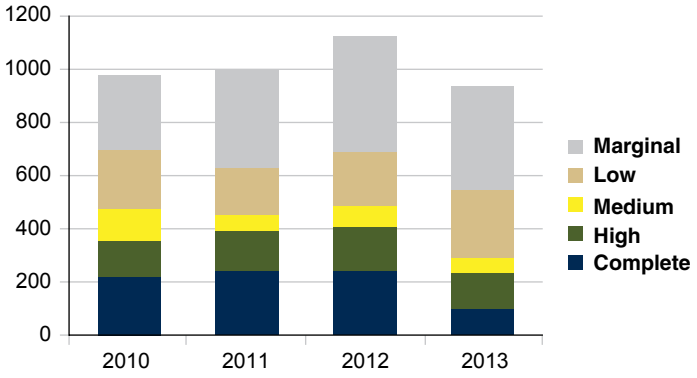
Figure 3.2. Growth Rates of CC-Response Appropriations and Total Budget Appropriations (investment and recurrent) of Five Line Ministries (including NTP-RCC) from 2010–2013 (constant price 2010 VND billion)



rate[54] of between 3 to 4 percent) (see Figure 3.2). These results indicate a continuing GoV commitment to a firm CC-response policy despite a tightening fiscal environment. However, CC-response spending budgeted during this time period from the five line ministries is equal to around 0.1 percent of Vietnam's GDP.[55] As a reference, the WB's *Charting a Low Carbon Development Path for Vietnam Study* has found that the incremental investment cost for Vietnam to move from a BAU scenario to a low-carbon development path is 1 percent of annual GDP during 2010–2030 (which does not account for the additional cost of adaptation).

The GoV's CC-response for the five line ministries primarily consists of investment projects that only have indirect climate change adaptation or mitigation co-benefits. The majority of projects under implementation (on average 58 percent of CC-response projects under implementation and 42 percent of annual CC-response allocations of the five line ministries[56] including through the NTP-RCC and NTP-EE), can be characterized as having "low" or "marginal" relevance to the CC-response, as classified by the TCCRE (See Figure 3.3). These projects are classified as such because they consist of activities that display attributes where indirect adaptation and mitigation benefits may arise, but where these are not explicitly listed in project objectives or stated results/outcomes. In total, only a minority of the central government

Figure 3.3. Number of CC-Response Projects under Implementation (investment and recurrent) for Five Studied Line Ministries, NTP-RCC, and NTP-EE by CC-Relevance Category (not including road transport projects)



projects studied in this CPEIR (on average 34 percent of CC-response projects under implementation and 20 percent of CC-response allocations) were classified as having "high CC-relevance" or "complete CC-relevance." Despite this, the total allocations directed towards these types of projects have increased in 2013 (from 2011–2012 levels) to 22 percent of total allocations, indicating a concerted effort made by the Government to develop a tailored CC-response program.

The majority of the identified central government CC-response allocations have been in the form of MARD irrigation and MOT road transport projects. Figure 3.4 displays the distribution of CC-response expenditures by line ministry and by year. As shown, MARD attains the largest share of spending, with 79 percent of implemented CC-response spending, followed by MOT, which accounts

54. Calculated using the compound annual growth rate formula, which is appropriate when assessing the gross change over time (as opposed to typical year-to-year change over a period).
55. Source: General Statistics Office of Vietnam.
56. Given the different methodology used to calculate expenditures towards road, bridge, and highway transport infrastructure, these projects and expenditures were omitted from the analysis of the share of projects contributing to climate change activities.

Figure 3.4. Total CC Expenditures (investment and recurrent) by Line Ministries from 2010–2013 (2010–2012 implemented, 2013 budgeted, by constant price 2010 VND billion)

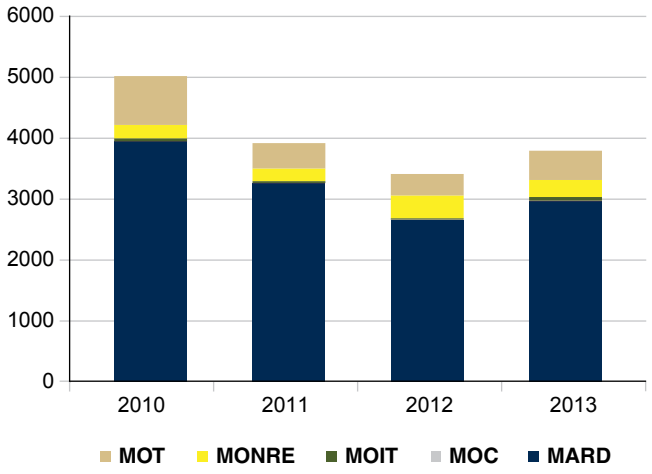
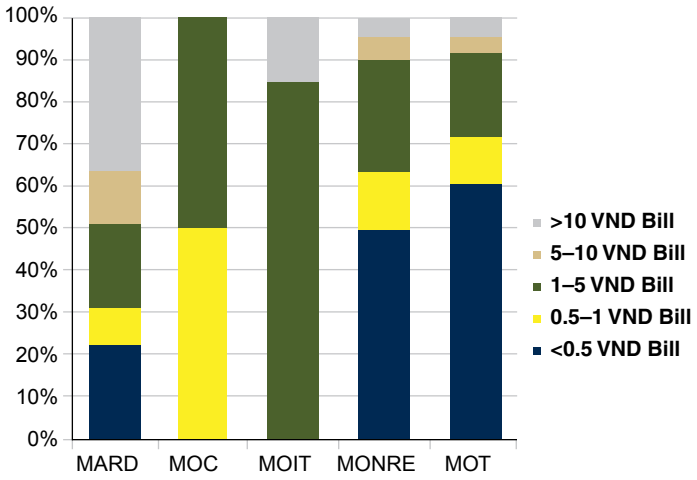


Figure 3.5. Distribution of Annual Allocations of CC-Response Investment Projects by Project Size for Line Ministries from 2010–2013 (2010–2012 implemented, 2013 budgeted, by constant price 2010 VND billion)



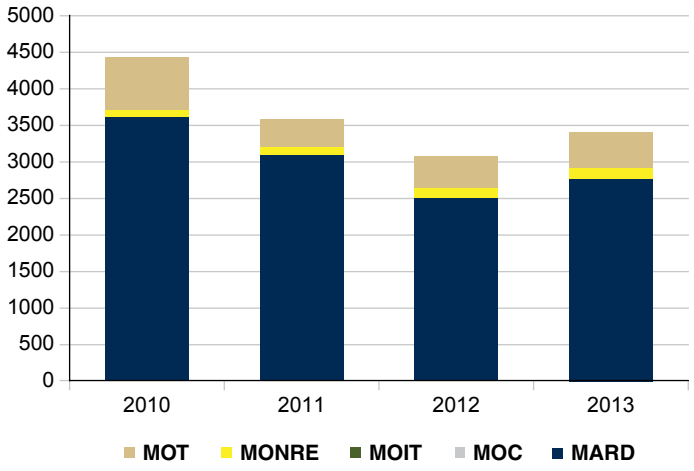
for 13 percent of CC-response spending. Both of these ministries primarily finance infrastructure projects that have climate resilience co-benefits. A total of around VND 12,800 billion has been directed towards MARD's CC-response spending, which has been allocated towards large CC-response projects (as shown in Figure 3.5, which displays the distribution of annual commitments towards CC-response projects). This emphasizes the importance of sustained climate leadership within MARD and the need to review the current distribution of expenditures against the priorities of the MARD climate change action plan to ensure that the Government is getting value for money in its CC-response spending. In light of the need to improve project appraisals and strengthen the mainstreaming of the CC-response, as identified in Chapters 1 and 2, it is essential to ensure that financing is directed towards interventions that are based on strategic priorities rooted in sound vulnerability and low-carbon options assessments, complemented by clear design standards. Almost half of MARD's CC-relevant investment projects and the vast majority of MOT's projects have been classified as having "marginal CC-relevance," illustrating the need for further mainstreaming of the CC-response into project planning and appraisal and the need to ensure that infrastructure projects are undergoing proper climate screening. MONRE, MOIT, and MOC account for 8 percent of the CC-response expenditure. While MONRE's CC-response budget is relatively small, it is still the lead agency for the NCCS and action plan, as well as for the NTP-RCC, enabling it to facilitate the close coordination of climate change policymaking and capacity building required across ministries. MOC and MOIT play an important role in mainstreaming, in particular in promulgating policies, regulations and standards that facilitate a CC-response in their respective sectors (see Chapter 1 for a further discussion of the roles of the line ministries).

The rate of change of each line ministry's allocation for a CC-response varies considerably across ministries. From 2010–2013, the CC-response budgets of MONRE and MOIT increased (by 9 and 5 percent respectively) despite their total budget decreasing during this same time period (see Figure 3.2). MOT is the only ministry where the climate budget decreased at a substantially higher rate relative to its total budget. MARD's climate budget is nearly at the same level in 2013 as it was in 2010, with a slight negative annual average growth rate (–2.5 percent) compared to its total budget (–0.9 percent). The aggregate climate budget for the five line ministries decreased at nearly the same rate as the total budget.

As noted, CC-response spending is primarily focused on adaptation, but a growing amount of financing is being directed towards mitigation (as shown in Figure 3.15). From 2010–2013, the GoV allocated financing for projects that provided a significant amount of climate change adaptation co-benefits (88 percent of CC-response financing). As noted previously, MARD accounts for the majority of this total adaptation financing (corresponding to 81 percent of total adaptation financing covered in the CPEIR, as shown in Figure 3.6). This is aligned with the strategic viewpoint of the NCCS. The share of tasks directed towards mitigation increased slightly from 2.6 percent in 2010 to 3.9 percent in 2013.[57] Recurrent spending on mitigation (through the NTP-EE) is the main driver for the increase in this CC-response spending.

57. It should be noted that CC-response spending towards mitigation-only tasks within studied line ministries decreased significantly during 2011–2012.

Figure 3.6. Adaptation CC-Response Spending (investment and recurrent) by Line Ministry (not including NTP-RCC and NTP-EE) (2010–2012 expenditures, 2013 budgeted, by constant price 2010 VND billion)



CC-response financing for mitigation is generally coupled with adaptation (accounting for about 10 percent of CC-response allocations from the five line ministries, NTP-RCC and NTP-EE), though a number of projects and programs exist that focus exclusively on mitigation. Mitigation projects that are financed include a diverse range, such as projects that implement solar and wind hybrid energy generation in a railway station and the development and implementation of pilot models for mitigating GHG emissions in cement production. MOIT and MARD account for the vast majority of mitigation CC-response spending (45 percent each), emphasizing the ministries' importance in the GoV CC-response spending (as shown in Figure 3.7 below).

Recurrent CC-response spending has also prominently financed projects that contribute to both adaptation and mitigation. These expenditures primarily cover forestry projects, with an additional amount directed towards city and provincial-level action plans to respond to climate change. MARD accounts for the largest share of this spending (55 percent), with the remaining spending split mainly between MONRE (30 percent) and MOT (9 percent), as shown in Figure 3.8. As a whole, while 57 percent of MONRE's total CC-response expenditures are directed towards adaptation, a large additional portion (39 percent) targeted projects that have both adaptation and mitigation benefits.

Central Government Climate Change Response Spending: By CPEIR Typology

This section characterizes the type of CC-response spending for the five line ministries, NTP-RCC, and NTP-EE. In particular, this section addresses:

a. The distribution of CC-response tasks, as classified by the TCCRE;

b. The types of GoV-financed projects that can be classified as explicitly addressing climate change or having climate change adaptation and/or mitigation co-benefits;

c. The CC-response tasks that are financed by the five line ministries; and

d. The main types of tasks that have not been addressed by CC-response financing from the five line ministries.

Figure 3.7. Mitigation CC-Response Spending (investment and recurrent) by Line Ministry (not including NTP-RCC and NTP-EE) (2010–2012 expenditures, 2013 budgeted, by constant price 2010 VND billion)

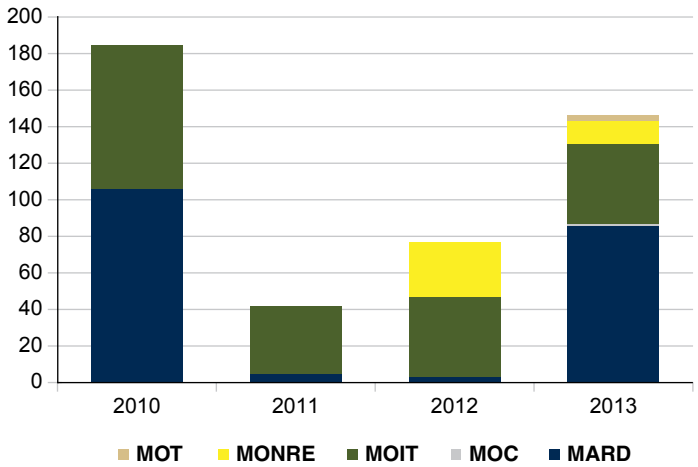
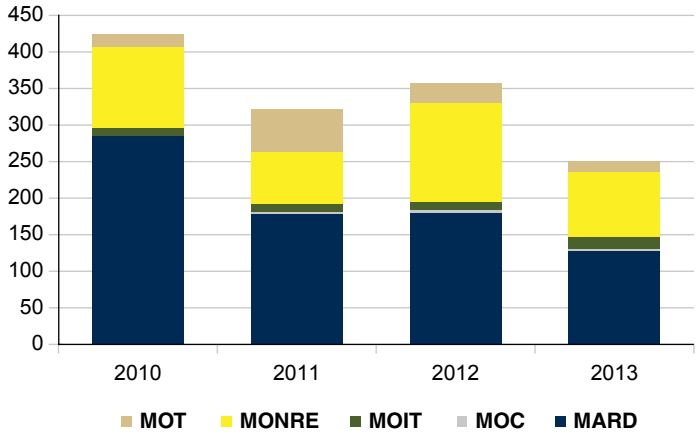
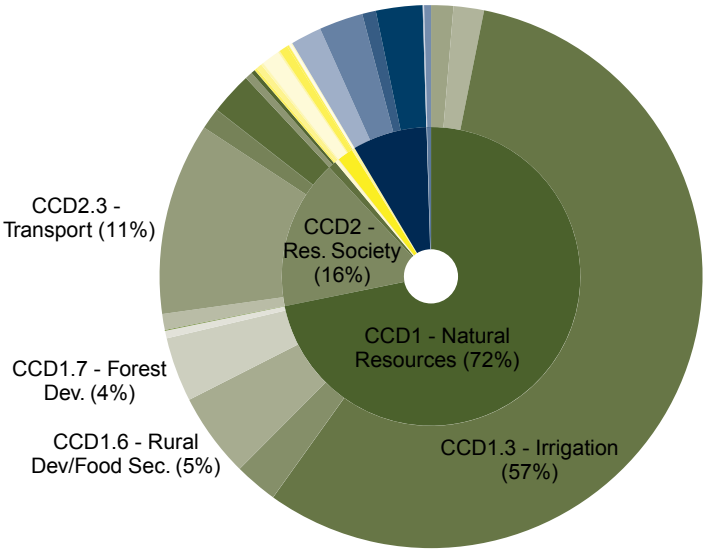


Figure 3.8. Adaptation and Mitigation (projects that contribute to both) CC-Response Spending (investment and recurrent) by Line Ministry (not including NTP-RCC and NTP-EE), (2010–2012 expenditures, 2013 budgeted, by constant price 2010 VND billion).



Classifying Vietnam's CC-response projects and programs using the TCCRE provides an overview of the balance of tasks between sector delivery (CCD) and enabling activities (PG and ST) and indicates that the vast majority of financing has been directed towards the former. Figure 3.9 shows the distribution of central government spending on CC-response from the five line ministries (including through the NTP-RCC and NTP-EE) in terms of the TCCRE hierarchy: the categories within each pillar [Policy and Governance (PG), Scientific, Technological and Societal Capacity (ST), and Climate Change Delivery (CCD)] are shown in aggregate in the inner ring, and the outer ring shows the tasks within each category. As mentioned, the GoV's CC-response financing is largely directed towards CCD activities (89 percent of CC-response financing), with a specific focus on natural resources, which includes the major task of irrigation (57 percent of total CC-response expenditures), and developing a resilient society, which includes tasks such as developing disaster-specific infrastructure and transport (the latter accounting for 11 percent of total CC-response expenditures). Financing for rural development and food security (mainly towards MARD rural infrastructure development projects) and forest development (mainly towards forest livelihood improvement and DP-financed forest sector projects) is also included as part of this pillar of investments. This heavy emphasis on CCD tasks, particularly those related to water resources, highlights the earlier noted need for robust appraisal, monitoring and evaluation methodologies and for strong institutional conditions to ensure value for money spent.

Figure 3.9. Total Climate Change Expenditures (investment and recurrent) (VND 16,683 billion) for Five Line Ministries, NTP-RCC, and NTP-EE by TCCRE (2010–2012 implemented, 2013 budgeted by constant price 2010 VND billion). Note: From inner wheel to outer wheel (TCCRE category and task). See Annex III.2 for detailed typology



A relatively small proportion of CC-response expenditures have been directed towards Scientific, Technological, and Societal Capacity (ST—9 percent) and Policy and Governance (PG—2 percent) for essential enabling activities to improve the capacity for CCD. 94 percent of financed ST activities are projects and programs that develop science and technology as a foundation for policy formulation, impact assessments, and the subsequent identification of appropriate climate change adaptation and mitigation measures. This spending has generally been directed towards information and database development and hydro-meteorological and climate/risk projection enhancements, which provide Vietnam with the technical capacity and analytical basis to select high impact CCD tasks for financing. A small portion of CC-response expenditures are directed towards PG activities, which predominantly finance the development of action and sector plans.

The GoV's CC-response spending has provided limited finance towards some tasks that are essential for further developing Vietnam into a climate-resilient low-carbon economy. The GoV, through the five line ministries covered in the CPEIR, has provided just a small percentage of its CC-response financing towards concrete CCD activities whose main objectives or desired results are addressing saline intrusion (CCD1.2) (1.8 percent of CC-response spending), water quality and supply (CCD1.5) (0.02 percent) and improving the resilience of fisheries and aquaculture to climate change impacts (CCD1.8) (0.5 percent). In particular, the GoV has mobilized a limited amount of its own resources for mitigation tasks (in the studied line ministries and NTPs) that are necessary for stimulating a low-carbon CC-response development path, including low-carbon energy generation (0.02 percent or VND 4 billion) or energy efficiency measures (0.45 percent or VND 76 billion). A significant amount of ODA financing is being directed towards energy SOEs for energy efficiency and low-carbon energy generation (discussed later in Chapter 3).

MARD's CC-response expenditures have mainly targeted investments in climate-resilient irrigation, which account for 73 percent of its total CC-response spending (see Figure 3.10). Other tasks that have received CC-response financing include those for rural development and food security (6 percent) and forest development

Figure 3.10. Total MARD CC-Response Spending (investment and recurrent) (VND 12,811 billion) by Category and Task of TCCRE (implemented, by constant price 2010 VND billion)

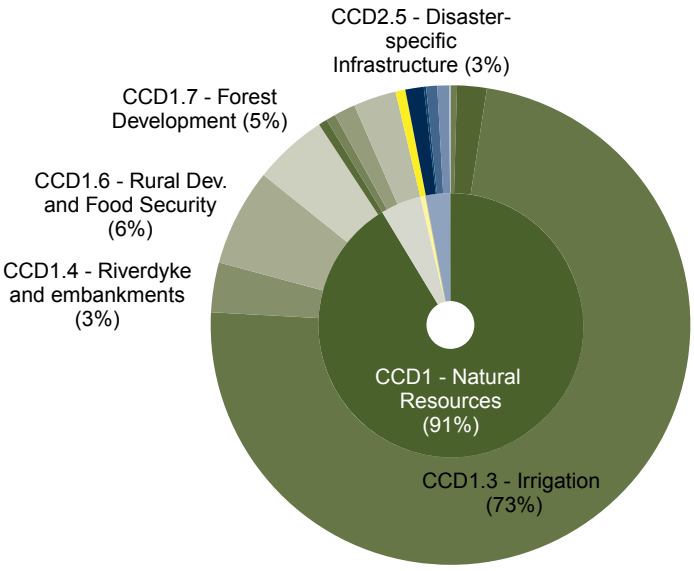
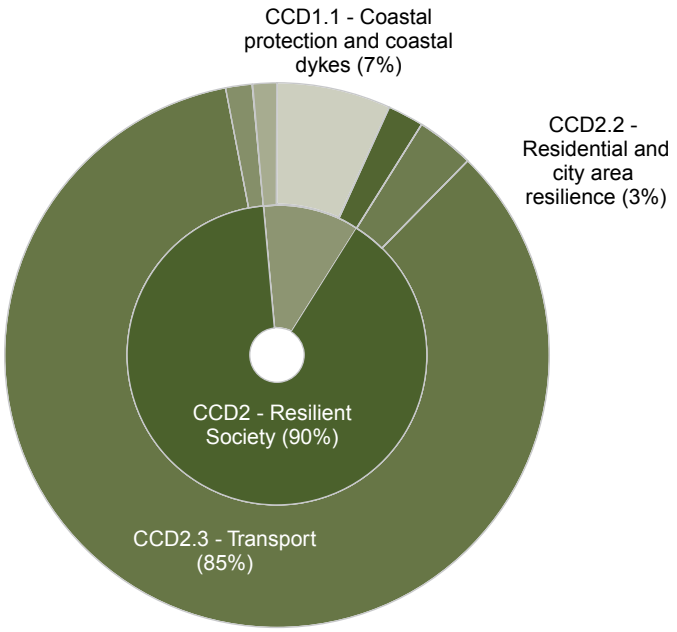


Figure 3.11. Total MOT CC-Response Investment (VND 2,248 billion) by Category and Task of TCCRE (implemented, by constant price 2010 VND billion)

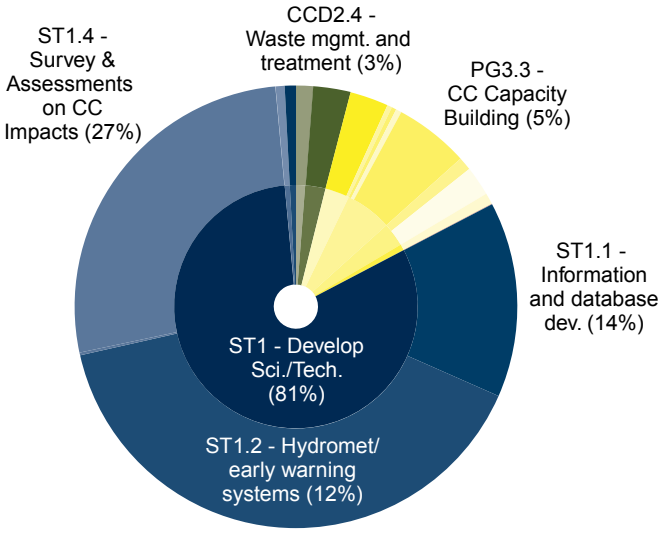


(5 percent). While 2 percent of MARD's CC-response investments are directed towards ST tasks, the majority of recurrent spending (67 percent) targets this pillar of tasks. This includes a variety of research projects, including those that study the effect of climate change on rice production and of salinization on crop yields. In addition, there has been a small amount of CC-response spending on PG activities through recurrent spending, where it is mostly spent on action and sectoral plans.

Available data[58] indicates that financing from MOT has primarily been directed towards road transport infrastructure development (accounting for 85 percent of the CC-response investment budget) that facilitates the construction of more climate resilient roads, highways, and bridges. MOT also contributes 7 percent to coastal protection, with the remaining 9 percent directed towards irrigation, residential and city resilience, disaster specific infrastructure, and infrastructure and construction activities (see Figure 3.11).

MONRE's CC-response spending has been paramount as it has financed the majority of the GoV's spending towards developing climate-relevant Scientific, Technological and Societal Capacity (ST) (61 percent) (see Figure 3.12). This spending is mostly funded through its recurrent budget, which consists of about half of MONRE's

Figure 3.12. Total MONRE CC-Response Spending (investment and recurrent) (VND 1,044 billion) by Category and Task of TCCRE (implemented, by constant price 2010 VND billion)



CC-response financing and is responsible for implementing a large portion of projects financed through the NTP-RCC, where projects are generally designed with CC-response as the main objective. The recurrent expenses mainly include surveys and assessments on climate change impacts (69 percent) and information and database development (17 percent). Almost all of the remaining recurrent spending has been directed towards PG tasks. This includes financing

58. This notes the difficulty in post-hoc classification of MOT's CC-response spending (see Background Note II) and that MOT has provided only the total aggregate figure for recurrent spending.

towards capacity building, developing policy and planning mechanisms for a CC-response, and adaptation and mitigation policy instruments. MONRE's investment budget has also been active in financing ST tasks, with 80 percent of investments directed towards specifically enhancing hydro-meteorological and climate risk projections. MONRE also contributes to financing CCD tasks that include waste management and treatment (such as urban wastewater treatment projects) and that address saline intrusion.

While MOIT's CC-response appropriations are not large, there has been increasing emphasis on energy efficiency (mostly through the NTP-EE) (see Figure 3.13). This has been mostly funded through its recurrent budget, which accounts for the majority of MOIT's CC-response expenditures. MOIT spending towards CC-response has financed energy efficiency activities, including spending directed towards improving the energy efficiency of public facilities such as schools. The NTP-EE, which is coordinated by MOIT, has led to financing of over VND 137 billion, mostly dedicated to energy efficiency tasks and developing community capacity in CC-response.

Without counting the recurrent budget (not made available), MOC has the smallest amount of CC-response spending among the five ministries included in the CPEIR. A total of VND 22 billion has been budgeted for CC-response in MOC's investment budget over a four-year period, when including NTP-RCC financing. This includes an energy efficiency program in 2010 (CCD3.2), a plan to renovate and build rural residential areas in the central coast provinces that are able to withstand the effects of CC (CCD2.3) (from 2012 NTP-RCC financing), and a 2013 capacity building project for appraising construction project quality (ST1.4) (see Figure 3.14). As noted earlier, MOC has not provided any recurrent budget data, which has led to a potential underestimation of their total CC-response expenditures. Mainstreaming of CC-response activities, particularly with respect to urbanization and regional development is under active consideration by MOC. Discussions with MOC indicated a high degree of interest and potential involvement in a wide range of CC-relevant activities, including revised design standards in construction and use of materials, and urbanization and regional development. Up to now, the main issue has been the limited focus on mainstreaming climate change into BAU policies. The recent emphasis on mainstreaming, in part through the CPEIR dialogue, can lead to a higher proportion of investments meeting CC-relevance criteria.

Central Government Climate Change Response Spending: Investment vs. Recurrent

This section addresses the level and type of CC-response spending that is allocated from the GoV's investment and recurrent budgets. In particular, this section focuses on:

a. The allocation of studied CC-response spending from investment and recurrent budgets;

b. The types of activities being financed by investment and recurrent budgets; and

c. The line ministries that play a larger role in CC-response recurrent spending.

