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CLIMATE CHANGE

KNOWING WHAT YOU SPEND

A guidance note for Governments to
track climate finance in their budgets

Climate Change Financing Framework
Technical Note Series



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PREFACE

Climate change is the single greatest challenge humanity has ever faced, threatening water and food security, health, livelihoods, and the safety of billions of people. Climate change represents an all-of-society challenge and all-of-society opportunity. The latest report from the UN Intergovernmental Panel on Climate Change (IPCC)¹ has stated that the planet will reach the critical threshold of 1.5 degrees Celsius above pre-industrial levels by as early as 2030, triggering the risk of extreme drought, wildfires, floods and food shortages for hundreds of millions of people – posing a threat to the achievement of the entire Agenda 2030.

Achieving the primary goal of the Paris Agreement – to keep the average global temperature rise well below 2C degrees and as close as possible to 1.5C above pre-industrial levels will increase the ability of governments to achieve the Sustainable Development Goals (SDGs) in the context of the changing climate. Bold actions on climate change deliver USD 26 trillion in economic benefits by 2030² and climate change has been called the “greatest investment opportunity in history” valued at about 10 percent of global GDP³.

In order to stay within safe planetary boundaries and within 1.5-degree future, countries must raise the ambition of their National Determined Contributions (NDC) and translate them into bold, tangible, implementable actions. Through their NDCs, countries are tailoring and prioritizing strategies to their own most urgent risks, vulnerabilities, and resource needs. Within two years, many are expected to release a new or updated NDC plan, demonstrating an enhanced level of ambition.

Accelerating the implementation of NDCs requires clear financing strategies which work to mobilise resources from both public and private sectors. International climate change finance will have a key role to play in this and will be most effective when aligned with domestic budget frameworks and used catalytically to leverage further private finance behind NDCs. A strong performance oriented domestic budget which integrates climate risk and reduces greenhouse gas emissions will provide the enabling environment to align international and private financial flows. In relation to adaptation most of the climate change efforts will need to be managed by national and

subnational governments through their domestic budgeting systems. Strong oversight and public accountability are essential to ensuring that these systems manage climate change-related resources effectively to build sustainable, resilient and equitable societies.

Climate Budget Tagging (CBT) has been designed to help address these challenges in the broader context of SDG budgeting reform. Embedded in the country’s Public Financial Management systems, it is a tool that identifies, classifies, weights and marks climate-relevant expenditures in a government’s budget system, enabling the estimation, monitoring and tracking of those expenditures. By providing data on government’s allocations or existing spending, CBT also contributes to the identification of the funding gap and under-resourced priorities in the national climate change policy and action plan, and in systematically monitoring the implementation of that plan. This helps both in supporting the most effective targeting of existing resources, as well as informing government’s efforts to mobilize additional resources. CBT may also facilitate stronger inter-linkage with other cross-cutting themes – for instance in supporting the inclusion of gender and poverty in climate expenditure analysis.

UNDP has played a key role in supporting Climate Budget Tagging in as an element of national Climate Change Financing Frameworks (CCFFs), which present consolidated policy road maps and financing gap analyses for climate action to enhance budgetary and planning processes through a more systematic integration of climate change at all stages. This Guidance Note is based on that experience. While not aiming to be a comprehensive instruction manual, it is hoped that this note will support budget and planning officials to better shape their public financial management systems to incorporate for NDCs and climate policy into their budget process.



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1 www.ipcc.ch/sr15/

2 Please see WRI/NCE, 2018

3 www.energetics.com.au/insights/thought-leadership/climate-change-a-7-trillion-investment-opportunity

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ABOUT THE GOVERNANCE OF CLIMATE CHANGE FINANCE TEAM (UNDP)

The Governance of Climate Change Finance Team of the UNDP Bangkok Regional Hub comprises of experts specialised in Governance, Climate Change, Public Financial Management, Local Governance and Decentralisation, Development Effectiveness and programme management.

ABOUT THIS GUIDANCE NOTE

This guidance note is intended for government agencies responsible for climate finance within Ministries of Finance, Ministries of Planning, or climate change policy making bodies (e.g. Climate Change Commissions, Ministry of Climate Change, Ministry of Environment and Forests etc.) that wish to set up a Climate Budget Tagging (CBT) system or strengthen an existing one. The note focuses on the design of a CBT system that is grounded in government financial management and, as such, covers public sector expenditure – while acknowledging that a significant portion of climate relevant spending occurs in the private sector and non-governmental organisations.



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ACRONYMS

BUR	Biennial Update Report
CCPB	Climate Change Policy Body
CBT	Climate Budget Tagging
COA	Chart of Accounts
CPEIR	Climate Public Expenditure and Institutional Review
CPEBR	Climate Public Expenditure and Budget Review
DAC	Development Assistance Committee
GHG	Greenhouse gas
FMIS	Financial Management Information System
IFMIS	Integrated Financial Management Information System
LGU	Local Government Unit
MDB	Multilateral Development Banks
M&E	Monitoring and Evaluation
MOCC/E	Ministry of Climate Change/Environment
MOF	Ministry of Finance
MOP	Ministry of Planning
MRV	Monitoring, Reporting and Verification
NAP	National Adaptation Plan
NAPA	National Adaptation Programmes of Action
NDA	National Designated Authority
NDC	Nationally Determined Contributions
OECD	Organisation for Economic Co-operation and Development
PEFA	Public Expenditure and Financial Accountability
PFM	Public Financial Management
SDG	Sustainable Development Goals
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change





EXECUTIVE SUMMARY

“Climate Budget Tagging” (CBT) is one of a set of climate related finance tools designed to help countries mainstream climate change in public financial management in order to mitigate the economic, social and environmental impacts of climate change.

This overview guidance note is provided for countries who wish to learn more about CBT, and who are exploring ways to improve their management of the response to climate change and to reduce long term impacts on their nations. It is directed principally at the core government institutions who should be involved in the design of CBT – the Ministries of Finance and Planning, and the lead Ministry for Climate Change policy. It is not intended as a detailed technical guidance note, nor as a prescriptive document on how to implement CBT, but rather as an overview of issues to be considered, and approaches that have been used to date by some countries.

The guidance is based on the experience of seven case study countries in developing and applying CBT – Bangladesh, Ghana, Indonesia, Kenya, Nepal, Pakistan and the Philippines. Those countries, together covering more than 10% of the world’s current population, face a variety of climate change risks and with vulnerability rankings ranging from Bangladesh in 13th place to Ghana in 101st place⁴. On the long-term climate risk index, Philippines ranks as 5th with Bangladesh (6th), Pakistan (7th) and Thailand (9th) being in top 10 of the most affected countries⁵.

Climate change both now and in the future, is expected to cause substantial environmental, social and economic damage worldwide, and represents a major developmental challenge. The burden is expected to be borne disproportionately by developing countries that have historically not contributed to the causes of climate change. Action is required both to mitigate and adapt to the threats posed by climate change. While there are mechanisms such as the Green Climate Fund to provide developing countries with funds for adaptation and mitigation, these mechanisms on their own are unlikely to be sufficient.

4 German Watch 2018 Global Climate Risk Index

5 <https://germanwatch.org/sites/germanwatch.org/files/publication/20432.pdf>

Governments, and Ministries of Finance in particular, need to consider the role of domestic resources, and understand both the impact of climate change on their economies, as well as the value for money and effectiveness provided by current and potential resource allocations in relevant sectors.

Climate change is a cross-cutting theme, and is rarely if ever a separate sector or complete programme in government financial management and reporting. Public sector activities relevant to climate change adaptation and mitigation are typically scattered across a number of ministries – including for example ministries of public works, agriculture, energy and transportation. This dispersion creates the risk of a lack of ownership and awareness, and poses specific challenges for Public Financial Management (PFM) relating to the difficulty of planning, identifying and reporting climate related expenditures.

CBT is designed to help address these challenges. It is a tool for identifying, classifying, weighting and marking climate-relevant expenditures in a government's budget system, enabling the estimation, monitoring and tracking of those expenditures. It includes the process of attaching a climate budget marker, such as a tag or account code, to budget lines or groups of budget lines.

The experience of the case study countries shows a wide range of benefits can result from implementing CBT. For example, in helping to mobilise resources. In Indonesia CBT data has helped to facilitate the issuance of green bonds – including the world's first sovereign green sukuk bond raising USD 1.25bn. Green bonds are also planned in Kenya for 2018/19.

By providing data on government's existing spending, CBT can also help in identifying the funding gap and under-resourced priorities in the national climate change policy and action plan, and in monitoring the implementation of that plan. This helps both in supporting the most effective targeting of existing resources, as well as informing government's efforts to mobilise additional resources. CBT may also facilitate stronger inter-linkage with other cross-cutting themes – for instance in supporting the inclusion of gender and poverty in climate expenditure analysis.

Raised awareness among policy makers and planners across government of the relevance of climate change actions to their own ministries and departments was the most widely reported benefit from the case study countries, and the one with potentially the most significant long-term and sustainable impact. CBT has proved to be a practical tool to help embed climate change thinking across government. It is by using CBT to help facilitate that culture change – which critically requires strong leadership from the central Ministries of Finance and Planning – that governments are most likely to reap rewards. Also CBT implementation often leads to further climate change related budget reforms that are essential to help governments protect their economies from the impacts of climate change.

1 **Section 1** of this guidance note provides an introduction to the guidance and to CBT, and to the role of CBT in mainstreaming climate change in public financial management.

2 **Section 2** outlines the common steps, considerations and options for CBT development.

3 **Section 3** summarizes common technical challenges based on the experience of the case study countries.

4 **Section 4** outlines how countries have used CBT-generated data, and the benefits, and draws a number of key lessons. Additional reference material is provided in a series of annexes.

In **Section** Error! Reference source not found. the approach to introducing CBT has been broken down into ten steps, grouped into three phases as follows.

The **first phase** is to identify the purpose and setting of CBT. This phase involves determining the government's objectives and purpose in introducing CBT, and the main stakeholders. It also involves mapping and understanding both the climate change policy context and also the PFM system's requirements and capabilities.

The **second phase** is to determine the technical design of CBT. This phase is the heart of the CBT process, and comprises three steps, which are inter-dependent and need to be considered together, using an iterative approach. These three steps together determine the underlying complexity of a CBT system.

- First, defining and classifying climate expenditures. This includes developing guidance for identifying what is and what is not climate relevant, typically drawing on the national climate change policy. It also requires defining a typology for climate change expenditure – which may for example be simply into two categories, adaptation and mitigation (e.g. Ghana and Indonesia), or may be a more elaborate structure of climate change interventions (e.g. Bangladesh and Philippines).
- Second, assessing and measuring (“weighting”) the climate relevance of those expenditures so that a lower proportion of the expenditure on less relevant activities is captured as “climate relevant expenditures” than for expenditure on more highly relevant activities.
- And third, determining how those expenditures will be identified, or “tagged”, in the PFM system. For example, by using a thematic tag where one already exists in the system for other cross-cutting themes (e.g. Nepal); or defining – or adding – a part or “segment” of the chart of accounts to encode and help provide climate change data (e.g. Kenya); or linking climate change data to one of the existing segments in the chart of accounts (e.g. Pakistan).

The **third phase** is to determine the implementation design. This includes the detailed design of the procedure both for doing the tagging, and also for validating and reviewing the approach. This phase includes for example decisions about the allocation of roles and responsibilities; how centralised the tagging process will be; how automated within the budgeting and accounting systems; whether a phased approach should be used; and the scope, design and frequency of reports and other data outputs.

Key challenges experienced by the case study countries in implementing CBT relate to leadership and buy-in across government, as well as to developing and maintaining momentum through demand side reporting requirements and supply side staff training and capacity building. As with any reform process that cuts across the whole of government, securing and maintaining political buy-in has been key to successful introduction and continuous implementation of CBT – ideally in the form of a strategic champion for climate change issues at the very top of government, at the presidential or prime ministerial level. To be maintained, and to ensure good coordination between line ministries, this typically needs to be combined with the convening power of the central ministries of finance and/ or planning and be embedded in the relevant existing budgeting regulatory frameworks.

Comprehensive and repeated capacity building initiatives and development of clear guidelines are also fundamental to successful CBT implementation and continued use. Common problems include frequent changes in ministry staff; lack of knowledge on climate activities in ministries of finance, planning and sector ministries; and lack of sector ministries’ understanding on the core objectives of CBT.

As ever there is a trade-off between increasing complexity and potential usefulness of data on the one hand, and the risks that the system will be too onerous to maintain on the other. This guidance note seeks to share experience and information to help countries considering CBT to decide on what balance to strike.



1

INTRODUCTION TO CLIMATE BUDGET TAGGING

1.1 GENERAL CONTEXT

The adverse impact of climate change on human lives, environments, societies and economies, has made clear the need for concerted action at global and national level. This is reflected in the Sustainable Development Goals (SDGs), which emphasise that social and economic development must be achieved in ways that are sustainable for the planet. This requires mobilizing financial resources from a wide range of sources - public and private, bilateral and multilateral.

Specifically, on climate change, Governments have translated international commitments made under the United Nations Framework Convention on Climate Change (UNFCCC) into national policies and plans of action to mobilise efforts across different sectors to mitigate and adapt to climate change. To ensure their efficient and effective implementation, adequate resourcing and monitoring is required.

As noted in Bangladesh's 2018 paper on Climate Public Finance Tracking⁶, *“it is increasingly important to track and report financial flows that support climate change mitigation and adaptation, to build trust and accountability with regard to climate finance commitments and monitor trends and progress in climate-related investment.”*

Climate Budget Tagging (CBT) is a tool for identifying, classifying, weighting and marking climate-relevant expenditures in a government's budget system, enabling the estimation, monitoring and tracking of those expenditures. CBT is used by a growing number of countries to identify and routinely measure climate relevant expenditure within the existing budget system.

The tracking of cross-cutting goals such as climate change adaptation and mitigation present challenges to traditional budget management, which is typically structured around organisational, economic and programmatic classifications. Traditional budget management does not normally allow for capturing spending on cross-cutting issues like climate change. CBT has been designed to overcome this constraint, building on the experience from other thematic budget measurement tools, such as for gender, poverty reduction, or children – and also itself providing a platform and body of experience for developing other cross-cutting budget tools.

⁶ Climate Public Finance Tracking (Approach and Methodology); Ministry of Finance Bangladesh and UNDP, 2018.

In particular, CBT may provide an entry point to support governments' efforts towards tracking resources for SDGs, bearing in mind that the cross-cutting goals of climate adaptation are linked to a number of SDGs. Firstly, CBT can help monitor the progress towards SDG 13 in particular ("Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy"), as well as the climate change aspect that cuts across other SDGs such as SDG 7 (affordable and clean energy)⁷. Secondly, beyond its climate focus, CBT can serve as one component of a conceptual model for countries that consider introducing SDG budgeting or budget tracking.

1.2 OVERVIEW OF BENEFITS OF CLIMATE BUDGET TAGGING

More than an expenditure tracking tool, CBT has demonstrated a range of benefits. Those benefits – including potential future benefits – are elaborated more fully in the following sections and drawn together in Section Error! Reference source not found. Benefits include:

Raising awareness and understanding of climate change, for example:

- Helping to strengthen planning and budgeting in line ministries. In Pakistan, the Ministry of Water⁸ has used the CBT information to integrate climate change in its Medium-Term Budgetary Framework. In Indonesia, the Ministry of Finance and the National Planning Agency encourage line ministries to use the climate expenditure data to strengthen their quantitative performance indicators.
- Giving visibility to government climate change action both within the government, towards state accountability and oversight institutions, and among citizens. In Nepal, the National Planning Commission and the Ministry of Environment and Forestry used the CBT data to raise awareness among line ministries of the scale of existing

climate change action and motivate further action. To raise public awareness of government action CBT data was published as a dedicated "Citizens' Climate Budget" in Nepal and as part of Department of Budget's "People's Budget" in the Philippines. In Bangladesh, the government presents its annual climate budget report to the Parliament and has also issued its first Climate Citizen Budget with the Budget 2018-2019.

Mobilising resources for climate change, for example:

- **Providing evidence on government's existing spending as the basis for estimating the funding gap to inform government engagement with development partners and broader efforts to mobilise additional resources.** For example, the Ministry of Finance in Indonesia used the CBT data to show the gap between the existing public spending and the estimated cost of the national climate mitigation action, and thereby the need to promote innovative financing and mobilise private finance. Subsequently, the MOF issued sovereign Green Sukuk (Islamic bond) designed to fund climate and biodiversity related programmes. With similar objectives to leverage additional, private financing, the MOF in Kenya is preparing to issue its sovereign Green Bond (for more details see Error! Reference source not found.).

Improved monitoring and reporting of climate change policy and progress, for example:

- **Facilitating government reporting on international commitments,** such as Biennial Update Reports (BURs) on UNFCCC's Nationally Determined Contributions (NDCs), and progress towards the SDGs. For BURs, CBT provides expenditure data routinely collected by the existing financial management system to quantify both the existing spending and the need for additional financing for implementing NDCs.

⁷ For a systematic analysis of the alignment between climate change objectives under National Determined Contributions and the SDGs please refer to climate watch analysis: analysis <https://www.climatewatchdata.org/ndcs-sdg>.

⁸ Ministry of Water was created as a new Ministry in 2017, it was earlier part of the Ministry of Water and Power, which was one of the ministries with the largest share of climate related budget.

BOX 1. CLIMATE EXPENDITURE AND INSTITUTIONAL REVIEWS

A CPEIR is a diagnostic tool that has been developed to assess opportunities and constraints for integrating climate change concerns within the national and sub-national budget allocation and expenditure process. A CPEIR provides a qualitative and quantitative analysis of a country's public expenditures and how they relate to climate change, its climate change plans and policies, institutional framework and public finance architecture. The definition of climate change related expenditures is tailored for each country based on a consultative process that takes into account its national priorities.

The CPEIR methodology has been developed from the public expenditure review methodology and has been elaborated by UNDP in its 2015 CPEIR Methodological Guide. As set out in that guide, the CPEIR analytical framework has three key pillars: Policy Analysis, Institutional Analysis and Climate Public Expenditure Analysis.



Policy Analysis: A review of the climate change policy framework and its monitoring framework as well as how the policy objectives translate into programmes and instruments.



Institutional Analysis: An analysis of the roles and responsibilities of institutions and their capacities in formulating, implementing and coordinating climate responses. This pillar also includes the review of the budgetary and planning process and its linkages to financing climate change policies and programmes (adaptation and mitigation).



Climate Public Expenditure Analysis: This pillar quantifies the climate relevant expenditure out of the total national budget and measures fiscal policies, such as tax incentives and subsidies, as part of climate financing instruments.

Further resource: UNDP 2015 CPEIR Methodological Guidebook.

1.3 CBT AS PART OF MAINSTREAMING CLIMATE CHANGE IN PUBLIC FINANCIAL MANAGEMENT

CBT is not a standalone initiative but part of a broader package of reforms that governments may use to help operationalize national climate change policies and action plans, incorporating consideration of climate change into public financial management.

A number of countries have undertaken a Climate Expenditure and Institutional Review (CPEIR) to take stock of their existing climate change structures and resources, and as a baseline for designing further reforms – see Box 1. CBT reforms, which can be adapted to the particular context of the national PFM system and climate change policy, seek to institutionalize, and make routine, expenditure analysis that draws on the CPEIR findings and recommendations.

In Kenya, a Climate Public Expenditure and Budget Review (CPEBR) was undertaken, broadly similar to the CPEIR approach. Through the CPEBR process, the role and place of the Ministry of Finance in

supporting climate change mainstreaming has grown significantly. The National Treasury now has become an important player in the climate change discourse, having been embedded in the Climate Change Act 2016, with a new National Climate Finance Policy 2018 having been adopted by Parliament, augmenting this position.

As illustrated in Figure 1, CBT is one component of a Climate Change Financing Framework (CCFF), which has the broader scope of bringing together the multi-sectoral climate relevant finance flows by: providing a comprehensive overview of domestic and international climate finance; linking climate change policies with planning and budgeting; prioritising climate actions; and developing appropriate modalities to manage climate financial flows in an effective and transparent manner.⁹ To maximize the utility of CBT, the tool should link with other CCFF processes to incorporate climate change in planning and budgeting, and be integrated in the existing PFM system.

9 UNDP. 2015. Climate Budget Tagging Report: Country-driven initiative in tracking climate expenditure.

Figure 1 illustrates the components of CCFF work including, as “layer 3” of that diagram, the key elements of a CCFF. The relationship between those components and how they relate to routine planning and budgeting activities is described in Figure 2.

1.4 ABOUT THIS GUIDANCE NOTE

This guidance note is intended for government agencies responsible for climate finance within Ministries of Finance, Ministries of Planning, or climate change policy making bodies (e.g. Climate Change Commissions, Ministry of Climate Change, Ministry of Environment and Forests etc.) that wish to set up a CBT system or strengthen an existing one. The note focuses on the design of a CBT system that is grounded in government financial management and, as such, covers public sector expenditure¹⁰ – while acknowledging that a significant portion of climate relevant spending occurs in the private sector and non-governmental organisations.

The guidance explores key decisions around CBT features and presents options for each. The options discussed in this note draw from the experiences of seven case study countries that have implemented or are currently implementing CBT, and which together account for over 10% of the earth’s population.

Table 1 gives an overview of the countries through some key indicators and features, illustrating the varied contexts represented.

¹⁰ However, CBT generally does not cover expenditures by parastatal entities.

FIGURE 1. COMPONENTS OF CCFF WORK¹¹

Government Bodies and Processes that Constitute a Climate Change Financing Framework



Outer layer: Institutional bodies and champions/drivers.



Layer two: Existing planning budgeting and financing processes



Layer three: Key elements of a Climate Change Financing Framework



Inner layer: All of the processes described in the outer layers join together to create a coherent a policy framework

Note that the diagram above represents a stylised/suggested model and is not proscriptive. Different countries will have different models according to their institutional arrangements.

11 Source: Hard Choices, Integrated Approaches: A guidance note on Climate Change Financing Frameworks; UNDP, 2018

FIGURE 2. WORKFLOW WITHIN CCFF

Work flows within a Climate Change Financing Framework

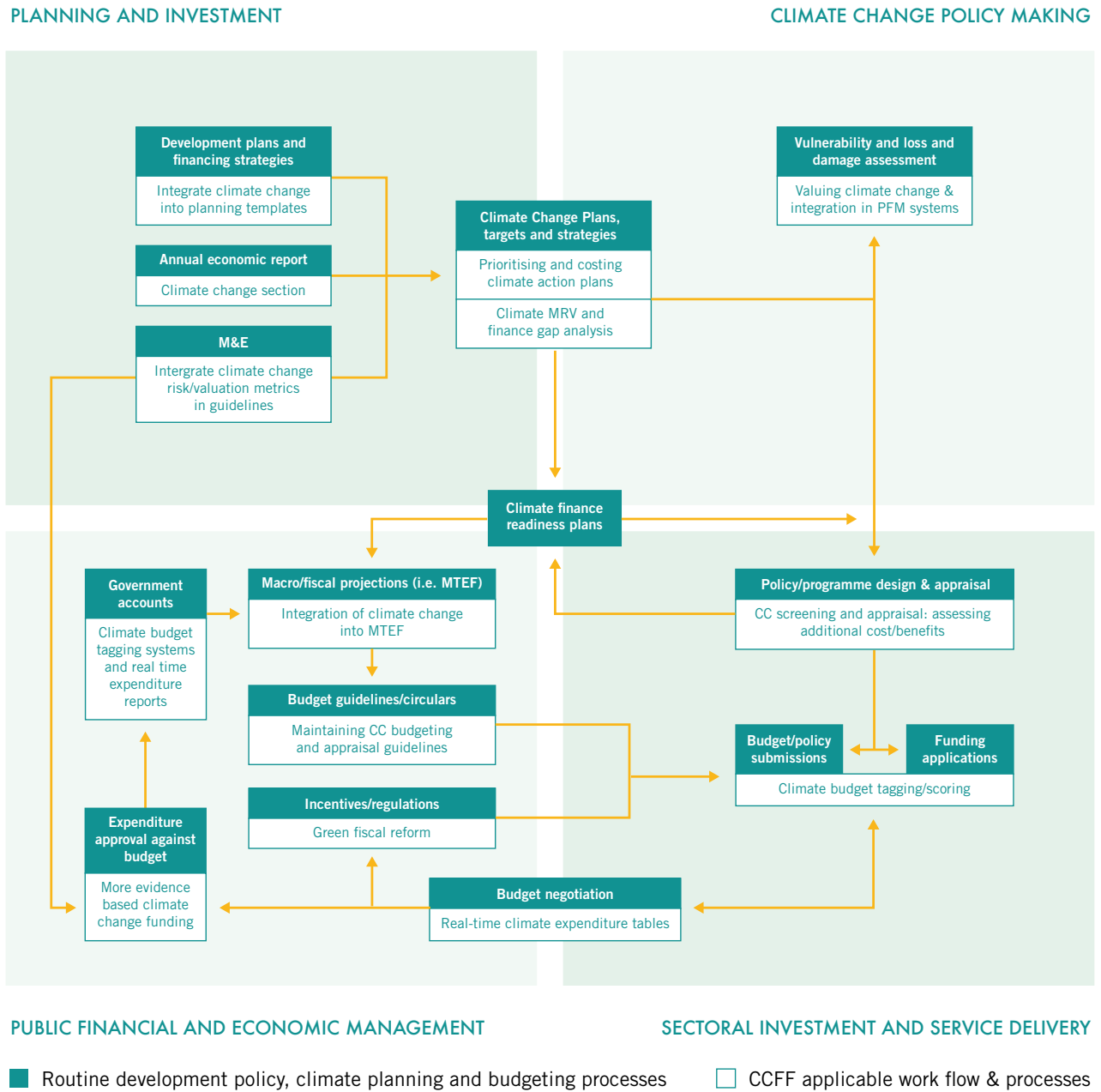


TABLE 1. OVERVIEW OF CASE STUDY COUNTRIES IMPLEMENTING CBT

	Bangladesh	Ghana	Indonesia	Kenya	Nepal	Pakistan	Philippines
GDP per capita¹² (2017 USD)	1,516	1,641	3,847	1,508	835	1,548	2,989
Population¹³ (2018 million)	166	30	267	51	30	201	107
Climate risk index ranking¹⁴	13 th (6 th for long-term risk)	101 st	70 th	45 th	14 th	40 th (7 th for long-term risk)	16 th (5 th for long-term risk)
Main climate change risks	Rising sea levels, cyclones, storms, tidal surges	Droughts, rising sea levels	Rising sea levels, droughts, floods, forest fires	Droughts and floods, Rising sea level (on the coastal strip).	Glacier lakes outburst floods, melting of snow reserves, extreme weather events	Extreme climate-induced events (floods)	sea level rise, increased frequency of extreme weather events, rising temperatures and extreme rainfall ¹⁵
Main climate policy framework	Bangladesh Climate Change Strategy and Action Plan (2009), CIP-EFCC (2017), Delta Plan 2100 (2018), Roadmap for Implementation of NDC	National Climate Change Policy (2014) Ghana National Climate Change Master Plan Action Programmes for Implementation (2015–2020)	2011 National Action Plan on Climate Change Mitigation (RAN-GRK); 2014 National Action Plan for Climate Change Adaptation (RAN-API)	2010 National Climate Change Response Strategy; 2nd National Climate Change Action Plan 2018-2022; Climate Change Act 2016; NDC 2017; draft Climate Finance Policy 2018; National Adaptation Plan 2015-2030	2011 Climate Change Policy	National Climate Change Policy (2012) Pakistan Climate Change Act 2017. Framework for implementation of climate change policy (2014-30). National Climate Change Financing Framework (2017)	2009 Climate Change Act (updated 2012) National Framework Strategy on Climate Change 2010-2022 National Climate Change Action Plan 2011-2028

12 World Bank: GDP per capita (current USD) in 2017

13 UNFPA website – world population dashboard

14 German Watch 2018 Global Climate Risk Index. The annually published Global Climate Risk Index analyses to what extent countries have been affected by the impacts of weather-related loss events (storms, floods, heat waves etc.).

15 Source: <https://www.climatelinks.org/resources/climate-change-risk-profile-philippines>

	Bangladesh	Ghana	Indonesia	Kenya	Nepal	Pakistan	Philippines
Climate budget share in the total budget	4% (2018-2019) ¹⁶	2% (2014) ¹⁷	3.9% ¹⁸ (mitigation only)	8%	30.76% (2017/18) ¹⁹ – of which 4.52% is “highly relevant” and 26.24% “relevant”	8.4% (2015/16) ²⁰ federal	7.3% (2018) ²¹
Year CBT introduced	2017 (also used in 2012 in CPEIR study)	n/a	2016	started in 2014 and finalized in 2016	2013/14	2015/16	2013 ²²
Paris Agreement Ratification Status (in force 4 Nov 2016)	21 September 2016	21 September 2016	31 October 2016	28 December 2016	5 October 2016	10 November 2016	23 March 2017
Gender and Climate Change Policy	Climate Change Gender Action Plan 2013	The Climate Change Master Plan is structured around 10 Policy Focuses. One of them fully dedicated to Gender issues in Climate Change	RAN-API requires systematic gender mainstreaming prior to Climate Change Adaptation measures. RAN-GRK is not gender responsive.	Kenya 2 nd NCCAP 2018-2022 is gender responsive	Climate Change Gender Action Plan 2012	NCCP states pro-poor and gender responsive adaptation as one of the its main objectives and proposed a set of strategic interventions for this purpose.	Key Themes of NCCAP 2011-2028 are Gender Responsive

16 Ministry of Finance 2018 Climate Financing for Sustainable Development. Budget Report 2018-19, which covers 20 line ministries/ divisions. The cumulative budget allocation of these twenty ministries/ divisions accounts for 45.84 percent of the total national budget of FY2018-19, and out of their total allocation, 8.82 percent is climate relevant – hence 4.04% of overall budget.

17 Overseas Development Institute and Institute of Statistical Social and Economic Research, University of Ghana 2015 Climate Change Finance in Ghana

18 Ministry of Finance 2018 Analysis Report on Climate Mitigation Budget 2016-2017

19 Government of Nepal 2018 Climate Change Fiscal Framework. Note: The large share of national climate-relevant budget is a result of (1) a sharp increase from FY2015/16 due to post-earthquake reconstruction; (2) further increase in FY2017/18 with the inclusion of block grant transfers to the newly established local governments. Prior to these increases, the share of climate-relevant budget was 7-10% in FY2011/12-FY2014/15.

20 Federal expenditure. UNDP/Government of Pakistan 2017 Pakistan CPEIR

21 Department of Budget and Management. Technical Notes on the 2018 Proposed National Budget

22 As early as 2013, the Philippines has issued DBM-CCC Joint Memorandum Circular prescribing Guidelines in Tagging/Tracking Government Expenditures for Climate Change in the Budget Process (JMC 2013-01; dated Dec 27, 2013)

In many cases the case study countries have built on the country's existing experience with other cross-cutting themes such as poverty reduction and gender sensitivity/ women development, while adapting – and developing - those tools to the particular requirements of climate finance, and also addressing the gender and poverty themes within climate finance (see Box 2).

The rest of the Guidance Note is structured as follows: Section 2 outlines the common steps, considerations and options for CBT development. Section 3 summarizes common technical challenges based on the experience of the case study countries. Section 4 outlines how countries have used CBT-generated data, and the benefits, and draws a number of key lessons. Additional reference material is provided in a series of annexes.

BOX 2. INCORPORATING GENDER AND POVERTY IN CLIMATE EXPENDITURE ANALYSIS

Incorporating gender and poverty in the analysis of public climate expenditure can show policy makers and other stakeholders the extent to which climate spending reflects policies to address the particular climate risks related to poverty and gender inequality. The basis for such an analysis is a review of priority sectors for climate change to identify programmes that are also pro-poor and gender-sensitive.

Depending on the availability and level of disaggregation of public expenditure on gender and poverty (or other) thematic tagging, different options are available for conducting the analysis. These are outlined in Error! Reference source not found., along with a reference to the example of the application of one of them using data from Bangladesh.

Such an analysis should ideally be conducted by an inter-disciplinary team. Especially when disaggregated public expenditure data is not available, it is also advisable to set up a mechanism for consensus on estimates of poverty and gender expenditure.

Further resource: UNDP 2014 Incorporating Gender and Poverty Analysis in the Climate Public Expenditure and Institutional Review: A Methodological Note.