Figure 3.13. Total MOIT CC-Response Spending (investment and recurrent) (VND 228 billion) by Category and Task of TCCRE (implemented, by constant price 2010 VND billion)

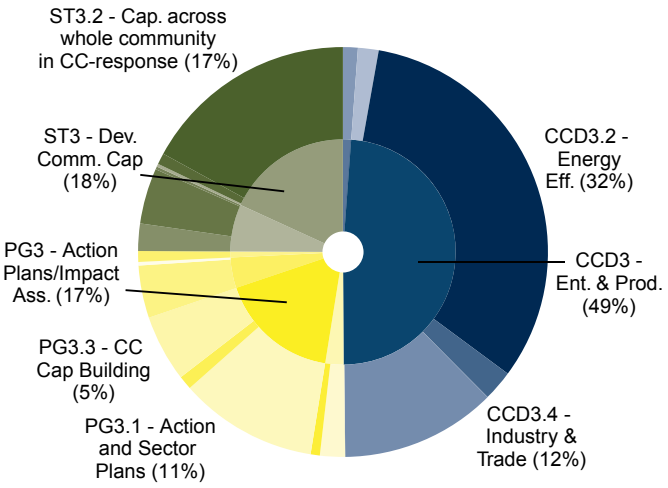
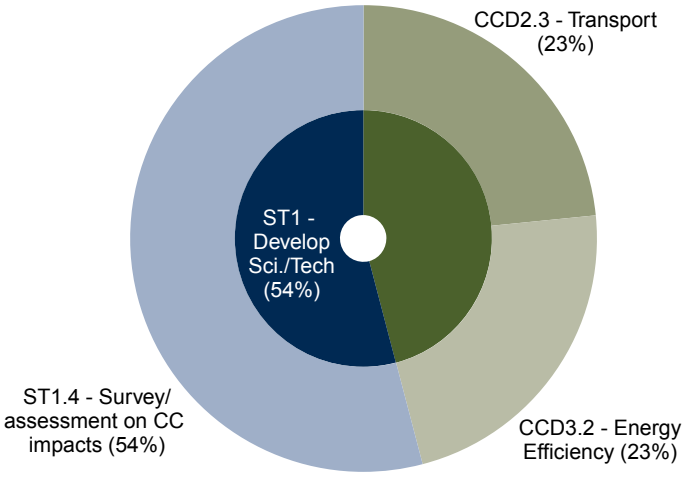


Figure 3.14. Total MOC CC-Response Investment Spending (VND 2 billion) by Pillar, Category, and Task of CPEIR Typology (implemented, by constant price 2010 VND billion)

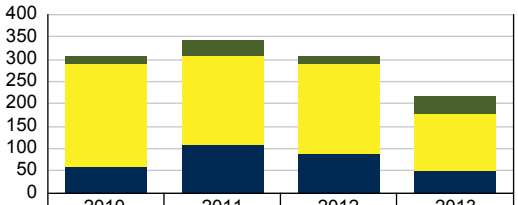


The majority of CC-response spending is through investment (92 percent of the CPEIR central government expenditures), but climate change recurrent spending has a key role in financing enabling activities and administrative and technical support in managing climate change investments. Vietnam's investment budget has a number of projects that provide climate change co-benefits, demonstrating that the country has already aimed to implement CC-response at scale. The importance of recurrent spending is illustrated by the data from the NTP-RCC. As discussed further below, the NTP program has provided strong technical inputs to Vietnam's CC-response by supporting mostly recurrent spending (of which it accounts for about 40 percent of the total) that proactively targets activities to improve the country's enabling environment and capacity to deliver CC-response investments. MONRE and MARD contribute the bulk of the recurrent spending out of the ministries that have provided recurrent budget data (with 26 and 20 percent of 2010–2012 expenditures and the 2013 budget[59] respectively), confirming the key role of these two ministries in shaping the CC-response and supporting its implementation using State Budget funds. Recurrent spending for CC-response by year is displayed in Figure 3.15 below.

Central Government Climate Change Response Spending: Tracking against NCCS Strategic Objectives and VGGS Solutions

This section tracks CPEIR CC-response spending with the key climate strategies of the GoV. In particular, this section asks:

Figure 3.15. Recurrent CC-Response Spending for Five Line Ministries, NTP-RCC, and NTP-EE by Adaptation and Mitigation (planned, by constant price 2010 VND billion)



	2010	2011	2012	2013
Mitigation	21	20	26	50
Adapt. & Miti.	230	207	200	120
Adaptation	57	111	88	54

59. Noting that the review team was not provided with recurrent spending figures from MOT or MOC.

a. Is CC-response spending aligned with the strategic objectives and solutions of the NCCS or VGGS?

b. Which objectives or solutions of these two strategies is CC-response spending mostly directed to?

c. Are the majority of projects directly or indirectly providing climate change co-benefits?

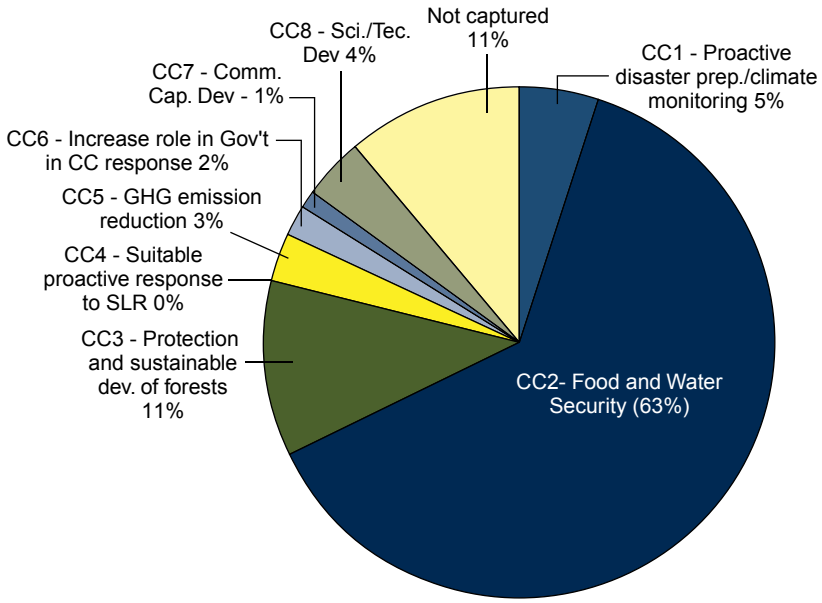
d. Which strategic objectives or solutions are currently not being financed or have only received a limited amount of finance?

Tracking CC-response spending against the strategic objectives of the NCCS indicates a significant emphasis on spending towards the strategy's food and water security goal, accounting for 63 percent of central CC-response expenditures.[60] Over VND 10,500 billion (constant 2010) of the CC-response central government 2010–2012 expenditures and 2013 budgeted amount analyzed in this CPEIR have been directed towards food and water security (see Figure 3.16). These projects primarily consist of MARD projects that improve the climate resilience of irrigation systems. A large volume of CC-response spending towards only one of the NCCS' ten strategic objectives indicates potential inefficiencies in CC-response allocations and highlights the added value of agreeing on planning and budget allocation guidelines for CC-response.[61] The second largest financed strategic objective is the protection of sustainable development of forests, attaining 11 percent of CC-response expenditures. Fourteen percent of CC-response expenditures have been divided between the following four NCCS objectives: proactive disaster preparedness and climate monitoring, scientific and technology development for CC-response, GHG emission reduction, and increasing the role of government for CC-response. The portion of CC-response spending dedicated to investing in the development of climate resilient road transport infrastructure does not fit under any of the stated CC-response strategic objectives, indicating a potential gap in the NCCS's priorities. A number of NCCS strategic objectives received little to no financing. These include actions to address sea-level rise in vulnerable areas, community capacity development to respond to climate change, international cooperation and integration to enhance the country's status in climate change issues and diversification of financial resources and more effective investments.

60. See Annex III.2 for a detailed chart tracking the policy elements of NCCS and VGGS onto the TCCRE.

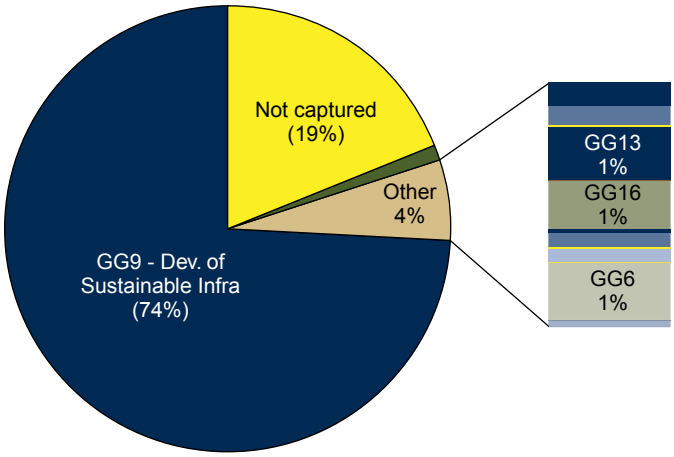
61. This is the only such NCCS objective that has received more financing from DPs than from domestic sources.

Figure 3.16. Total Climate Change Expenditures (investment and recurrent) by NCCS Strategic Objectives (2010–2012 implemented, 2013 budgeted by constant price 2010 VND billion)



Tracking CC-response expenditures studied in the CPEIR against the VGGS solutions highlights that 74 percent of these expenditures address the development of sustainable infrastructure in transportation, energy, irrigation, or urban works, and confirms that financing directed towards some resilience activities is not captured within the VGGS policy framework (see Figure 3.17). The expenditures directed towards the development of sustainable infrastructure mostly correspond to MARD investments in climate resilient irrigation systems and MOT road transport investments. Many VGGS policy elements have had limited financial support from the GoV through the 5 line ministries, NTP-RCC, and NTP-EE. These activities include those that correspond to improving energy productivity and energy use efficiency; economic and efficient use of natural resources; promoting technological innovation and stimulating cleaner production; communication; raising awareness; support for implementation; development of a new rural model with lifestyles in harmony with the environment; resource mobilization for the VGGS; and reduction of GHG emissions through the development of sustainable organic agriculture. The GoV's main objective under the VGGS is to promote low-carbon growth and, as such, approximately 19 percent (around VND 3,200 billion in constant 2010 VND) of CC-response 2010–2012 expenditures and the 2013 budgeted amount that are mainly directed towards adaptation activities were not tagged with a corresponding VGGS

Figure 3.17. Total Climate Change Expenditures (investment and recurrent) by VGGS Solutions (2010–2012 implemented, 2013 budgeted by constant price 2010 VND billion)



Legend:
GG6: Review and adjust master plans for the production sectors and gradually limit the development of "degrading" economic sectors while creating favorable conditions for new green production sectors
GG13: Promote sustainable consumption and build green lifestyles
GG16: Study to develop science and technology, issuing a system of economic and technical standards, and establish an information/data centre on green growth

solution. It should be stressed, however, that sustainable economic growth that enables a high quality of life depends on the ability to increase climate resilience across the economy and all levels of society. Tasks that are not covered include policy and governance activities that support climate change adaptation and risk reduction, adaptation and mitigation policy instruments, the adaptation related elements of science and technology development for a CC-response, and a number of adaptation CCD tasks (such as the development of coastal and river protection, dykes and embankments, saline intrusion mitigation measures, improved resilience of water quality and supply, forest development, and disaster specific infrastructure).

The CPEIR analysis shows that a large amount of expenditures on climate change in Vietnam (in the studied ministries and NTPs) are targeted towards the policy objectives of food and water security (CC2 in the NCCS) and sustainable infrastructure (GG9 in the VGGS). These policy objectives (which in this context relate mainly to irrigation) are of national importance and should be a component in public climate expenditures, given that the agricultural sector contributes about 20 percent of the country's GDP.[62] With irrigation and water resources management serving as key areas of expenditures, clear and direct gains would be apparent from further linking of the MONRE climate scenarios into the enhanced design and planning of irrigation systems. Although uniform expenditures across all policy objectives would not be an *a priori* expectation, with the predominance of irrigation related tasks in the CC-response, most of the CC-response budget does not flow to other target areas identified in the NCCS or VGGS.

The link between expenditures and NCCS and VGGS policy objectives has the potential to provide key longitudinal information in CC-response oversight. A high-level picture of expenditure against relevant policies is a useful tool in the refinement and strengthening of Vietnam's CC-response. The value in the tagging and tracking approach will become increasingly significant as climate change policies become increasingly embedded in planning, budgeting and delivery processes of the line ministries and provinces over the next few years. Consequently, resource allocation across the climate change related policy elements will be modified and will increasingly reflect the characteristics and priorities of the CC-response in Vietnam.

Central Government Climate Change Response Spending: Sources of Climate Change Response Funding

This section tracks the sources of CC-response spending for the five line ministries, NTP-RCC, and NTP-EE. It asks:

a. What share of the CC-response is being financed by ODA?

b. What are the respective sources of CC-response financing for each studied line ministry? What types of projects are financed by domestic sources and what types by ODA?

c. What form of financial assistance is provided by ODA through these line ministries and to what types of tasks?

d. Is the level of ODA financing towards CC-response changing? Is the mix of projects addressing adaptation and/or mitigation changing with it?

e. What types of projects is the NTP-RCC financing? How are activities financed by the NTP-RCC aligned with the strategic objectives of the NCCS?

f. What types of activities are being financed as part of the SP-RCC Financial Mechanism and where are these projects located?

The analysis of ODA financing towards CC-response exemplifies the difficulty in tracking and monitoring CC-relevant expenditure and the need for a comprehensive climate budgeting system. ODA data provided to the CPEIR was compiled using two methodologies. The first methodology, which was used to identify the disaggregation of financing sources for the line ministries and NTPs (see Figure 3.18), corresponds to data provided by the line ministries on their CC-response projects. The second, which provides a view of the past 10 years of CC-response financing in central government (see Figure 3.19), was provided by MPI. The present budgeting and reporting system does not reconcile the sources of ODA data. Unfortunately, this limits the scope of the analysis given that ODA financing is also disbursed through channels other than line ministries. ODA can be channeled to sectors directly to SOEs or through MOF to provinces and cities. In addition, SP-RCC budget support is disbursed to the general State Budget.

62. World Bank, World Development Indicators 2012.

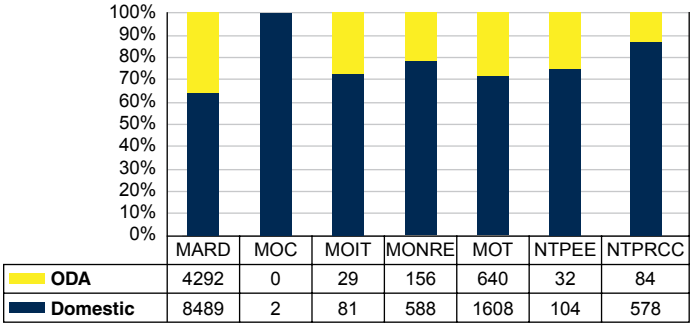
CC-response spending has been mostly financed by domestic sources, though DPs have financed 31 percent of CC-response financing implemented directly by the five line ministries (including through the NTP-RCC and NTP-EE) (as shown in Figure 3.18 below).[63] Figures 3.18 and 3.19 illustrate that ODA for climate change activities has risen a large degree over the past decade and has given substantial, although variable, support to mitigation as well as adaptation—broadly reflecting a measure of responsibility of DPs to provide financial support for both climate change concerns.

The largest portion of ODA has been in the form of loans for investment projects with an initial focus on CCD and an increasing emphasis on PG activities. Figure 3.20 below shows ODA support for CC-response spending through loans and grants from 2004–2013. The major part has been in the form of loans (approximately 97 percent). The main emphasis overall has been to support CCD-oriented activities. In the CPEIR survey period, however, both loan and grant assistance has given more emphasis to PG activities. Science and Technology (ST) has been supported mainly by way of grants, with highly variable allocations.

While GoV SOE CC-response expenditures are outside the scope of this CPEIR, a review of ODA financing towards SOEs has found that a significant amount of DP resources are being directed towards SOEs for CCD tasks, particularly for energy efficiency and renewable energy (about VND 10,000 billion for 2010–2013). Coupled with the fact that the GoV has thus far provided limited financing towards these activities, this highlights the notion that low-carbon energy generation/efficiency activities, which have a number of development co-benefits, are largely financed by DPs. While this is common in developing countries, it will be essential for Vietnam to scale up this financing in order to enter a low-carbon development path that supports green growth.[64]

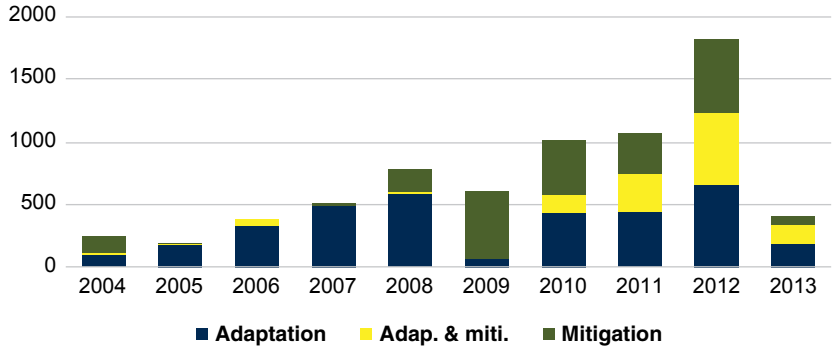
The NTP-RCC is an example of the influence on CC-response by a program catalyzed with DP funding through the State Budget. As described in Chapter 1, the NTP-RCC, which was DP-financed and channeled through the State Budget, focused first on scientific analysis and initial planning. The second phase (2011–2015), which corresponds most closely to the CPEIR period of review, emphasizes detailed planning, capacity building and implementation of (sectoral and provincial) action plans. Its NTP status signifies that it is formulated to respond to areas where development is perceived to be lagging behind. The pattern

Figure 3.18. Total CC-Response Expenditures by Source of Funding (implemented, constant price 2010 VND billion)



	MARD	MOC	MOIT	MONRE	MOT	NTPEE	NTPRCC
ODA	4292	0	29	156	640	32	84
Domestic	8489	2	81	588	1608	104	578

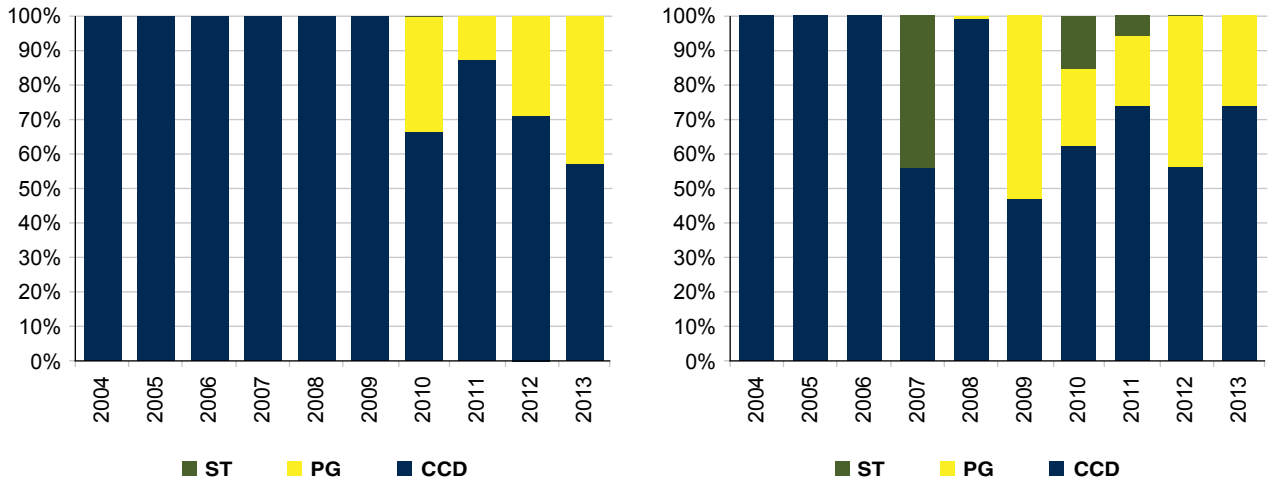
Figure 3.19. ODA Commitments Towards CC-Response (in USD million). Note: 2013 data does not include all donor projects delivered in 2013. ODA data is not deflated because data of projects under implementation by year is not available.



63. It should be noted that NTP-RCC financing is partially funded through the SP-RCC ODA budget support mechanism and is thus integrated in Figure 3.18 as domestic financing.

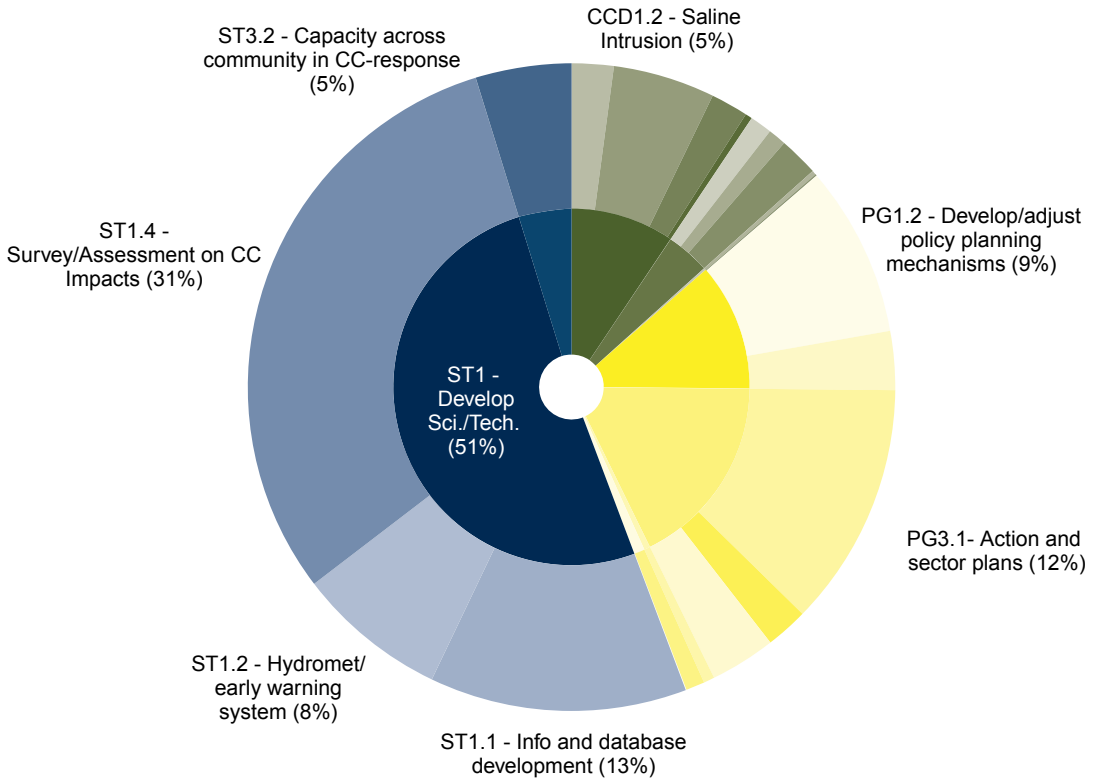
64. See World Bank (2014) *Vietnam 2030: Charting a Low Carbon Development Path for Vietnam* for an economic analysis of the various low-carbon development options available to Vietnam and the cost savings and development co-benefits that are associated with these options.

Figure 3.20. ODA Commitment by Pillar of CPEIR Typology (investment lending (loans) on left; technical assistance (grants) on right)



of spending in terms of its focus on different TCCRE pillars and categories and of actual spending relative to allocation is illustrated in Figure 3.21. This type of analysis, in the context of a broader coverage of total GoV and ODA spending and better linkage with the planning and budgeting cycle, helps identify whether the perceived focus matches national priorities. In the longer term, this analysis helps to indicate needed changes in such programs over time, in particular during the planned third phase of the NTP. The information also helps improve coordination among the line ministries taking leading roles in other climate change related national programs. As mentioned in Chapter 1, the next phase of the NTP-RCC may benefit from a focus on more prioritized implementation of sector and provincial action plans and mainstreaming of MONRE's climate scenarios into adaptation planning.

Figure 3.21. NTP-RCC CC-Response Spending (VND 663 billion) by Category and Task of TCCRE (implemented, by constant price 2010 VND billion)



The NTP-RCC has given considerable emphasis to enabling activities to support the mainstreaming of climate action and the development of capacities, with 51 percent of its expenditures directed towards developing ST as a foundation for the GoV's CC-response agenda. As illustrated in Figure 3.21, much of this spending has focused on climate change impact assessments, coordinating adaptation and risk reduction implementation across government, enterprises, and communities, and investments in information and database development and hydro-meteorological and climate risk projection enhancement. The NTP-RCC program has also financed policy and governance activities, including the development of sector and action plans. The largest CCD tasks financed through NTP-RCC are interventions to halt saline intrusion. The NTP-RCC has also placed an emphasis on moving forward on mitigation-oriented activities—often as part of joint mitigation and adaptation objectives (as illustrated in Figure 3.22 below), including the design of sector pilot projects that reduce GHG emissions.

Tracking NTP-RCC financing with NCCS policy elements indicates an emphasis on expenditures for activities that increase the role of the GoV in CC-response (30 percent) and promote scientific and technological development (28 percent). This confirms the NTP-RCC's plan to focus on enabling activities that underpin CCD tasks. A significant additional amount of NTP-RCC financing is directed towards the NCCS strategic objective of providing suitable proactive response actions to sea-level rise in vulnerable areas (19 percent). Of the NTP-RCC expenditures that are captured within the VGGS (noting that most are not captured as they are not mitigation related), the majority (77 percent) are directed towards economic and efficient use of natural resources and the review and adjustment of master plans for production sectors.

Reporting actual outturn against budget allocation is an important element of the accountability of the NTP-RCC. As noted in Chapter 2, however, a number of departments were unable to report on actual spending because the finance departments did not provide regular reports on outturns. MARD and MONRE were able to provide both allocation and outturn data. The pattern of allocation and realization for the NTP-RCC is illustrated in Figure 3.23.