2

SETTING UP A NATIONAL CLIMATE BUDGET TAGGING SYSTEM

2.1 OVERVIEW

Based on discussions with officials and review of documents for the case study countries, ten steps have been identified in the process of considering, developing and implementing Climate Budget Tagging. These steps should not be viewed as a prescriptive methodology – rather, they capture options around key decisions as they emerge across differing contexts.

Figure 3 gives an overview of the ten steps grouped under three phases, and showing for each step the government agency or agencies that typically take the lead role. (Specific institutional arrangements will, of course, vary depending on a country's context.)

FIGURE 3. OVERVIEW OF KEY DECISIONS IN CBT DEVELOPMENT PROCESS

The following three sub-sections elaborate on each of these three phases, and the constituent steps within each phase.

1 PURPOSE AND SETTING OF CBT

- Step 1. Define key objectives and stakeholders *(by CCPB with MOF, MOP)*
- Step 2. Identify how CBT can help reach national CC goals *(by CCPB)*
- Step 3. Identify existing PFM parameters *(by MOF)*

2 TECHNICAL DESIGN

- Step 4. Set framework to identify CC expenditure *(by CCPB)*
- Step 5. Define weighting methodology *(by CCPB with MOF)*
- Step 6. Determine how climate change expenditure will be identified in the PFM system *(by MOF)*

3 IMPLEMENTATION APPROACH

- Step 7. Determine overall modality for CBT *(by MOF with CCPB, MOP, LM)*
- Step 8. Design tagging procedure *(by MOF with CCPB and MOP)*
- Step 9. Determine reporting format *(by MOF with CCPB and MOP)*
- Step 10. Assign roles and responsibilities *(by CCPB, MOF, MOP)*

2.2 PHASE I: IDENTIFY THE PURPOSE AND SETTING OF CBT

The cross-cutting nature of climate change can complicate the task of defining a clear scope for CBT. Even where addressing the impacts of climate change forms one of the core strategic goals of a government, the cross-cutting nature of CC makes it highly unlikely that all CC activities can be grouped and managed as a single policy programme by one line ministry.

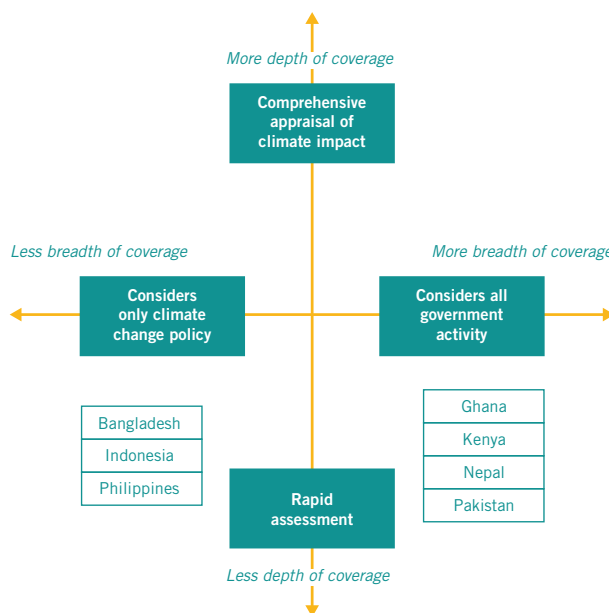
The difficulty of establishing a single climate change programme is illustrated by the structure of the Sustainable Development Goals (SDGs). While climate action is represented by SDG 13 (“Take urgent action to combat climate change and its impacts”), actions under a number of the other SDGs can also be expected to help in climate mitigation and adaptation efforts (e.g. SDG 7 “Ensure access to affordable, reliable, sustainable and modern energy for all” and SDG 2 “End hunger, achieve food security and improved nutrition and promote sustainable agriculture”).

While some activities can be identified as climate action based on their explicit objectives (i.e. they articulate climate change objectives, or are linked to the national climate change policy) there are many other activities across all government sectors that may not have an explicit climate-related objective but their implementation nevertheless has significant impact on climate change (e.g. construction projects that incorporate climate change adaptation solutions). With such activities there is also the question of “additionality”. For example where a project that was already planned to be done, received additional funding to make it more climate sensitive. E.g. a road already budgeted for, being financed to make the road more resilient to floods induced damage etc. The climate related expenditure in this case, is the additional funds, that were added strictly as a response to climate change considerations. The element of additionality becomes more complex where – as should be preferred - climate change resilience is designed into the project from the outset.

There are two key parameters that define the contour of the CBT:

1. **Breadth of coverage** - The scope of CBT can cover the national climate change policy, which defines a number of priority sectors (e.g. in the Philippines), or encompass a wider range of (central) government activity (e.g. in Nepal and Pakistan). While the latter option will generate more comprehensive information, it requires significant capacity to generate vulnerability information and undertake consistent assessment of a programme/project’s climate change relevance across all sectors, which leads to point (2)
2. **Depth of coverage** - The level of comprehensiveness of the climate relevance analysis ranges from a rapid assessment based on project documents and consultation with government experts to an in-depth climate screening appraisal of whether the implementation brings mitigation and/or adaptation benefits. A comprehensive approach would be one modeled after environmental impact assessments of programmes.

FIGURE 4. KEY PARAMETERS DEFINING THE CONTOUR OF THE CBT



Clarity on the intended objectives of CBT is the starting point for formulating its scope and key stakeholders.

STEP 1. DEFINE KEY OBJECTIVES AND STAKEHOLDERS OF CBT

The purpose of this step is for the key stakeholders to agree on government’s priority objectives for CBT, which can then serve as the basis for guiding the decisions on its final design.

Suggested technical lead agencies: the bodies who share responsibility for climate planning and finance such as the Ministry of Finance, the National Planning Body and the Climate Change Policy Body.

When introducing CBT, governments in the case study countries have typically pursued some combination of objectives. For example, Bangladesh²³ identified the following key objectives for its use of CBT:

- Support better project design;
- Enable tracking and reporting climate finance flows internally and externally;
- Facilitate the assessment of results from climate investments;
- Facilitate the mobilization of resources from capital markets.

Table 2 summarizes common objectives of CBT, together with potential stakeholders. While the precise composition of stakeholders will depend on the context of the national governance structure, Table 2 lists stakeholders that will likely have most direct involvement in each objective. The stakeholders’ main general functions and interests are briefly described below the table.

TABLE 2. COMMON OBJECTIVES OF CBT AND RESPECTIVE STAKEHOLDERS

Common objectives	Lead stakeholders	Supporting stakeholders
To monitor and report on national climate change policies/ action plans and international commitments, and to improve the effectiveness of existing spending	CCPB; MOF; MOP; Parliamentary Accounts Committee	Line ministries; local governments; Parliament; Supreme Audit Institution UNFCCC and Standing Finance Committee; donors & development partners; dedicated climate funds

23 Climate Public Finance Tracking (Approach and Methodology), 2018; Bangladesh Ministry of Finance and UNDP

Common objectives	Lead stakeholders	Supporting stakeholders
To support mobilization of additional external financing by (a) identifying the funding gap on a regular basis, and (b) demonstrating government commitment and co-finance	MOP; MOF; CCPB; donors and development partners; dedicated climate funds	Line ministries; local governments
To mobilise climate-related action across government sectors by providing evidence of on-going climate-related activities and creating synergies	CCPB; MOP; MOF	Line ministries; local governments
To raise public awareness of climate change issues and government’s climate change action	CCPB; Parliament; Supreme Audit Institution; citizens, civil society and the media, academia	MOP; MOF; line ministries; local governments;

Government stakeholders’ typical responsibilities²⁴:

- **Ministry of Finance (MOF)**²⁵ takes responsibility for public revenue and expenditure and for coordinating the budget process. The MOF also has an interest in reducing impact on economy and society from shocks such as climate change ones and limit the resulting macro-fiscal losses.
- **Ministry of Planning (MOP)**²⁶ takes responsibility for coordinating long-term national development planning and issuing guidelines for ensuring that service delivery and investment contributes to improved livelihoods and economic opportunities for all. It can also play a key role in developing targeted programmes and policies to attract green investment.
- **Climate Change Policy Body (CCPB)** responsible for integrated climate change governance including developing, monitoring and coordinating a national climate policy. This role

24 UNDP. Hard Choices Integrated Approaches: A Guidance Note on Climate Change Financing Frameworks.

25 In the case of the Philippines, the Department of Budget and Management plays a key role

26 Sometimes combined with the Ministry of Finance

is typically played either by a Ministry of Climate Change/Environment (MOCC/E) operating independently or as the Secretariat of an inter-ministerial climate change council. In a few countries, a unit of the MOF plays this role, or a dedicated ministry or authority has been set up.

- **Line ministries** are responsible for the design and implementation of sectoral policy and for mainstreaming climate change into their sector plans and budgets. Investment agencies can be set up to facilitate PPPs and state-owned enterprises with a particular sectoral scope that is climate-relevant (e.g., renewable energy).
- **Local governments and local government bodies** are the channels through which national policies and commitments on both sustainable development and climate change are implemented. Their proximity to the poor and climate vulnerable socio-economic groups²⁷ and their capacity for engagement with communities can result in more inclusive and responsive climate action especially in highly decentralized countries. Local stakeholders have better access to indigenous knowledge about weather variabilities, ecological zones, local traditions and culture, and indigenous practices.²⁸ Local governments may also mobilise and deliver climate finance.

In addition to institutional responsibilities, the CBT design process should also take into consideration the strategic role of any ministry that has been appointed as National Designated Authority by international climate funds. Which ministry or ministries are NDAs depends on the country's institutional set-up, allocation of government business functions, and political economy. In some countries, one ministry can accumulate the NDA role for all funds. In other countries, they are divided between at least two ministries. Traditionally, MOCC/Es were more likely to be NDAs but the picture is now more complex with MOFs' growing role, in particular with regards to the most recent international climate fund, the Green Climate Fund.

Key stakeholders that hold the government to account include:

- **Parliament** has the legal mandate to scrutinize and review government policies and spending, including through parliamentary committees such as the Public Accounts Committee;
- **Supreme Audit Institution** conduct financial, compliance and performance audits, and submit reports to Public Accounts Committee;
- **Citizens** who are directly affected by the effects of climate change have the right to information on government's action (in some places provided by a law on public information) and to demand accountability for it;
- **Civil society, the media, and academia** influence the public opinion by analyzing, interpreting and communicating the information on government's climate change policies and spending. Specialized civil society organizations such as budget transparency organizations, women organizations, disabled people organizations play a key role in advocating to government how climate change concerns should be integrated into the budget process to mitigate its impact on the most vulnerable.

Finally, **development partners, donors and dedicated international climate funds** that provide technical and financial assistance have an interest in an effective and transparent use of climate change finance, with results that can demonstrate value for money and show how their international and domestic climate relevant finance complement and enhance each other.

27 These socio-economic groups have been precisely defined in the preamble of the Paris Agreement (2015).

28 UNDP. 2016. Making Local Governments Fit for Purpose.

STEP 2. IDENTIFY HOW CBT CAN CONTRIBUTE TO ACHIEVING THE NATIONAL CLIMATE CHANGE POLICY OBJECTIVES

The purpose of this step is for the key stakeholders to articulate the linkage between CBT and the achievement of the objectives defined by the national climate change policy framework.

Suggested technical lead agency: Climate Change Policy Body

The objectives of the national climate policy framework are typically defined by the following documents:

- **National climate change policy** that defines priorities for the climate change action based on the country’s context and climate change risks;
- **National CC implementation plan or strategy** that specifies the actions for operationalising the national climate change policy. Where the action plan is provided by international instruments such as NAPAs and NAPs²⁹ or in domestically developed stand-alone climate change sector specific action plans, these need to be systematically linked to government planning and budgeting.
- **The country’s international commitments** under the UNFCCC to reduce greenhouse gas (GHG) emissions, for which governments have set their own targets in the Nationally Determined Contributions (NDC)³⁰ under the Paris Agreement (2015). Updates on NDC progress are provided through Biennial Update Reports (BURs)³¹ on the status of GHG emissions, mitigation actions taken, and the needs and support received.

- **The country programmes of multilateral and bilateral agencies** may also set out policy priorities and frameworks.

Table 3 gives examples of the main ways in which the CBT process and the information it generates can contribute to achieving climate change objectives and the UNFCCC goals:

TABLE 3. MAIN CHANNELS FOR CBT CONTRIBUTING TO CLIMATE CHANGE POLICY IMPLEMENTATION.

Climate change policy aspect for CBT contribution	Examples [note: benefits of CBT are elaborated more fully in Section 4.1]
Strengthening the monitoring framework	<ul style="list-style-type: none"> • Budget and expenditure information can complement the output/ outcome performance information to give a more detailed picture of the progress towards climate policy and/ or finance targets; • Where policies and programmes are costed, the funding gap can be estimated.
Informing government planning and prioritisation	<ul style="list-style-type: none"> • Expenditure information can complement the output/outcome information as the basis for reviewing programme performance (economy, efficiency, effectiveness); • Budget information can serve as an indication of whether or not climate policy priorities are reflected in the country financial commitments.
Raising awareness - within government and among the public - of the scale of public spending on climate change action	<ul style="list-style-type: none"> • The process of identifying climate expenditure in each ministry/sector and CBT capacity building can help increase the visibility of climate change policy objectives across the government and mobilise further action; • Communicating to the public about the scale of government’s climate budget can raise the profile of the issue and mobilise support for climate change action.

29 The national adaptation programmes of action (NAPAs) were set up in 2001 to support LDCs in UNFCCC implementation through a process to identify activities to meet their urgent and immediate climate change adaptation needs. The national adaptation plan (NAP) process was set up in 2010 as a process to identify medium- and long-term adaptation needs, and strategies to address them.

30 <https://unfccc.int/process/the-paris-agreement/nationally-determined-contributions/ndc-registry>

31 <https://unfccc.int/process/transparency-and-reporting/reporting-and-review-under-the-convention/biennial-update-reports-and-international-consultation-and-analysis-non-annex-i-parties/biennial-update-reports>

BOX 3. MOLDOVA DESIGNED CBT AS AN ELEMENT OF THE M&E FRAMEWORK FOR NATIONAL ADAPTATION PLAN

In Moldova, CBT was designed to be part of the M&E framework for the NAP. The objective was to supplement indicators on national and sectoral objectives with information on the overall spending, its distribution among sectors, and sources of funding (external/domestic). Reports that will be developed at sectoral and national level are intended to inform the subsequent planning. It should be noted that key adaptation indicators such as the number of direct and indirect beneficiaries from introduced adaptation and climate resilience measures or number of people permanently displaced from their homes/ localities due to floods, landslides, droughts are not required to be disaggregated by sex or any socio-economic or demographic groups disproportionately affected by climate change.

Further resources:

- General information on indicators, including for climate budget and external finance: <http://portal.clima.md/taboneview.php?l=en&idc=73&t=/Indicators/General-information>;
- Further details on budget and finance indicators <http://portal.clima.md/indicatori.php?l=en> ;
- Brief overview of Moldova's NAP M&E framework in: UNEP 2017. The Adaptation Gap Report 2017. United Nations Environment Programme (UNEP), Nairobi, Kenya, p. 29
- <https://www.unenvironment.org/resources/report/adaptation-gap-report-2017>
- Methodological Guidelines on Climate Tagging of the National Public Budget http://www.md.undp.org/content/moldova/en/home/library/climate_environment_energy/methodological-guidelines-on-climate-tagging-of-the-national-pub.html

As will be seen from later steps in the CBT design, one critical decision relates to the level of detail required in CBT outputs. Here there is a continuum running from expenditure simply being identified as climate relevant at one end, through a distinction between adaptation and mitigation (intermediate), to a fuller programmatic classification reflecting major themes or programmes in the national climate change policy of action plan. While increasing programmatic detail makes the CBT data more useful, there is a trade-off between complexity to allow for more granularity and disaggregation and practicality for implementation and institutionalisation purposes. A key determinant of the balance to strike will be the constraints of the national PFM system, the extent of climate change knowledge within the CCPB and the sector ministries, the full engagement of the MOF in the CBT process³², the collaboration between the relevant stakeholders and the existence of internal platforms or mechanisms to enable such collaboration.

STEP 3. IDENTIFY THE PARAMETERS SET BY THE EXISTING PFM SYSTEM

The purpose of this step is to ensure that the CBT development process, its technical design and implementation procedure are grounded in the national PFM system.