As noted in Chapter 1, a dedicated GoV CC-Response Financial Mechanism was created in 2010 to finance CC-response projects under a set of criteria decided by MONRE, in coordination with MOF and MPI. A review of the selected projects thus far has shown that financing has been mostly directed towards activities with an emphasis on improving the resilience of coastal areas and riverbanks. The SP-RCC FM has selected 61 projects for a planned allocation of around VND 17,900 billion (over the lifetime of the activities), of which the SP-RCC FM has planned to finance 80 percent and provinces the remaining 20 percent. Thus far, 16 projects (of around VND 4,400 billion) are being financed, with approximately VND 815 billion committed for 2013 and 2014. As indicated in Figure 3.24, about 40 percent of the allocated financing for the 16 projects is directed towards coastal protection through the construction and upgrading of sea dykes or embankments. This includes investments in building culvert systems in Bac Lieu city and upgrading dykes or embankments along the coast in the Ha Tinh and Ca Mau provinces and Duyen Hai district. An additional amount is allocated towards the construction of river dykes and embankments (accounting for 36 percent) and towards addressing saline intrusion (accounting for 12 percent). The remaining allocated financing has focused on projects that improve irrigation systems in low-lying areas and improve water quality and supply. Forest development and disaster-specific infrastructure projects have been selected for financing but are not included among the 16 projects that have financing allocated. As shown in Figure 3.25, about

Figure 3.22. NTP-RCC by Adaptation and Mitigation (implemented, by constant price 2010 VND billion)

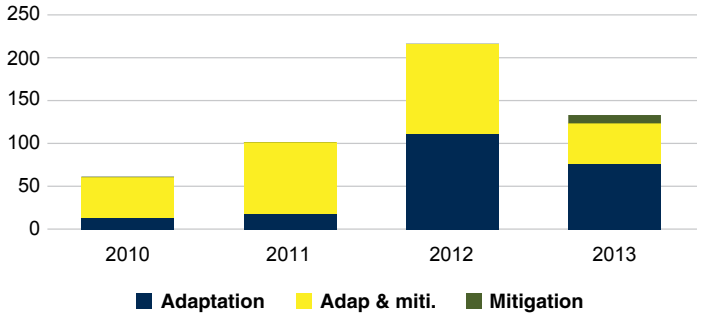


Figure 3.23. NTP-RCC: Planned vs. Outturn

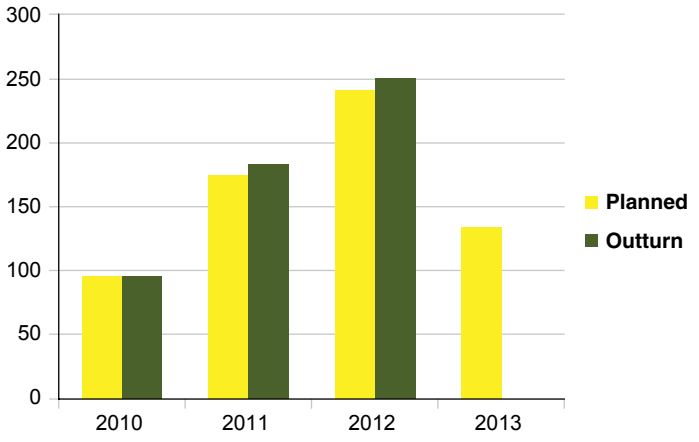


Figure 3.24. Financing by CPEIR Typology Task of SP-RCC Allocated and Selected Projects (constant price 2010 VND billion)

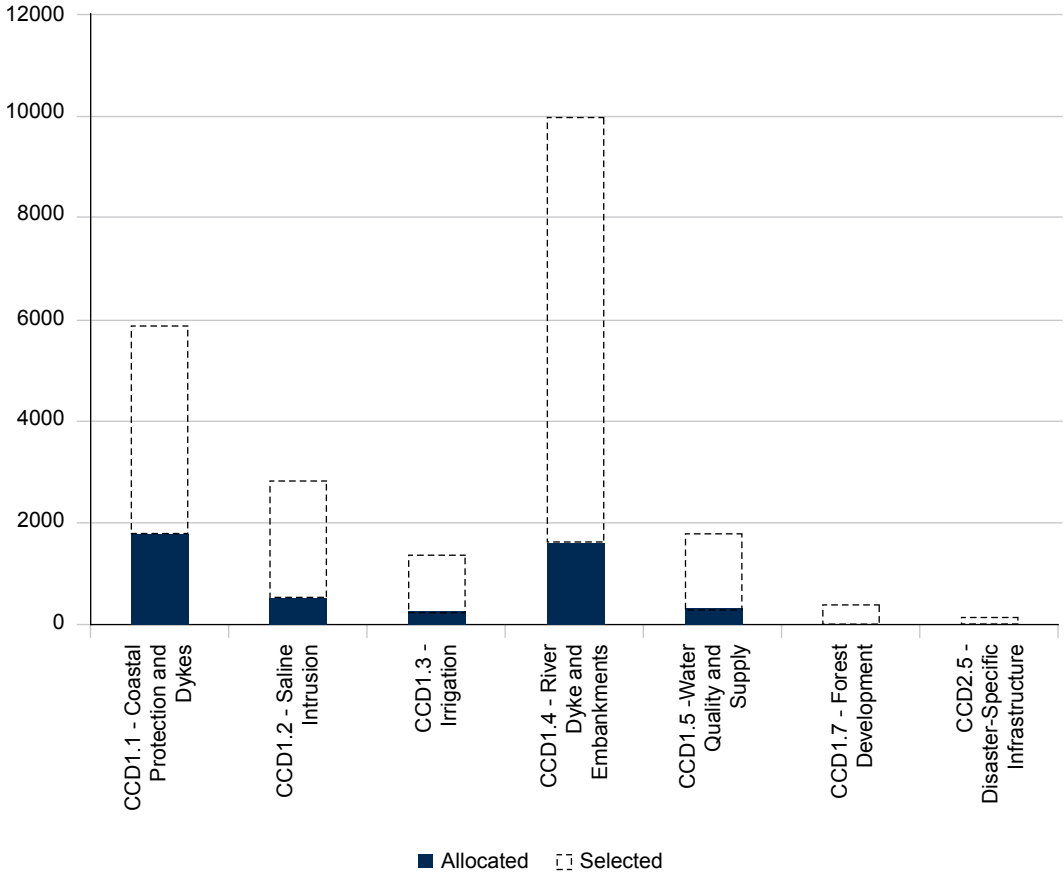
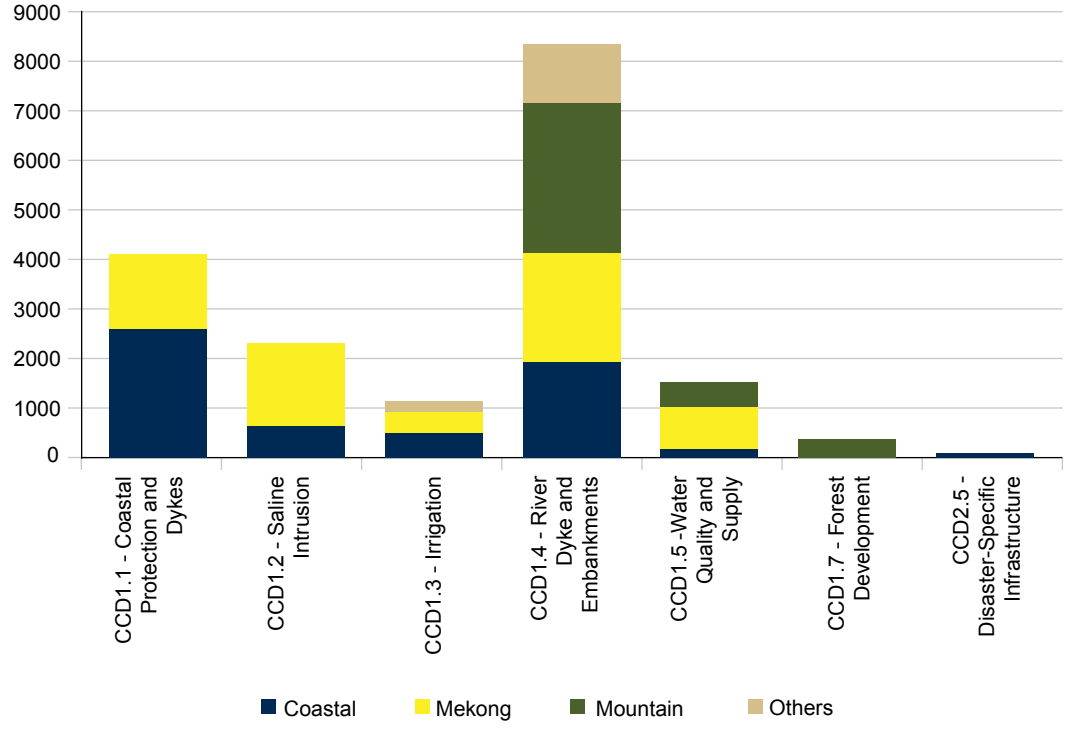


Figure 3.25. Total Financing for SP-RCC Projects by Geographic Region (allocated, VND billion)



37 percent of total financing for the 61 selected projects has been directed towards activities in provinces in the Mekong region, 33 percent to the coastal region and 22 percent to the mountainous region. 8 percent of the financing is directed to other regions, though these projects are not among the 16 financed in 2013 or 2014.

Tracking SP-RCC FM projects with national strategic climate change and green growth objectives indicates that allocations are largely covered under a select few NCCS strategic objectives but are generally not captured under the VGGS as they consist of adaptation activities. The vast majority of total financing (88 percent) has been directed towards the NCCS strategic objective "suitable proactive response actions to sea-level rise in vulnerable areas," while the remaining financing is split between "proactive disaster preparedness and climate monitoring—early warning, DRR" and "food and water security." As noted earlier, only about 6 percent of financing from allocated projects is captured under the VGGS (all directed to the "development of sustainable infrastructure for transportation, energy, irrigation and urban works"). Given the narrow scope of financing across the NCCS strategic objectives and that the SP-RCC has been identified as a financing source for the implementation of the newly launched Green Growth Action Plan, this highlights the need to review the planning and review processes for project selection under the SP-RCC FM.

3.2 Provincial government climate change response expenditure analysis

This section assesses a sample of sub-national CC-response spending in Vietnam. The section addresses:

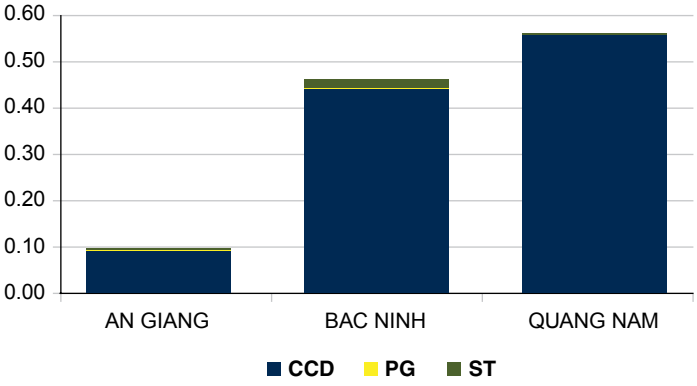
a. The types of CC-response projects that this group of provinces finances, and

b. The share of CC-response financing for each of the provinces in relation to their total budgets.

Provincial spending data are examined separately from the central climate change allocations and outturns, primarily because of the limited size of the provincial data set (three of 63 provinces). This coverage does not allow quantitative inferences to be drawn about the totality of provincial spending, so these data are analyzed primarily from the perspective of each province,[65] though some findings may have broader regional implications. An aggregate compilation would not provide a basis for estimating overall provincial trends. As spending from sub-national governments account for the majority of total capital spending by the GoV, this further highlights the need for planning, budgeting, tracking, and monitoring CC-response expenditure at the local level and building capacity in sub-national governments to apply the TCCRE to these expenditures is therefore necessary. The analysis demonstrates that the TCCRE is adaptable to the provincial level and therefore constitutes a unifying framework for linking objectives, activities, and CC-response dialogue, planning, budgeting, and spending across sectors and levels of the GoV. The analysis also serves as a baseline for the three provinces moving forward in efforts to begin articulating the "climate budget" for each level of GoV.

All three provinces have given primary emphasis to CCD activities and have climate budgets growing at a faster pace than their total budgets. Figure 3.26 shows the relative size of spending in each of the selected provinces in a per capita basis. In all three, the primary emphasis of financing has been CCD activities, with relatively few resources allocated to provincial ST or PG activities. This is consistent with the relatively limited capacity at provincial level and the need for central and sector inputs on policy and scientific support. As indicated in Figure 3.27, the climate budgets for the three provinces increased at a faster average annual rate

Figure 3.26. Provincial Climate Change Expenditure per Capita by CPEIR Pillar (aggregate of 2010–2012 implemented and 2013 planned by constant price 2010 VND million per person)



65. As discussed in Chapters 1 and 4, in establishing a national CC-review process, a broader national perspective on provincial level spending should include regional initiatives including on urbanization, and the Mekong Delta and HCMC projects, all of which will give insight to major spending in urban and delta areas. These aspects are not within the scope of the CPEIR data analysis.

Figure 3.27. Growth Rates of CC-Response Appropriations and Total Budget Appropriations (investment and recurrent) of Studied Provinces from 2010–2013 (constant price 2010 VND billion)

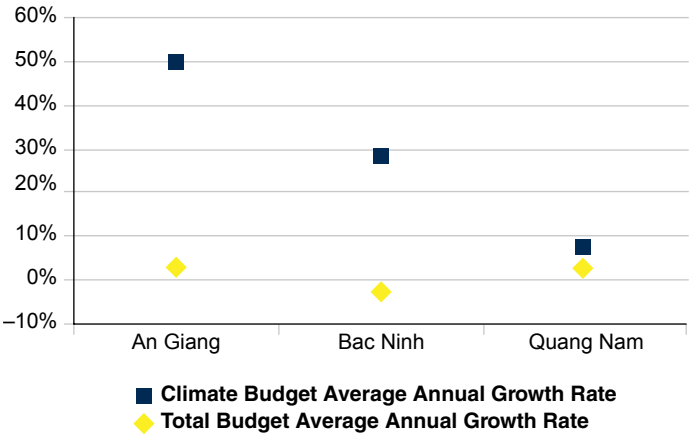
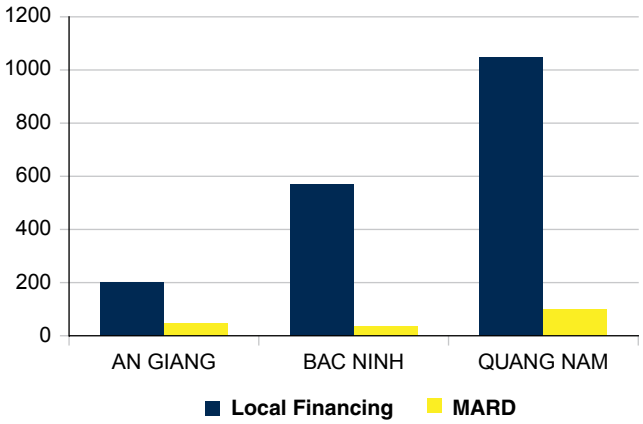


Figure 3.29. A Comparison of CC-Response Allocations for 2010–2013 from MARD and the Three Provinces (Note: If MARD projects cover more than one province, the financing was pro-rated based on the number of provinces covered in the project)

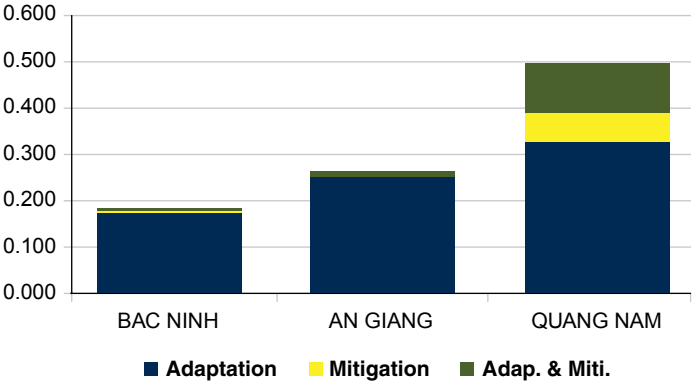


than the total budgets, with the increase in An Giang being the most pronounced.

The three provinces have likewise given considerably more emphasis to adaptation activities. Quang Nam has financed some mitigation activities, which correspond to its provincial action plan to respond to climate change that places some priority on energy conservation measures in the transport, industrial, and energy sectors. In all three provinces, however, adaptation remains by far the highest priority—consistent with national policy (Figure 3.28).

The three studied provinces have spent a sizable share of their total budgets on a CC-response, given the many competing priorities that must be financed. The share of total budget directed towards CC-response spending is around or below 5 percent for the three provinces. Bac Ninh's budget for CC-response activities accounts for about 4 percent of its total budget, with the vast majority directed towards river dykes and embankments and irrigation systems (see Figure 3.30). Quang Nam, whose climate budget also accounts for 4 percent of its total budget, has primarily financed irrigation systems, forest development activities, and waste management and treatment (see Figure 3.31). An Giang has appropriated about 1 percent of its budget from 2010–2013 for climate change programs, which are mostly directed towards the development of river dykes and embankments, resilient irrigation and transport systems, waste management and treatment, and improved water quality and supply (see Figure 3.32). In addition, a comparison of MARD's CC-response financing with local financing in the three provinces confirms that the provinces are financing a large portion of CC-response activities directly (as indicated in Figure 3.29).

Figure 3.28. Total Climate Change Expenditure per Capita in Provinces by Adaptation and Mitigation (implemented, constant price 2010, in VND million)



3.3 Institutional strengthening and data compilation

The distribution of CC-response spending points to a need for a vigorous mainstreaming of CC-response policies in many of the line ministry and provincial discussions. Comparatively few projects are wholly CC-relevant and designed specifically to meet CC-response objectives. Discussions at both line ministry and provincial level made it clear that direct action through the SEDP process would be necessary to encourage the more traditional oriented officials to initiate action aimed specifically at a CC-response.

Figure 3.30. Total Bac Ninh CC-Response Spending (investment and recurrent) (VND 481 billion) by Category and Task of TCCRE (implemented, by constant price 2010 VND billion)

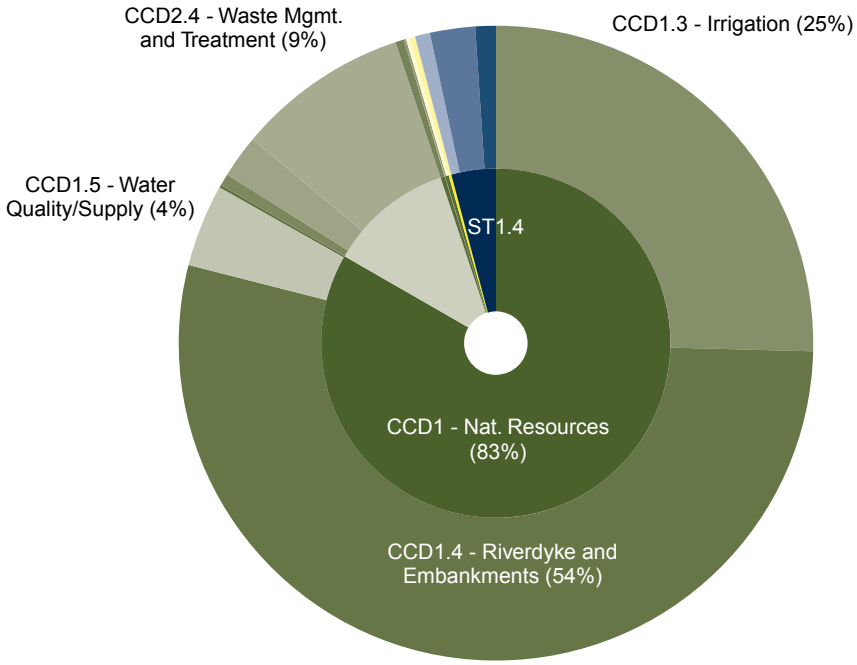
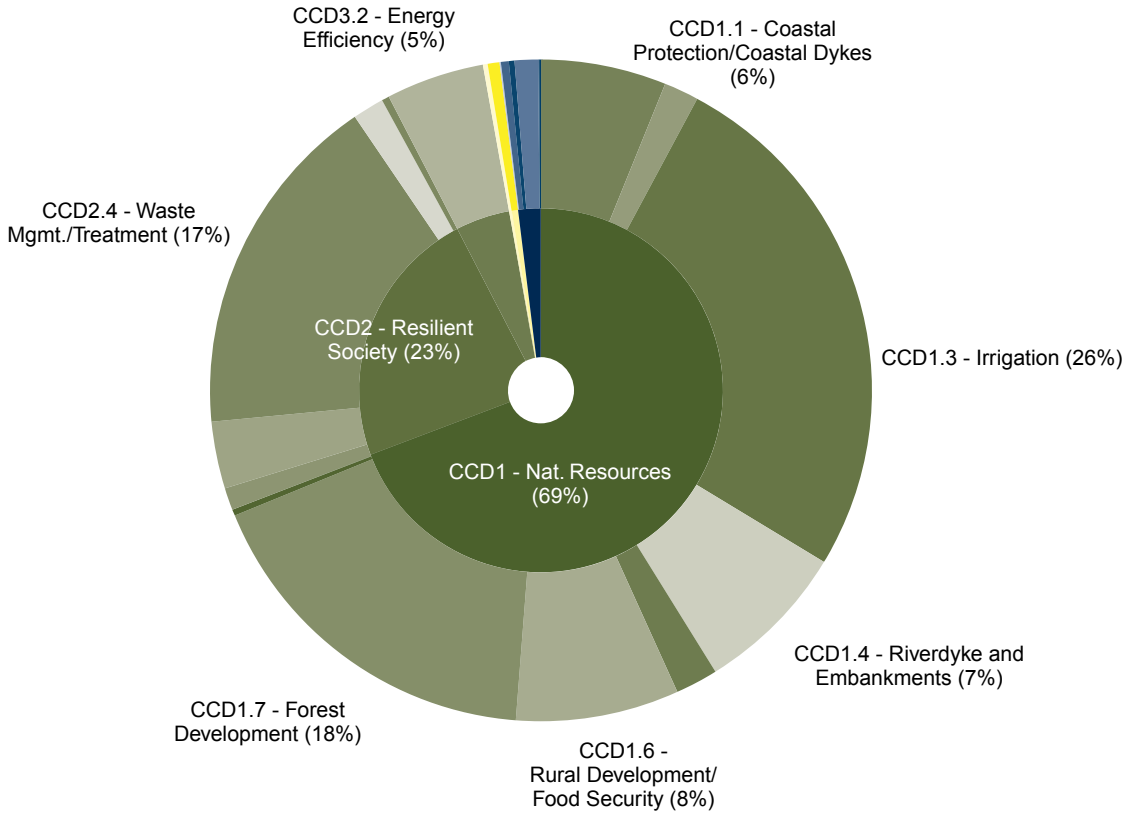
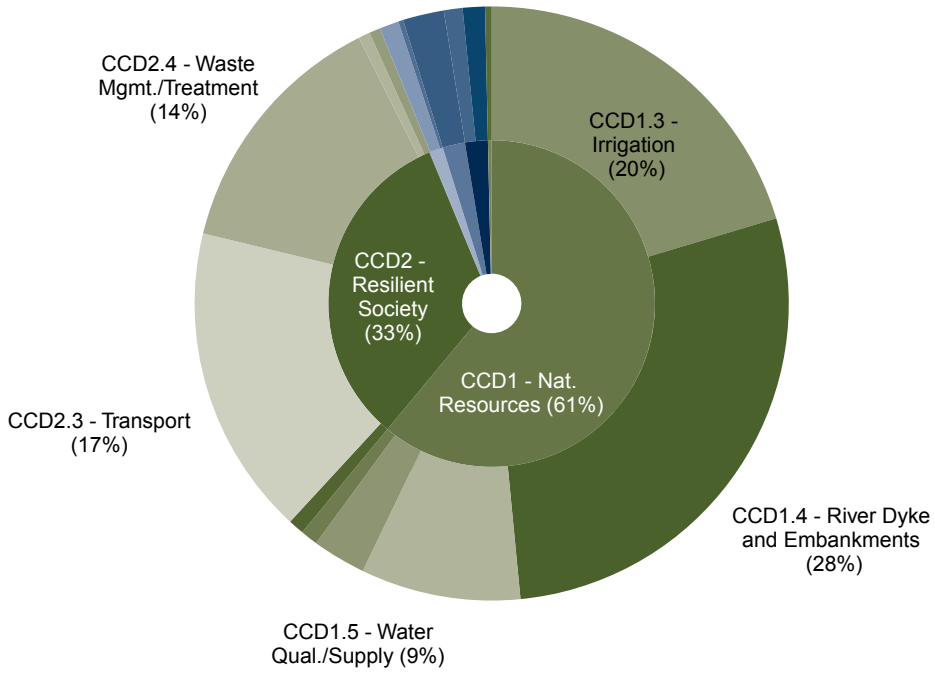


Figure 3.31. Total Quang Nam CC-Response Spending (investment and recurrent) (VND 850 billion) by Category and Task of TCCRE (implemented, by constant price 2010 VND billion)



The findings outlined in the preceding sections provide considerable evidence of the need to improve data collection and compilation to strengthen the planning and budgeting process. The main findings from the CPEIR are summarized in the list at the very beginning of this chapter.

Figure 3.32. Total An Giang CC-Response Investment Spending (VND 179 billion) by Category and Task of TCCRE (implemented, by constant price 2010 VND billion)



Box 3.1. Recommendations from Chapter 3

1. **Undertake a systematic tagging of CC-response spending as part of the government planning, budgeting and reporting systems** (confirmation of Chapter 2 recommendations underpinned by the findings of Chapter 3):
   a. Develop a comprehensive mapping and monitoring of the level and nature of the CC-response effort from all sources as part of the SEDP (State Budget investment and recurrent, ODA and others); and
   b. Conduct regular analysis of CC-response spending to support reporting and guide next (five-year and annual) planning and budgeting cycles.
2. **Review alignment between CC-response spending and climate change policy priorities:**
   a. Provide special attention to planning, designing, appraisal, monitoring, and reporting of irrigation and transport projects since these represent the core of the GoV's current CC-response spending; and
   b. Review gaps and weaknesses of CC-response spending coverage highlighted in the CPEIR, and define implications in the mainstreaming, planning, appraisal and monitoring processes.
3. **Increase resource mobilization and value for money in the climate response:**
   a. Identify funding gaps where public or private, and domestic or international, financing needs to be mobilized, and define a comprehensive resource mobilization framework to allow higher and more effective CC-response spending to meet Vietnam's objectives in climate resilient, low-carbon development and growth.
   b. Build stronger complementarity and convergence across sector budgets, ODA sources, and between central and sub-national CC-response spending (investment and recurrent) to reduce fragmentation of climate change efforts and maximize poverty reduction and shared growth co-benefits.
   c. Develop a more strategic use of the NTP-RCC and of the FM of the SP-RCC to support capacity development, increase prioritization and targeting, diversify the CC-response and promote global and local knowledge uptake from ODA and other supported activities.

4. MOVING FORWARD:
Incorporating Climate Change Policy in the Planning and Budgeting Cycle and Establishing a Climate Policy Review

A systematic process to plan, budget, and track CC-response spending is key to effectively execute, control and assess the GoV's climate change policies. Chapters 1 and 2 identified major elements that need stronger emphasis within the current policy context and planning and budgeting cycle for climate change and green growth. Elements of such procedures have been applied to the CPEIR selection of ministries and provinces covered in Chapter 3. An important conclusion, however, is that these techniques could be more fully integrated with strategic and annual planning and budgeting. Chapter 3 illustrated some of the analytical benefits that could be gained from regular and more comprehensive reviews. This chapter highlights the importance of applying the TCCRE in the forthcoming five-year plan and the preparation of the 2015 annual SEDP and recurrent budget. Measures to strengthen project preparation and management are broadly similar for expenditure allocations aimed at either adaptation or mitigation. But, as outlined in Chapter 1, the differing requirements for policies with respect to adaptation and mitigation must be recognized. Therefore, this chapter highlights areas where policy analysis and review processes differ. Producing an annual Climate Budget that covers both adaptation and mitigation spending, and a regular Climate Report that gives some assessment of the budget's impact is strongly recommended. Together, they will provide needed analytical information and a public focus on climate change and green growth. To make this a reality, the GoV must make a sustained effort to develop a strong planning and financing framework, which should aim to strengthen coordination of GoV and DP inputs. It is proposed that this be implemented from 2014 onward, initially on a pilot basis, building on the experience of those line ministries and provinces that have been involved in the CPEIR. The ministerial coordinating architecture will need to be strengthened significantly to reflect these considerations and to manage reporting and analysis and long-term policy implementation effectively.

4.1 Climate change expenditures in the planning and budgeting cycle

Climate change spending should be clearly linked to strategic CC-responses, identified, and appraised during the annual planning and budgeting cycle. The planning process for both adaptation and mitigation activities should be established as an integral part of sector and provincial plans and should:

a. Guide annual allocations by setting directions for the CC-response at central and provincial levels in the five-year SEDP.
b. Develop broad guidelines on resource allocation available for a sector and province CC-response within the overall fiscal framework.
c. Establish clear CC-response planning and project guidelines for each sector, city, and province/region.
d. Strengthen M&E processes for CC-relevant programs at line ministry, province and city level.
e. Initiate an annual national Climate Budget and Climate Report and corresponding review that leads to:
f. Review of policies and budget envelopes for the following year's CC-response policy implementation.

Guiding the Priority Setting Process in the SEDP

The GoV should conduct an extended pilot to establish broad strategic priorities for CC-response spending as part of the 2016–2020 SEDP. The current CPEIR's information and findings should help determine CC-response spending in terms of allocation to adaptation and mitigation efforts and distribution among sectors and provinces. Tagging of *all* CC-responses associated with sector and provincial programs, alongside CC-response sector policy and institutional development, will help to define these initiatives over the long term. This, in turn, will help establish broad priorities between adaptation and mitigation, as well as between needs for enabling different CC-delivery activities for both objectives. A major effort to review sector policies in this respect will provide stronger guidance for the annual planning and budgeting cycle. Once more complete data on all CC-response spending is made available, MPI and MOF can begin to pilot evidence-based ceilings for expenditure on all elements of the CC-response; though it will take several annual planning and budgeting cycles to establish provincial and sector shares of available fiscal space, given the separation of political mandates. As this process becomes established at sector and provincial levels, MONRE should play an important technical role in assessing the subsequent impact of the CC-response across programs and projects, which then feeds back into future revision of the agreed expenditure envelopes.

Over time, annual climate budget ceilings should be established to guide sector ministerial and provincial CC-response project preparation. Once more complete data on all CC-response spending is made available, the MPI and MOF should begin to pilot evidence-based ceilings for expenditure on all elements of the CC-response. Indicative ceilings linked to objectives and performance history provide essential guidance to sector ministerial and provincial project preparation; though it will take several annual planning and budgeting cycles to establish provincial and sector shares of available fiscal space, given the separation of political mandates. As this process becomes established at sector and provincial levels, MONRE should play an important technical role in assessing the subsequent impact of CC-response across programs and projects, which then feeds back into future revision of the agreed annual expenditure envelopes.[66]

Programs with potential CC-relevance should be part of SEDP planning, and priority projects should be considered in the annual cycle. In strategic SEDP discussions, pilot ministries and provinces should be encouraged to examine BAU policies and programs for a potential CC-response—particularly MOT, MOC, and MOIT. The ministries and provinces should be clearly advised that a CC-response applies to many projects with development or social policy objectives, not only those dedicated exclusively to a CC-response. For example, integrating climate change resilience or low-carbon technology in many projects can be a small, but highly significant, part of the overall budget. In the annual SEDP appraisal process, line ministries and provinces should present clearer evidence of CC-response elements competing for budgetary allocation within the overall fiscal envelope.