Suggested technical lead agency: Ministry of Finance
Given the objective of CBT to institutionalize tracking of climate related expenditure, its design and implementation needs to be grounded in the existing PFM system. Table 4 outlines the key PFM features relevant to CBT and briefly describes the considerations around those when designing and implementing a CBT system.

32 In certain countries, the involvement of the Office of the Controller General of Accounts (or equivalent) might also be needed, especially if they are the custodian of budget execution data.

TABLE 4. KEY PFM FEATURES RELEVANT TO CBT

Key PFM feature relevant to CBT	Description of key considerations for CBT
Roles and responsibilities	<ul style="list-style-type: none"> Whose involvement, leadership and ownership is needed to institutionalise the tagging system in the PFM processes? How to align the functions of MOF/MOP/Auditor General/Parliament with the tasks of CBT design, implementation procedure, and reporting arrangements?
Budget approach and presentation	<ul style="list-style-type: none"> Is the budget developed and published as a programme-based budget? If not published, is programmatic data captured during a) budgeting and b) expenditure reporting that could be used for CC financial reporting? If there is no programmatic data, can another classification (e.g. functional, project) serve as a proxy for programmatic classification?
Budget and account code structure	<ul style="list-style-type: none"> Where could the climate budget tag or code be applied? Does the chart of accounts (COA) include either a programmatic/activity field or a field that can be used for cross-cutting policy themes? If not, is it an option to create an additional segment in the COA that can be used for cross-cutting themes? Could such a segment be multi-character? If not, is it an option to create a parallel module tagging the programs automatically without changing the COA structure? Are budget and account code aligned? If not, can a mapping be created to link budget and expenditure?
Other budget-related aspects of tagging	<ul style="list-style-type: none"> At what stage of planning and budgeting should the climate tag be assigned and by whom? What routine PFM documents³³ need revision in order to incorporate a CC dimension? Is there a need for additional PFM documents? What type of guidance documents on methodology are needed to accompany the routine PFM documents (if any)? Who and at what stage should review/validate the tagging and on what basis? At what stage of planning and budgeting should CBT-generated information be used as input?
IT systems at national level	<ul style="list-style-type: none"> Is there an integrated financial management system that can enable tracking of the climate budget and expenditures? If not, a manual approach to tagging would need to be developed.
PFM and IT system at subnational level	<ul style="list-style-type: none"> Can expenditure at subnational level be tracked by the central government – including to a programmatic level? <ul style="list-style-type: none"> (a) If yes, can the CBT system design and procedure mirror that designed at the central government? (b) If not, what approach can be used to determine CC relevant expenditure at sub-national level?
Parastatals and donor funded expenditure	<ul style="list-style-type: none"> How does the PFM system capture expenditure on donor funded programmes? Is there a system for recording any off-budget expenditure that can be used in the CBT process? Does the PFM system capture expenditure by parastatals or other semi-autonomous agencies/directorates?
Other thematic codes and how they function	<ul style="list-style-type: none"> How can CBT build on any existing thematic tagging systems (e.g. gender, poverty)? <ul style="list-style-type: none"> (a) Can the existing procedures be replicated to facilitate the implementation and reporting on/by line ministries? (b) Are there any lessons to optimise CBT design and implementation?
Standard reports generated	<ul style="list-style-type: none"> Considering their use and audience, which mainstream government financial reports are most relevant to the objectives of CBT and provide climate change expenditure information integration opportunities? Is there a need to publish a stand-alone climate budget report?
PFM reforms	<ul style="list-style-type: none"> What are the priorities for PFM reforms in the country, and what is the pace and direction of travel? What implications might that have for the development and any phasing of CBT?

33 E.g. Bangladesh has integrated climate change into the Planning Manual Guidelines issued by the Planning Commission and in Pakistan the Ministry of Climate Change has submitted a proposal to the Ministry of Planning, Development and Reforms for revising the existing planning template (PC-1). The PC-1 form has already incorporated gender and poverty. The objective is to facilitate basic climate change analysis at the project formulation stage. Similar integration has been done in the budget circular in countries such as Bangladesh and Indonesia whereas countries like the Philippines have published a separate memorandum.

BOX 4. PAKISTAN'S ASSESSMENT OF ITS PFM SYSTEM IN DETERMINING THE CBT DESIGN

A thorough assessment of the key PFM features formed the basis for developing the CBT system in Pakistan and the process is well documented in the following papers:

- *Introducing climate change coding in the IFMIS³⁴ – Pakistan. Draft options paper (23 December 2015)*: proposes options for CBT designed based on (a) the existing budget classification structure; (b) a review of the existing pro-poor thematic tagging; (c) IT system features and coverage, including IFMIS authorization for updating elements of the budget classification; (d) limitations in the IFMIS with regards to CBT (e.g. in capturing details of subnational spending) See Annex 2.
- *Briefing proposal: Introduction of climate change coding and tracking system (2016)*: identifies the limitations in the way budgets and expenditures are recorded in the existing system (e.g. lack of detail in large development budget items managed by a number of government entities and provincial umbrella projects) and proposes ways to address them; outlines the existing government reporting formats (mainstream and on-demand reports) to inform possible reporting on climate expenditure; and suggests roles and responsibilities for different central government stakeholders to ensure effective coordination of the CBT development.

Further resources on the national PFM system: Latest PEFA report for the country <https://pefa.org/country/pakistan>

A good illustration of one approach to analyzing the interplay between CBT options and the PFM system is provided by Pakistan, which has documented the process it followed – see Box 4.

OFF-BUDGET EXPENDITURE

The scope of expenditure that can be tagged and analysed is necessarily determined by the budget and expenditure coverage. Some public resources may be “off-budget” i.e. not be captured in the budget – for example, some external funding from donor assistance, international climate funds, etc. Additionally some public resources, which may or not be off-budget, may be “off-treasury” i.e. not be routed through a government’s treasury systems – for example some funds routed through state-owned enterprises or other entities (such as national climate funds delivering outside treasury systems).

An example is Kenya, where the CPEBR established that close to 40% of the government budget is released to parastatals, agencies, semi-autonomous agencies as transfers, and not through the Integrated Financial Management Information Systems (IFMIS). Therefore, tracking and tagging such expenditures requires a manual system of reviewing CBT.

Tracking climate expenditures that are incurred off-budget and/or off-treasury may require developing a separate methodology. While the omission of such

expenditure leads to under-reporting of climate expenditures, a flawed methodology for addressing this issue may result in the opposite situation - over-reporting and double counting of expenditures.

In the case of external funding, whether it is entirely or only partly channeled through government system will vary from country to country. For an example of treatment of funds from foreign sources see Box 5, which describes the situation in Bangladesh.

Some other approaches to capturing external funding for case study countries are included as Annex 4 and may be summarised as follows:

- In Ghana, the government collects data on external climate funding to CSOs and private sector manually through a bi-annual survey on international climate financing.
- In Kenya, donor funding – other than from multi-lateral agencies or provided to non-state actors - must be signed off by the Treasury and administered through the Government budget. In future, the Government plans to issue a separate climate finance report that would cover expenditures in non-state sectors.
- In Indonesia, the government revised its regulation on foreign loans and receiving grants in 2011 to require all international actors providing external financing outside the Treasury to be reported to the MOF as part of state budget reporting.

34 Integrated Financial Management Information System

BOX 5. BANGLADESH AND TREATMENT OF FUNDS FROM FOREIGN SOURCES

Article 84(1) of the constitution of the People's Republic of Bangladesh stipulates that revenue and funds received by the government including from foreign sources will be a part of the consolidated fund thereby bringing them under the rubric of the country's PFM. Circulars and notices by the Ministry of Finance (MOF) and Planning Commission (PC) for budget preparation require inclusion of overall financing in national budget, including climate change related financing by the development partners.

Development cooperation programs and projects funded by the development partners are an integral part of the Annual Development Program (ADP), the Medium-Term Budget Framework (MTBF) and the national budget. Financing for climate related programs or projects also form part of the MTBF and ADP. The share of foreign financing in the ADP hovered around 40% in the recent years.

The ADP, an integral part of the annual budget, prepared by the PC contains relevant information on all climate related programs and projects being funded by development partners. Additionally, a web portal named Aid Information Management System (AIMS) hosted by the MOF allows accessing information by all regarding financing of development programs including climate financing by DPs.

Both loans and grants being provided by bilateral, multilateral and vertical funds for climate related financing are fully integrated in the budget documentation. But, a large part of the grant financing for climate related activities remains off-treasury and disbursed directly by the development partners with periodic information submitted to the government. Moreover, climate relevant projects being implemented by foundations such as Social Development Foundation (SDF) and Palli Karma Sahayak Foundation (PKSF) are invariably on-budget but remain outside the purview of national treasury. A review of the ADP and climate- related portfolio of major DPs reveal that treasury is being used for fund disbursements for the large portion of climate portfolio.

Further resources: Climate Change Integration Index Assessment: Bangladesh; UNDP 2017

SUB-NATIONAL EXPENDITURE

Local governments also mobilise and deliver climate finance, particularly in autonomous regions or federal governments, and a significant proportion of climate relevant expenditure may take place under the control of sub-national authorities. A complete picture of a country's spending on climate change action is only possible to obtain if spending at subnational level is included. The ability to monitor the levels - and categorize the types - of spending at subnational level is also important given the diversity of climate change issues in different localities and their mandates to provide services or define own measures relevant to climate change mitigation/adaptation.

However, designing a CBT system that also captures subnational climate relevant expenditure poses a challenge in many countries as PFM systems and capacity are usually less advanced at the local level. A common problem is the absence of a unified structure for classifying expenditures at national and subnational levels. This explains why, among the case study countries, Pakistan, which has a unified classification structure for budgets and expenditures and IT coverage across the three tiers of the government, has been able to gradually roll out its CBT to provinces using a procedure that mirrors that at the central government.

Box 6 provides an overview of the approach to sub-national expenditure in three of the case study countries, with further details in Annex 14.

BOX 6. CAPTURING SUBNATIONAL CLIMATE RELEVANT EXPENDITURES

In **the Philippines**, where CBT was implemented prior to the introduction of a unified accounts code structure at the sub-national level, the government developed a manual procedure for local governments to tag climate expenditures. Tagging is done in the Annual Investment Program forms which are submitted to central government. Those forms provide separate columns to identify mitigation, adaptation and the climate change typology code.

In **Pakistan**, despite the country's federal system, the PFM structure is highly centralized. All tiers of the government (though not state-owned enterprises) use central IFMIS for budgeting and expenditure management with a unified COA. The government is moving towards expanding the system to provincial governments by mirroring the federal arrangement. Currently, two provinces have tagged their expenditures. Replicating the current federal arrangement (including tagging of entities/cost centres) requires the Controller General of Accounts (CGA) involvement in rolling out the system at the provincial level. Given the unified COA, this is not difficult but nevertheless requires CGA to formulate a module, install it on the computer system and train provincial planning departments.

In **Indonesia** sub-national budget tagging has not yet been institutionalized. The country has undertaken subnational-level Climate Public Expenditure Reviews (CPEBR) in a sample of three provinces/ regions focused on mitigation activities. For the purposes of monitoring the sub-national government budget, the analysis and recommendations in these reports inform discussion as to how to develop a climate change mitigation budget tagging system to identify budget and activities related to climate change mitigation.

In **Kenya**, the 2010 Constitution heralded a new governance structure that introduced 47 new County Governments that are headed by an elected Governor, and local County Assemblies. The Counties receive their allocation from the National Government, which they appropriate through their County Assemblies based on the development interests of the Counties and in line with the national development aspirations captured in the development blueprints and frameworks. The CPEBR in Kenya undertook a pilot review on three counties (Isiolo, Laikipia and Bungoma Counties) to establish the climate related finance as compared to their total expenditures. There is need for more work to be done to upscale this work to the other 44 counties, and to undertake capacity building and sensitization to the counties to encourage them to adopt a more proactive climate resilient strategy of budgeting and financing their resources.

For further information on capturing climate relevant expenditure at subnational level in Pakistan, Philippines and Indonesia see Annex 14.

2.3 PHASE II: DETERMINE THE TECHNICAL DESIGN

Given the broad scope of what can be defined as climate change action across different sectors, CBT should be designed to enable the government to analyse climate spending by relevance and, where practical, by types of interventions. While less complex designs, perhaps driven by existing capacity, will facilitate initial implementation, it is important for the system to be able to evolve over time (to capture for example the implications of climate science and policy evolutions for what qualifies as climate relevant in the budget) and provide information for a robust analysis.

The technical design of CBT comprises the following three steps, which together determine the underlying complexity of a CBT system.

- First, defining and classifying climate expenditures by types of interventions;
- second, assessing and “weighting”³⁵ the climate relevance of those expenditures; and
- third, determining how those expenditures will be identified, or “tagged”, in the PFM system.

In order to provide an overview, Table 5 summarises the approach followed by each of the seven case study countries to Steps 4-6. Further details are provided in the sections following.

³⁵ Weighting involves assessing the climate relevance of expenditure and is further detailed and explained under the sub-section on Step 5.

TABLE 5. KEY STEPS IN TECHNICAL DESIGN OF CBT: CASE STUDY APPROACHES

Country	Step 4: Climate relevance framework and typology	Step 5: Weighting	Step 6: Tag
Bangladesh	<p>Framework: Bangladesh Climate Change Strategy and Action Plan (BCCSAP).</p> <p>Typology: the 6 themes and 44 programmes of the BCCSAP.</p>	<p>New approach (from 2018/19): Each of the 44 programmes under BCCSAP has been assigned a composite weight using statistical methods and based mainly on the underlying actions for each programme per BCCSAP. The calculation of those composite weights draws on a table of percentage ratings for each of those underlying actions in terms of (a) climate sensitivity, and (b) climate change relevance³⁶.</p>	<p>Activities are coded to BCCSAP programmes using a 4 digit additional “derived” segment in the COA.</p>
Ghana	<p>Framework: National Climate Change Policy Master Plan 2015-2020</p> <p>Typology: adaptation/ mitigation only</p>	<p>Policy objectives are grouped into high, medium and low relevance according to direct relevance to NCCP Master Plan and to mention of “climate change” in policy objective description in Ghana medium term development plan. Weightings are 100% for high, 50% for medium and 20% for low – so for example all low relevant policy objectives have 20% of the funding classified as being climate change relevant.</p>	<p>Two COA segments are tagged – policy objective and activity/ operation segments – but not in the IFMIS. Tagging is done in an offline system (“Climatronic”)³⁷.</p>
Indonesia	<p>Framework: Mitigation - National Action Plan to Reduce GHG Emissions; activities with (a) direct impacts and (b) indirect impact contributing to GHG emission reduction, GHG emissions absorption, carbon stock stabilization. Adaptation (from 2018/19): guidance being developed from National Action Plan for Climate Change Adaptation.</p> <p>Typology: Adaptation and Mitigation. While direct and indirect impacts are separately identified in the classification, this distinction does not appear to be recorded for the national CBT system.</p>	<p>No weighting process as yet – 100% of all expenditures tagged as adaptation or mitigation related are reported as CC expenditures.</p>	<p>The Government’s budgeting and performance reporting system (“Krishna”) has a series of (currently) seven budget tags of which one is CC adaptation and one is CC mitigation (others include gender, infrastructure, health and education).</p> <p>Tagging is at the output level – which is level 3 of the programme budget hierarchy (1. Programme, 2. Activity, 3. Output, 4. Component, 5. Detailed expenditure).</p>

36 ‘Sensitivity’ is the usual amount of climate financing that is subsumed in the routine development financing; ‘Relevance’ is the expected amount of climate finance compared to the routine development financing for resilience. It is considered that not all the activities are equally relevant as vulnerability varies across the places and production systems. The difference between the ‘Relevance’ and ‘Sensitivity’ percentage determines the required additional financing for certain activities.

37 Climate Change Budget and Finance Tracking Manual; Ghana Ministry of Finance 2018.

Country	Step 4: Climate relevance framework and typology	Step 5: Weighting	Step 6: Tag
<p>Kenya</p>	<p>Framework: Guidelines based on CPEIR (CPEBR). For an activity to qualify to be categorized as climate relevant expenditure, funds incurred or invested must:</p> <ol style="list-style-type: none"> Address one or all of adaptation, mitigation or enabling environment (climate awareness, training, policy and capacity building) as per the definition given by OECD-DAC “Rio Markers” – see Annex 6. More than 25% of the funding must go to one or all the above climate risk mitigation or proofing category Actual incremental or additional financing need not be demonstrated but there must be certainty that funds have been used for a) above. Outcome/output must be increased resilience, reduced emissions or more awareness on climate change. <p>Typology: Mitigation, Adaptation and Enabling Environment.</p>	<p>Weighting of each programme according to three levels of objective – principal, significant, low. As follows:</p> <ul style="list-style-type: none"> “Principal objective” should cover adaptation dimension explicitly in the objective, or should have most of the activities (and the budget) as adaptation/ mitigation-related. 100% of the budget/ expenditure is allocated as climate relevant. “Significant objective” should specify adaptation/ mitigation dimension as a secondary objective (of a programme module) or at least one indicator on activity or outcome level. 50% of the budget/ expenditure is allocated as climate relevant. No climate related objective is treated as low relevance. No budget/ expenditure is allocated as climate relevant. Note that percentages may be varied to follow real values if the information is available. 	<p>The climate tag is linked to the programmatic segment of the COA, and details are provided in an additional, 8th segment of the COA that has been created in GOK’s IFMIS to capture cross-cutting issues, such as climate change – but training of officials is now required in order to operationalize use of this segment.</p> <p>The 8th segments is made up of 4 digits. For CC the first two digits mark CC (01); the third digit adaptation/ mitigation; and the fourth digit principal/ significant/ low.</p>
<p>Nepal</p>	<p>Framework: CPEIR 2011 identified 83 climate relevant programmes, following which a list of 11 climate relevant categories of programmes was developed to guide future identification. [note: currently developing a sector-specific guideline with the Ministry of Agriculture, and other sectors may follow. Under that approach, the relevance of an activity is assessed based on the following three non-financial factors:</p> <ol style="list-style-type: none"> the degree to which an activity targets the correct beneficiaries; whether it links to a climate change policy; whether it is based on a climate risk assessment. <p>Typology: highly relevant, relevant and neutral. Currently climate change expenditures are not classified into adaptation and mitigation.</p>	<p>The budgets of climate relevant programmes are reviewed; each underlying activity budget line is marked as climate relevant or not. The budgets for the relevant activities are summed and calculated as a percentage of the total budget for that programme. If the climate relevant percentage of the total budget is >60%, the programme is marked as “highly relevant”; if between 20% to 60%, marked as “relevant”; below 20% “neutral”. The whole of the budget for the programme is then entered into the category computed above. Nepal is exploring ways to refine its tagging method to improve budget accuracy, and is expected primarily to use the three evaluating criteria mentioned under step 4.</p>	<p>A single digit climate budget tag with 3 settings is attached to each programme both in the budget and accounting systems – 1= highly relevant, 2 = relevant, 3 = neutral.</p>

Country	Step 4: Climate relevance framework and typology	Step 5: Weighting	Step 6: Tag
<p>Pakistan</p>	<p>Framework: follows approach of CPEIR 2015 - budget lines that were identified to have an aim or likely outcome (intended or not) to contribute to climate adaptation and/ or mitigation objectives.</p> <p>Typology: classified into 4 themes – adaptation; mitigation; both adaptation and mitigation; supporting areas. In the CPEIR these themes were then further classified into tasks determined from NCCP policy objectives.</p>	<p>Percentage weightings for each cost centre/ project are calculated by summing all the individual budget lines within a project that are judged relevant to climate change and expressing as a percentage of the total budget/ expenditure for the cost centre. Cost centres are then grouped into 4 categories (a) high (>75%): clear primary objective; (b) medium (50-74%): either secondary objectives or programmes with a range of not-easily separated activities, some of which are directly relevant; (c) low (25-49%) indirect contributions; (d) marginal (<25%). Currently analytical capacity needs to be strengthened so that this information can be used to inform the planning and budgeting of different sectors.</p>	<p>A budget tag is applied semi-offline at cost centre level – the tagging is done in the Government’s Financial Management Information System. The tagging identifies a) the relevance to the 4 thematic areas; b) the percentage weight.</p>
<p>Philippines</p>	<p>Framework: National Climate Change Action Plan.</p> <p>Typology: the CC typology defines 247 activities structured into the following 5 level hierarchy, starting at top:</p> <ul style="list-style-type: none"> • Adaptation/ mitigation; • NCCAP strategic priority; • NCCAP sub-priority; • Type of intervention; • Activity. <p>Note: this typology is used for analysing the budget, but expenditure is not captured in same level of detail</p>	<p>No weighting as such – 100% of all expenditure identified as climate relevant is booked. For Programs, Activities, and Projects (PAPs) identified as CC adaptation-related or CC mitigation-related, the entire budget is tagged as CC expenditure if the main objective, or one of the main objectives, of the PAP is to address climate change. If the PAP’s main objective does not explicitly articulate addressing climate change, identify only the components of the PAP that directly address climate change based on the CC typology, and include only the expenditure of the identified CC component.</p>	<p>Climate Change Expenditure Tagging (CCET) uses a 6 character typology code (1 character for each of the first 4 levels of hierarchy, and 2 characters for level 5 – activity) for each of the 247 CC activities. This code is integrated with the budgeting system (and is part of budget inputting), but not with the expenditure COA (manual mapping is necessary, and at a summarised level).</p>

STEP 4. DEFINE AND CLASSIFY CLIMATE RELEVANT EXPENDITURES

The purpose of this step is to set a framework for identifying public sector expenditures that are climate change relevant. This will typically be a list of sector-specific activities or activity categories grouped by types of interventions that can be applied across different line ministries.

Suggested technical lead agency: Climate Change Policy Body

a. Basis for identifying climate expenditures

The following can be used as reference for defining climate change action and identifying relevant activities in specific sectors:

- National climate change policy/action plan, which typically identifies the priority sectors, ministries and programmes, as well as sector-level climate change action plans or sectoral plans that have incorporated climate change considerations;
- Definitions for climate change mitigation and adaptation as part of the “Rio Markers” developed by the OECD-DAC to track climate-related ODA (Annex 6);
- Definitions and criteria for adaptation and mitigation developed by the multilateral development banks (MDBs)³⁸ to track their investments (Annex 7).

The choice will depend on the primary objective of CBT, whether it is to monitor national policy/action plan implementation through the national budget, or to demonstrate a capability for tracking external funding. In practice, these approaches are not mutually exclusive and several countries have adapted the OECD-DAC or MDB definitions and criteria to their national contexts.

The list can be updated over the course of implementation or through periodical reviews. In the Philippines for example, line ministries identify relevant expenditures by referring to the guidelines

issued jointly by the Department of Budget and Management and the Climate Change Commission but in case an activity does not feature in the list, it can be submitted for CCC’s review and potential inclusion.

As well as positive expenditure on climate action, some public expenditure (or revenue foregone such as fuel subsidies) may have a negative impact on climate change. To date no country has incorporated negative expenditure into CBT – Box 7 provides some further information on this topic.

b. Creating a typology³⁹ of climate expenditures

The purpose of creating a typology/classification is to enable analysis of the composition of climate change spending. If the typology is related to the national climate policy and action plan there will be an opportunity to reinforce the implementation of the national plan by mapping expenditure to priority areas, identifying gaps and imbalances, and integrating financial and non-financial monitoring.

A typology also ensures consistency of multi-year comparisons that administrative classification does not, given that ministries and public agencies may undergo restructuring over time.

It is generally recommended that at a minimum, the typology should enable differentiation between mitigation and adaptation activities, and - if the existing account code structure does not already allow for it - sources of funding, and location of the spending unit.

³⁸ The African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the Inter-American Development Bank, the World Bank, the International Finance Corporation and the Islamic Development Bank.

³⁹ Note that a Step 4 typology (reflecting different types of interventions) is not the same as grouping expenditures into degrees of relevance (e.g. high, medium, low), which is part of the weighting process covered in Step 5.

BOX 7. NEGATIVE CLIMATE CHANGE EXPENDITURES

Negative expenditures can be broadly defined as expenditures (or revenue foregone) on activities that have a negative impact on climate change mitigation or adaptation and, as a result, undermine the progress towards climate change policy targets.

In practice, systematically identifying and accounting for negative expenditures across the public sector can prove challenging as it would require conducting climate change impact assessments for all policies and programmes (the way environmental impact assessment are applied). This may explain why currently there are no examples of CBT systems that record negative expenditures.

Methodological and political economy challenges notwithstanding, accounting for negative expenditure is inevitable if investment in climate change action is to be effective. A starting point can be to identify priority sectors and large expenditure items/areas that have negative impact on climate change. Common examples include fuel subsidies, activities that entail deforestation, and mining and burning coal. Subsidies are likely to act as disincentive to switching to more sustainable energy sources. Highlighting their costs may help to identify opportunities to develop subsidies that promote use of more sustainable fuels without damaging economic activity.

A number of countries have identified sectors with negative impact on climate change in policy documents as a means to highlight the need for action. In some cases, these attempt to illustrate the magnitude of the negative impact by attaching an economic cost based on available international or country-specific estimates.

Bangladesh Climate Fiscal Framework (2014) recognises the need for removing fossil fuel subsidies, recognising their effect on inefficient fuel consumption in the transport sector, especially in the cities. Together, fuel and electricity subsidies made up almost half of total subsidies between FY2010-11 and FY2013-14 (with total subsidies at around 3% of GDP). At the same time, the Government acknowledges the political challenges of removing energy subsidies, and the need to mitigate for the short-term negative impact on the poor⁴⁰. The document makes reference to foregone revenues (although it does not quantify them) from tax exemptions that aim to incentivise schemes that contribute to climate change action, e.g. renewable energy (energy-saving light bulb, solar energy plants, wind turbines and related equipment), and waste treatment plants.

Indonesia's Mitigation Fiscal Framework (2012) cites the cost of fuel subsidies (IDR 120 trillion/year over the previous two years – equivalent to USD 13.2 billion) and calculates that halving the subsidies and raising the prices by 50% would reduce consumption of fuel by 5% and reduce emissions by about 5 million tCO₂e. Similarly, halving the electricity subsidy was calculated to reduce consumption by 15% and emissions by 15 million tCO₂e (tonnes of CO₂ equivalent). The analysis acknowledges that reducing subsidies would have a significant impact on GDP and that the foregone revenues exceed the cost of the most cost-effective mitigation actions. It concludes that reducing energy subsidies contributes to climate change mitigation not primarily by the effect on fuel consumption and emissions but by making available scarce public finance for use for mitigation actions.

More recently, Indonesia's Roadmap for Green Growth (2015) has dedicated a chapter to highlight the cost of the status quo, which acknowledges that that country's economic growth had been largely driven by natural resource industries (mining, energy, agriculture and forestry) and use of fossil fuels. Citing various international and Indonesia-specific estimates, the document highlights the cost of climate change and environmental degradation, e.g. cost of mortality from air pollution (3% of GDP in 2010), cost of cleaning water pollution from deforestation and mining (USD 2 billion by 2025), societal costs of mining and burning coal (including health impacts, environmental damages, and coal transportation – USD 100 billion per year, excluding climate change damages).

Sources: Ministry of Finance (2014) Bangladesh Climate Fiscal Framework, pp. 40-41; Ministry of Finance (2012) Indonesia's First Mitigation Fiscal Framework, pp. 44-45; Government of Indonesia - GGGI Green Growth Program (2015) Delivering Green Growth for a Prosperous Indonesia: A Roadmap for Policy, Planning, and Investment.

40 Since 2015 the subsidies for fossil fuels – especially oil - have been either reduced or eliminated

BOX 8. TYPOLOGY OF CLIMATE CHANGE ACTIVITIES IN THE PHILIPPINES

The Philippines adopted the Joint MDB definitions of climate change mitigation and adaptation. Climate change activities are grouped by strategic priorities of the National Climate Change Adaptation Plan (NCCAP) (food security, water sufficiency, environment and ecological stability, human security, sustainable energy, climate smart industries and services, knowledge and capacity development), then sectors under each strategic priority (e.g. under food security this includes agriculture and livestock, fisheries); and further by policy instruments (policy development and governance; research, development and extension; knowledge sharing and capacity building; action delivery). Each activity has a corresponding (a) Unified Account Coding Structure (UACS) code composed of the sector/sub-sector and outcome, and (b) climate change typology code with various information (mitigation/adaptation; NCCAP strategic priority; sector; and instrument. In the Online Submission for Budget Proposal (OSBP) system, there is a form that captures both the UACS code and the typology. In the excerpt below from the typology of activities, the first column represents part of the UACS code while the second column represents the typology code – structured into 6 characters as described in Table 5 above.

Excerpt from the Philippines typology of activities:

1 - FOOD SECURITY					
Adaptation			Migration		
Agriculture and livestock					
UACS	FY2016	Policy development and governance	UACS	FY2016	Policy development and governance
162-03	A111-01	Incorporate climate change and climate variability considerations in policies and institutions	162-02	M111-01	Introduce rules and regulations to reduce the emissions of greenhouse gases (GHGs), or absorption of GHGs in the agricultural sector
162-03	A111-02	Regulate commodity shifting and agricultural land conversion	162-02	M111-02	Public administration of sustainable land and water management that address land degradation and agro ecological conditions
162-03	A111-03	Design and implement climate change risk transfer and social protection mechanism in agriculture and fisheries	162-02	M111-03	Monitor carbon sequestration
162-03	A111-04	Incorporate risks from climate change and climate variability in irrigation/water management planning			
UACS	FY2016	Research, development and extension	UACS	FY2016	Research, development and extension
168-03	A112-01	Conduct agricultural vulnerability and risk assessments, impact assessments and simulation models on major crops and livestock	168-02	M112-01	Develop, test and introduce practices or techniques to sequester carbon dioxide in crop production, animal husbandry, forest management and aquaculture management systems

Source: Department of Budget and Management, and Climate Change Commission Joint Memorandum Circular. 2015-01. Revised Guidelines for Climate Change Expenditure Tagging.

Further resources

For overviews of international definitions and typologies for climate change adaptation and mitigation:

- Handbook on OECD-DAC Climate Markers (OECD, 2011)
- 2017 Joint Report on Multilateral Development Bank’s Climate Finance

For more detailed guidelines on identifying climate change expenditures and examples of typology:

- UNDP 2015 CPEIR Methodological Guidebook
- Country-specific CPEIR can provide a basis for CBT definitions

For the details on how the Philippines and Bangladesh align climate change definition and typology with the structure of the national policy:

- Department of Budget and Management, and Climate Change Commission Joint Memorandum Circular No. 2015-01, on the Revised Guidelines for Climate Change Expenditure Tagging.
- Finance Division, Climate Public Finance Tracking: Approach And Methodology, April 2018.

The following can be used as reference for classifying climate change activities into types of interventions (e.g. policy development, research, service delivery, etc.).

- National climate change policy/action plan may provide a structure for grouping climate change action (e.g. by strategic objectives or themes, and even programmes if the design of the climate policy/action plan allows for it). This approach enables linking budget allocation to national policy priorities.
- UNDP's CPEIR Methodological Guidebook presents a standard typology⁴¹ with three pillars (policy and governance; scientific, technological and societal capacity; and climate change delivery), which are then further broken down by category and task. (Annex 8). The standard methodology allows for the construction of robust times series by type of climate spending regardless of changes in the administrative organization of the country. This approach also enables comparison between countries adopting this methodology.

As in the case of identifying climate-relevant expenditures, the two approaches are not mutually exclusive and can be used to complement each other. In both cases, new categories can be added as they emerge. However, this needs to be balanced with the consideration that the more detailed and complicated the system becomes, the more risk of errors in classification.

By way of illustration, Box 8 provides details of the climate change typology being used by the Philippines. Annex 2 provides an overview of how all the case study countries are defining and classifying climate change expenditure.

STEP 5. DEFINE THE METHODOLOGY FOR WEIGHTING THE TAGGED EXPENDITURE

The purpose of assigning a weight to each identified expenditure is to reflect its degree of relevance (i.e. what portion of the activity's budget serves directly the climate change objective) and avoid inflating the scale of climate spending.

Suggested technical lead agency: Climate Change Policy Body in collaboration with the Ministry of Finance

The process of weighting is an attempt to reflect the fact that not all expenditure identified as climate relevant is equally relevant. So for example in Bangladesh, under the Climate Fiscal Framework weighting methodology used until budget 2017/18, projects which “directly [and fully] address one or more of the Bangladesh Climate Change Strategy and Action Plan thematic areas” were regarded as 100% climate relevant; while those addressing “land stabilization and protection of coastal areas” were 60% relevant; and those concerning “toxic waste management” were 30% relevant (see Annex 9 for full details).