Agreeing on Planning and Budget Allocation Guidelines for Climate Change Response Expenditures

Develop agreed guidelines on the broad level of resources available for a CC-response during each planning period. Such practices are relatively well established for sector planning,[67] but sector targets have not yet emphasized the need to define CC-response objectives and resource needs because of the issue discussed in the preceding paragraph. It will take some time for the GoV to establish a full overview of how climate change is addressed across sectors and sub-national governments or the level of resources needed, but the basis should be initiated now. The CPEIR exercise helps in this regard by giving an initial (albeit partial) idea of how much is actually being spent at the central level—and, as described, indicates the need to encourage CC-responses from line ministries and provinces through dialogue and guidance in the SEDP process. As indicated in Chapter 2, application of the TCCRE as part of the budget preparation process will explicitly require line ministries and provinces to identify projects aligned with CC-response guidelines and thus help foster mainstreaming of sector and provincial projects with CC-response policies.

Planning and budgeting envelopes should eventually aim to progressively encompass all relevant CC-response spending at all levels of government and from all sources of funds. Current data relating to climate change efforts is highly fragmented in separate target programs and different levels of government. Full application of the TCCRE to all domestic and foreign-financed CC-response spending will enable these efforts to be better coordinated and, as noted earlier, help identify potential gaps in addressing adaption and mitigation needs. More work by the GoV and DPs is needed, however, to capture foreign-financed elements of climate change spending that are currently outside the State Budget process. Progress toward this goal will be helped by encouraging greater use of Vietnam's TABMIS system for accounting[68] and reporting on ODA as well as GoV spending, and by better and timely reconciliation of all ODA in annual financial reports. As noted below, however, mitigation efforts involve a range of fiscal instruments, so a review of mitigation planning and budgeting needs to look beyond the expenditure budget.

66. Ideally these guidelines would be developed as part of an MTEF rolling budget framework incorporating forward estimates of continuing costs of all programs and allocating new policy spending each year within an MTFF. CC-response expenditure management is well suited to and needs such an approach. Development of this approach for CC-response programs could help develop a more general approach to fiscal management. Significant changes to present budget law may prove necessary however.

67. According to PEFA 2013, indicative ceilings are given for recurrent spending and for sector plans, but these ceilings are not well observed by spending ministries. Moreover, revenue is generally underestimated at all levels of government and additional funds are allocated during the year. In general, these processes take time to be fully established, but implementation can only be successful by fostering discussion and agreement amongst all stakeholders.

68. See Box 2.1 for discussion of the nature of data on CC-response and the role of TABMIS.

Strengthening Planning and Project Guidelines

Priority-setting should support and highlight the climate change relevance of projects within the national/sub-national climate change policy objectives. As noted above, few projects are wholly aimed at climate change. Priority setting needs to operate with a broad-ranging focus, including development considerations and poverty objectives in relation to climate change. For instance, CC-response can be embedded as co-benefits of expenditures for poverty reduction through careful appraisal and selection. As noted in Chapter 2, guidelines for defining project objectives within each sector need to give more emphasis to design of projects, programs and policies with CC-response potential, and accompanying poverty reduction co-benefits that will be competing for inclusion in the development plan and annual budget. The adaptation prioritization framework (APRF) manual[69] has been developed to help with this adaptation appraisal process and to help set priorities among adaptation projects and programs in the SEDP. Appraisal of GHG mitigation-oriented projects, as discussed below, also needs strengthening.

The TCCRE will strengthen project design and appraisal. The CPEIR methodology has been concerned with identifying whether or not projects are CC-related. Use of the TCCRE methodology will help to improve both project information and detailed discussion of CC-relevant project objectives.[70] These aspects of the TCCRE will help improve APRF effectiveness for adaptation projects and will allow for an opportunity of consistent classification between climate change project information and the APRF by checking the coding of tasks, based on GoV's climate change strategic priorities. The experience of compiling data on CC-related expenditure for the CPEIR indicates that the APRF will be difficult to implement until projects are required to identify clear and strategic CC-response objectives and their respective performance indicators.[71] The performance of the APRF is expected to improve over time, and establishing objectives and indicators will be a primary focus of APRF implementation over the next several years. Ensuring that all projects include clearly specified objectives and indicators is essential in order to classify spending appropriately, and to ensure that the project outcomes in the M&E process are assessed, as discussed further below.

The real cost of GHG emissions should increasingly be considered in appraising projects with mitigation objectives. As discussed in Chapter 1, the viability (and therefore the ability to mobilize increasing public and private spending) of many emissions-reducing initiatives is highly dependent on the relative price of fossil fuels and clean energy sources. Taxes and subsidies also need to be used as policy tools along with expenditure. Introducing a shadow price for carbon would help ensure consistency in policies, whether implemented through the expenditure or the tax side of the budget. It would permit a more incisive consideration of climate change investments at all levels of government and all sources of funds. These points are discussed in more detail in section 4.3 on page 87.

Monitoring and Evaluation

Effective and strategic M&E is essential to CC-response policy credibility. M&E processes should operate at the level of project and program implementation within each sector and at the high policy level of assessing the impact of total adaptation and mitigation policy efforts. As yet, little evidence of effective climate change linked M&E at the project or program level is available. Elements of M&E are undertaken as a matter of course in most donor-funded projects, but even these data are not systematically compiled or reported. Designing an M&E system for climate change is a complex process due to the cross-cutting and mainstreamed nature of CC-response. However, a cohesive M&E system can be initiated with an early emphasis on capacity enhancements and a focus on strategically important indicators at all levels of implementation. For sector projects and programs, M&E processes should link clearly to the planning, budgeting, and CC-response classification elements described above, by defining a limited range of key *outputs* and outcomes expected at that level, starting with the programs that currently represent the bulk of CC-spending in Vietnam.

Policy-level M&E should consolidate project and program level data. Emphasis should be placed on linking outputs to achieving the policy objectives embodied in NCCS and VGGS and identifying key performance indicators to assess the degree to which expenditures are aligned to these policy objectives. Relying on a macro-level analysis of activities associated with reducing vulnerability, managing risk

69. *Adaptation Prioritization Framework (APRF) Manual for Socio-Economic Development Planning*, (Final Draft) issued by MPI under Decision No. 1485/QD-BKHDT dated October 17, 2013.
70. See the TCCRE Guide in Background Note III.
71. See Chapter 2 for more detail.

and reducing GHG emissions, M&E should ultimately assess the extent to which the expenditures meet adaptation and mitigation policy objectives across the range of sectors. Again, it should be possible to establish a limited range of KPIs for these objectives for each sector. Mitigation objectives related to the rollout of clean technology, renewable energy and GHG emission reductions are relatively easy to define, although measurement can be more challenging. Higher-level adaptation outcomes are more complicated and sector specific. For example, an intermediate outcome could be the proportion of construction projects in which climate change scenario predictions are included in the design and construction. These are relevant mainly for MOT and MOC but also for disaster prevention-related infrastructure and fisheries. Robust definition of such intermediate outcomes, however, would provide an opportunity for convergence of climate change outcomes across sectors and high-level harmonization across the spectrum of CC-response. Including the outcome/impact strata of the M&E can provide objective and verifiable "state of the CC-response" information, including the effect of the CC-response, and provide feedback to the planning, budgeting and expenditure level as well as the policy objective level. This M&E information can thus drive policy refinement and enhance expenditure prioritization, as well as make a periodic assessment of what benefits are being achieved relative to the money being spent. *The CPEIR recommends that the GoV engages in a process in the near future to review current capacity and initiate the development of a CC-response linked M&E system and development of strategic KPIs to assess CC-response impact building on international good practices.*

In the short term appropriate strategic, multi-level key indicators should be developed. In the long term an effective M&E system will require sustained effort, supported by MPI and MONRE. The effective delivery of the outcomes/impacts that are intended to be achieved should be sequenced in the M&E roll-out, but it is important to focus on key indicators and avoid excessive detail. Practical M&E systems should be put in place, in the first instance as part of ministry and provincial work-plans. This will involve setting a limited number of strategic and readily measurable output and outcome targets for all actions and regularly reporting to ministry management. In turn, these reports should be conveyed to the relevant coordinating ministries (MPI and/or MONRE) for review, and enforcement of reporting should be strengthened. Significant capacity building is required at all levels to establish a comprehensive, but practical, M&E system that generates and compiles information on key CC-response outcomes in a way that can be compared to vulnerability baseline data and expenditure data to enable a thorough assessment of the effectiveness of the national climate budget.

Current regulatory instruments and monitoring systems can support development of a practical and systematic M&E process. Strategic environmental assessments (SEAs) that are required for all strategies and plans of five years or more, including sector and provincial SEDPs, provide useful and relevant information. These reviews provide a rich source of data on environmental effects that can be combined with other data to illustrate changes that have occurred, in part as a result of government programs. Environmental impact assessments (EIAs) of projects can similarly contribute useful information on environmental changes, and could be used more systematically. Both SEA and EIA mechanisms will be strengthened in the revised Law on Environmental Protection.

Climate Change Reporting and Review

A regular report should be presented showing how CC-response money has been spent, giving a broad assessment of achievement against the stated objectives. Such a report should be considered as an essential component of climate change policy implementation. It should be comprehensive, published regularly (likely biennially, once established, but as discussed below prepared in pilot form by mid-2016), disseminated to the public, and be subject to independent technical review. Institutionally, such a report would be under the aegis of the National Committee on Climate Change (NCCC). MONRE would continue to lead in preparing technical updates of risk and vulnerability assessments and the impact that CC-response programs are having in increasing resilience to climate change risks, as well as MRV of the GHG emission status. Implementation of adaptation and mitigation policy relative to targets set would be reported as separate components of a proposed Climate Report. Chapter 3 of this CPEIR illustrates partly the type of analysis, but coverage and performance analysis would be progressively enhanced with strengthened technical and skills capacity.

The TCCRE will be central to the Climate Report compilation. The availability of regular and timely data on CC-response expenditures through application of the TCCRE methodology would greatly enhance the relevance and significance of the report and would buttress political and administrative executive control and direction of the overall climate change program. The planning and finance department of

MPI, MOF and MONRE, as well as other key technical ministries, would coordinate closely to establish an effective structure for compiling the data, and analyzing and reporting on developments (see section 4.4). The introduction of the TCCRE methodology to the government reporting system is thus critical for early implementation of a systematic and sustainable review process.

The Climate Budget and Report should be subject to some form of external review. The GoV would provide the first level of review, but such reports should also be open to independent review as a matter of general international practice, and both the report and review made widely available to the public. It will take some time for the capacity to undertake such a review to be put in place. For example, the State Audit of Vietnam has limited capacity currently to conduct such reviews. For the immediate future, external review could be provided by DPs for quality assurance, and priority could be given to this area in the near future.

TABMIS reports at project level will play a critical role. TABMIS provides the basis for accounting of all State Budget transactions (and in principle can cover all ODA spending). As discussed in Box 2.1, the TABMIS accounting role, however, would be limited to reporting actual spending by all CC-relevant projects. An estimation of CC-response spending would be made using the agreed apportionment of relevance to adaptation and mitigation in applying the TCCRE, as discussed below.

The TCCRE's CC-relevance component would be assessed as part of project appraisal and reported to MPI and MONRE and incorporated within the SEDP process. The SEDP process and climate change objective level accountability are thus best handled separately by MPI and MONRE. MPI tagging and analysis can easily be linked to the TABMIS accounting reports at project level. A clear and transparent system for estimating relevance could thus be set up under MPI, MONRE and MOF direction to give the most reliable overview possible of the GoV's efforts to implement its CC-response policies through public investment and spending. This procedure will correspond quite closely to best international practice (see Annex II for the French experience).

Key prerequisites to establish a CC-response expenditure budgeting, reporting, and accountability system include the following:

1. Improve forward planning of the national frameworks and establish more effective coordination of sector and provincial CC-response programs.
2. Tag all CC-relevant projects in the context of the SEDP process and establish clear assessments of the magnitude of CC-relevance for each project included in the annual plan and budget.
3. Require all CC-relevant finance departments to report on climate change project spending as part of regular budget execution reports. MPI should develop reports on spending on CC-relevant elements based on these reports.
4. Prepare regular expenditure reports on climate adaptation and mitigation investment and expenditure by MPI and MONRE.

The CPEIR therefore recommends immediate measures be taken to establish a CC-response planning and budgeting platform, initially on a pilot basis. The pilot would be based on the line ministries and provinces already included in the CPEIR (likely with an extended sample of provinces) and should be closely linked to the development of the 2016–2020 SEDP and the annual planning and budgeting cycle. Implementation would involve eight key steps, as outlined below.

1. Refinement of the TCCRE guide and capacity building in line ministries and provinces to apply the TCCRE.
2. MPI begins establishing strategic guidelines for CC-response spending and mainstreaming climate change policies in the 2016–2020 SEDP.
3. MPI issues the revised TCCRE guide, which requires climate change tags, objectives, indicators, and milestones for all CC-relevant projects.
4. MPI progressively generates CC-response expenditure estimates for all CC-relevant projects in pilot entities.
5. Preparation of a pilot draft memorandum Climate Budget for the ASBR.
6. MOF directs all pilot line ministries and provincial finance departments to report on total spending on all CC-relevant projects.
7. MPI and MONRE strengthen M&E processes on CC-relevant projects during project implementation.
8. Preparation of a pilot Climate Budget Report.

These steps will be critical to launch a systematic, transparent and evidence-based climate change planning and budgeting cycle. They will be a good start to strengthening key procedures, but will need to be supported by more effective coordination of activities both within the GoV

and between the GoV and DPs. Specific policies related to adaptation and mitigation need to be addressed alongside the planning and budgeting process. The remainder of this section will discuss aspects of planning and budgeting that need further development. Issues relating more specifically to strengthening adaptation and mitigation policy implementation and the ministerial coordinating architecture are discussed in the following sections.

The Climate Report will provide a basis to reassess priorities and identify financing gaps. It will provide an opportunity to increase alignment between spending and NCCS/VGGS priorities and review the effectiveness of CC-response spending. Together with the strategic emphasis on M&E outlined above, it will help ensure that the GoV receives value for money spent on its CC-response actions. Financing and coverage gaps, as illustrated in Chapter 3, can be reviewed regularly in association with the Climate Budget and Climate Report. As coverage is extended to the provinces, complementarity between national and provincial action can be strengthened (see next column). Coverage of recurrent spending and all ODA spending will also allow more effective coordination of linked (and possibly overlapping) activities. The Climate Report will also help to identify the roles of the NTP-RCC and SP-RCC more clearly in relation to other CC-response activities; and opportunities for the FM of the SP-RCC to increase and diversify its portfolio should be more easily identified. The Climate Report will also provide a basis for an annual CC-response Financing Report (CCR-FR) to identify financing gaps and appropriate sources of finance. The patterns of spending shown in the Climate Report will give a preliminary indication of how money is being allocated relative to NCCS/VGGS/DRRM and the fundamental objectives of adaptation/DRRM and mitigation (see Chapter 3). These findings can then be related to available sources of CC-response finance and current FMs. Both the Climate Report and CCR-FR can enable a substantial improvement in managing CC-response financing as well as improving the effectiveness of resource allocation. Both sets of tasks, however, will require significant capacity building, as discussed in section 4.4 on page 89.

Strengthening Coordination of Planning and Budgeting

Sector, provincial, and regional coordination needs strengthening. Timely and reliable information for all parties involved in climate change allocation decisions can help resolve some tensions in the still-developing process of decentralization. MPI and MONRE could lead planning efforts to address adaptation efforts on a more coordinated regional basis. Vulnerability factors cross provincial boundaries, so regional solutions are likely to be more efficient and effective than separate sectoral and provincial efforts. The Mekong Delta area, for instance, is a highly populated area that is highly vulnerable to climate change, but addressing these issues requires coordinated efforts by multiple central government sectors across provincial boundaries as well as action by several provinces. An Giang province, for example, has established a Provincial Action Plan to implement national strategies on climate disaster preparedness and community-based DRRM. However, ideally these should be coordinated with sector policies and policies in other Mekong Delta provinces.[72] *The CPEIR recommends that MPI and MOF explore ways of establishing multi-sector regional projects that address known vulnerability issues but are financed by both city/provincial and central budgets. The NTP-RCC may provide an appropriate vehicle to catalyze the piloting of such an approach.*

Capacity building, including stronger uptake of global knowledge and best practices from ODA-supported projects, are needed to further support coordination, especially at the provincial level. Better coordination will require enhanced capacity, in particular at the provincial level. The need to align planning and budgeting with climate change policy objectives requires a good understanding of the planning process in relation to climate change policy objectives. This becomes even more important if more regional approaches are undertaken to try to enhance the CC-response effectiveness. Capacity enhancement leads directly to improved M&E, which will be a key tool for ensuring an effective CC-response. Structuring the capacity program for improved coordination within the M&E framework may well provide the best outcomes. Activities financed by ODA should also be better integrated in regular country systems to increase uptake of good practices and global knowledge.

Planning and budgeting should be more effectively linked—particularly by balancing new investment with stronger operation and management capacity in the context of the available fiscal space. The TCCRE highlights the need to support enabling activities as well as CCD to

72. Ideally, such programs should also be informed by broader regional efforts, such as the USAID funded program for the Lower Mekong Delta Basin, (see USAID, 2013 *Mekong Adaptation and Resilience to Climate Change* (Mekong ARCC) http://www.mekongarcc.net/sites/default/files/mekongarcc_draft_synthesis_report.pdf.

address climate change. Generally, current planning focuses on creation of assets through investment in development projects. Very often, however, the recurrent budget is unable to meet ongoing operating and maintenance costs associated with that asset. More generally, it is essential that priority setting for a CC-response is put firmly in the context of available fiscal space in a clear medium-term time frame. These issues can be tackled through ongoing PFM reforms, in particular the development of rolling medium-term fiscal and expenditure frameworks (MTFF and MTEF). The MOF has successfully piloted the use of an MTFF and MTEFs in four line ministries and three provinces. Reviews of these pilots by MOF and an independent consultant have shown that adoption of these processes improve cost of baseline spending and new policies, and link capital and recurrent budgets more effectively. Many of the advantages of MTFFs and MTEFs can only be fully realized in the context of a reliable and comprehensive information system, like TABMIS. *The CPEIR recommends the GoV initiate a climate finance budget (and sector budgets) for the 2016–2020 SEDP in a form consistent with a general government MTFF, as part of the SEDP preparation*.

DPs should increasingly use TABMIS for budget, accounting, and reporting on resources provided to Vietnam for CC-response expenditures. The desire to process ODA through country systems is recognized in Vietnam. However, efforts to reconcile ODA expenditure not yet on budget and account in TABMIS with the debt management system have been less timely. While improvements in timeliness will help, a major effort should be made to process ODA transactions as much as possible through TABMIS. DPs, of course, wish to be reassured regarding reporting format and timeliness, as well as with regard to fiduciary risk. As noted in Chapter 1, some work is being done on a pilot basis with regard to provincial ODA-financed projects. *The CPEIR recommends that the GoV and DPs agree on principles and a timeline for processing all CC-relevant ODA through TABMIS—initially by piloting selected ODA projects to use the GoV plan, budget, and payment and reporting process for financial management and reporting to all stakeholders.*

4.2 Planning and financing adaptation policy

Climate adaptation planning, financing, and policy implementation processes need improvement to effectively respond to growing climate change risks. The GoV's policies and programs to manage these risks, strengthen climate resilience, and adapt to climate change have been reviewed and analyzed in Chapter 1. Many of these policies and programs guide ministries toward focusing CC-response efforts, others help strengthen the information base for assessing climate vulnerabilities, and a number have advised on strengthening the methodology for identification, appraisal and prioritization of projects and activities. The considerable amount of recent work on adaptation responses has established a solid foundation on which to develop such a framework.

National Vulnerability Assessment

Climate risk and vulnerability assessment is the critical starting point for an operational adaptation policy framework. A considerable amount of work has already been done to establish basic scenarios of climate change and assessment of vulnerabilities and risks that Vietnam's different regions and sectors face (see Chapter 1). These assessments identify areas most vulnerable to climate change impacts and, in turn, some of the current programs that are primarily addressing policy implementation. However, the vulnerability study needs to be extended to all relevant sectors and provinces in order to identify and secure assets against climate change related vulnerability. This process should be formalized and institutionalized to ensure that progressive resilience building is aligned to the revised versions of the climate change scenarios as they are generated. This may be done through, for example, a sector-specific under-law which provides guidelines on inclusion of climate change resilience in the interventions. The response to climate-derived vulnerability covers adaptation responses in a number of line ministries, as well as disaster risk reduction and management activities, mainly in MARD. However, disaster response (related to disaster risk) and climate change adaptation (related to climate change related vulnerability) are perceived in policy terms and institutionally as separate entities and objectives, rather than a common agenda responding to vulnerability which is derived, or exacerbated, by climate change. A more effective response to vulnerability should be instigated, with increased alignment of adaptation and DRRM approaches both in higher-level policy objectives as well as in institutional coordination. The recent high-level DRRM/CCA coordination forum in October 2013 is a move toward this goal. However, there is a need for increased institutionalization of this approach with the main government entities involved in DRRM and adaptation response.

National climate change scenarios and vulnerability assessments are vital to ensure evidence-based CC-response policy implementation. Maintaining a national scenario is critical for national and provincial administrators to set priorities on adaptation responses to climate change through the planning and budgeting process. Such predictions, however, have a high degree of uncertainty and depend on global efforts to improve scientific knowledge on likely future climate developments and adaptation technology. Regular updating and strengthening of the national adaptation scenario, including by employing stress tests across several possible climate and socio-economic future scenarios, is important. In addition, regional and local scaling of national scenarios is needed. More efforts are also needed to support the practical use of the scenarios by sectors and provinces to further encourage mainstreaming. The interpretation of climate scenarios and related key climate change variables in relation to vulnerability of the sectors needs to be made more apparent and directly applicable to users. The inevitable uncertainty in climate projections needs to be dealt with in a practical way, with the onus on no-regret adaptation actions or adaptation interventions which have other positive benefits. In addition, guidance on frameworks to embed climate change in project design and implementation need to be developed to promote the CC-response. For example, with substantial financial resources going towards road building and with no proactive approach to future-proofing roads there is a need for systematically building climate change projections into road design standards. MONRE, and particularly the Institute of Meteorology, Hydrology, and Climate Change, will be the national anchor for such efforts. *The CPEIR recommends continued efforts to update and scale the scenarios to regional and local levels and across a variety of climate and socio-economic futures to enhance their use, improve accessibility and practicality across sectors and provinces, and to ensure that projects and programs are appraised under a variety of projections of future climate impacts.*

The Role of SOEs in Adaptation Policy

The role of SOEs needs to be recognized explicitly. Some CC-response programs deliver services through state or provincial SOEs in place of, or in combination with, direct government spending. This is more common in activities that are aimed at mitigation but also applies to some adaptation activities (such as irrigation and drainage management companies for irrigation services). The issue is more complex in the case of mitigation, as discussed on the following page, but whenever SOEs are used it adds to the difficulty of interpreting expenditure data, as discussed in Box 2.1 and Annex I on the forestry sector (the latter suggests the benefits of more detailed sector/provincial studies where SOEs have major responsibilities for policy implementation). On the Treasury accounts, these expenditures are recorded as transfers to the SOE rather than as direct delivery of services; the actual expenditure by the SOE will be recorded on the enterprise account. Depending on the balance of these transactions, Treasury may overstate or understate the actual amount involved. In effect, the actual expense is carried out off-budget, and assessing its impact will require establishing clear agreements with the SOEs and effective monitoring of their actual CC-spending and outcome delivery. *The CPEIR recommends that SOEs' role in adaptation program execution should be clearly stated and any major impact on fiscal risk should be clarified.*

Design Standards and Regulations

Better design standards are an important part of the climate change response, and regulators can play a critical role. Raising design standards to meet both adaptation and mitigation objectives should be emphasized in SEDP discussions with agencies involved in construction activities, such as MOC and MOT. Implementing new standards for construction (or for materials or fuel) will often require supporting regulations to ensure compliance by enterprises. For example, construction activities are regulated under the 2003 Law on Construction (No. 16-2003-QH11) administered by the MOC. Discussions with the ministry indicated that these issues are under active consideration and that many aspects are being examined, particularly in the context of urbanization, though they are not yet part of the mainstreaming dialogue in the context of the SEDP. Setting appropriate CC-related considerations in design and construction standards can help build resilience. This can be supported by extending the accessibility and practical use of the MONRE CC scenarios to key sectors, as well as production of appropriate assessment frameworks for site-based risk.[73] *The CPEIR recommends that mainstreaming of CC-relevant design and regulatory standards should be addressed and possible CC-response projects should be formulated in the SEDP process from 2014 onward.*

73. For example, the *Climate Impact Assessment Guidelines for Roads* (World Bank) which uses a three-phase assessment approach: climate considerations, strategic project consideration and risk assessment / summary project assessment to support planning and design considerations of road construction.

4.3 Planning and financing mitigation policy

Mitigation policy implementation should be evidence-based and linked to global efforts. For reasons already outlined, however, the operational concerns for the mitigation component of CC/GG policies differ substantially from those of adaptation. Mitigation operations are concerned with progress on global mitigation initiatives, taxes and incentives, and policies of SOEs in energy sector much more than with direct investment expenditure. Many of these issues involve complex policy issues that will be resolved progressively, and their implementation involves a much higher degree of uncertainty and risk than implementing adaptation policy. Moreover, many are addressed outside the standard planning and budgeting cycle. These factors do not make mitigation policy any less important, but they do mean that its implementation will be subject to more complex policy discussion, longer gestation, and a higher degree of uncertainty than that of adaptation. This will affect the type and amount of direct public expenditures that will actually be needed to develop effective GHG mitigation policies.

One starting point for a national mitigation policy (beside co-benefits) is for a country to identify, recognize and track its GHG emissions. Details of the development of an MRV system to track and report emissions levels are given in Chapter 1, which notes that, while the GoV has given highest priority to adaptation, it has demonstrated its commitment to low-carbon growth through its Green Growth Strategy and has set an ambitious mitigation target for 2030. Details on the business case for low-carbon development are provided in the World Bank's 2014 *Charting a Low Carbon Development Path for Vietnam* study. As noted, these processes require a range of data, need to be implemented at different levels, and require considerable capacity development to be implemented successfully. Establishing regular reporting on emissions by sector and by region is a starting point for an effective national mitigation policy implementation framework. However, since tracking emissions is also critical for global emissions policy, it is very appropriate that much of the effort in this area be strongly supported by global knowledge and support from DPs—and that all expenditures financed by ODA in this area should be tracked as an element of Vietnam's mitigation policy implementation framework. Internationally compatible MRV systems need to be developed to enable Vietnam to plan and pursue low-carbon green growth. The development of a national MRV system would benefit from both a top-down and bottom-up approach for compiling and elaborating emissions data. In the near term, it is possible that existing bottom-up approaches could be adapted (such as those used for CDM projects) in sub-sectors that are candidates for crediting mechanisms, developing lessons learned and serving as a model for other sub-sectors. In the medium term, a top-down approach will be required that will account for national/sector emissions to be translated into a semi-regular national inventory of GHG emissions. Both approaches will require verification guidelines to be developed from international standards. *The CPEIR recommends that a roadmap be developed to set priorities for establishing MRV capacity.*

Mitigation policies should link with global and national action on GHG emissions abatement and green growth targets. Mitigation is complex and involves many stakeholders. The following parts of this section recommend further steps to consolidate the GoV's policies on mitigation, as well as major barriers and risks to moving forward rapidly in order to identify the role of public spending and of fiscal policies in their implementation.