Weighting an activity/ programme/ objective essentially involves two steps:

1. Categorizing its relevance;
2. Determining a percentage weighting to apply to the budget and expenditure given that category.

Thus in Ghana the first step involved categorizing policy objectives into high, medium and low relevance. The second step involved assigning weights of 100%, 50% and 20% respectively to those three categories.

These two steps may be combined when relevance is categorized by a percentage, and that same percentage is applied to the budget and expenditure – as in Bangladesh.

Once the climate relevance has been assigned a weighting, and if not already done so during the weighting process, countries typically group the weighted activities into a hierarchy – e.g. highly relevant; relevant; medium relevance; low relevance/ neutral.

41 Derived from the UNDP/World Bank supported CPEIR in Vietnam in 2015.

Two main technical approaches to weighting relevance have been used by countries – the objectives-based approach and the benefits-based approach. Typically, the former is simpler, while the latter is more complex and time-consuming, but potentially more robust.

- Objectives-based approach:** weighting is determined by an assessment of the relevance of a programme/ activity's stated objectives. One example of the objectives-based approach is use of the CPEIR climate relevance index, where the declared objective of the activity is mapped against the index (from highly relevant to marginally relevant or neutral). Each relevance level corresponds to a weight on the scale of 0-100%, indicating the proportion of the expenditure to be counted as climate relevant. The mapping of objectives against the index is usually based on the judgement of the officer performing the tagging based on the information contained in the project document/ planning template. When reporting on the total climate budget it is important that items with large budget in absolute terms but only marginal climate relevance are reflected (Annex 11).
- Benefits-based approach:** this approach involves applying a benefit cost ratio, where the weight is determined by analysing the benefits when climate change impacts materialise compared to the situation without climate change. The method identifies the “additional” climate change component of an activity on more objective grounds compared to subjective judgement of the declared objectives in the CPEIR climate relevance index method. However, this approach is not always feasible due to data requirements and the complexity of the analysis.

CC% = (B – A) / B
A = the benefits that would be generated by the action, if there was no CC
B = the benefit that would be generated with CC

The benefits from an action are those conventionally recognised in national planning and include: economic benefits (e.g. incomes, assets), social benefits (e.g. education, health, welfare, gender) and environmental benefits (e.g. biodiversity, reduced pollution). For major

investments, the benefits may be estimated as part of an economic analysis (e.g. rates of return for irrigation, roads, new crop varieties, energy investments). For other actions, they may be defined as outcomes in logical frameworks, with associated indicators (e.g. people protected from floods, hectares of forest planted, number of households).⁴²

Note that the benefits-based approach typically results in lower estimates of climate relevant expenditure – mainly because the maximum weighting under the objectives-based approach is typically 100%, while under the benefits-based approach it is typically 33%.

Given the potential complexity of developing a weighting methodology, countries have taken different approaches to facilitate national implementation. Three examples are shown in Table 6 along with their advantages and disadvantages. Further details of these approaches, together with the weighting approaches of the other case study countries, are set out in Annex 12.

In Nepal, the initially simple CBT methodology is being elaborated over time to address specificities of different sectors. More detailed definition of climate expenditure and weighting is being piloted at the Ministry of Agriculture (Box 9).

STEP 6. DETERMINE HOW CLIMATE CHANGE EXPENDITURE WILL BE IDENTIFIED IN THE PFM SYSTEM

The purpose of this step is to determine how climate change expenditure will be identified in the PFM system by deciding the most relevant and feasible dimension of the chart of accounts for tagging or coding climate change budget/ expenditure, and the desired level of detail.

Suggested technical lead agency: Ministry of Finance

The key to identifying types of expenditure in a country's PFM system is in the country's chart of accounts (COA) code structure. The COA structure typically consists of several segments, such as for administrative/ functional units, economic, programmatic, source of funding and geographic classifications.

42 UNDP 2015 CPEIR Methodological Guidebook, pp. 54-55

TABLE 6. EXAMPLES OF THREE COUNTRIES’ APPROACHES TO INTRODUCING WEIGHTING METHODS

Country example	Advantages	Disadvantages
Nepal’s climate relevance index (highly relevant; relevant; neutral) is assigned to a programme based on the sum of budgets of its relevant activities expressed as proportion of the programme’s total budget.	The relatively simple method made it possible to roll out CBT to line ministries within a short period of time.	Lack of flexibility at present. E.g. The size of highly relevant climate budget appeared overstated in 2017/18 as block grant transfers to the newly established local governments were marked as relevant. These large, unanalyzed transfers distorted the overall picture.
Bangladesh has calculated percentage weightings for each of the 44 programmes under the national CC action plan (BCCSAP) using statistical methods.	Facilitates good linkage to BCCSAP and gap analyses. Also enables line ministries to link their projects to multiple BCCSAP programmes and weights.	May provide a spurious level of accuracy if there is not robust review of the methodology and its results.
Indonesia decided to implement CBT with the weighting component to be introduced only at a later stage recognizing the complexity of developing a robust cost-effectiveness methodology and the consensus-building it entails.	<p>Delaying the introduction of the weighting component allows time to build a consensus around the methodology.</p> <p>More complex methods can produce more objective results that links spending to its outcome.</p>	<p>The accuracy of complex methods depends on the availability and reliability of data and capacity to conduct the analysis. The investment of time and effort to develop and periodically update the method needs to be balanced with potential gains in the accuracy of estimates.</p> <p>Until very recently Indonesia has only tagged mitigation expenditure, where it may be more feasible to defer weighting.</p>

BOX 9. NEPAL’S PILOT OF NEW RELEVANCE AND WEIGHTING METHODOLOGY (BASED ON NON-FINANCIAL FACTORS)

Following the initial implementation of CBT using a simple weighting method that applied the weight at the programme level, Nepal is testing a new approach in the Ministry of Agriculture.

The current method uses (a) 11 criteria to define climate relevant programmes and (b) share in climate relevant activities in the total programme budget as the basis to define the programme’s weight (Annex 2). The piloted method unpacks the 11 criteria into seven agriculture specific typologies for defining climate relevance of programmes and the activities under them. (Beyond the pilot stage, developing sector/ministry-specific typologies raises the question of sustainability given the likely need for periodic review and update.)

The relevance of an activity is assessed based on the following three non-financial factors:

- (1) the degree to which an activity targets the correct beneficiaries [including gender];
- (2) whether it links to a climate change policy;
- (3) whether it is based on a climate risk assessment.

If an activity satisfies two or more of these points it is classified as “highly relevant”; and if it satisfies only one, it is classified as “relevant.” This new approach helps tagging at the design stage of a project rather after the project has been developed.

Resources:

- Bangladesh Climate Public Finance Tracking (Approach and Methodology) Finance Division, Ministry of Finance and UNDP. 2018.
- UNDP 2015 CPEIR Methodological Guidebook

That COA structure is also likely to be used for preparing budgets, although the budget system may omit some segments (e.g. relating to location of expenditure) and also may have some additional segments or features (particularly around programmatic detail). An important decision to be made is whether a country will tag budget, expenditure or both. While the ideal is clearly to tag both, it may be more complex to tag expenditure because the financial controls around payments and expenditure are likely to result in less flexibility in the budgeting system. So for example in both Nepal and Pakistan, CBT was initially applied just to budgets, but has subsequently been rolled out to cover expenditure as well.

While the details of the budget code tagging arrangements will be developed in the implementation design phase – particularly in Step 8 – it is important to determine the main key that will link climate change budget/ expenditure and the PFM system as part of the technical design phase. This is because it is an iterative process that needs to be combined with steps 4 and 5 – as well as building on the work done in steps 1-3. A variety of factors need to be balanced, including:

- the capability of the PFM budget and expenditure systems, and particularly whether the climate tag can be a multi-character part of the COA (as in Bangladesh and Kenya), or whether it should be a simpler, possibly one character code attached to a COA segment (e.g. Pakistan and Nepal), perhaps building on existing arrangements for thematic tags such as gender or poverty reduction;
- the extent to which the desired classification system for CC expenditure can be supported – trade-off between detail and expediency;
- whether the desired weighting scale can be captured;
- the entry point for tagging, which ideally should be the same as the dimension used for identifying climate relevant expenditure under step 4. Based on the common practices for the identification of climate change expenditures in case study countries, this will typically be the programmatic classification segment - the majority of case study countries have identified the activity level as the most appropriate.

Boxes 10 and 11 reference varied approaches to identifying where in the account code the climate tag should be applied, raising issues of continuity and feasibility/ desirability for changes to existing regulations that would be required. Annex 13 sets out further details of the approaches followed by the case study countries.

BOX 10. TAGGING THE BUDGET IN TWO DIMENSIONS IN GHANA

In **Ghana**, in addition to activities, climate tag is also applied to policy objectives, which are derived from the current Medium-Term Development Plan (MTDP). While the approach has the advantage of linking climate change action to the country's overarching development priorities, the change in the policy objective codes every 4 years may require a review of the codes and not necessarily a repetition of the tagging exercise.

BOX 11. COUNTRY DECISION PROCESSES ON THE FORMAT OF THE CLIMATE TAG

Pakistan decided to apply the climate tag using a module attached to its existing FMIS (SAP). The decision process has been documented along with other options in *Introducing climate change coding in the IFMIS – Pakistan. Draft options paper (23 December 2015)*.

In **Indonesia** several options for location of the climate tag were considered based on existing budget classifications (including priorities, functions, and themes). Factors taken into consideration included:

- Need for changed/new regulation
- Need for reformatting the application used by line ministries to prepare annual plans and budgets
- Frequency of the need to update (e.g. priorities were deemed unsustainable as they would require updates with every change in government's policy)
- Possibility to include the information in standard reporting

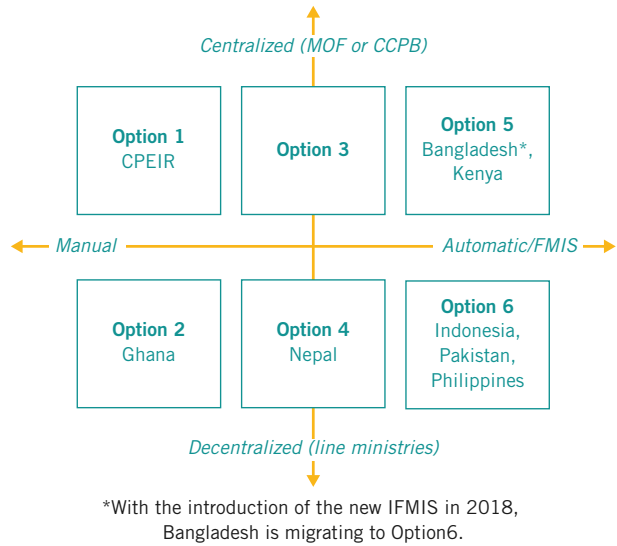
The decision is documented in *Ministry of Finance. 2014. Low Emission Budget Tagging and Scoring System (LESS) for Climate Change Mitigation Expenditures in Indonesia. (pp. 21-22)*

2.4 PHASE III: DETERMINE THE IMPLEMENTATION DESIGN

The choice of the implementation modality is important for determining how centralized (i.e. involving primarily MOF and CCPB) or broad-based or decentralized (i.e. requiring active involvement of line ministries) the CBT process is. While the latter approach will require significant capacity development for line ministries, it can help raise their awareness of climate change action as a government priority. An alternative approach is to implement CBT in a phased manner, starting with a more centralised approach to tagging and gradually delegating it to line ministries, and eventually expanding beyond tagging and towards greater integration of climate change in the budget cycle. An important consideration in the design will be the government’s administrative structure, and whether for instance there is a federal or unitary form of government and the extent to which budgets and decisions are devolved to the sub-national level.

- The availability of IT systems across all parts and levels of government and the extent of their integration.

FIGURE 5 MODALITIES FOR CLIMATE TAGGING SYSTEM



STEP 7. DETERMINE THE OVERALL MODALITY OF THE CBT SYSTEM

The purpose of this step is to outline the main features of the CBT architecture, based on (a) whether tagging should be centralised (i.e. done by MOF or a Climate Change Policy Body⁴³) or decentralised (i.e. done by line ministries); (b) how automated and integrated into FMIS the tagging should be.

Suggested technical lead agency: Ministry of Finance in consultation with the Climate Change Policy Body, the national planning body, and line ministries

Figure 5 shows a model developed by Pakistan to illustrate the various options, and maps the case study countries as examples. Table 7, from the same source, explains each option, its advantages and disadvantages. The feasibility of particular options will depend on:

- The complexity of the identification and weighting methodology, and the necessary capacity at implementing ministries;

43 Depending on the country’s institutional setup, a Climate Change Policy Body can be the Ministry of Climate Change, the Ministry of Environment, or a Climate Change Commission, or another agency responsible for climate change policy/finance.

TABLE 7. SUMMARY OF MODALITIES FOR ASSIGNING THE CLIMATE TAG⁴⁴

Option	Description	Advantages	Disadvantages
1	An expert gathers information from the budget database after the budget data are compiled, and produce a separate table (e.g. in Excel) with the CC-relevant budget allocations and expenditures.	<ul style="list-style-type: none"> • Simple solution that does not require extensive involvement from government agencies – easy to get agreement to implement this option. • Methodology is applied centrally – no need for capacity development in line ministries. • Allows for the prompt publication of annual ex-post climate change budget allocations reports. 	<ul style="list-style-type: none"> • Not an institutional solution and hence not sustainable. • Manual work is extensive and entails quality risks (manual data input errors). • Fluctuating methodology (as experts may change over time) can undermine the comparability of results. • Process not linked to the development stages of the budget cycle.
2	Methodology identical to Option 1 with the exception that the MOF or CCPB requests line ministries to identify and calculate the relevant expenditure, following an operational manual and capacity development. The data is then assembled centrally, at MOF or CCPB.	<ul style="list-style-type: none"> • Line ministries can identify climate-relevant expenditure better as they have better understanding of their programmes. • Tagging process is more institutionalized than in option 1. • Tagging process better integrated to the budget cycle and therefore more “institutional” compared to option 1. 	<p>Same as for Option 1.</p> <ul style="list-style-type: none"> • In addition, requires capacity development for line ministries and issuance of guidance by CCPB and/or MOF. • Requires amendment to the Budget Circular or the issuance of a separate circular to which MOF might be resistant for various reasons.
3	Centrally located expert/unit produces a “mapping table” or a separate record (e.g. in the planning and budgeting application), mapping the climate-relevant expenditures (with additional fields, such as the weighting, mitigation/adaptation, source of funding) with the coding structure of the FMIS system. This means that the expert does not interfere with the FMIS system but only requests a new reporting module to be incorporated in the FMIS, which will extract information from the main database, align/check with the mapping table and produce the reports.	<ul style="list-style-type: none"> • Calculations are automatic, and reports are generated quickly and in formats required. • Data comes from the FMIS, so errors in reporting are excluded. • Easy to get MOF agreement as FMIS structure is untouched. • Easy to update the weights whenever required as the mapping table itself will be outside of the FMIS. • Only one/few experts need training. 	<ul style="list-style-type: none"> • The initial construction of the “mapping table” requires time. • Requires IT engagement from MOF to develop the new reporting module. • Risk to sustainability: still requires some manual work for annual update of the “mapping table” with the new information. • Engagement of Line Ministries relatively modest. • Reporting on climate change is automatized but remains “ad-hoc”.

⁴⁴ Based on paper “Initial thinking over the options for climate change budget coding in Pakistan.” UNDP analysis prepared for Ministry of Finance of Pakistan, 15 December 2015

Option	Description	Advantages	Disadvantages
4	Same as the option 3 but the “mapping table” or separate record (e.g. in the planning and budgeting application) is developed in the line ministries [e.g. in Nepal the Budget Management Information System includes a climate tag field which is completed by the line ministry planners].	<p>Same as for Option 3.</p> <ul style="list-style-type: none"> In addition, line ministries can identify climate-relevant expenditure better as they have better understanding of their programmes and are strongly involved in the process with potential long-term beneficiary impact on budget formulation process. 	<ul style="list-style-type: none"> Requires greater time investment during the initial construction of the “mapping table” as line ministries’ tables need to be assembled into a one table at the center. Requires IT engagement from MOF to develop the new reporting module. Requires significant capacity building in line ministries on how to populate the mapping table. Dependent on the existing access rules to the FMIS database, this option may require giving additional rights to line ministries that may pose IT security risks. Requires an additional “cross-checking” function by the central mapping expert. Sustainability risks increase as this option requires annual update of the “mapping table” by more actors. Reporting on climate change is automatized but remains “ad-hoc”.
5	A segment is identified in the COA to incorporate identifiers for climate change (and its additional characteristics). Depending on the existing structure of the COA and availability of a suitable field for CBT, this may involve a change in the structure of the FMIS database. The climate relevant expenditures are identified and tagged by a centrally located expert at MOF or CCPB.	<ul style="list-style-type: none"> Sustainable solution, as climate tag is embedded in the database structure and filling it in becomes mandatory during budget data input processes. High accuracy and speed of reporting. 	<ul style="list-style-type: none"> May meet with MOF’s resistance as this option requires changes in the FMIS system. Requires time (and potentially significant financial resources) to upgrade the FMIS. May require formal adjustment of the normative acts on the general ledger fields, classification, etc. Requires capacity building for the budget data operators. Requires regular update of the weighting criteria in the database itself.
6	Line ministries identify and code climate change activities in their budget submissions based on a standard framework; and can submit additional ones for the review and approval of the centrally located technical unit at MOF or CCPB.	<p>Same as Option 5.</p> <ul style="list-style-type: none"> In addition, line ministries can identify climate-relevant expenditure better as they have better understanding of their programmes. Climate change expenditure reporting fully mainstreamed and formalized throughout the budget cycle. Involvement of Office of Comptroller and Auditor-General facilitated in terms of oversight. 	<p>Same as Option 5.</p> <ul style="list-style-type: none"> Requires significant capacity building in line ministries on how to populate the mapping table.

Further resources:

Documentation of Pakistan’s options:

- “Initial thinking over the options for climate change budget coding in Pakistan.” UNDP analysis prepared for Ministry of Finance of Pakistan, 15 December 2015

STEP 8. DESIGN THE TAGGING PROCEDURE

The purpose of this step is to define the procedure for assigning climate tags that is in line with the existing budget process and institutional mandates.

Suggested technical lead agency: Ministry of Finance in consultation with the Climate Change Policy Body and the national planning body

Table 8 outlines the three key elements the CBT process should determine, and the potential advantages and disadvantages of the options for each.

TABLE 8. OPTIONS FOR DETERMINING THE KEY ELEMENTS OF THE CBT PROCEDURE.

Options	Advantages	Disadvantages
Who assigns the climate tag i.e. identifies the climate relevant expenditure and its other features (such as typology group and weight)?		
(a) Centrally located expert / unit at MOF or CCPB	Only one / few experts need training; easier to ensure consistency of quality.	Centrally located expert / unit might have limited understanding of line ministries' programmes.
(b) Line ministries	Line ministries have better understanding of their programmes; involvement of line ministries helps raise awareness of climate change across government.	Requires capacity building for line ministries.
At what stage of the budgeting process are climate tags assigned?		
(a) During planning when activities are developed (by line ministries)	Can promote consideration of climate change from the planning stage; can help strengthen link between plan and budget.	Needs to be updated once the budget is allocated.

Options	Advantages	Disadvantages
(b) After initial budget inputted into the system	Reflects any reviews to budget allocations (e.g. by the parliament); does not require additional time to review and update the tagging.	Risk that line ministries don't factor in climate change impacts when developing their projects and budgets.
(c) Tagging expenditure	The actual level of spending is measured.	Budget and expenditure cannot be compared, which provides an incomplete picture of climate budget execution, especially in context where the use of virements is widespread.
(d) Combination of the above	Provides the most comprehensive picture (see Box 12).	Unless there IFMIS is in place, requires significant effort to create manual mapping of budget and expenditures
How and by whom is the tagging validated?		
(a) CCPB or a unit at MOF in the budget review process	CCPB/MOF are likely most familiar with the procedure	Potentially limited objectivity of assessment
(b) Auditor General	Contributes to mainstreaming climate change throughout the PFM process	May require a change in the mandate of the Auditor General; requires capacity building for the Auditor General
(c) Independent peer review (e.g. by research institution)	Provides the most objective assessment.	Requires additional time to incorporate in the government processes.
(d) A combination of the above.	Provides the most comprehensive assessment.	Requires time and coordination; and the need to reconcile potentially different findings.

Box 12 provides further information on option 2d) from Table 8.

BOX 12. UPDATING THE TAGGING ALONG THE BUDGET DEVELOPMENT PROCESS

In the Philippines, the tagging is applied (1) during budget preparation; and then (2) updated after budget hearings, once the proposed budget is developed to the Congress, and (3) once the Congress approves the budget. The first tagging is done in the Online Submission of Budget Preparation system used by line ministries. For (2) and (3), line ministries re-tag manually and submit the forms to the Department of Budget and Management to reflect any changes.

Although potentially cumbersome due to manual updates, the advantage of this approach is that it ensures that any changes to the budget emanating from budget hearings or legislative review are reflected, providing an accurate figure to compare with expenditure data (Annex 10).

Regardless of how the roles and responsibilities are assigned, it is important that there is an active collaboration between the various parties involved, especially during (a) the design process and (b) the initial stages of implementation. For example in Nepal, the CBT procedure was designed in a process involving relevant line ministries (see Box 13).

BOX 13. NEPAL'S PARTICIPATORY APPROACH TO DEVELOPING THE CBT PROCEDURE

In Nepal the CBT procedure was developed and validated in a series of workshops with line ministries' planning officers. This has allowed for identifying potential challenges at the onset of the design process, such as the fact that not all ministries have the same level of details in their proposed programmes (as Ministries develop detailed activities for budgeting purposes but submissions present the information at the programme level).

The CBT development process is documented in: National Planning Commission, Government of Nepal. 2012. Climate Budget Code: Documenting the national process of arriving at multi-sectoral consensus.

STEP 9. DETERMINE THE FORMAT FOR CBT REPORTING

The purpose of this step is to identify the reporting format for climate change expenditures that reflects the objectives of introducing CBT.

Suggested technical lead agency: Ministry of Finance in consultation with the Climate Change Policy Body and the national planning body

Table 9 suggests possible formats for reporting the information generated by CBT depending on the CBT's main objective and the respective target audience.

While additional dedicated reports can be tailored to the intended audience incorporating information on climate change expenditure in government's mainstream financial reporting will help ensure sustainability. This can be done, for example, by adding a climate change budget as an annex to the budget, or by incorporating information on climate change expenditure in government's annual financial statement and national economic surveys. Examples of reports produced in case study countries are listed in Box 14.

STEP 10. ASSIGN ROLES AND RESPONSIBILITIES FOR CBT DEVELOPMENT AND IMPLEMENTATION

The purpose of this step is to - based on the tasks outlined in the previous steps - assign clear roles and responsibilities among the key stakeholders, while ensuring their active collaboration.

Suggested technical lead agency: Jointly decided between Ministry of Finance, Climate Change Policy Body and the national planning body

Table 10 summarises the institutional arrangements for CBT development and CBT implementation processes in case study countries. When assigning the roles and responsibilities to respective government bodies, these should reflect their specific mandates, technical expertise, as well as the ability to ensure continuous leadership – both political and technical.

TABLE 9. OPTIONS FOR REPORTING CLIMATE CHANGE EXPENDITURES

Objective	Main target audience	Reporting formats
To monitor national policies and international commitments, and to improve the effectiveness of existing spending.	<ul style="list-style-type: none"> • CCPB • MOF • Line ministry planners • Parliament • Supreme Audit Institutions • International bodies (incl. UNFCCC) 	<ul style="list-style-type: none"> • Part of mainstream financial reporting • Dedicated report by CCPB tailored to the Parliament / international climate change bodies
To support mobilization of additional external financing by (a) identifying the funding gap on a regular basis, and (b) demonstrating government commitment and co-finance.	<ul style="list-style-type: none"> • Donors • Development partners • Dedicated Climate- Change Funds 	<ul style="list-style-type: none"> • Part of mainstream financial reporting • Dedicated report by CCPB • Dedicated report by any Agency playing the role of NDA
To mobilise climate-related action across government sectors by providing evidence of on-going climate-related activities.	<ul style="list-style-type: none"> • Line ministries • CCPB 	<ul style="list-style-type: none"> • Part of mainstream financial reporting • Separate reports by line ministries to MOF / CCPB
To raise public awareness of government's climate change action.	<ul style="list-style-type: none"> • Citizens • Civil society and the media • Academia 	<ul style="list-style-type: none"> • Part of mainstream financial reporting made public • Part of citizens' budget or a dedicated citizens' climate budget

TABLE 10. SUMMARY OF ROLES AND RESPONSIBILITIES⁴⁵

Country	Custodian of CBT	CBT development		CBT implementation		
		Basis for identifying CC activities	Tagging procedure design	Tagging	Validation	Reporting
Bangladesh	MOF	National policy	MOF	MOF *	-	MOF/ CCPB
Ghana	MOF	Terminology list **	MOF	MOF/Line ministries	MOF / CCPB	CCPB
Indonesia	MOF	National policy	MOF	Line ministries	MOF	MOF
Kenya	Treasury	CPEBR***	Treasury	MOF/Line Ministries	MOF /inter-ministerial coordination committee	CCPB
Nepal	Planning body	CPEIR	Working group led by Planning body	Line ministries	MOF/ inter-ministerial coordination committee	MOF
Pakistan	MOF/ CGA/ CCPB	CPEIR	MOF	CC Exp'ture Tracking and Monitoring Committee	CCPB	CCPB /MOF
Philippines	DBM/ CCPB	National CC policy	DBM / CCPB	Line ministries	CCPB	DBM

* Handing over to line ministries who are being trained to tag based on BCCSAP thematic and programme areas using a new climate expenditure tracking methodology.

** A list of key terms grouped by policy themes developed by responsible unit in MOF to use by line ministries when analyzing budget documentation

*** Kenya conducted a Climate Public Expenditure and Budget Review (CPEBR), instead of a CPEIR.

45 For the purposes of this table MOF is generally taken to include planning, although in some countries this function is under a separate planning ministry or commission.

BOX 14. EXAMPLES OF REPORTS ON CLIMATE CHANGE EXPENDITURE:

Case study countries produce different types of reports using CBT data, both as part of routine budget documentation and financial reporting, and separate dedicated climate reports. Below are some examples. Annex 2 provides information for the remaining countries.

Bangladesh

In 2017/18 Bangladesh produced a detailed climate budget report covering six climate relevant large line ministries, and presented to Parliament. In 2018/19 the second climate budget report “Climate Financing for Sustainable Development (2018-19)” was expanded to cover 20 line ministries and divisions (102 pages). This report is among the budget documents available on the MOF’s website, along with the Child Budget and Gender Budget reports.

Also the Bangladesh Economic Review has introduced for 2018 a chapter on climate change (available in Bangla, will be available in English from Jan 2019).

Nepal

- As part of standard government reports: MOF includes climate budget in the Consolidated Financial Statements, Economic Survey Report, and as annex in the Red Book and the Budget Speech.
- In addition: While the Government of Nepal does not publish its own citizens’ budget, CBT data was used by a local NGO to develop a Climate Citizens’ Budget, a clear overview document summarizing Nepal’s main climate change risks and government spending, to increase public awareness. It was recommended that a Climate Citizens’ Budget should be regularly published by the government.

Pakistan

- As part of standard government reports: MOF presents a summary of CBT data in its annual budget documents detailing reforms related to climate change finance. Pakistan Economic Survey, which informs government planning and budgeting, includes a chapter on climate change with CBT budgets and expenditures presented by adaptation and mitigation.

Philippines

- As part of standard government reports: Technical notes on the proposed budget – in 2018 climate change expenditure was reported as part of the chapter on development priorities, under the section “Ensuring Ecological Integrity, Clean and Healthy Environment”; climate change is mentioned in DBM’s “People’s Budget” for 2016.
- The Philippines government data portal started publishing the detailed climate expenditures data in 2015 but no updates have been released since.
- The Philippines has launched the National Integrated Climate Change Database Information and Exchange System (NICCDIES) which serves as the country’s integrated climate information portal. NICCDIES serves as the primary enabling platform in consolidating and monitoring data and information on climate change from sources and actors coming from both public and private sector and other stakeholders.

The NICCDIES includes a detailed section on climate finance data presenting the results of the climate change tagging exercises at national level by year, agency/attached agency, budget cycle milestone (e.g. agency request), pillar (adaptation/mitigation), and strategic priority.



3

SUMMARY OF TYPICAL OPERATIONAL CHALLENGES

Challenge related to the existing PFM system

Expanding CBT to subnational level [note: similar issues may arise in expanding CBT to cover parastatals]

Example of country practice

In **Pakistan**, given the unified classification structure for budgets and expenditures and IT coverage across the three tiers of the government, the roll-out of CBT to subnational level is relatively straightforward. The government is moving towards expanding a CBT procedure mirroring that at the central government to the subnational level.

Where the accounts structure is not unified across government levels, there is a need to develop (1) a separate subnational CBT system/procedure and (2) a procedure to reconcile subnational and central government data. In **the Philippines**, while the unified accounts code structure introduced in 2014 has not been yet extended to the LGUs, a procedure was developed for LGUs to tag climate expenditures in their Annual Investment Plans. The procedure follows the definitions and typology climate expenditure that are applied at the central level. As with the central level procedure, LGUs can submit a request to CCC to identify local-specific programmes or activities that are not listed in the current typology.

In **Ghana** and **Kenya** a key challenge is identifying climate relevant donor funds sent direct to the subnational level – as well as donor funds to NGOs. For Kenya, one challenge is how to treat the funds allocated to parastatals and semi-autonomous agencies, which receive their funds as transfers outside of the IFMIS, requiring a highly manual process to determine climate related finance. The 47 county governments in Kenya also require extensive capacity building, and a refinement of the CPEIR methodology to allow for more local level planning, financing and budgeting processes.

For further details on the examples of subnational CBT arrangements in case study countries see Annex 14.

Treatment of external funds provided off-budget

See details on off-budget expenditure under Section 2.2 Step 3.

Challenge related to the existing PFM system	Example of country practice
Lack of programme classification (or not fully functional)	In Nepal , the climate tag is recorded in a computerised system under the National Planning Commission used by line ministries to prepare their plans and budgets, and incorporating programmatic data. Programmatic data is not currently transferred to the MOF's budget system, and the budget tags are manually mapped at a high level to the MOF's budget and accounting systems using the administrative/ functional classification as a proxy for programme classification. Under the new approach being piloted in Ministry of Agriculture, MOF will provide access to ministries to tag in the MOF's system.
Capturing budget and expenditure data	In Nepal , where budget and accounting classification structures are not aligned, MOF created a mapping that allows expenditure data to be generated manually. In Ghana , unusually, the climate budget tag is mapped to two separate segments of the COA – the policy objective segment and the activity/ operation segment. The policy objective codes and structure change every 4 years with each MTDP creating a logistical challenge to implementing – and maintaining – CBT.
Initial capacity of line ministries and subnational governments	In Bangladesh, Nepal and Pakistan , CBT was first applied to several key ministries, and was gradually expanded over time. A focus on just the most relevant ministries is easier to manage and maintain, and may be more effective and yield higher quality data than an approach covering the whole of government. In the Philippines , the Climate Change Commission and the Department of Budget and Management set up a temporary Help Desk to assist line ministry (and a dedicated one to assist LGUs) in the first years of implementation and provide weekly updates through Frequently Asked Questions to the climate change/ budget focal person in each ministry. A series of orientation on the tagging process was held for line ministries and customized coaching was made available on request. In addition, DBM, CCC, and DILG developed a brief and reader-friendly "Primer for Local Government on Climate Change".
Ensuring technical quality of information and consistency across ministries	In Pakistan , the MOCC set up a technical committee to review the newly tagged expenditures. In the Philippines , line ministries and LGUs, in addition to tagging their budget, submit Quality Assurance and Review (QAR) forms to the CCC (Annex 10).
Maintaining staff capacity and technical quality over time	In Pakistan , to avoid losing support and capacity in line ministries due to senior staff turnover, focused on training middle level management In Nepal , the initially simple CBT methodology is being elaborated over time to address specificities of different sectors. More detailed definition of climate expenditure and weighting is being piloted at the Ministry of Agriculture (In Nepal, the initially simple CBT methodology is being elaborated over time to address specificities of different sectors. More detailed definition of climate expenditure and weighting is being piloted at the Ministry of Agriculture (Box 9).