Climate Fiscal Policy, Mobilization of Public and Private Low-Carbon Investment and Development of the Concept of a Carbon Price Anchor

The principle that fossil fuels impose a global cost is important to mitigation policy. As described in Chapter 1, establishing the costs of carbon emission involves a range of fiscal measures that go beyond expenditure. It is evident that mitigation policy based on establishing either taxes or market-based prices has faced a great deal of resistance from vested interests in all countries where it has been proposed or attempted. But these political economy barriers must be tackled if mitigation is to be successful over the long run—either nationally or globally. Efforts in Vietnam provide direct benefits in terms of reducing energy vulnerability, and, while small in the global context, could be globally influential if they are based on clear principles and applied consistently. As described in Chapter 1, current fiscal policies are moving in the right direction, but are not yet fully consistent overall. Measures to establish a consistent mitigation policy regime should address the following aspects:

a. **A cost recovery approach to energy pricing and reduction of any remaining subsidies (including implicit subsidies).** In Vietnam's case, while direct

subsidies have been reduced, implicit subsidies remain. Cheap domestic fuel sources are viewed as an easy way to provide benefits to people. However, the economic arguments against such a course are strong: the real cost of cheap domestic fuel is the price that it could command on the world market, not just its domestic production cost.

b. **Support to lower income groups.** Lower fuel costs may benefit the better-off. Low prices also increase demand for fossil fuels, resulting in a spiral of increasing demand that puts pressure on the government budget and energy policies. Lower income sectors disadvantaged by market and carbon pricing can be compensated in a variety of ways, including cash transfers, strengthened social protection, and better infrastructure, while allowing market (and emissions-linked) prices to determine production and consumption costs.

c. **Use a consistent estimate to set both renewable and energy efficiency taxes and incentives.** While carbon-trading markets have yet to establish a carbon price that reflects climate change's global impact, it is important for each country to use clear and consistent price[74] mechanisms as a central tool of its climate change policy and response spending. Individual country assessment of the most appropriate price will differ across countries. Nonetheless, a consistent application of pricing principles will help harmonize national policies. It will also be a very significant advantage in terms of market preparedness (see discussion of current efforts in Chapter 1) when global carbon trading markets are in place.

Policies aimed at market readiness and carbon abatement should be consolidated and consistent. The general view on setting prices has tended to favor market-based emissions trading schemes as the most efficient way of establishing prices. However, experience in Europe and elsewhere has also demonstrated the need for a phased approach in setting up such schemes, in terms both of how many carbon emission permits to issue and of establishing global agreement on extension of the market. Issuance of too many permits in the EU's Emission Trading Scheme led to the EU market's collapse and consequently a world-wide drop in the price of carbon to a level that would have only marginal impact on fossil fuel-based energy costs. As a consequence, some countries consider establishing a carbon tax as a possible first step toward global agreement on setting effective prices on GHG emissions. A middle way, focusing mainly on consistency, could be a progressive move toward establishing a shadow price for carbon, derived in part from international estimations, marginal abatement costs, and by review of the prices implicit in current investment options and tax decisions. Such a shadow price is then meant to be applied to all mitigation investment appraisals and fossil fuel tax rate considerations. Studies, in particular the LCOA (WB, 2014), to develop a low-carbon development roadmap have examined options in relation to Vietnam's most likely technological options for future energy needs. These studies do not at this stage formally apply a shadow price, but the work is consistent with efforts to formulate such a price to apply consistently to future investment decisions. *The CPEIR therefore recommends that the GoV review its mitigation policies with a view to establishing a consistent policy delivery framework that aligns all fiscal instruments to the common goal of cost-effective abatement of emissions.*

74. See OECD (2013) *Effective Carbon Prices*, OECD Publishing. The international consensus on mitigation policy is that setting a price on carbon emissions is the most effective instrument to change enterprise and consumer behavior and reduce emissions. This study covered climate change policies in 15 countries and their impact on such areas as electricity generation, household energy use, road transport, and manufacturing, and concluded that carbon prices were cheaper and more effective than any other instruments. In the European electricity sector, for instance, abating a tonne of CO_2 cost an average of €10, compared with €176 for capital subsidies and €169 for feed-in tariffs.

The Role of SOEs in Mitigation Policy

The GoV's policy and management of SOEs is crucial to understanding mitigation policy in the energy sector and the accompanied CC-response spending. Pricing energy to reflect market realities as well as to encompass GHG emissions impact is a critical part of energy sector reform. The bulk of energy investment and sale of energy to the public is executed through energy SOEs, notably Electricity Vietnam (EVN). A cost recovery approach to electricity pricing is recommended as a minimum policy for EVN, with any subsidies to vulnerable areas or lower income groups being handled directly by the GoV rather than from EVN's balance sheet.[75] SOEs contribute a significant share of total GHG emissions, which as a result creates challenges for operationalizing emission reduction targets within a decentralized setting where line ministries play a crucial role due to their direct links to SOEs. This further illustrates the importance of energy pricing reform that would create the proper market incentives for implementing emission reduction activities.

75. See discussion of the role of SOEs in Box 2.1.

The critical role that energy SOEs play in passing through prices to reflect both market realities and the impact of GHG emissions should be strengthened. The GoV is addressing the above issues to allow market forces to operate effectively[76] and for the public and private sectors (both domestic and international) to invest in low-carbon energy. While these matters are under consideration in the broader arena of general SOE reform, which lies outside the mandate of the CPEIR, these energy-related issues are central to an effective mitigation spending and policy response to address GHG emissions and need to be given critical attention. *The CPEIR recommends therefore that the GoV reviews its policies with regard to energy SOEs to help define pricing arrangements, investment plans and stakeholder representation that is most conducive to boost country CC-mitigation response.*

Performance-Based Payments: REDD+ and Forest Management Related Activities

REDD+ principles could have wider application as an integral part of the National Plan on Forest Protection and Development (NPFPD). As discussed in Annex I, which examines the relatively complex arrangements for mainstreaming CC-response policy in the forestry sector, the principles underlying REDD+ are aimed primarily at establishing environmental performance related payments as the basis for CC-response in the forestry sector. These principles could be applied more widely during and after the REDD+ Phase II, to support delivery of the NPFPD. If further aligned, the REDD+ instruments and policies have great potential to help realize NPFPD objectives, as well as poverty co-benefits, and could be managed as a strategic asset of the mitigation portfolio. Their implementation through international/national/private sector financing of incentive-based benefits confers further advantages when REDD+ becomes operational. While carbon sequestration is limited and finite it is an important part of the wider mitigation effort. REDD+ also has potential for multiple adaptation benefits (such as flood control and reduction of soil erosion). Both the potential carbon sequestration and the nature and extent of adaptation benefits are site-based. As such, a highly devolved structure for implementation is a pre-requisite.[77] Implementation of these principles, as indicated in Annex I, however, does indicate a need for deeper examination of the relative roles of SFCs, provinces, and MARD in NPFPD implementation than has been possible in this broad CPEIR review. It would be essential that MARD carry out a more detailed review of forest management practices to integrate REDD+ and the NPFPD. *The CPEIR recommends that REDD+ principles should be established as an integral part of the overall mitigation portfolio of Vietnam, integrated with the NPFPD rather than seen as a separate and isolated undertaking, and that planning for a systematic increase in adaptation co-benefits be strengthened.*

4.4 Strengthening the ministerial architecture and intergovernmental coordination

The NCCC needs high-quality information in order to drive more effective CC-response spending. The role of the NCCC SO is vital for channeling high-quality, verified and succinct information to the NCCC. The SO needs to strongly encourage M&E of the CC-response to support effective oversight by the NCCC. Buy-in needs to occur across all ministries through the CC focal points. The SO will have primary responsibility for rolling out M&E and collating the information as it flows back from CC undertakings. Full development of M&E is challenging and a long-term task that must cover central government sectors as well as provinces and cities; it is the key tool to link the delivery of planned budget and the climate change response impact. Considerable further capacity development will be needed in the SO as the NCCC matures during 2015 to ensure the best possible development of information and analysis is available to the NCCC, in combination with a demand for strong inter-ministerial coordination. The SO should also use this information and analysis to guide the development of the Climate Report. *The CPEIR recommends significantly strengthening the SO to guide development of the M&E system and the Climate*

76. While a portion of subsidies to consumers is still borne by EVN, cross subsidies among electricity consumers have reduced over the years and electricity tariffs have increased both in nominal and real terms in the past few years, improving the financial viability of the sector. Current average electricity tariffs of US cents 7.6/kWh roughly cover EVN's opex and financing costs (average tariffs cover legacy debt and tariff adjustments have to cover investment requirements). However, to also cover the power sector's large investment requirements the sector needs further tariff increases up to US cents 16/kWh by 2020 to make the power sector financially viable.

77. MARD has established a National REDD+ Network and a REDD+ Working Group, which are divided into REDD+ Sub-technical Working Groups on (i) REDD+ Governance; (ii) Measurement, Reporting and Verification; (iii) REDD+ Financing and Benefit Distribution; (iv) Local Implementation of REDD+; and (v) Private Sector Engagement. The working group is a subsidiary body to the Steering Committee for Climate Change Mitigation and Adaptation.

Report to enable the NCCC realize its oversight, prioritization and coordination role.

The financial architecture should be strengthened and unified as a result of stronger planning and budgeting, strategic M&E development, and more effective inter-ministerial coordination. The development of a climate budget, tracking of actual spending, basic M&E, and effective coordination of all these activities will provide a basis for identifying financial gaps and overlaps. Rather than a multitude of programs and strategies competing for available funds, it should be possible to review the budget result and the Climate Report to narrow the scope of FMs to more specific targets and sources of funds. The existence of a more comprehensive mechanism will, in itself, help to attract funding sources and provide a basis for designing FMs to suit Vietnam's needs. *The CPEIR recommends that the financing framework be harmonized to focus clearly on adaptation and mitigation policy implementation goals and establish appropriate Financing Mechanisms linked to these goals.*

Box 4.1. Recommendations from Chapter 4

Key short- to medium-term recommendations that will support the key steps to strengthen CC-response planning and budgeting in the process of developing the 2016–2020 SEDP and in the 2015 annual planning and budgeting cycle[78] and help address the findings and recommendations of earlier chapters are as follows:

1. Address issues of mainstreaming CC-relevant design and regulatory standards in SEDP discussions to encourage CC-relevant construction projects and appropriate regulations to be formulated in support of the SEDP process from 2015 onward. These activities will often require detailed sector/provincial reviews.
2. Strengthen sub-national/sector coordination to make better use of data available through the planning and budgeting improvements. Emphasize integration of CC-response strategies with sector and provincial strategies.
3. Instigate a more effective response to vulnerability with increased alignment of CC adaptation and DRRM approaches, both in higher-level policy objectives as well as in institutional coordination.
4. Mandate instructions to increase usage and update vulnerability and risk assessments for all areas to take into account climate scenarios at regional and local levels.
5. Clarify the role of SOEs in implementing CC-response objectives and ensure that SOE performance targets are set and monitored.
6. Take initial steps to strengthen the SO of the NCCC to enable it to guide the development of the M&E system and the Climate Report and assist the NCCC to realize its CC-response oversight, prioritization and coordination role.
7. Develop a framework to coordinate and mobilize financing of CC-response activities and establish appropriate financing mechanisms in line with adaptation and mitigation policy implementation frameworks.

Longer-term initiatives that should be initiated in the near term but employed progressively in line with developing capacity and successful implementation of the measures to integrate CC-response policy in the SEDP cycle are as follows:

1. Develop and implement a roadmap to set priorities for establishing MRV capacity.
2. Review the mitigation fiscal framework to help align all fiscal instruments and develop a consistent policy and instruments to achieve cost-effective abatement of GHG emissions.
3. Further review policies regarding energy SOEs to define pricing arrangements, investment plans, improve public financial disclosures, and enhance stakeholder representation in support of national climate policy implementation.
4. Embed the basic principles of performance payments underlying REDD+ as an integral part of the National Forestry Strategy, rather than a separate and isolated undertaking under the CC-response umbrella.
5. Initiate a climate finance budget (and sector budget) for the 2016–2020 SEDP in a form consistent with a general government Medium Term Fiscal Framework (MTFF) as part of the SEDP preparation.

78. These steps are described above and developed in detail in Chapter 5.

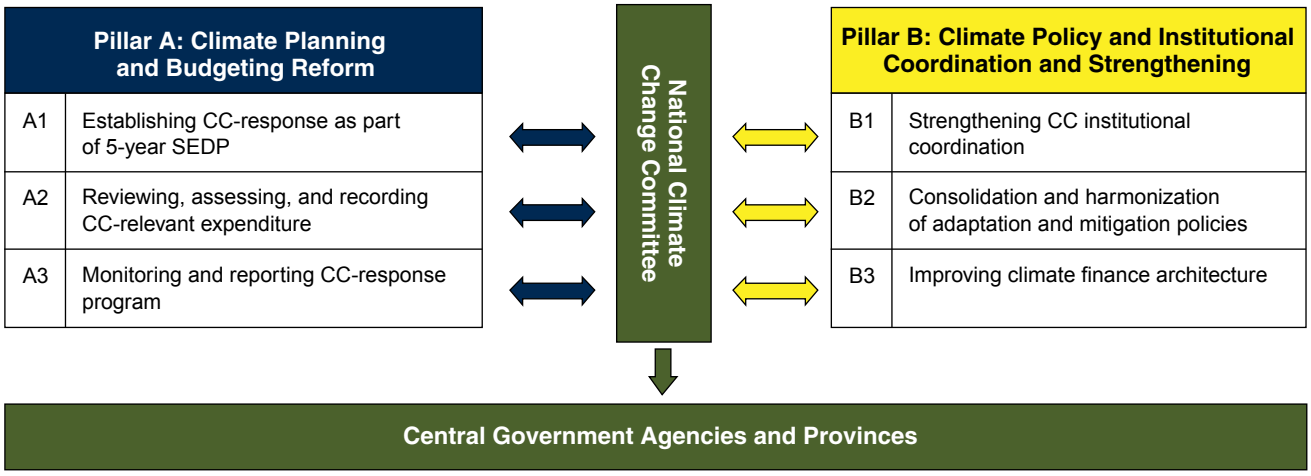
5. A NATIONAL ACTION PLAN TO ESTABLISH A CLIMATE CHANGE BUDGET AND ANNUAL REVIEW: Implementing the CPEIR Recommendations

Plans for a Climate Budget and associated review and financing process should begin as early as possible. This chapter further develops the recommendations presented earlier, particularly those in Box 4.1 and Annex I, by specifying activities needed to implement the key recommendations. The precise form of these activities and their management is to be determined by the GoV. Particular emphasis is placed on immediate actions aimed at establishing a basic CC-response platform for the next SEDP—an opportunity that should not be missed. Section 5.1 outlines the broad structure of the suggested program and focuses on the need to coordinate the many dimensions of that program effectively. The following sections then review the two main components and activities that must be put in place to implement the CPEIR recommendations over the short, medium, and long term. Section 5.2 outlines specific activities required in the immediate future to strengthen the SEDP and the planning and budgeting cycle. Section 5.3 specifies the activities required for policy development and institutional strengthening to support adaptation and mitigation policy development and financing mechanisms for priority CC-response activities. Section 5.4 presents a framework that can be used by the GoV to review and develop these activities into an action plan that is aligned with Vietnamese institutional norms and procedures. First, Table 5.1, located at the end of this chapter, summarizes all elements of the proposed program in a *results framework* format that further details the activities and major sub-activities needed to implement each recommendation. It highlights the expected outputs and outcomes of these activities, their linkages with other activities (to help identify priorities and sequencing), and identifies risks that need to be taken into account for effective implementation. Table 5.2 includes all of these activities in an *action plan template*, together with other ongoing CC-response activities, which can form the basis for more detailed *work plans* for each of the responsible agencies and units. These units will specify milestones and a timeline for completion of each activity. All activities are tagged with the CC-response typology (TCCRE) element that they will contribute to, since implementation of the CPEIR will itself be a component of Vietnam's CC-response strategy.

5.1 An overview of the results framework and action plan

Strengthening coordination among the key CC-response policy agencies, as well as linking policies to the CC-response activities of line ministries and provinces, is critical. Figure 5.1 below illustrates the main components and activities included in the proposed results framework and action plan template. The two components of the proposed program are interdependent. The first pillar focuses on the immediate need to establish CC-response activities as a clear and accountable part of the strategic and annual SEDP, planning, budgeting, and financing cycle. The second pillar relates to policy and institutional processes combined

Figure 5.1. CPEIR Recommendations and Action Plan Framework



with a proposed financial architecture. It is concerned with initiating activities to strengthen the adaptation and mitigation arms of the CC-response policy and the financial architecture that can use the planning and budgeting data to inform decision-making about mobilizing and coordinating available sources of finance. The central pillar highlights the need for a stable technical body with capacity to review and coordinate all of the functions involved in the planning and budgeting cycle and development of the financial architecture and appropriate financing mechanisms. As identified in Chapter 1, the existing inter-ministerial architecture and workflow under the NCCC need strengthening to direct and prioritize implementation efforts. The activities proposed under pillar 2 will help to develop aspects of coordination, but these issues need to be taken up by the key agencies involved in CC-response, as well as by the NCCC. International support for all of these activities would likely be forthcoming.

Effective coordination is central to the whole effort. Enhanced information flow and coordinating mechanisms will help to ensure that all relevant information is provided to the key agencies, including the SO. The NCCC's role will thereby be significantly strengthened. Setting up appropriate technical capacity, combined with strengthened high-level coordination, helps set priorities at a technical and evidence-based level in each of the program activities, as well as allow better high-level assessment of the overall balance of the CC-response program, combined with identification of financial gaps. These changes, in turn, will allow better, more harmonized design of FMs to align financial resources with identified gaps. Overall, the NCCC will be better prepared to adjust the operational strategy in response to emerging needs, budget limitations, or other factors, such as new technological options for mitigation or increased disaster risk from updated scenarios.

Evidence-based analysis of CC-related budgets and spending will result in better financial coordination. Currently this task is meant to be handled by the Climate Finance Task Force under MPI, but a strengthening of the system will provide a more comprehensive overview, including on-going and planned investment operations, trends in climate-friendly investment, current climate finance flows and, most importantly, the impact of investments. Increasingly, as policy implementation targeting and M&E are improved, more information will become available on the impact of CC-response spending. Stronger coordination, through implementation of the CPEIR recommendations, will help forge the development of information collection and reporting routes to ensure that CC-response investment portfolios and operations are robust and compatible with international best practices. Successful implementation, however, will depend very much on GoV steps to develop the existing inter-ministerial structure to harmonize planning and budgeting with the ongoing development of its CC-response strategies and policies.

5.2 Climate planning and budgeting reform

Core requirements for strengthening planning and budgeting for CC-responses have been identified and justified in earlier chapters. Chapter 1 identified key areas for improvement in Vietnam's climate change policies and response, which included further mainstreaming of climate change responses into sector policies; harmonization of adaptation and disaster risk management actions, combined with further institutional coordination; consolidation of evidence-based national GHG reduction targets; further harmonization of M&E of different (climate-related) policies and programs; and, improved information flow to promote coordination and enhanced prioritization by the NCCC. Chapter 1 also highlighted the need for the SEDP process to support the CC-response more directly through strengthening the current planning and budgeting cycle to improve project selection processes and promote further mainstreaming. Building on this approach, Chapter 2 emphasized the necessity of, first, establishing a policy-based classification of all CC-response expenditures (the TCCRE), and second, of strengthening procedures to assess the quantitative relevance of each expenditure to either or both climate change adaptation and mitigation objectives. Chapter 4 identified the steps needed to incorporate the TCCRE and the assessments of CC-relevance in the planning cycle (listed on pages 80–82 of Chapter 4). *Primary importance is given to activities aimed at establishing strategic priorities during the preparation of the 2016–2020 SEDP, and they will guide priority setting for the subsequent annual cycles*. The recommendations in Box 4.1 are closely linked to the TCCRE steps, and should be carried out to consolidate CC-response initiatives within a strengthened planning and budgeting cycle over the medium to long

term. The activities associated with each of the TCCRE steps and the corresponding recommendations are outlined below.

A fully operational climate change budget will take several budget cycles. All the activities included in this report would serve as a basis to finalize a detailed action plan in consultation with the relevant GoV authorities. Though the immediate target is to establish the first draft Climate Report by mid-2016, this would be a pilot exercise rather than a final product. It will take two to three years to establish a system that operates effectively on all aspects of planning and budgeting. Capacity building will be needed to ensure that the system can be operated sustainably over the long term, and likely technical assistance will be required to implement the needed changes. Possible areas for technical assistance are noted in section 5.4 (Tables 5.1 and 5.2).

Adoption and Issuance of the TCCRE Guide

TCCRE refinement and training are critical to strengthening the planning and budgeting cycle. The CPEIR developed a TCCRE and prepared a basic guide on its use, including a methodology for assessing CC-relevance. The TCCRE and Guide was circulated and general principles were broadly agreed upon in the context of the CPEIR. Two activities are recommended to help ensure that the tool is applied effectively:

- *Finalization of the Guide:* Both the TCCRE and the Guide will need further refinement to enable their use by all line ministries and provinces in the government SEDP planning and budgeting process. Revised documents will need to be produced prior to budget submissions and provisions should be made to regularly update both the TCCRE and the Guide over time. The Guide will need to be formally adopted and then issued for line ministry uptake.
- *Training in Use of the Guide:* TCCRE training courses should be conducted prior to the preparation of projects and negotiations commencing in 2015.

Early technical assistance support for these activities is advisable. This would start with support for both finalization of the Guide and design of training courses on use of the Guide, covering all central line ministries and provincial representatives, with a sustained program covering all provinces to be conducted during 2015. Outcomes that can be expected to be achieved over time will be the establishment of clearly defined climate change objectives, indicators and milestones for all CC-relevant projects and other CC-related expenditures. The main risks that need to be mitigated relate to weakness in capacity and political commitment.

Preparation of the 2016–2020 SEDP

A major effort is needed to establish CC-response as a central element of the forthcoming five-year SEDP. Preparation of the SEDP 2016–2020 begins in 2014. To introduce CC-response most effectively to this process, however, it is critical that MPI and MONRE build on the findings of this CPEIR, particularly with regard to mainstreaming CC-response into sector and provincial programs that can have a major effect on climate change response.

An important task will be to establish a strategic direction for CC-response plans and expenditure in the 2016–2020 SEDP. MPI, in coordination with MONRE, would lead a review of all major ministries to identify ways their current programs can be enhanced to incorporate a CC-response. The CPEIR analysis in Chapter 1 provides a starting point for such a review, but further technical assessments to deepen the analysis would be desirable. The outputs of this work would consist primarily of sector and provincial reviews of the CC-response potential in each of the major sectors (which would be incorporated in the five-year SEDP) and detailed guidelines to each ministry on the approach to be taken for preparation of action plans and CC-relevant projects and programs for the annual plan and budget submissions. This should include a focus on specific sub-sectors or regions that have been identified as highly strategic for an effective CC-response, including the Mekong Delta. The main risks to fulfilling these targets will be some capacity weakness in the ministries and uneven political commitment to ensure that the tasks are pursued. A proactive, strategic dialogue on climate change with involvement of DPs may help mitigate these risks.

The SEDP process should also help consolidate a more strategic approach to area-based planning. Recommendations 2 and 3 (Box 4.1) in Chapter 4 highlights the need to develop multi-sector, area-based projects to address high-priority, vulnerable regions and issues. The SEDP discussions provide an opportunity to initiate a review and establish joint activities to develop such approaches and initiatives with a high degree of national climate policy anchoring, and initiate steps toward institutionalizing such an approach as part of the SEDP and annual budget. Initiatives to augment bottom-up M&E and reporting on the provincial climate response, project design, implementation and delivery should be included as supportive activities to the SEDP. The results

of these discussions and broad intentions to adopt a multi-sector, area-based approach can be incorporated in the five-year SEDP. Activities to implement this policy element could then follow. In this context, outputs from the activities would consist of (i) reviews of existing regional initiatives of this nature (including analysis of benefits and costs of such arrangements and of institutional set-up); (ii) proposals for mechanisms for joint financing by both city/provincial and central budgets; and (iii) proposals establishing pilot multi-sector regional projects with possible distinct budgetary tracking and information flow. These outputs need not be geared specifically to the annual planning and budgeting cycle, as most will require a longer time frame to complete. Eventually, however, the regional approach would be integrated and coordinated with the annual planning and budgeting cycle. The main risks to achieving these objectives will be political difficulties in pursuing intergovernmental coordination and a lack of capacity at provincial and sector level. As above, technical assistance will help to address some of these risks.

Preparation of Climate Change Response Expenditure Estimates

TCCRE application in the annual planning and budget cycle will provide CC-response spending data[79] for the next budget. Use of the Guide for the 2015 budget preparation will generate estimates of CC-response expenditures against adaptation or mitigation objectives for all projects included in that year's budget. These amounts could be entered as memorandum[80] entries in the state and provincial budgets for projects not exclusively dedicated to CC-response (for which the total budget entry would be recorded as an appropriation). Total CC-response allocation across government at all levels could then be reported in the State Budget estimates book and an overview of climate change spending included in the Annual State Budget Report (ASBR).[81] The action plan would aim to include estimates of CC-response spending for 2015 in the ASBR for that year. These estimates would give an initial baseline and picture of CC-response resource allocation across all levels of government for that year, which would begin the process of establishing guidelines for future years as well as for tracking actual spending performance against budget during 2015 and over time.

Close cooperation between MPI, MONRE, and MOF is essential to incorporate CC-response spending estimates in the State Budget and ASBR. This is a critical part of strengthening the planning and budgeting cycle. A close link between MOF, MPI as well as MONRE is particularly important, and it will also be important to bring other country experience to bear on the way that CC-response is handled in the budget environment. Outputs would be the inclusion of the CC-response (memorandum) estimates in the budget, and a CC-response overview in the ASBR for 2015. Outcomes in the long run would be a progressive improvement in analysis and presentation of the CC budget, which would be a major input to its subsequent financial and performance monitoring as outlined in the following sub-sections.

Long term, the Climate Budget could be formulated as a rolling program based on an annually updated Medium-Term Fiscal Framework. As per Chapter 4 Recommendation 5 (Box 4.1), there are significant advantages in reviewing long-term expenditure commitments framed in a fixed-term plan in light of changes in the fiscal environment. Such an approach would be particularly appropriate for CC-response planning, which by definition needs to also have a long-term horizon, and in recent years has been subject to fiscal constraints, as the data reviewed in Chapter 3 attest. While fixed-term planning has served Vietnam relatively well, technology now allows a more flexible approach, and good fiscal management practice gives increasing emphasis to reviewing investment commitments in light of future recurrent costs of assets and fiscal space to manage the overall budget deficit. Such far-reaching changes can be made only over the long term, but a review of the current system could be initiated in the medium term and a roadmap drawn up for a long-term adoption of more integrated budgeting practices in CC-response planning and budgeting. It is suggested that an activity to carry out such an analytical review be included in the proposed action plan. The main output would be a roadmap for initiating a rolling plan framework for the climate change budget, with longer-term implications for modernization of current planning and budgeting. Risks arise mainly from the tendency for agencies to operate within narrow established mandates and the consequent reluctance to change current practices.

79. Note that, as defined in Chapter 2, the term CC-response expenditure refers to that element of project expenditure assessed to be climate relevant. Projects with a CC-response component of expenditure are designated as CC-relevant projects for purposes of reporting total CC-relevant project spending.
80. The entries are assessed values and not transaction-based. They are of significance to the GoV's CC-response policy, but cannot be directly monitored by MOF Treasury.
81. See report for 2013 at http://www.mof.gov.vn/portal/page/portal/mof_en/State_Budget/dosb/asbr?p_folder_id=94850424&p_recurrent_news_id=94848411.

Reporting on All Climate Change Relevant Projects: A Basis for Monitoring Actual Climate Change Response Spending

MOF should instruct all line ministries and provincial finance departments to report actual CC-relevant project spending. The MOF Treasury would have no responsibility to report expenditure against the *memorandum* level budgets for CC-response activities in projects with multiple development objectives. However, it is critical that Treasury records *total* spending on all CC-relevant projects be made available to all sector ministerial and provincial managers, as well as to MPI and MONRE, to enable them to provide an overview of implementation of the climate budget by applying the CC-relevance rules used in the TCCRE.

Implementation of the TCCRE and MOF reporting on CC-relevant projects may need to be phased. Introducing the recommended changes to all provinces and all line ministries will be a substantial task, and it may best be phased over, for example, a three-year period. A first phase could consolidate the work already done with the CPEIR selection of ministries, since these cover the bulk of the central government CC-response spending. It should also include a more extensive selection of provinces that have a significant climate change response program. Following phases would then roll out to all ministries and provinces.

MPI and MONRE can use project-level data to generate reports on CC-response spending. Some simple (perhaps Excel-based) software[82] should be developed to allow MPI and MONRE to generate regular reports from TABMIS project-level reports. This application should help overcome the present gap in reporting and data sharing by different levels of government. All CC-response spending by project, line ministry and province can thus be made accessible to all managers throughout government. The present record-keeping, most often confined to department/division level, can then be replaced with regular CC-expenditure reporting. The new system should also convey much more information on the nature of the projects because of the more detailed CC-project design requirements (see below) and TCCRE assessment procedures.

TABMIS-based activities will provide a sound mechanism for DP financing of CC-response support. Aligned with Chapter 4 Recommendation 5 (Box 4.1), pilot work on channeling ODA through TABMIS, already in place for NTPs and being initiated for provinces, should be accelerated (including any ODA associated with this proposed national CC-response reform action plan). Budgeting, accounting, and reporting on outputs from activities would represent an increased proportion of CC-response spending included in the SEDP, State Budget, and accounts. The outcome would be a more comprehensive and financially accountable coverage of CC-response spending. Risks in this area relate to ensuring that TABMIS operations do not pose high fiduciary risks and that satisfactory reports can be generated by TABMIS (and MPI) to meet both DP and GoV financial reporting requirements.

Improving In-Year M&E and Reporting

Effective Climate Budget M&E is an essential element of accountability for public spending. As outlined in Chapter 1, the whole process of M&E on CC-response spending is inhibited by limited definition of project objectives, lack of verifiable performance indicators, and highly decentralized management of many national CC-response programs. Implementing the TCCRE and strengthening reporting on policy implementation and expenditure will help address some of these issues, but the Government, under the leadership of the NCCC, MPI and MONRE, should formulate a detailed work plan to strengthen all aspects of CC-response project and program monitoring against objectives, targets, and milestones. These factors are the basis for the recommendation in Chapter 4 to develop a CC-response linked M&E system and strategic KPIs to assess CC-response impact. The requirements for M&E differ between adaptation and mitigation policies, and specific high-level requirements for these are discussed further in section 5.3.

M&E is required throughout the CC-response program and needs significant long-term capacity building. As described in Chapters 1 and 4, the TCCRE and CC-relevance assessment process will help to establish clearer objectives and targets, but these must be formally monitored at project and program level and then evaluated as part of the Climate Report against high-level KPIs. Finally, they should be subject to external review by the State Audit of Vietnam and the National Assembly. Implementation will take some time and extensive training at all levels, but initiating the development of such a system will, in itself, give credibility to the GoV's CC-response program and will be welcomed by the international community. The key outputs sought in the first stages of implementation will be a review of current practices and assessment of needs. On this basis a roadmap for establishing CC-response M&E, including high level

82. Including the possibility of applying the World Bank developed BOOST application to this task.

indicators for tackling vulnerability and reduction of GHG emissions, can then be prepared and financed.

Preparation of the Pilot Climate Report

A pilot Climate Report in mid-2016 will be a key output. As noted at the outset and further emphasized in the preceding sub-sections, it will take several years to establish an operational Climate Budget that is fully integrated with the SEDP strategy and the annual planning and budgeting cycle. The initial pilot report would necessarily be relatively simple—essentially a report of performance against the Climate Budget appropriations and summary ASBR overview. Performance against key elements of the overall program that are already subject to some elements of M&E (NTP-RCC and related NTPs, such as the NTP-EE) should be included, as well as more general progress that has been made in incorporating climate change in the annual planning and budgeting cycle and progress in delivery of NCCS and VGGS. In subsequent years, with improved information generated by more extensive CC-focused M&E, the Climate Report should provide more substantive reporting of:

- Progress toward harmonized policy objectives included within the NCCS, VGGS and related programs (both in terms of expenditure against policy objectives, and also impact assessment of interventions).
- A consolidated assessment from all sectors and provinces of progress toward adaptation and mitigation objectives and targets. Reporting against policy objectives and adaptation and mitigation outcomes allows key areas for policy revision and reform to be identified as the Climate Report develops over the years.

The pilot report should apply available data to assess progress in implementing the NCCS and VGGS. It is important that the TCCRE data is used initially to report progress on the current major CC-response policy statements. As time goes on, increasing emphasis should be given to assessing progress against the overall adaptation and mitigation policy objectives, using objectively verifiable performance indicators. This reporting task should be under the aegis of the CCWG. Technical assistance should be sought to design the format and content for both the ASBR overview and the pilot Annual Climate Report, which will be sent to the Chair of the NCCC for guidance and endorsement. This work should also aim to produce a roadmap for development of the Climate Budget and the annual Climate Report over the medium to long term. Over time, the Climate Report would increasingly reflect policy developments and achievements in relation to the GoV's adaptation and mitigation goals. While, as discussed in section 5.3, these goals will be developed independently of the annual planning and budgeting cycle, key elements will be progressively incorporated in the SEDP five-year plans and the next 10-year SEDS; and these policies will increasingly influence project design, priority-setting, and budget allocations.

5.3 Climate policy and institutional coordination and strengthening

There are two primary concerns: (i) coordinated implementation of adaptation to climate change and mitigation of GHG emission actions; and (ii) developing the CC-response finance architecture to finance identified policy-delivery gaps. As outlined in Chapters 1 and 4, adaptation and mitigation policy development have significantly different technical requirements. Adaptation policy is an immediate priority and is furthest advanced in practical implementation by having established the strategic and technical basis in terms of maintaining an oversight of vulnerability of different sectors and regions of Vietnam. Mitigation policy has also become a domestic priority, as particularly reflected in VGGS, but should also be highly connected to global processes and negotiations under the UNFCCC. Fiscal policies, particularly those directly linked to fossil fuels and energy SOEs, also need to be considered—sound fiscal management is needed to achieve CC and GG targets. Adaptation and mitigation policy development is discussed separately in the following sub-sections.

Adaptation Policy Coordination

Adaptation and DRM specialists should jointly develop more integrated vulnerability assessments and forecasts to better link risk reduction to vulnerability. The knowledge platform on which adaptation and DRM are based should be improved through regular updating and uptake of scientific developments in forecasting and vulnerability assessments. This should be maintained as a priority for the national CC-related programs. Approaches to vulnerability should cover the realm of climate change-related effects, from low frequency/high impact events (e.g. cyclones) to high frequency/low incremental impact (e.g. high tide saline intrusion of rice fields).

Project-level M&E systems must be linked to high-level assessment against key adaptation indicators. Further improvements to and enhanced harmonization of the existing M&E templates and practices for climate change adaptation and DRM can lead to a comprehensive yet practical M&E system, built on international best practices in a locally tailored way. The initial focus should be on *strategically important outputs and outcomes* to avoid overloading practitioners and decision-makers with high volumes of low quality data. The process of harmonization needs practical and usable medium-term vulnerability indicators to lead to the eventual outcome of more effective management of risk and vulnerability. Activities should be put in place to research and develop a linked M&E system for adaptation and DRM based around vulnerability to enable more collaborative working relationships between agencies working on CCA and DRM (such as the Department of Dyke Management and Storm Control and the Disaster Management Centre, both in MARD, and the Department for Hydro-Meteorology and Climate Change in MONRE). The National Platform on Disaster Risk Reduction and Climate Change Adaptation may be an effective vehicle to promote harmonization of vulnerability reduction, if this body can be effectively institutionalized and help oversee the creation of a more unified response to vulnerability.

Mitigation Policy Coordination

Vietnam needs MRV systems and national target setting mechanisms to pursue low-carbon green growth and attract financial and technical support. Internationally agreed MRV systems (for GHG emissions) are key to developing Nationally Appropriate Mitigation Actions (NAMAs),[83] but also more widely provide a valid assessment of progress in mitigation. As with high-level adaptation M&E, such national and sector systems will be implemented only over the long term. Activities to this end should be initiated by MONRE, which is managing the national GHG inventory, but in close collaboration with line ministries and provinces who are in charge of the sector MRV of various emission sources. Technical knowledge transfer and capacity building efforts must be established to support the implementation of sector-based MRV systems and further alignment to the national GHG inventory. Enhanced quality in GHG emission data will potentially allow Vietnam to apply more detailed methodologies using IPCC guidelines, which will elevate the national communications and bi-annual updates to UNFCCC. Via sector and national MRV systems, detailed GHG emission data should be collected and presented to the NCCC, who consequently will be in a better position to strengthen and enhance efficiency in the national climate change mitigation response. As with adaptation M&E, a starting point is to review current progress and draw up a roadmap to achieve a working MRV system.

Key tasks for implementing mitigation policy are to: (i) review current mitigation activities and develop consolidated mitigation targets for post-2020 and an implementation roadmap for low-carbon options; and (ii) establish a consistent fiscal policy framework to encourage reduction of fossil fuel use. A well-coordinated team in mitigation policy and market preparedness should work under an appropriate governmental entity to review current mitigation responses. The team should review all current responses and activities related to mitigation policy, building on the framework provided in the National GHG Management Program (Decision 1775 of 2012), the NTP-EE and the VGGS/GGAP (including already established sector specific reduction targets). Its main outputs would be recommendations for consolidated GHG reduction targets for the post-2020 period, in combination with a roadmap toward implementing mitigation policies consistently and as cost effectively as possible, while highlighting policy risks and measures to reduce these. The critical role of phasing out indirect fossil fuel subsidies and subsequently applying a carbon price in the future to both tax and investment decisions should be examined in this context, which also relates to the objectives of the GHG plan on carbon credit. The main risk in developing and applying such a policy framework is the need to develop ownership and agreement from key stakeholders—such as enterprises (including SOEs) and communities under a comprehensive engagement approach.

The role of REDD+ as part of an overall coherent framework for mitigation needs to be determined. REDD+ is part of a mitigation response as it reduces emissions and enhances carbon sequestration. In addition, REDD+ undertakings have significant benefits in reducing vulnerability and building resilience, and forest investment related to REDD+ should be more broadly considered as a comprehensive climate response tool rather than a sequestration mechanism. The positioning of REDD+ as a tool within the mitigation framework should be further streamlined and integrated under a national CC-response, including climate-change

83. See http://unfccc.int/files/focus/mitigation/application/pdf/towards_nama_readiness_inVietnam.pdf, details may be referred to in Chapters 1 and 4.

adaptation CCA benefits, and roll-out of REDD+ should be monitored by the NCCC. It is equally important that efforts undertaken by REDD+ support the objectives of the NFDS, and implementation at central and provincial level and REDD+ policy approaches are mutually supportive.

The Fiscal Environment and Climate Change Institutional and Policy Risks

The broad fiscal environment can have a determining influence on the implementation of CC-response policy. Like any other area of policy, CC-response spending and use of tax instruments will be subject to fiscal constraints. The earlier proposal to initiate a move toward a MTFF should help to make such effects more predictable, but so far, no firm commitment has been made to establish such an environment. Such elements of policy are outside the scope of the CPEIR, but because a potential deterioration in macro-fiscal policy adds to the risks of instituting a stable and productive Climate Budget (as evidence by the findings in Chapter 3), MPI and MOF should begin to take these factors into account each year in assessing the Climate Budget and the Climate Report. General fiscal risks posed by SOEs are well recognized.[84] This aspect is also beyond the scope of the CPEIR, but needs to be taken into account in a macro-fiscal context.

Some SOEs have a more direct bearing on CC-response expenditure estimation. The CPEIR is concerned with specific risks posed by SOEs that are directly involved in implementing CC-response policies. If these policies are undertaken through SOEs rather than directly by the GoV budget, the expenditure in the State Budget may not represent actual spending but rather a transfer to the SOE, again with some element of fiscal risk.[85] These risks should be quantified and expenditure data adjusted to the extent possible in assessing CC-response policy effectiveness.

Energy SOEs' quasi-fiscal activities can directly affect mitigation policy financing and implementation. EVN is the major investor and provider of electricity to the public and its transmission of prices directly affects consumption of electricity. Though the GoV is taking steps to ensure EVN's financial viability, there are continuing price and policy pressures. While the Electricity Law requires that tariffs should reflect costs, elements of cross-subsidy and direct subsidy financed by EVN exist. EVN is at present subject to a detailed study of its financial situation, and the data from that study could provide a basis for review of quasi-fiscal activity through EVN. Such a review may be included in the scope of the mitigation policy specialist group at an appropriate time and build on relevant existing and ongoing studies.

5.4 Action plan summary matrices

Activities described above need to be considered and developed further by the GoV for practical and detailed implementation. The concepts outlined in the preceding sections are set out in a preliminary way to help initiate this task. Table 5.1 below presents a draft summary Results Framework (RF), which lists all of the activities proposed in the preceding section in a form that defines activities and sub-activities needed to implement the major CPEIR recommendations. It defines each activity in terms of its objectives and sub-activities, outputs and outcomes expected, linkages to other activities (in terms of contribution to or from these activities), and the level of implementation risks that may be faced and have to be mitigated. This RF is a working document that will be further reviewed by GoV authorities and may be added to or modified before or after the release of the CPEIR.

The Results Framework provides a basis for developing an Action Plan (AP) that can be implemented and monitored by the GoV and any participating DPs. Once agreement is reached on broad structure, priorities, and sequencing, the agreed set of activities can be set in a time-bound action plan, showing resource needs of each element and milestones to be achieved against performance indicators over the AP implementation period. A template for such an action plan is presented in Table 5.2. At present, this AP template simply reflects the RF activity structure and will be changed as that structure is modified. Beyond those structural changes, however, the full participation of GoV agencies will be necessary to define fully the feasible milestones that can be achieved in implementing the plan. It is also suggested that this framework incorporate all relevant ongoing CC-response activities that are already contributing to the objectives of building up a CC-response PG infrastructure; these could include current NTPs and the SPR-CC. The AP is designed to eventually be taken over by the GoV for implementation.

84. See Box 2.1 and World Bank (2013*), Vietnam Fiscal Transparency Review: Analysis and Stakeholder Feedback on State Budget Information in the Public Domain*, pp. 39–40.
85. See forestry case study in Annex I for reference on the role of SOEs.

Table 5.1. Draft Results Framework for a Climate Budget and Financing Action Plan: Key Activities, Objectives and Risks

Component/Activity/ Objective		Tasks/Sub-Activities	Outputs and Outcomes	Linkages	Risks/Comments
1.	**Climate Planning and Budgeting Reform** ***Objective:*** *Establish a Climate Budget, a Climate Report, and CC-Response Financing Report*				
1.1	**Preparation of the 2016–2020 SEDP** ***Objective:*** *Strengthen strategic direction for CC-response/ Green Growth plans in relevant sectors and provinces*	1.1.1 Conduct CC-response mainstreaming discussions with CC-relevant line ministries and provinces 1.1.2 Enhance CC-response strategy for line ministries and provinces 1.1.3 Establish a regional strategy to coordinate efficient and effective sector and provincial CC-responses	Clearly defined CC-response strategies in each sector of the SEDP and CC-response action plans Priority sector policy and regulations reforms identified and/or initiated A regional CC-response strategy policy paper to define key elements of a regional strategy approach to climate change	Essential precursor to strengthen the annual CC-response planning and budgeting cycle	**Low risk:** Part of established process
1.2	**Adoption of the TCCRE Guide** ***Objective:*** *To guide and build capacity in policy ministries, line ministries, and provinces in design and assessment of CC/GG-relevant expenditures*	1.2.1 Develop the TCCRE Guide, including improved project documentation, to apply in the annual investment and recurrent budget process 1.2.2 Mount a series of workshops to train staff at all levels in classifying and assessing CC-relevant expenditures	Final Guide document released and circulated Detailed CC-objectives in project documents and IDD Staff trained Clearly defined and classified CC-response expenditures in annual budget	Critical input for implementation of all CPEIR recommendations Linkage/ convergence with APRF (guide, workshops, and development of champions)	**Low risk:** Possible delays in approval (and likely technical assistance required); capacity building for implementation will take more time. Likely to best use a phased approach with a focus on the main CC stakeholders and develop champions
1.3	**Preparation of CC-response estimates** (the draft Climate Budget) ***Objective:*** *To provide an overview[86] of CC-response spending across line ministries and provinces*	1.3.1 Compilation of total CC-response spending for the annual budget law and inclusion in ASBR	A clear statement of the Climate Budget and its objectives in the ASBR, which can be monitored	Central element of Climate Budget and a basis for accountability for CC-response spending	**Low risk:** Dependent on training and application of TCCRE. Should progressively improve

86. Note this overview is at a *memorandum level* of budget appropriation as described in the text.

Component/Activity/ Objective		Tasks/Sub-Activities	Outputs and Outcomes	Linkages	Risks/Comments
1.4	**Reporting on all CC-GG relevant projects by line ministry and provincial finance departments** ***Objective:*** *To ensure that all CC-response managers are aware of actual spending on CC-GG relevant projects relative to the budget*	1.4.1 MOF to instruct finance departments in line ministries and provinces to report on actual spending in all CC-relevant projects and expenditures[87] 1.4.2 MPI, line ministries, and provinces to use MOF data to record estimated CC-response spending in each element of the CC budget	Issuance of reports on CC-relevant projects Application of FD reports by MPI, line ministries, and provinces to produce CC-response outturn estimates Compilation of aggregate CC-response estimates	A critical step in producing the Climate Report and monitoring the Climate Budget Effective implementation of TCCRE Guide (2.2) will be key to success	**High initial risk:** Ensuring compliance across all finance departments, line ministries and provinces will be a major task in 2014; training and capacity building should mitigate risks to low over the medium term
1.5	**Harmonize and strengthen CC-response M&E** ***Objective:*** *To establish verifiable indicators and milestones, and track performance against targets for all CC-response spending*	1.5.1 A review of current M&E practices and analysis of critical needs based on international experience and preparation of a roadmap to establish CC-response M&E 1.5.2 Initiate pilot M&E strengthening for key areas of the CC-response (technical assistance will be required)	Review document Roadmap document Pilot M&E systems initiated	This objective will be implemented in the long-run and will have limited initial impact on other activities Establishing effective M&E, however, is critical for the long-term success, credibility, and financing of the CC-response budget Ensuring consistency between APRF and TCCRE and linking M&E	**Moderate risk:** Implementing an effective M&E system faces a number of business process weaknesses and capacity constraints, and is typically a long-term project Training and capacity building should mitigate risks to medium once a basic system is piloted
1.6	**Enhancing use of country systems** ***Objective:*** *To increase the number of ODA CC-response projects that use SEDP, budget, and TABMIS for managing budget and payments processing*	1.6.1 Pilot selected CC-response ODA projects at central and provincial level to manage budgeting and reporting through TABMIS 1.6.2 Develop better reporting and reconciliation between GoV data on CC-response, ODA and DP data	Coordinate ODA and GoV reports on spending on CC-response Improve Paris-Busan aid effectiveness targets for aid-on-budget and use of country systems		

87. As per text, MPI would provide MOF with a list of all such projects and expenditures included in the Annual Development Budget. Finance Departments would report only on *total* expenditures in each of these categories (possibly further details may be developed over time).

Component/Activity/ Objective		Tasks/Sub-Activities	Outputs and Outcomes	Linkages	Risks/Comments
1.7	**Preparation of Climate Report (CR)** ***Objective:*** *To strengthen accountability to the GoV, the NA, and the public on performance against the CC-response policies and budget*	1.7.1 Preparation of a pilot CR by mid-2016 and roadmap toward full establishment of the Climate Budget and CR by January 2017	CR mid-2016 Roadmap document	A central marker of achievement of CC-response policies The CR will be sent to the Chair of the NCCC for guidance and endorsement Dependent on effective coordination of all activities outlined above Successful initiation of the Climate Budget and CR will substantially enhance international credibility and encourage external financing Input from APRF implementation	**Medium risk:** Producing a pilot CR should be achievable; the main risks lie in the quality of the final product. Technical assistance will help both to assure initial quality and establish a credible roadmap for future developments
1.8	**CC-response financing report (CCR-FR)** ***Objective:*** *To review the Climate Budget and its financing, identify major financing gaps, and initiate action to seek appropriate sources of finance*	1.8.1 Review of Climate Budget, CR, and ODA and identification of future CC-response financing needs	Review document Draft CCR-FR	Dependent on successful CR Will enhance international credibility and encourage external financing	**Medium risk:** As per above, dependent on all preceding inputs and quality of final product

Component/Activity/ Objective	Tasks/Sub-Activities	Outputs and Outcomes	Linkages	Risks/Comments
2. Climate Policy and Institutional Coordination and Strengthening ***Objective:*** *Harmonize policy implementation, strengthen coordination and enhance the climate finance architecture*				
2.1 Strengthen policy coordination and priority setting between adaptation and mitigation policies, with enhanced links to the budget and planning cycle ***Objective:*** *To progressively enhance the linkages between the NCCS, VGGS and other climate-related programs to the planning and budget cycle, with identified funding mechanisms for priority setting by the NCCC*	2.1.1 Enhance the role of the NCCC to oversee the implementation of the NCCS, VGGS, and National REDD+ Action Program, and coordinate and harmonize implementation with related strategies and programs, including the NTP-EE and DRM 2.1.2 Review existing program/ project priority setting criteria/frameworks and consolidate a synchronized set of criteria for overall priority setting and financial allocation 2.1.3 Strengthen technical capacity in the SO of the NCCC, MPI, MONRE, line ministries and provinces to enhance the coordination capacities and technical foundation to link planning and budgeting to a strategic CC mitigation and adaptation response, for the NCCC's decision making 2.1.4 Create clear linkages between the NCCS and VGGS toward the planning and budget cycle 2.1.5 Strengthen the alignment between financing mechanisms (FMs), budgeting and mitigation/adaption policy delivery to promote a more harmonized and effective CC-response	A document to the NCCC that explains the links of core strategies under the NCCC to other (CC-related) policies and programs A document review with recommended criteria for prioritization Activity reports and report on capacity assessments Report on FMs in relation to: (i) CC-response cycle; and (ii) policy delivery as assessed by harmonized M&E to provide increased alignment between FMs and policies	Advance the CC-response within frameworks of financial instruments Provide prioritization and a route towards more effective CC delivery, including consistency between tools (including APRF)	**Medium risk:** Capacity advancement can be structured in a step-wise approach but might not be sufficient to ensure significant progress towards the next five-year SEDP. Financial mechanisms to be transparent, accessible and available for periodic high-level review

Component/Activity/ Objective	Tasks/Sub-Activities	Outputs and Outcomes	Linkages	Risks/Comments
2.2 M&E and reporting strengthened and harmonized across mitigation and adaptation responses ***Objective:*** *To create a harmonized M&E and reporting system across all main climate response mechanisms and actions and linked to related programs and actions, led by the NCCC's SO*	2.2.1 Develop a harmonized M&E system across mitigation and adaption responses as per the NCCS, VGGS and their action plans, as well as other climate-related programs, led by the SO of the NCCC 2.2.2 Link national and sector M&E and reporting systems to the climate planning and budget cycle 2.2.3 Enhance efficiency and quality in M&E information flows provided to the NCCC by the SO, based on inputs from focal points and units in line ministries and provinces	System as operated by the SO of the NCCC and focal points/program offices in line ministries and provinces	A cross-cutting and harmonized M&E system which will allow the NCCC to formulate synchronized priority setting for an effective mitigation and adaptation response	
2.3 Coordinate and harmonize implementation of adaptation and DRM responses ***Objective:*** *Strengthen the coordination and harmonization of implementation of adaptation and DRM responses*	2.3.1 Strengthen and institutionalize the National Platform on Disaster Risk Reduction and Climate Change adaptation 2.3.2 Coordinate and harmonize implementation of CC adaptation measures and DRM actions within and between MONRE, MARD, and other line ministries and between actions in the Community Based Disaster Risk Management Program, NAPCC, NTP-RCC, and CC action plans of line ministries and provinces	Reports on better harmonization of climate change adaption and DRM response actions Enhanced institutional alignment, coordination and more effective distribution of information between MARD and MONRE and other ministries, as per monitoring reports to the NCCC	Closely linked to M&E system development at project/program level, but focused primarily on nation-wide assessment Highly dependent on international linkages and support	**Low risk:** Development requires a high level of scientific and technical inputs and capacity building. Links to international concerns with respect to vulnerability should encourage ODA support, which will reduce vulnerability over the medium and long term

Component/Activity/ Objective		Tasks/Sub-Activities	Outputs and Outcomes	Linkages	Risks/Comments
		2.3.3 Undertake vulnerability assessment in a coordinated manner, in priority geographical areas, hazards and sectors for both CC adaptation and disaster risk reduction 2.3.4 Officially require the use of CC-scenarios for mainstreaming actions in provincial socio-economic plans and sector plans 2.3.5 Capacity building for relevant stakeholders, in particular in provinces, for improved vulnerability-related project design using climate change scenarios	Active participation in the National Platform on disaster risk reduction and climate change adaptation as per reports of the Forum Published CC scenario and disaster risk updates, vulnerability mapping and specific guidance to sectors in use of climate future tools Legal document requiring active use of climate change scenarios Reports on capacity building needs and new capacities in the NCCC's SO, related focal points in line ministries and provinces and standing offices of related programs		
2.4	**Consolidation of mitigation targets and enhancement of implementation of mitigation policy** ***Objective:*** *Consolidate national, sector and provincial mitigation targets and strengthen the implementation of mitigation actions*	2.4.1 Establish an inter-ministerial technical working group on mitigation to review and consolidate national and sector science-based mitigation targets (after 2030) with unified national GHG baseline and reference levels, based on the latest available GHG emissions inventory	A review of current and potential mitigation targets, and proposal for consolidated national and sector mitigation targets Clarity on post-2020 mitigation targets in relation to domestic and international funding sources for communication to UNFCCC Comprehensive GHG emissions MRV system High-quality communications to UNFCCC Enhanced energy sector reform and enhanced marked based regulation of the energy sector will lead to GHG mitigation	A consolidated GHG emission reduction target is highly linked to the financial mechanism and climate budget as described in component 1 Communication of mitigation targets to UNFCCC should be combined with a clearly defined reference level and mechanism to monitor emissions	**Medium initial risk:** As above, progress is highly dependent on scientific and technical inputs. Mitigation efforts are also highly dependent on progress in global agreements to reduce GHG emissions. International support for sustained effort in this area seems likely—providing a credible, accountable program can be mounted

Component/Activity/ Objective	Tasks/Sub-Activities	Outputs and Outcomes	Linkages	Risks/Comments
	2.4.2 Communicate consolidated national targets to UNFCCC in the context of a post-2020 global agreement (differentiated for domestic efforts and targets to be achieved with international financial and technical support)	Long-term integration of mitigation policies and plans into the SEDP and a better environment for formulation and implementation of NAMAs		
	2.4.3 Set up a MRV system for inventory, monitoring, and reporting of GHG emissions, based on consolidated mitigation targets, and with clear definition of roles of line ministries and provinces, in support of reporting to the NCCC and to the UNFCCC (national communications and biannual updates reports)			
	2.4.4 Review current mitigation frameworks (including REDD+) and develop a roadmap for implementation, including through mainstreaming in the SEDP (2016–2020)			
	2.4.5 Enhance sector reforms to reduce indirect subsidies on fossil fuels and introduce a carbon price to support energy efficiency, renewable energy and emissions mitigation as well as strengthening of public fiscal space			

Component/Activity/ Objective	Tasks/Sub-Activities	Outputs and Outcomes	Linkages	Risks/Comments
2.5 Strengthening climate finance architecture as overseen by the NCCC ***Objective:*** *Enhance climate finance architecture for CC-response as is overseen by the NCCC and identify key policy and fiscal risks and gaps*	2.5.1 Review arrangements for mobilizing, managing and delivering financial resources (both international and national) for a coordinated implementation of the country's climate change and green growth priorities, in line with ODA regulation and ministries' mandates, and report that to the NCCC 2.5.2 Based on synchronized priority setting criteria, harmonized M&E, and CC-objectives, develop a financial architecture that delivers a CC-response and target appropriation to relevant domestic and international financing mechanisms in combination with policy enhancement, for NCCC approval 2.5.3 Establish and build capacity for national implementing entity (or entities) to be accredited and able to access international climate finance	Report on climate finance architecture in relation to policies and CC-response targets to the NCCC Targeted fiscal gap filling through available financial instruments Policy decisions by the NCCC to support CC-response and maximize financial opportunities	Links to CCF-FR (1.7) and M&E provide essential information to identify climate finance architecture gaps	**Medium risk:** Changes in the fiscal environment clearly have to be taken into account. Inadequate FM unable to fill climate finance architecture gaps

Table 5.2. Climate Budget and Financing Action Plan: Results Monitoring Framework

Component/Activity/ Sub/Activity		Key Performance Indicator	AP Milestones[88] 2014	2015	2016	2017 and Beyond	Responsibility[89]	Target Objectives/ Outputs
1	**Climate Planning, Budgeting, and Financing**							
1.1.1	Conduct CC-response mainstreaming discussions with CC/GG relevant line ministries and provinces	Strategy directions in SEDP by June 2015	Initiate	Complete				
1.1.2	Enhance CC-response strategy for line ministries and provinces		Initiate	Complete				
1.1.3	Establish a region-based program to coordinate efficient and effective sector and provincial CC-responses	Regional strategy review and decision	Review paper by August 2014	PM decision [tbd]			MPI, relevant line ministries and provinces	
1.2	**Adoption of the TCCRE Guide**						MPI, MONRE and MOF	PG: CC appraisal process improvement
1.2.1	Develop the TCCRE Guide, including improved project documentation, to apply in the annual investment and recurrent budget process	Finalized Guide in use in SEDP	Document available by July 2014	TCCRE estab-lished tool for SEDP process	Same as 2015			
1.2.2	Mount a training program for staff at all levels focusing on classifying and assessing CC/GG-relevant expenditures in relation to their sector policy and spending priorities	Workshops (#) Trainees (#)	[tbc]	[tbc]	[tbc]		MPI in coordination with MONRE	PG3.3 CC- response capacity building
1.3	**Preparation of CC-response estimates** (the draft Climate Budget)						MPI and MOF	PG4: Support of budget law to CC-response
1.3.1	Compilation of total CC-response spending for annual budget law and inclusion in ASBR	Statement of the Climate Budget in the 2015 ASBR	November 2014	Established practice	Established practice			

88. This matrix is a template to be developed further by the GoV: in many cases it identifies the need for further review which would develop a roadmap and define milestones to be reached to give assurance of systemic improvement.
89. These are preliminary and broad suggestions; detailed responsibilities would be determined by the GoV.

Component/Activity/ Sub/Activity		Key Performance Indicator	AP Milestones				Responsibility	Target Objectives/ Outputs
			2014	2015	2016	2017 and Beyond		
1.4	**Reporting on CC/ GG-relevant projects by line ministry and provincial finance departments**							PG3: (*new element*) CC expenditure reporting
1.4.1	MOF to instruct finance departments in line ministries and provinces to report on actual spending in all CC/GG-relevant projects and expenditures	Issuance of reports on CC-relevant projects	Pilot reports issued in July 2014	Phased develop-ment of CC-relevant projects	Compre-hensive reporting on CC-relevant projects		MOF and MPI	
1.4.2	MPI, line ministries, and provinces to use MOF data to record estimated CC-response spending in each element of the CC budget	Survey of line ministries and provincial use (%)	Phased plan to be prepared				MPI	
1.5	**Harmonize and strengthen CC-response M&E**						MPI and MONRE	PG3.3: CC- response capacity building
1.5.1	A review of current M&E practices and analysis of critical needs based on international best practice	Needs analysis and roadmap	Undertake review and prepare roadmap					
1.5.2	Pilot M&E strengthening for key areas of the CC-response	Pilot M&E strengthen-ing in key line ministries and provinces	Imple-ment M&E strength-ening					
1.6	**Enhancing use of country systems**							
1.6.1	Pilot selected CC-response ODA projects at central and provincial level to manage budgeting and reporting through TABMIS	Number of ODA projects on TABMIS	Initiate pilots	Extend program			MOF, MPI and DPs	PG3: (*new element*) CC expenditure reporting
1.6.2	Develop better reporting and reconciliation between GoV data on CC-response ODA and DP data	Reduced lag time for reconciling ODA data	Review current process and develop roadmap					

Component/Activity/ Sub/Activity		Key Performance Indicator	AP Milestones				Responsibility	Target Objectives/ Outputs
			2014	2015	2016	2017 and Beyond		
1.7	**Preparation of Climate Report (CR)**						MPI, MOF and MONRE in coordination with line ministries and provinces	PG3: (*new element*) CC expenditure reporting
1.7.1	Preparation of a pilot CR by mid-2016 and roadmap to put Climate Budget and CR fully in place by January 2018	Pilot CR Roadmap	Prepare roadmap and initiate pilot CR	Implement roadmap				
1.8	**CC-response financing report (CCR-FR)**							PG 5.2: Strengthening international financing
1.8.1	Review of Climate Budget, CR, and ODA and identification of future CC-response financing needs	Pilot CCR-FR	Design pilot CCR-FR in line with data available; prepare roadmap for future use	Implement roadmap				
2	**Policy Coordination and Institutional Strengthening**							
2.1	**Strengthen policy coordination and priority setting between adaptation and mitigation policies with enhanced links to the budget and planning cycle**							PG 1 and 2
2.1.1	Establish technical teams in MONRE, SO, MPI and line ministries to review existing program/ project priority setting criteria/frameworks and consolidate a synchronized set of criteria for overall priority setting and financial allocation	Teams established (#) Survey impact of teams		Establish teams and annual plans for their deployment	Deploy teams [tbd]		MONRE and MPI in coordination with line ministries and provinces	PG 1 and 2
2.1.2	An analysis and review of options to strengthen and prioritize the linkages between financial mechanisms (FMs), budgeting and policy delivery	FM review; roadmap for FM development		Undertake review and prepare roadmap	Implement roadmap		MPI and MONRE	PG 1

Component/Activity/ Sub/Activity		Key Performance Indicator	AP Milestones				Responsibility	Target Objectives/ Outputs
			2014	2015	2016	2017 and Beyond		
2.1.3	Capacity building on technical issues for the SO of the NCCC and focal points in line ministries and provinces on the linkages between climate response activities and the budget and planning cycle	Number of stakeholders participating in the sessions		Capacity building sessions for the SO, line ministries and provinces	Capacity building sessions for the SO, line ministries and provinces		MONRE, MPI and line ministries	PG 3.3
2.2	**M&E and reporting strengthened and harmonized across mitigation and adaptation responses**						MONRE, MARD and MOT	PG1 and ST1
2.2.1	Expert working groups in MONRE, MOT and MARD to review current M&E and reporting templates and requirements and to provide recommendations for further harmonization	Review paper and pilot scheme	Working groups in MONRE, MOT and MARD identified and established	Identification of M&E and reporting templates and proposal for harmonization	Pilot period for selected projects on harmonized M&E and reporting templates			
2.2.2	Review the current M&E and reporting information flow from provinces and line ministries to the SO and NCCC, and proposed options for enhanced efficiency in the information flow to the NCCC	Review paper and proposal for enhanced efficiency		Review of current practice in the SO of the NCCC and selected line ministries and provinces	Proposal for enhanced information flow		SO of NCCC and selected line ministries and provinces	
2.3	**Coordinate and harmonize implementation of adaptation and DRM responses**							

Component/Activity/ Sub/Activity		Key Performance Indicator	AP Milestones				Responsibility	Target Objectives/ Outputs
			2014	2015	2016	2017 and Beyond		
2.3.1	Conduct technical assessment on options to strengthen and institutionalize the National Platform on disaster risk reduction and climate change adaptation combined with capacity building activities	Report of options for further enhancement and strengthening of the National Platform		Review is initiated	Review completed and capacity building activities initiated		MARD and MONRE	PG 1
2.3.2	Establish technical team to undertake vulnerability assessment in high priority geographical areas with a combined DRM and CCA focus	Combined DRM and CCA vulnerability assessment		Review initiated	Presentation of the review for key stakeholders at the National Platform		MARD and MONRE	PG 1
2.3.3	Legal document requiring the active use of climate change scenarios in provincial and local planning			TBD	TBD		MONRE and MARD	PG 3.2
2.4	**Consolidation of mitigation targets and enhanced implementation of mitigation policies**							
2.4.1	Formulate inter-ministerial technical working group to review and consolidate national and sector specific science-based GHG targets for the post-2020 period	Report with consolidated national and sector specific targets		Inter-ministerial technical working group established	First draft report circulated to key stakeholders		MONRE, MPI, MOF and key line ministries	PG 2
2.4.2	Actions to enhance energy sector reform and enhanced marked based regulations of the energy sector	TBD		TBD	TBD		MPI, MOF, MOIT and energy SOEs	PG 2

Component/Activity/ Sub/Activity		Key Performance Indicator	AP Milestones				Responsibility	Target Objectives/ Outputs
			2014	2015	2016	2017 and Beyond		
2.4.3	Recommendations for an effective sector-based GHG MRV system which will feed into the national GHG inventory	Sector specific MRV scheme		Recom-medations formu-lated for the most energy intensive sectors	Pilot phase for the sector-based MRV sys-tem and later distri-bution of GHG data to the national inventory		MOIT, MONRE and MARD	ST 1.1
2.5	**Strengthening climate finance architecture as overseen by the NCCC**							
2.5.1	Review of climate finance architecture in the context of national polices and climate response targets	Report of finance architecture		Review initiated	Draft report circulated to key stake-holders		MPI, MONRE and MOF	PG 1+2
2.5.2	Capacity building initiatives for national implementation entity (or entities) to be accredited and access to international climate finance	TBD		TBD	TBD		MOF, MPI and MONRE	PG2

ANNEXES

ANNEX I: Case Study—Mainstreaming Climate Change Response: Institutions and Targets in the Forestry Sector

Globally, anthropogenic emissions from land use account for approximately 10% of total GHG emissions. Reducing emissions from land use, including the forestry sector, is considered as one of the most cost effective approaches to climate change mitigation.

Despite registering a decline in the contribution of forests to national GDP, mainly due to an undervaluation of forest services, Vietnam's forests, covering an area of 13,862,043 ha,[90] of which special-use forest cover 2,021,995 ha (14.58%), protected forest 4,675,604 ha (33.72%) and production forest 6,964,415 ha (51.70%), continue to play an important role in Vietnam's economic development. In Vietnam, the 2006–2020 National Forest Development Strategy (NFDS) emphasizes the continuing importance of protecting forested areas, increasing forest coverage, and supporting forest-related job creation. The national strategy's objectives are consistent with CC-response objectives to increase the resilience of forest dependent communities in forest areas and mitigate GHG emissions through increased CO_2 sequestration. In Resolution 24 (NQ/TW, 2013), Vietnam identified forests as an important component of its national CC-response both in terms of climate change adaptation (e.g. promotion of resilient and sustainable land use) and mitigation (through carbon sequestration and reducing forest loss and degradation).

The National Plan on Forest Protection and Development (NPFPD) identifies key intervention areas, including plantation of anti-sea erosion mangroves, watershed forest plantation, increasing productivity of production forests and enriching natural forests. The National Climate Change Strategy (NCCS) integrates the forestry sector through its contribution to disaster preparedness as well as its mitigation benefits from sustainable use. The climate change mitigation benefits of forests are included in the VGGS (Solution 5 on GHG reduction), as well as MARD's target to reduce GHG emissions in the agriculture and rural development sector by 20% by 2020 relative to Vietnam's 2000 baseline, equivalent to a CO_2 reduction of 18.87 million tons.[91] Reversing deforestation and forest degradation can make a significant contribution to achieving this target.

Coordinated action is needed to link these objectives to overall national, provincial and sector targets, with milestones set and progress tracked over time. Additionally, the linkages between the NFDS, the NPFPD and overall forestry sector development have not yet been clearly elaborated in a way that encourages coordinated CC-response action by all of the agencies involved.

There is scope to improve linkages between the NFDS, NPFPD and CC-related policies, bringing together common aspects to deliver co-benefits in forest development and CC-response. For example:

- To increase forest productivity and sustainability, the NPFPD sets a target for national forest cover to reach 44%–45% by 2020. Resolution 24, NCCS, VGGS and REDD+ also set a target of 45% for the purpose of climate change adaptation and mitigation. Other common policy elements apply in the areas of sustainable forest resource management, job creation and poverty reduction.
- Delivery of the NPFPD could be advanced through the REDD+ approach to payment for ecosystem services

90. Based on MARD's Decision No.1739/QĐ-BNN-TCLN dated July 31, 2013 announcing the national forest status in 2012.

91. MARD's Decision 3119 /QD-BNN-KHCN dated December 16, 2011 approving the GHG Emission Reduction in Agriculture and Rural Development Project.

(PES) to local people for measurable forest protection improvements.

- Harmonisation of CC and NPFPD policy through prioritisation and streamlining could be led by MARD at national level, and extended through associated delivery institutions at provincial level.

To further advance implementation of CC-response policies in the forest sector, it is necessary to strengthen coordination of sector and provincial policies, and to develop firm targets at each level to improve monitoring. This may well require a strategic overview of the sector to harmonize the forest planning process (primarily in MARD and DARD) as well as enhance capacity in forestry-related provincial bodies in relation to CC mitigation and adaptation.

For example, mangrove and watershed plantations were identified in the NCCC direction in February 2014 as investment priorities under the SP-RCC financing mechanism. The NCCC requested MARD to focus its resources for mangrove plantation, and quickly finalize the mangrove afforestation and development project to respond to CC for approval by the Prime Minister.

It is important to note that state-owned forest companies (SFCs) conduct most forest development and protection work at local level. These SFCs were formerly state forestry enterprises, most of which, since 2012, have been incorporated as fully state-owned limited liability companies, with others set up as Forest Management Boards (FMB), and a few as shareholding companies. With respect to SFCs, the GoV is reviewing ways to implement its policy of equitizing these entities to encourage greater involvement of local communities and the business sector in their management and operation. The public sector manages directly about 50% of total forest areas, including all special-use forest, 65% of protection forest and 30% of production forest.

A number of issues need to be addressed to ensure the effectiveness of SFCs in their role to promote participation in forest economic development and create incentives for effective CC-responses. For example, streamlining the legal framework, including land use rights and planning, simplifying equitization to attract investors, and adopting clearer business-oriented policies. Additional incentives are also needed, such as the creation of long-term loan mechanisms for banks and/or credit organizations, payment schemes for environmental services emanating from forests, including protecting land from erosion and sedimentation, regulating and maintaining water for production and domestic supply, carbon sequestration, and protecting natural landscapes and biodiversity.

Based on a case study of the Loc Bac and Di Linh SFCs in Lam Dong Province, two functions of SFCs emerge: providing public services and stimulating business activity. For example, the SFCs contract local households to protect watershed and forest areas at high risk of illegal cutting, mineral exploitation and encroachment. Payment for forest ecosystem services is made to local households at the provincially regulated rate of 300,000 VND/ha/year from the Provincial Fund on Forest Protection and Development. Additional incentives for the sustainable use of forests by SFCs are needed, including sharing of co-benefits under REDD+.

The SFCs that are primarily engaged in commercial forest production also manage a certain area of protection and special-use forest (around 18 percent of the land area) and are subsidized by the state budget to carry out forest protection and reforestation. While most of the special-use and protection forests are managed by the Forest Management Boards, which are fully subsidized by the GoV, some SFCs manage a limited area of special-use forests and a few dozen SFCs manage protection forests. Key policy elements with respect to these SFCs needing to be developed more clearly are:

- Drawing a distinction between commercially sustainable forest areas and areas that require CC-response related activities, which represent public interests and should be eligible for finance by the state budget.
- Identifying the nature of the CC-response expenditure in the state or provincial budgets as indirect subsidies and administrative support to SFCs rather than direct investment.
- Clarifying objectives of SFC investments relating to CC-response and developing indicators to monitor and assess performance against targets set by the SFCs.

In principle, revenue generation by SFCs, of which a significant portion is derived from payment for environmental services (PES), should provide an incentive to improve environmental management of forests. In practice, however, these payments are often not related to tangible services and performance indicators; in many cases they have become a subsidy from viable enterprises (particularly hydropower stations) to the SFCs. The net effect may thus be a disincentive to clean energy production and a possibly negative effect on forest management.

The UN-REDD Program Phase II has been implemented by MARD since July 2013, with the funding from Government of Norway. The main objective of the program is to enhance Vietnam's ability to benefit from future results-based payments[92] from REDD+ and undertake transformational changes in the forestry sector. The Program focuses on completing the establishment of required capacities and providing technical assistance to build up Vietnam's emerging REDD+ implementation framework, including capacities for REDD+ among national and sub-national institutions and key stakeholder groups. At this phase, the program will focus on six provinces to create REDD+ pilots at commune and provincial levels, and will closely work with key forest owners including community groups, SFCs and FMBs.

92. The term "results-based payments" refers only to the basis for international transfer of funds to Vietnam.

The CPEIR proposal to review and mainstream CC-response policies for all sectors as part of the 2016–20 SEDP and the 2015 annual plan and budget preparation will be an important step towards clarifying CC-response policies relating to the forest sector. Accordingly, it would be beneficial for MARD to conduct a detailed review of forest management practices in relation to mainstreaming of CC-response policies than has been possible in this CPEIR review. With the REDD+ program readiness activities underway in Vietnam, including a clear emphasis on linking payments to performance in achieving net reductions in CO_2 emissions through better forestry management, the NPFPD could extend the REDD+ approach to a wider array of ecological services. Further review could also suggest ways to develop closer linkages between REDD+ initiatives, CC-related objectives, and general management of the forestry sector.

ANNEX II: International Experience in Climate Change Response Planning, Allocation, Tracking, and Evaluation of Expenditures

II.1 Korea's approach to climate change response management[93]

In 2008, the Republic of Korea proclaimed "Low-Carbon, Green Growth" as a new national vision, targeting GHG emissions to be reduced by 30 percent by 2020 from the BAU baseline. To achieve this vision, Korean leadership took a strategic approach in which the Government played an active role. The Government set up a governance structure to implement green growth initiatives systematically, established a legal framework on low-carbon and green growth, and enabled fiscal policies and budget resources to support the initiatives firmly.

There are three key elements of the institutional arrangements made by the Government: (i) a strategy and an action plan; (ii) high-level visibility for green growth policy; and (iii) the establishment of an inter-ministerial institution. The National Strategy (2009–2050) for Green Growth was adopted along with the Five-Year Plan (2009–2013) for Green Growth. Through this plan, climate change mitigation and adaptation objectives and programs were mainstreamed into all related ministries. To deal effectively with climate change and attain energy independence, the Government took actions such as setting medium- to long-term mitigation goals, increasing the use of new and renewable energy sources, and strengthening water resource management to increase climate change adaptation capacities. In addition to creating new engines of growth on multiple fronts, the Government placed emphasis on increasing strategic investments in the research and development of green technology. Meanwhile, a new position, Senior Secretary for Green Growth, was established in the Presidential Office. It played a key role in transforming presidential endorsement into actual implementation of green growth initiatives. Furthermore, Korea established the Presidential Committee on Green Growth (PCGG) as the highest inter-ministerial institution. This Committee was co-chaired by the Prime Minister and a representative of the private sector. Through the Committee, the planning and implementation of green growth initiatives were monitored and encouraged to achieve planned outcomes.

To ensure a more holistic and consistent implementation, an integrated legal approach was necessary covering the entire social structure, including the economy, industry, technology, land use, environment, and national consciousness. As a comprehensive law, the Framework Act on Low-Carbon, Green Growth was enacted in 2010. Additional enactments followed to support the response to climate change in major fields such as sustainable transportation logistics, smart grids, and green buildings.

With regard to fiscal adjustments that enabled Korea to implement green growth, there are three noteworthy points to be considered: (i) green growth needs to be monetized in the form of a budget policy; (ii) the central finance and planning agency has to play a leading role; (iii) a green growth budget increase should not necessarily require a decrease in health and education budgets.

In order to monetize green growth, the first task was to identify green growth related expenditure. In formulating

93. Contribution from Sang Dae Choi, Senior Economist, World Bank.

the Five-Year Plan, about 680 budget activities in 26 agencies were identified as green growth related. In doing this, a goal-oriented, top-down consultation approach was taken. The goal in Korea was to achieve a new national development paradigm creating new growth engines through clean energy, i.e., sustainable growth that reduces GHG and environmental pollution. To achieve this goal, the PCGG set up three objectives, 10 policy directions, and 50 core projects. And then, through consultation among the PCGG, the Ministry of Strategy and Finance as the central finance and planning agency, and other related ministries, budget activities to back up the 50 core projects were identified. The next issue was how much the Government should invest in those budget activities. The Government established the "two percent budget rule," a policy whereby two percent of GDP would be allocated for the implementation of green growth strategies. This amount was approximately seven to eight percent of total expenditure per year and exceeded the UN Environment Programme recommendation of a minimum investment of one percent of GDP. Through this rule, the request for fiscal support in the Five-Year Plan for Green Growth was fully reflected in the Five-Year National Fiscal Management Plan (2009–2013), Korea's medium-term expenditure plan, as well as in subsequent annual budgets.

Moreover, the central finance and planning agency was encouraged to take a proactive stance in leading fiscal support for green growth programs. First, green growth was a priority on the presidential agenda and the PCGG communicated continuously with the agency. Second, the Five-Year Plan for Green Growth included an investment plan for 2009 to 2013, which set forth the total amount projected and main programs targeted, all of which was agreed with the agency. Third, Korea's budget process and practice have been well aligned so to integrate policy into budget allocation in both annual and medium-term plans. In particular, the medium-term expenditure plan was a key tool to integrate green growth initiatives into the national budget. In its formulation process, the President chairs the Fiscal Strategy Cabinet Meeting (FSCM)[94] annually that covers all fiscal and policy issues while setting final expenditure ceilings. In the meetings since 2009, green growth has been a core issue. A medium-term perspective was particularly important where the Government tried to shift resources towards emerging policy priorities such as green growth. Commonly, fiscal space increases in the outer years of the medium-term expenditure plan as base revenues increase and expenditure commitments phase out.

In the meantime, at the outset, there was concern that a green growth budget increase could come at the expense of other crucial budget items such as health and education. However, data since 2007 shows this was not the case. The budget amounts and the share of the overall budget allocated to such public goods were continuously increased—health and welfare budgets increased from 25.8 percent in 2007 to 28.5 percent in 2013, while education increased from 13 percent to 14.6 percent over the same period. The necessary funds were mobilized through an expenditure review process by cutting expenditure on programs with low execution rates and poor performance. Using a performance-based budgeting system, Korea has two practical tools it can use: program assessment rating tools (PART) and in-depth study. In the PART, the budgets of low performing projects were cut by 10 percent or more compared to prior budget allocations. In-depth study allowed the budget authority and line ministries to cut their budgets if redundant projects were identified. Additional resources were made available following efforts to reduce public administration expenses by 10 percent. Evidently, budget allocation among green growth and other critical sectors does not need to be a zero-sum game.

In terms of integration of green growth policies into a budgetary framework, Korea's approach has many good practices applicable to other countries. However, in aspects of consolidated management and reporting systems for green growth budget activities, challenging issues to be addressed exist. Green growth related budget activities also go through a performance monitoring process with the other budget activities under the PART and in-depth study scheme. When compared with other cross-cutting sectors, such as R&D and gender sensitive budgets, however, green growth budgets need to be improved in public financial monitoring and reporting. For example, R&D budgets are managed through the Fiscal Management Information System (FMIS) by allocating an economic code. Gender sensitive budgets are managed by assigning a special code in the FMIS, providing gender budget reports, and submitting them to the National Assembly by the National Fiscal Management Law. Green growth budgets have not been managed in the FMIS, and there has been no separate reporting system yet on green growth budgets to the National Assembly.

94. This Meeting was launched in 2004 and is composed of Cabinet members and Senior Advisors for the President, as well as private sector experts. In this Meeting, fiscal issues and related policy agenda are discussed, ultimately endorsing medium-term expenditure ceilings by sectors and ministries.

II.2 Tracking and evaluation of expenditures for climate change policy in France[95]

I. A Cross-Cutting Policy Document to Support the Climate Change Agenda in France

Since 2001 mitigation of and adaptation to climate change have been established as national priorities in French law. Since then, France has set itself the ambitious goal of reducing its GHG emissions by 75 percent between 2005 and 2050. This goal has been translated into legislation through the Framework Law for Energy Policy, 2005. The adoption of the EU Climate and Energy Package was also a priority for France during its European Union presidency in 2008 and is part of the aforementioned goal. The EU Climate and Energy Package had been designed to help achieve a 20 percent cut in GHG emissions from 1990 to 2020, a 20 percent share of renewable energies in final energy consumption in the EU by 2020 and a 20 percent improvement in energy efficiency. The Government has also organized a national debate on the energy transition during the first semester of 2013. This will feed into the energy transition law, which will schedule the reorganization of France's energy mix and favor further energy savings.

The Directorate of Energy and Climate of the Ministry of Ecology, Sustainable Development and Energy is involved in the development and coordination of the French domestic mitigation and adaptation policy,[96] as well as with the reporting on national policies at the European and international level. However, numerous other directorates, ministries and local authorities are involved in the implementation of the climate policy.

The State Budget is structured in missions, programs and actions, but mitigation and adaptation policies cannot be restricted to one of these. Since 2008, the fight against climate change is one of the 15 cross-cutting policies which are covered by a cross-cutting policy document (*Document de Politique Transversale*—DPT). It has been created as a tool to i) support the mainstreaming of climate change into all ministries; and ii) inform the Parliament during the debate preparing the vote of the Finance Law.

Outline of the DPT

The Climate DPT brings together a synthesis of State expenditures on actions to cope with climate change in all dimensions from mitigation to adaptation over three years. It is prepared by the Directorate of Energy and Climate. The document gathers a coherent presentation of budgetary (i.e. subsidies and investments) and fiscal (i.e. tax credits) expenditures over three years—i) expenses realized during the previous year; ii) budget adopted in the initial finance law for the present year; and iii) budget proposed by the Government for the year to come. However, it does not offer a comprehensive evaluation of all measures and therefore it is not an impact assessment document. It also centralizes the relevant performance indicators from diverse programs, in line with the Constitutional Bylaw on Budget Acts of 2001 (*Loi Organique relative aux lois de finances*), which has established a process of public finance management based on policy performance measured by quantitative indicators.

The establishment of the budgetary "climate-share" supporting the DPT

For budgetary expenditures, the amounts that are presented in the DPT are restricted to the "climate share" of wider expenditures. This share is evaluated by the authority in charge of each program, in coordination with the Directorate of Energy and Climate. This climate share allows for tracking of:

- Expenses at a finer resolution than the actions presented in the State Budget. For example, it establishes the share of credit for spatial research financing satellites used to monitor climate change within the wider European Program on Global Monitoring for Environment and Security.
- The relative importance of mitigation in comparison with other goals for which a policy is conducted. For example, it has been decided to allocate a climate share of 50 percent for the Agri-environmental Grassland Premium, as it helps to maintain carbon stocks in the soil and increase the resilience of fragile soil. This Premium also brings benefits in terms of biodiversity and soil protection that are accounted for in another annex of the State Budget project.

Examples of fiscal and budgetary expenditures

Climate change related (and especially mitigation related) policies involve annual expenditures of a few billions euros (once

95. A presentation jointly prepared by the Greenhouse Effect Department of the French Ministry of Ecology, Sustainable Development and Energy (MEDDE/DGEC/DLCES) and ADETEF, the agency for international technical cooperation of the Ministries in charge of economic and financial affairs and sustainable development.
96. Respectively by the Greenhouse Effect Department and the National Observatory on the Effects of Climate Change.

taking into account only their climate share). A large share of these expenditures are long-term oriented, with the highest budgetary expenditures devoted to R&D and low-carbon transport infrastructure, and the largest fiscal expenditures sustaining the thermal renovation of buildings. For some expenditures, such as the tax abatement for sustainable development (which encourages households to undertake thermal renovation work for their housing), assessment of the public abatement cost (€ of public spending per tCO2e of emissions avoided) is reported on a yearly basis in the framework of the Finance Law project.

II. Evaluation

Ex-ante evaluation, when elaborating the public policies

Ex-ante socio-economic evaluations are a powerful tool to optimize the usage of comparable policies and measures. In this view, the assessment of the (social and public) cost of abatement is one of the main benchmarks to assess the efficiency of mitigation policies.

Tools have been developed to facilitate the ex-ante evaluation of public policies:

- SceGES enables the evaluation of GHG savings against BAU scenarios within a framework closely comparable to the national inventories. Regarding the main measures of the national mitigation policy, evaluations are made public on a regular basis, for example in the updates of the National Mitigation Action Plan, the reports that are sent to the European Commission and the National Communications prepared for the UNFCCC.
- NECATER® has been developed to ensure the neutrality of GHG emissions induced by the investments financed by the European Structural Funds and the State Regional Planning Contracts.
- To mainstream the ex-ante evaluation of the GHG impact of projects, the French Environment and Energy Management Agency (ADEME) has developed a set of tools to assess impact in terms of GHG emissions (Bilan Carbone, Clim'Agri, Dia'Terre) and maintains a database for harmonized data of emission factors (ADEME Base Carbone). Other tools, such as the Barometre Carbone, enable finer evaluations of territorial development projects for specific territories.
- Projects financed by the French Development Agency (AfD) are also subject to an evaluation of their impact on the trajectories of emissions in a harmonized way (systematic calculation of the carbon footprint, selectivity matrix etc).

When the benefits in terms of mitigation are to be integrated in wider socio-economic assessments, they are valorized on the basis of a national normative value of carbon established in the "Quinet" report (with a cost rising over time from 30€ per ton of CO_2 equivalent in 2010 to 100€ by 2030 and continuing to increase later on). This methodology is mainly used to help prioritize infrastructure projects, especially in the transport sector. In other cases, the public cost of an action can be expressed in € per abated CO_2 ton and then compared to this normative value.

With regards to adaptation, the generalization of the vulnerability assessments is a key consideration for infrastructure investments and territorial development projects.

Independent audit and evaluation

On a biennial frequency, France sends a report to the European Commission on the policies and measures that have been launched, their aggregated impact, in terms of projection of GHG emissions (top-down approach), and where possible, on their individual impact (bottom-up estimate). France also regularly reports on its climate change policies and measures to the UNFCCC through the National Communications (and biennial reports from 2013 onward). All these reports are subject to a review mechanism.

The Court of Auditors (*Cour des Comptes*) makes regular audits of the various trading and special purpose accounts, such as the one through which the carbon assets of France and the fee bate scheme are managed (the latter has been set up to encourage the reduction of GHG emissions from cars). Both have been evaluated in May 2013. The court also uses its very broad powers of review and examination to publish in-depth evaluation of public policies. For instance, among the main policies and measures included in the National Mitigation Action Plan, the Court recently published reports on:

- The policies in favor of the development of renewable energy (July 2013), completing an assessment of specific tools that have been used to this end: the Contribution to the Public Electricity Service by which the guaranteed feed-in tariff for renewable energy is financed (July 2012) and the measures that have encouraged the development of biofuels (January 2012).
- The "white certificate" scheme to encourage energy efficiency (October 2013).

Since the last constitutional reform of 2008, the role of the Parliament in the evaluation of policies launched by the Government has been reinforced (article 51-2 of the Constitution). While being independent from the legislative and executive branches of the Government, the Court of Auditors assists the Parliament and the Government in the evaluation of public policies (article 47-2). As an example, an evaluation by the Court of the implementation of the EU Climate and Energy Package in France is ongoing at the demand of the Control and Evaluation Commission of the National Assembly.

II.3 Tracking public expenditures contributing to the climate change policy of the Philippines

I. Cross-Cutting Policy Defining the Climate Change Agenda in the Philippines

The Philippines has demonstrated a strong commitment to, and continued leadership on, a comprehensive reform agenda focused on climate change in synergy with disaster risk reduction. To guide policies and programs for institutional coordination and financing of climate action, the Government has enacted Republic Act no. 9729 or the *Climate Change Act 2009*, which requires all government agencies to mainstream climate change in various phases of policy formulation, development plans, poverty reduction strategies and other development tools and techniques. The Climate Change Act was recently amended by Republic Act No. 10174, establishing the People Survival's Fund (PSF) to support local adaptation measures.

As mandated by the Act, the Climate Change Commission formulated the *National Framework Strategy on Climate Change* in 2010, followed by the adoption of a medium to long-term plan to implement the strategy—the *National Climate Change Action Plan 2011–2028 (NCCAP)*. Recognizing the already high vulnerability to disasters from existing climate variability and the increased risks from climate change, the Government formulated a complementary law, strategy and action plan—the *Philippines Disaster Risk Reduction and Management Act,* the *National Disaster Risk Reduction and Management Framework* and the *Action Plan (NDRRMA)*—that adopt a paradigmatic shift towards disaster preparedness and prevention. With these changes, the disaster risk reduction and management policies have converged with climate change policies on adaptation. On the mitigation side, the NCCAP has co-opted ongoing sector policies and reforms that support climate change, including those in the *Renewable Energy Act*.

The NCCAP defines seven strategic priorities: food security, water sufficiency, ecological and environmental stability, human security, climate smart industries and services, sustainable energy, knowledge and capacity development. It envisions public action to prioritize climate adaptation while establishing an enabling environment for the private sector to optimize mitigation opportunities. The NCCAP includes a detailed set of outputs defined over three successive six-year periods that support a set of intermediate and long-term outcomes.

Integrity of the environment and climate change adaptation and mitigation is one of five key results areas in the President's "Social Contract" with the Filipino people. The medium term *Philippines Development Plan (PDP) 2011–2016* identifies climate risks as one of the major challenges to the country's inclusive growth goals. Following an internal mid-term review on the progress made towards PDP targets, the Government has prepared a three-year roadmap which concretely defines how PDP targets will be achieved during the remainder of the PDP through 2016.

II. Institutional and Financing Framework to Support the Climate Change Agenda

The Government has continued to strengthen the institutional arrangements for delivering climate results, begun with the establishment of the Climate Change Commission (CCC) in 2009. Constituted under the leadership of the President, the CCC provides a centralized platform for leading climate policy development throughout Government as mandated by the Climate Change Act. The climate policies and programs, however, are implemented by the respective line agencies at the national level. To strengthen coordination and delivery of results, the Cabinet has been reorganized into clusters around five key results areas, one of which is on climate change. In addition, the CCC and the National Disaster Risk Reduction Management Council signed a Memorandum of Understanding to strengthen the institutional arrangements in implementing the policy convergence on disaster prevention and climate change adaptation.

The Government has also begun to actively mobilize financing. A 2013 Climate Public Expenditure and Institutional Review found that the Government response to climate issues has increased by two and one-half times in real terms over the past five years, reaching two percent of the total budget

by 2012. These expenditures have largely been focused on adaptation and have been financed from domestic sources. In addition, since 2013 the Government has adopted the Program Budget Approach to channel its available fiscal space to priority programs focused on delivering on each of the key results areas. Appropriations to the climate change program under this scheme have quadrupled from around USD 325 million in 2013 to over USD 1,200 million in 2014.

At the local level, Local Government Units (LGUs) are the frontline agencies in the formulation, planning and implementation of climate change action plans in their respective areas. LGUs are mandated to formulate Local Climate Change Action Plans and Local Disaster Risk Reduction Plans and to integrate climate change adaptation and disaster risk reduction into their Comprehensive Land Use Plans, in accordance with the Supplemental Guidelines issued by the Housing and Land Use Regulatory Board. In order to finance these plans, local governments are mandated to set aside five percent of their general funds to address disaster risk reduction with a specific focus on prevention. In addition, the national Government appropriated a first tranche of resources for the PSF, aimed at financing the climate adaptation programs of local governments and communities.

Following the devastating impacts of Typhoon Yolanda, the Government has begun to put in place a major initiative to Build Back Better. In parallel, the Government, under the leadership of the Department of Finance, is strategically engaged in mobilizing additional domestic and international resources and is developing a new mechanism: the Climate Adaptation and Disaster Resiliency Fund to further scale up the climate response and address existing financing gaps. This country-driven initiative aims to develop a new public/private fund for climate change and disaster resilience, consisting of a risk insurance and an investment window.

III. Implementing and Monitoring the Climate Change Agenda

Despite a strong reform agenda and the substantial progress made in its implementation, the 2013 Climate Public Expenditure and Institutional Review identified important implementation gaps. In response the main oversight agencies (the Department of Budget and Management (DBM), CCC, NEDA, and DOF) have developed a three-year work plan focused on strengthening the planning, execution and financing framework, enhancing accountability through monitoring, evaluation and review and building capacity and managing change.

In particular, harmonizing differences in perspectives across agencies on what constitutes a climate response has been a major challenge. In order to address this challenge, DBM and CCC have jointly developed a common approach for identifying climate programs, activities and projects. It consists of a list of climate typologies, developed by the Commission, and guidelines on using the typologies to identify climate response. All national departments were required to use the approach to tag their proposed 2015 budget for climate change and to identify the portion of the budget for each of their programs, activities and projects that is directed towards attaining climate change outputs and outcomes.

The results of the tagging effort have made it possible to conduct a systematic review of the budget against climate policies and plans and has informed the discussions on the proposed agency budgets between the respective agency and the DBM. Lessons learned from the 2015 tagging effort are expected to lead to refinements in the guidelines for the tagging effort for 2016. This includes ways to increase the accuracy and reliability of the collected public expenditure data. The initial results from this effort have also informed the design and implementation of similar pilots to tag local government budgets that are to be undertaken during the last half of 2014.

Currently, systematic methods do not exist for tracking the disbursement of climate expenditures against the tagged budget amount. The Government is formulating, for implementation in 2015, a Unified Accounts Code Structure (UACS) that can track, monitor reliably and report accurately the budgeted expenditures across Government. The CCC and DBM have taken initial steps to integrate the climate change expenditure tagging system within the new UACS by adding some functionality to track expenditures against the climate tagged budgets. The specific scope of the tracking remains to be finalized.

In order to ensure greater accountability of all public expenditures, the Government has introduced performance-based and zero-based budgeting. Under these initiatives, government departments have to define the outputs and outcomes that are expected to be achieved from their respective proposed budgets and identify indicators for measuring these outputs and outcomes. Budget approvals for the department's programs are then based on the demonstrated success of those programs. Monitoring the performance of government programs focused on climate has been difficult due to the lack of appropriate agreed climate indicators and by cumbersome reporting requirements. The CCC has taken initial steps to

develop a results-based M&E system for the overall climate agenda that can also provide guidance on the result indicators and their monitoring for specific programs. The integration of these indicators into the performance-based budgeting would provide a powerful mechanism for increasing the efficiency of public expenditures on climate.

Beyond improved planning, financing and monitoring, ensuring the delivery of climate results requires an inventory of best practice examples that can be emulated and replicated. As part of establishing such practices, the Government has begun an implementation review of the Program Budget Approach on climate change, as part of the 2015 budget planning and implementation process. This has entailed efforts to systematically review the formulation of the program in terms of its contribution to the climate agenda and to institutionalize convergence in planning and implementation across departments. In addition, selected case studies on the implementation of some of the activities within the Program Budget Approach for 2015 are expected to provide detailed tracking of expenditures against budgets and the performance of expenditures against climate outputs and outcomes.

ANNEX III: CPEIR Typology

Annex III.1 National climate change and green growth policy objectives

NCCS—10 Strategic Tasks
Proactive disaster preparedness and climate monitoring—early warning, DRR (CC1)
Food and water security (CC2)
Protection and sustainable development of forests, increasing carbon removals and biodiversity conservation (CC3)
Suitable proactive response actions to sea-level rise in vulnerable areas (CC4)
GHG emission reduction to protect the global climate system—renewable energy systems, energy saving, agricultural and solid waste management (CC5)
Increase the role of Government in climate change response—integration and institutional capacity (CC6)
Community capacity development to respond to climate change—community capacity and livelihoods, public health and knowledge exchange (CC7)
Scientific and technological development for climate change response (CC8)
International cooperation and integration to enhance the country's status in climate change issues (CC9)
Diversification of financial resources and higher effective investment (CC10)

VGGS—17 Solutions
Communication, awareness raising and encouragement of support to implementation (GG1)
Improving energy productivity and energy use efficiency, reduce energy waste in production activities, transportation and trade (GG2)
Changing the fuel structure in manufacturing and transportation (GG3)
Promote effective exploitation and increase the proportion of new and renewable energy sources in the nation's energy production and consumption (GG4)
Reduce GHG emissions through the development of sustainable organic agriculture, improved competitiveness of agricultural production (GG5)
Review and adjust master plans for the production sectors and gradually limit the development of "non-green" economic sectors, while creating favourable conditions for new green production sectors (GG6)
Economic and efficient utilization of natural resources (GG7)
Promote fast development of green economic sectors to create jobs, increase income and enrich natural capital (GG8)
Development of sustainable infrastructure for transportation, energy, irrigation and urban works (GG9)
Promote technological innovation and stimulate cleaner production (GG10)
Sustainable urbanization—planning, infrastructure and green urban areas (GG11)
Develop new rural model with lifestyles in harmony with the environment (GG12)
Promoting sustainable consumption and building green lifestyles (GG13)
Mobilize resources to implement the Green Growth Strategy (GG14)
Human resource training and development (GG15)
Study to develop science and technology, issuing a system of economic and technical standards, and establish an information/data centre on green growth (GG16)
International cooperation (GG17)

Annex III.2 The link between the climate change expenditure typology and the climate change, green growth and disaster strategy

Three levels of the typology (pillars, category, task) are present in left-hand three columns, then the policy elements from NCCS (2011; "Strategic Objectives"), VGGS (2012; "Solutions") and NSD (2007; "General responsibilities and solutions) are linked to the task level of the typology (empty white cell denotes no relevant policy element).

2 Category	Task	Policy Elements NCCS	Policy Elements VGGS	Policy Elements NSD
1 CC Pillars: Policy & Governance				
PG1—A national framework for adaptation and risk reduction.	PG1.1—Develop CC adaptation guidelines and technical regulations	Increase the role of Government in climate change response—integration and institutional capacity (CC6)		
	PG1.2—Develop/ Adjust policy, planning and mechanism for CC response and implementation across government, enterprises and communities	Increase the role of Government in climate change response—integration and institutional capacity (CC6)		Consolidate the system of laws, policies and mechanisms (NSD1) Consolidate organizational structure (NSD2)
	PG1.3—Manage and monitor implementation of Adaptation policies	Increase the role of Government in climate change response—integration and institutional capacity (CC6)		
PG2—A comprehensive consistent national mitigation policy framework.	PG2.1—Establish policy, tax and incentive structure for new and clean energy, energy efficiency and low GHG emission	Greenhouse gas emission reduction to protect global climate system—RE systems, energy saving, agricultural and solid waste management (CC5)	Review and adjust master plans for the production sectors and gradually limit the development of "degrading" economic sectors while creating favourable conditions for new green production sectors (GG6)	
	PG2.2—Develop/ Adjust sector plan and coordinate implementation among departments, enterprises, and provinces	Increase the role of Government in climate change response—integration and institutional capacity (CC6) Greenhouse gas emission reduction to protect global climate system—RE systems, energy saving, agricultural and solid waste management (CC5)	Review and adjust master plans for the production sectors and gradually limit the development of "degrading" economic sectors while creating favourable conditions for new green production sectors (GG6)	Consolidate organizational structure (NSD2)

2 Category	Task	Policy Elements NCCS	Policy Elements VGGS	Policy Elements NSD
	PG2.3—Manage and monitor implementation of Mitigation policies	Increase the role of Government in climate change response—integration and institutional capacity (CC6) Greenhouse gas emission reduction to protect global climate system—RE systems, energy saving, agricultural and solid waste management (CC5)	Mobilize resources to implement the Green Growth Strategy (GG14)	
PG3—Action Plans and Impact Assessment at national, provincial, and sector level to translate policy and governance into activity and delivery.	PG3.1—Action and Sector Plans	Increase the role of Government in climate change response—integration and institutional capacity (CC6) Greenhouse gas emission reduction to protect global climate system—RE systems, energy saving, agricultural and solid waste management (CC5)	Review and adjust master plans for the production sectors and gradually limit the development of "degrading" economic sectors while creating favourable conditions for new green production sectors (GG6) Economic and efficient utilization of natural resources (GG7)	Consolidate the system of laws, policies and mechanisms (NSD1)
	PG3.2—CC Impact assessments	Increase the role of Government in climate change response—integration and institutional capacity (CC6)	Review and adjust master plans for the production sectors and gradually limit the development of "degrading" economic sectors while creating favourable conditions for new green production sectors (GG6) Economic and efficient utilization of natural resources (GG7)	
	PG3.3—CC Capacity building	Increase the role of Government in climate change response—integration and institutional capacity (CC6)	Review and adjust master plans for the production sectors and gradually limit the development of "degrading" economic sectors while creating favourable conditions for new green production sectors (GG6)	Human resources development and social mobilization (ND3)

2 Category	Task	Policy Elements NCCS	Policy Elements VGGS	Policy Elements NSD
PG4—Legal framework to implement CC policy (all elements of CC/ GG policies)	PG4.1—Mitigation instruments	Greenhouse gas emission reduction to protect global climate system—RE systems, energy saving, agricultural and solid waste management (CC5)	Economic and efficient utilization of natural resources (GG7)	
	PG4.2—Adaptation instruments	Increase the role of Government in climate change response (CC6)		Consolidate the system of laws, policies and mechanisms (ND1)
	PG4.3—Mitigation and Adaptation Instruments	Increase the role of Government in climate change response (CC6)		
PG5—International cooperation, integration and diversification and strengthening of CC investment effectiveness.	PG5.1—Strengthen cooperation and partnership with international community on CC issues	International cooperation and integration to enhance the country's status in climate change issues (CC9)	International cooperation (GG17)	
	PG5.2—Effective management and coordination of foreign and domestic investment	International cooperation and integration to enhance the country's status in climate change issues (CC9)	Mobilize resources to implement the Green Growth Strategy (GG14)	Financial resources (ND4)
1 CC Pillars: Scientific, Technological and Societal Capacity (ST)				
ST1—Develop science and technology as a foundation for formulating policies, assessing impacts, and identifying measures on climate change adaptation and mitigation.	ST1.1—Information and database development	Scientific and technological development for climate change response (CC8)	Promote technological innovation and stimulate cleaner production (GG10) Study to develop science and technology, issuing a system of economic and technical standards and establish information/ data centre on green growth (GG16)	Develop science and technologies related to natural disaster prevention, response and mitigation (ND7)
	ST1.2—Hydrometeorology and early warning system and climate change projection	Proactive disaster preparedness and climate monitoring—early warning, DRR (CC1) Scientific and technological development for climate change response (CC8)		Develop science and technologies related to natural disaster prevention, response and mitigation (ND7) Promote international cooperation and integration (ND9)
	ST1.3—Biological & genetic resource strengthening	Scientific and technological development for climate change response (CC8) Food and water security (CC2)		

2 Category	Task	Policy Elements NCCS	Policy Elements VGGS	Policy Elements NSD
	ST1.4—Survey and assessment on CC impacts	Suitable proactive response actions to sea-level rise in vulnerable areas (CC3) Scientific and technological development for climate change response (CC8)		
	ST1.5—Technology for energy efficiency and low GHG emission	Greenhouse gas emission reduction to protect global climate system (CC5) Scientific and technological development for climate change response (CC8)	Promote technological innovation and stimulate cleaner production (GG10)	
ST2—Improve awareness of climate change.	ST2.1—Climate change awareness building in curriculums of primary to higher education establishments	Community capacity development to respond to climate change—community capacity and livelihoods, public health and knowledge exchange (CC7)	Communication, awareness raising and encouragement of support to implementation (GG1)	Human resources development and social mobilization (ND3)
	ST2.2—Awareness of climate change in diverse education and training initiatives for post-school aged learners	Community capacity development to respond to climate change—community capacity and livelihoods, public health and knowledge exchange (CC7)	Communication, awareness raising and encouragement of support to implementation (GG1)	Human resources development and social mobilization (ND3)
ST3—Develop community capacity for responding to climate change.	ST3.1—Support livelihood building for communities in the context of CC	Community capacity development to respond to climate change—community capacity and livelihoods, public health and knowledge exchange (CC7) Suitable proactive response actions to sea-level rise in vulnerable areas (CC3)	Communication, awareness raising and encouragement of support to implementation (GG1) Develop the new rural model with lifestyles in harmony with environment (GG12) Human resource training and development (GG15	Community awareness raising (ND5)

2 Category	Task	Policy Elements NCCS	Policy Elements VGGS	Policy Elements NSD
	ST3.2—Capacity across whole community in climate change response	Community capacity development to respond to climate change—community capacity and livelihoods, public health and knowledge exchange (CC7)	Communication, awareness raising and encouragement of support to implementation (GG1) Develop the new rural model with lifestyles in harmony with environment (GG12) Promoting sustainable consumption and building green lifestyles (GG13) Human resource training and development (GG15)	Community awareness raising (ND5)
1 CC Pillars: Climate Change Delivery (CCD)				
CCD1—Natural resources.	CCD1.1—Coastal protection and coastal dykes	Suitable proactive response actions to sea-level rise in vulnerable areas (CC3)		Ensure safety for dyke, reservoir and dam systems (ND8)
	CCD1.2—Saline intrusion	Suitable proactive response actions to sea-level rise in vulnerable areas (CC3) Food and water security (CC2)		Ensure safety for dyke, reservoir and dam systems (ND8)
	CCD1.3—Irrigation	Food and water security (CC2)	Reduce greenhouse gas emissions through the development of sustainable organic agriculture, improved competitiveness of agricultural production (GG5) Development of sustainable infrastructure for: transportation, energy, irrigation and urban works (GG9)	
	CCD1.4—River dyke and embankments	Suitable proactive response actions to sea-level rise in vulnerable areas (CC3)		Ensure safety for dyke, reservoir and dam systems (ND8)
	CCD1.5—Water quality and supply	Food and water security (CC2)		Ensure safety for dyke, reservoir and dam systems (ND8)

2 Category	Task	Policy Elements NCCS	Policy Elements VGGS	Policy Elements NSD
	CCD1.6—Rural development and food security	Food and water security (CC2) Greenhouse gas emission reduction to protect global climate system—RE systems, energy saving, agricultural and solid waste management (CC5)	Reduce greenhouse gas emissions through the development of sustainable organic agriculture, improved competitiveness of agricultural production (GG5) Development of sustainable infrastructure for: transportation, energy, irrigation and urban works (GG9)	
	CCD1.7—Forest development	Protection and sustainable development of forest, increasing carbon removals and biodiversity conservation (CC3)		
	CCD1.8—Fisheries & aquaculture	Suitable proactive response actions to sea-level rise in vulnerable areas (CC3) Protection and sustainable development of forest, increasing carbon removals and biodiversity conservation (CC4)		
	CCD1.9—Biodiversity & conservation	Protection and sustainable development of forest, increasing carbon removals and biodiversity conservation (CC4)	Economic and efficient utilization of natural resources (GG7)	
CCD2—Resilient society.	CCD2.1—Public health & social service	Community capacity development to respond to climate change—community capacity and livelihoods, public health and knowledge exchange (CC7)		
	CCD2.2—Residential and city area resilience	Food and water security (CC2) Protection and sustainable development of forest, increasing carbon removals and biodiversity conservation (CC4) Community capacity development to respond to climate change (CC7)	Development of sustainable infrastructure for: transportation, energy, irrigation and urban works (GG9) Sustainable Urbanization—planning, infrastructure and green urban areas (GG11)	

2 Category	Task	Policy Elements NCCS	Policy Elements VGGS	Policy Elements NSD
	CCD2.3—Transport	Greenhouse gas emission reduction to protect global climate system—RE systems, energy saving, agricultural and solid waste management (CC5)	Improving energy productivity energy use efficiency, reduce energy waste in production activities, transportation and trade (GG2) Changing the fuel structure in manufacturing and transportation (GG3)	
	CCD2.4—Waste management and treatment	Greenhouse gas emission reduction to protect global climate system—RE systems, energy saving, agricultural and solid waste management (CC5)	Promoting sustainable consumption and building green lifestyles (GG13)	
	CCD2.5—Disaster-specific infrastructure	Proactive disaster preparedness and climate monitoring—early warning, DRR (CC1)		
	CCD2.6—Strengthening disaster risk reduction	Proactive disaster preparedness and climate monitoring—early warning, DRR (CC1)		
CCD3—Enterprise and production.	CCD3.1—Energy generation	Greenhouse gas emission reduction to protect global climate system—RE systems, energy saving, agricultural and solid waste management (CC5)	Improving energy productivity energy use efficiency, reduce energy waste in production activities, transportation and trade (GG2) Promote effective exploitation and increase the proportion of new and renewable energy sources in the nation's energy production and consumption (GG4). Development of sustainable infrastructure for: transportation, energy, irrigation and urban works (GG9)	

2 Category	Task	Policy Elements NCCS	Policy Elements VGGS	Policy Elements NSD
	CCD3.2—Energy efficiency	Greenhouse gas emission reduction to protect global climate system—RE systems, energy saving, agricultural and solid waste management (CC5)	Improving energy productivity energy use efficiency, reduce energy waste in production activities, transportation and trade (GG2) Promote effective exploitation and increase the proportion of new and renewable energy sources in the nation's energy production and consumption (GG4) Promoting sustainable consumption and building green lifestyles (GG13)	
	CCD3.3—Infrastructure and construction	Food and water security (CC2) Suitable proactive response actions to sea-level rise in vulnerable areas	Development of sustainable infrastructure for: transportation, energy, irrigation and urban works (GG9)	
	CCD3.4—Industry & trade	Greenhouse gas emission reduction to protect global climate system (CC5)	Improving energy productivity energy use efficiency, reduce energy waste in production activities, transportation and trade (GG2) Promote fast development of green economic sectors to create jobs, increase income and enrich natural capital (GG8)	
	CCD3.5—Tourism	Protection and sustainable development of forest, increasing carbon removals and biodiversity conservation (CC4)		

ANNEX IV: Value Added of the CPEIR

The CPEIR will enable policymakers within the Government of Vietnam to assess the present status of their national response to climate change, and the policy and institutional readiness for scaling up access and delivery of climate and green growth finance. The CPEIR does this by utilizing a typology of CC-response expenditures to provide an early indicative estimate of the public resources (including ODA) being channeled to address climate change, and by assessing the extent to which the national policy and institutional context guides those expenditures. Moreover, the CPEIR builds ownership across the Government for a targeted and prioritized CC-response by undergoing an iterative process involving sector agencies and provinces. Specifically, the CPEIR adds value by:

Serving as an effective basis for a Government climate change and green growth resource allocation framework. The CPEIR:

- *Informs the Government's climate change and green growth decision making* by generating statistics on the allocation of resources, tracking climate change expenditures and providing a baseline to evaluate the climate change impact of public expenditures.
- *Provides a model to show how the budget process can be used to tag spending related to climate change, and to track actual expenditures.* This can be used to create more transparency over the allocation of funds to programs, and specification of the outputs to be delivered and the intended outcomes (including all spending from state-owned enterprises and external climate finance/extra-budgetary funds, if developed).
- *Provides a basis for the development of specific guidelines on how climate change and green growth issues could be addressed in the project selection and appraisal process*, including requiring a description of policy objectives and expected outcomes and an explanation of how these are reflected in budget proposals. Specific screening and appraisal criteria can be used to ensure that climate change is mainstreamed into investment projects.
- *Facilitates Vietnam's "readiness" for accessing, administering and coordinating flows of domestic and international climate finance* through the development of a typology for classifying climate change expenditures, which enables tracking of CC-response spending, and through a strategic action plan to implement the CPEIR recommendations, offering a sensible path towards developing a climate change budgeting and planning system.

Promoting coherence across sector policies and programs by fostering a link between the State Budget and climate and green growth policy. The CPEIR:

- *Assesses the effectiveness of the institutional framework for climate change monitoring and reporting*. The typology allows for the monitoring of the implementation of the National Climate Change Strategy and Vietnam Green Growth Strategy.
- *Measures needs through an analysis of the extent to which the Government's institutional capability for CC-response meets Vietnam's needs* and is effective in translating policy goals into development outcomes.
- *Evaluates the quality of the decision-making process for adaptation* by analyzing the extent to which decision making takes climate change into account, which is critical for determining the public sector's adaptive capability. The CPEIR offers suggestions that help integrate climate change considerations into the decision-making routines that are already in place. The methodology also provides the basis for the development of monitoring systems to evaluate the value of soft adaptation spending as this forms the basis of "adaptability" in the long term.