4

THE BENEFITS, AND LESSONS TO DATE, OF CBT

4.1 BENEFITS OF CBT

Section 1.2 provided a short overview of the benefits of CBT, and subsequent sections included reference to some of the realised and potential benefits of CBT. For ease of reference, this section 4.1 draws together the benefits experienced by case study countries in implementing CBT, and potential future benefits that may be expected from CBT. It also includes a sub-section on the benefit of using CBT with complementary tools to incorporate gender and poverty in climate expenditure analysis to promote equity, and provides several country illustrations.

4.1.1 BENEFITS FROM CASE STUDY COUNTRIES

RAISING AWARENESS AND UNDERSTANDING OF CC

- **Raising awareness among policy makers within government** that climate change is not just the concern of the climate change policy body, but is relevant to many government programs and activities. In Nepal the National Planning Commission and the Ministry of Environment and Forestry used the CBT data to highlight the breadth of sectors undertaking climate activities to motivate further action – for example the Ministry of Agriculture had not appreciated how much it was already doing on climate change.
- **Raising awareness among government planners.** In case study countries a major benefit of CBT has typically been the awareness creation among planners, and enhanced understanding the climate change dimension and relevance of their programs – resulting in budget submissions being prepared in a progressively more climate change responsive way.
- **Finance as a common language.** Policy makers understand the language of finance, which helps to improve communication between the CC Policy Making Body and both the Ministry of Finance and sectoral Ministries.
- **Provide feedback and inform the next iteration of climate change planning.** CBT may identify current activities that are contributing to CC objectives but were not captured by the National Climate Change Policy Framework. For example in Indonesia, CBT led to identification of climate change mitigation activities that had not been recognized as such in their climate change policy, amounting to 26% by value on top of the original budget in the policy⁴⁶.

46 Ministry of Finance 2018 Analysis Report on Climate Mitigation Budget 2016-2017

BOX 15. MOBILISING PRIVATE SECTOR FINANCE THROUGH GREEN BONDS IN KENYA AND INDONESIA

A green bond is a type of debt instrument whose proceeds are exclusively earmarked to fund projects that deliver environmental benefits – mostly related to climate change mitigation or adaptation but also to natural resources depletion, loss of bio-diversity, and air, water or soil pollution. Technically climate bonds are a subset of green bonds; use-of-proceeds for a climate bond must be invested in assets compatible with a low carbon future and/or that deliver adaptation and resilience to current and future climate change. In practice – and throughout this report – green bonds normally refer to climate bonds.

Green bonds are a way to mobilise private sector resources for climate change action. The first green bonds were issued by multilateral institutions in 2007 (the European Investment Bank and the World Bank), followed by commercial banks and corporations, and local governments. Since then the green bond market has expanded, with USD162.5 billion issued in 2017. (Climate Bonds Initiative, climatebonds.net).

Starting in late 2016, more and more countries have been issuing sovereign green bonds to mobilise additional financing for national climate change action. According to the Climate Bond Initiative, USD21bn of sovereign green bonds have been issued to mid 2018. In addition to raising additional resources, green bond signals the government's commitment to climate change action and sustainable growth, stimulates internal collaboration between treasury/finance ministries and those responsible for implementing climate change policy. Green bond complements, rather than replaces other government action on climate change, and is one of the means to finance projects and programmes defined by government strategies and policies. (Climate Bond Initiative: 2017 Sovereign green bonds brief and Bonds and Climate Change: the state of the market 2018)

CBT can help strengthen the national framework for green bond by providing rules and procedures for deciding the eligibility of projects, tracking the financing and reporting. This is the case of **Indonesia's Green Bond and Green Sukuk** (i.e. Islamic bond designed to comply with Islamic Law). In 2018 Indonesia issued the world's 1st sovereign green sukuk bond raising USD 1.25 billion – for use approximately 50/50 between re-financing existing projects and providing new project finance. CBT data was first used to estimate the funding gap for meeting national targets for reducing GHG emissions. CBT definitions and criteria are to be used:

1. by MOF and National Development Planning Agency to assess whether projects are eligible for financing from the Green Sukuk; from the tagged expenditures, the MOF will select items that are covered by the eligible sectors set out in the Green Sukuk Framework, and that have a project development timeline consistent with the tenor of the Green Sukuk.
2. by line ministries to track the expenditures on these to report at the end of the fiscal year to MOF.

The MOF will prepare and publish an annual report on their website. The report will contain at minimum a list and brief description of projects financed by the Green Sukuk, the amount allocated to each project and an estimation of the beneficial impacts of the projects, such as emissions reductions.

In **Kenya**, the **Green Bond** was developed by the National Treasury, which leads the country's climate finance policy. In collaboration with domestic and international partners, including the Central Bank of Kenya and Nairobi Securities Exchange, Kenya plans to issue its first Green Bond in 2018/19, with an initial target of raising USD 50 million. Based on international good practice of the Green Bond Principles and Climate Bonds Standards, the Nairobi Securities Exchange has developed the domestic guidelines on the use of proceeds, selection process, management of proceeds and reporting requirements of the issuer to bondholders. The details of types of assets to be financed are not yet published, but are expected to cover renewable energy, low-carbon transport, water infrastructure and climate smart/sustainable agriculture.

- **Informing the public on climate change** – both of what government does and the issue itself - by giving visibility to government climate change action within the government and among citizens. In Nepal, for example, a “Citizens’ Climate Budget” was published by a local NGO in 2017 using the publicly available CBT data, resulting in extensive media coverage and increased public awareness and debate.

FOR MOBILIZING RESOURCES TO IMPLEMENT CLIMATE CHANGE POLICY

- **Supports mobilisation of additional resources.** Providing data on government’s existing spending as an input to develop the climate fiscal landscape, and as the basis for estimating the funding gap to inform government’s efforts to mobilise additional resources.
- **Mobilising private sector finance** through issuance of sovereign Green Bonds (see Box 15). For example in Indonesia the Ministry of Finance used the CBT data 2016 and 2018 as a reference in selecting the list of green projects to become underlying assets for Indonesia’s first Sovereign Green Sukuk issuance in March 2018 (amounted USD1.25 billion).

FOR IMPROVED MONITORING AND REPORTING OF CLIMATE CHANGE POLICY PROGRESS

- **Helps governments to monitor resources that contribute to implementation of the National Climate Change Action Plan.** Due to the cross-cutting nature of climate change, monitoring NCCP and Action Plans is a major challenge for governments. CBT can facilitate. This may be only at a relatively high level – e.g. between adaptation and mitigation activities, as in Kenya. This benefit becomes more significant when combined with a tag/ account code that reflects the thematic and/or programmatic structure of a country’s CC Action Plan – as in Bangladesh and the Philippines. In such cases CBT can provide a decision support tool, helping to indicate where further financing is necessary and where policy priorities may need to be reviewed and adjusted.
- **Provides tangible information that strengthens reporting on national climate change action** e.g. as part of budget documents or annual financial reporting; enhancing government’s transparency.

- **Facilitates government reporting on international commitments,** such as UNFCCC’s Nationally Determined Contributions and progress towards the SDGs, using expenditure data routinely collected by the existing financial management system. Part of the monitoring, reporting and verification (MRV) system that tracks mitigation actions and progress towards NDC goals. E.g. in Indonesia The CBT data 2016-2017 was used as an input to Ministry of Environment and Forestry to develop Indonesia’s third national communication for UNFCCC.
- **Highlights information and analysis that can be used to explore challenges.** For example, in Indonesia a Ministry of Finance analysis of the spend against budget on mitigation activities for 2016 showed a relatively low budget execution rate of 72%. Nepal used tagging data to demonstrate that climate relevant ministries had lower budget execution rates than non-climate relevant ministries.

FOR BROADER PFM

- **Helps to strengthen the link between planning and budgeting at line ministries.**
 - In Pakistan, the Ministry of Water, one of the ministries with the largest share of climate related budget, has used the CBT information to inform its planning and budgeting for the following fiscal year.
 - In Indonesia, the Ministry of Finance and the national planning agency encourage line ministries to use the climate expenditure data to strengthen their quantitative performance indicators.
- **Provides information to strengthen prioritization of cost-efficient/effective programmes and activities in line ministries**

4.1.2 POTENTIAL FURTHER BENEFITS FROM CBT

As CBT becomes more established and routine in a country, further potential uses and benefits may be envisaged. For example:

- **Providing data to help measure the cost effectiveness of climate change actions.** For example, mitigation expenditure by program can be compared with how much GHG emission

reduction is achieved for each program, giving insights into relative value for money. This may provide central agencies with an additional criterion to prioritize their decision making alongside the economic, social and environmental criteria used to prioritize public investments and compare interventions in terms of mitigation cost effectiveness (measured in USD/ton of CO2 emissions reduced).

- **Providing a platform for in-depth sectoral and thematic analysis of how resource allocations are contributing to climate goals**, and exposing critical resource gaps. For example, comparing the sectoral shares of spending on climate change adaptation with the sectoral shares of macro-fiscal loss and damage resulting from climate change.
- **Help pave the way for improved planning and monitoring of resources for SDGs** and for raising awareness of SDGs within government.
- **Provide a robust basis for assessing whether on-budget, climate-relevant ODA is fairly stated in the OECD-DAC database.** The climate relevance (or its extent) of many ODA Programs have been contested as over-stated in the public debate and international climate change negotiation processes. The tagging of ODA Money in the OECD-DAC database has been based on the donors own criteria. For this benefit to be effective, the PFM systems (or at the very least the budget part of it) should capture a significant share of the ODAs delivered, or the tagging authority should be able to compile and consolidate the ODA data that is not captured by the PFM systems.
- **Setting financial targets that enable a structured approach to addressing climate change and its impacts.** Countries may, as part of their climate change financing framework or policy, start to adopt a climate change finance target they want to reach in order to reduce their adaptation and mitigation gap. Tagging allows them to monitor the progress vis a vis the target. An example is Nepal trying to monitor whether the climate finance allocation target of 80 percent delivery at sub-national level is being achieved.
- **Signal commitment of government** – by, for instance, including a paragraph in the Budget Speech made to Parliament stating the CC budget amount and increase from the previous year.

- **Promote equity by tracking climate finance delivery to climate change vulnerable districts and groups**, if CBT is supported by a sufficiently detailed and flexible budget and accounting system.

4.1.3 INCORPORATING GENDER AND POVERTY IN CLIMATE EXPENDITURE ANALYSIS

Addressing the impacts of climate change on poverty, gender equality, people with disabilities, ethnic minorities and other groups who are disproportionately affected by climate as demonstrated in the IPCC AR4 and AR5 and recognized in the preamble of the Paris Agreement increasingly requires the adoption of policy-making, planning and budgeting practices that are responsive to them.

A couple of approaches can be used to analyze the equity dimensions of climate change programs. These include:

- i. Exploring the extent of programmatic integration between Disaster Risk Reduction, Climate Change Adaptation and Social Protection within government interventions in order to build the resilience of the climate vulnerable and help them reach economic autonomy through adaptive social protection and adaptive livelihood programs.
- ii. Exploring whether infrastructure that is designed to provide climate benefits is beneficiary to the socio-economic groups it is supposed to serve.

Currently different tools complementing CBT have been piloted to analyze the equity dimensions of climate change programs.

In Bangladesh, the Planning Commission implemented:

- i. An Adaptive Social Protection expenditure review would look at the design of social protection, livelihood and other relevant climate programs to analyze whether they are designed to build the resilience of beneficiaries to climate related shocks and in particular women,
- ii. The policy, institutional and budget expenditure review of social protection programs is complemented by ethnographic research to get micronarratives from the beneficiaries allowing the Ministries of Planning and Finance to understand what factors are enabling the

effectiveness of the programs (for example, the possibility to blend the income received from the livelihood programs with other funds and reinvest them in income generating activities often leads to positive results etc.) or preventing social protection and livelihood programs building the resilience of those benefitting from them (e.g. being forced to invest the money received into housing because of destructions resulting from climate shocks instead of being able to invest them erodes the effectiveness of the programs...).

Such reviews provide a starting point for a national dialogue on the need for policy and budgeting changes in order to make social protection and livelihood programs more adaptive and responsive to the need of poor men and women, people with disabilities, ethnic minorities and other socio-economic and demographic groups disproportionately affected by climate change.

In Nepal, the Ministry of Agriculture, Land Management and Cooperatives in partnership with Civil Society implemented a Climate Change Poverty Impact Assessment in the Agriculture Sector, with a particular focus on gender.

The review analyzed impacts of climate investments on the poor and vulnerable as well as of the current gaps in its delivery of climate investment both at the national and sub-national levels. In particular, it looked at whether or not vulnerability of people and areas was taken into account during planning and resource allocation at the national and sub-national levels and made recommendations about how vulnerability assessments can be systematized and made available for improving budget proposals. These findings led to improvements in the tagging method to incorporate gender while planning climate actions.

In Indonesia, the Ministry of Finance is working in partnership with a CSO specialized in gender and budget transparency to analyze the gender and poverty impact of existing tagged climate programme/activities two sectors. This will entail:

- An analysis of the gap between national regulation (required action) and the actual practice on gender responsive planning and budgeting and poverty reduction with respect to existing climate programme/activities that have

been formally tagged using four criteria: Access, Participation, Control, and Benefit.

- Recommendations to make the existing tagged climate programme/ activities more responsive to gender and poverty.
- An action plan for two sectoral line ministries to improve tagged climate programme/activities responsive on gender and poverty issues by developing the implementation of the country's gender planning and budgeting tools which are the Gender Analysis Pathway (GAP) hosted by the Ministry of Planning and the Gender Budget Statement (GBS) of the Ministry of Finance.

As such pilots build a case for a more systematic approach, in the future, a case to tag climate change programs f or gender and other equity dimensions could be made and would entail the following:

- In countries with dedicated CCGAP, a mapping of budget programs versus the CCGAP. This is particularly straightforward if the CCGAP espouses the structure of the National Climate Change Action Plan.
- In countries, where gender is systematically mainstreamed into the national climate change action plan, the programs tagged for climate change relevance will also have to be analyzed for gender relevance and tagged accordingly.

The tagging exercise would allow countries to determine which proportion of their climate relevant expenditures are meeting CCGAP objectives or have been gender mainstreamed as per the national climate change action plan requirement and which have not.

For countries, with no systematic integration of equity concerns into climate change policy framework, the alternative could be the integration of a gender marker for Climate Change and Disaster Risk Management Program. While this has not been implemented in Asia yet, Tonga provides a good example where this has been piloted through the application of the Inter-Agency Standing Committee gender markers for the country's climate change and disaster risk management programs.

The key finding in Tonga was that:

“Almost half of all projects were assessed as completely gender-blind with no social or gender analysis or other measure of human vulnerabilities

and capacities, and no activities, indicators or outcomes designed to address sex, age or disability differentiated needs. Approximately, another quarter of all projects had limited or merely cosmetic reference to gender or social vulnerability. There is a reasonably strong likelihood that these projects may have failed to meet needs, or may have created or exacerbated social vulnerabilities”.

RESOURCES:

- UNDP Bangladesh (2016) Scope of Gender Responsive Adaptive Social Protection in Bangladesh: Policy, Institutional, Expenditure and Micro-Narrative Analysis Impact of Climate Change Finance in Agriculture on the Poor (2018)
- Ministry of Agricultural, Land Management and Cooperatives (MoALMC), United Nations Development Programme (UNDP) and National Disaster Risk Reduction Center (NDRC) Nepal
- Climate Financing & Risk Governance Assessment, (2016) Ministry of Finance and National Planning, Kingdom of Tonga, and UNDP

4.2 KEY LESSONS FOR A SUSTAINABLE CBT SYSTEM

Securing the benefits from implementing CBT will depend to a large extent on the way in which a country chooses to implement the system, as well as in the way it addresses the sort of operational challenges outlined in Section 0. A number of key lessons emerge from the experience of the case study countries.

As with any reform process that cuts across the whole of government, securing and maintaining political buy-in has been key to successful introduction and continuous implementation of CBT. Which national body/bodies takes leadership will depend on the country’s institutional set up and its political economy. As Table 10 shows, in case study countries the leadership role has usually been taken by the Ministry of Finance - which, given its typical role as custodian of budgeting and reporting processes, can be both politically and technically effective. This is further strengthened by the close partnership with CCPB as has been the case in Pakistan and the Philippines, where the respective CCPBs have provided technical leadership and quality assurance

in relation to climate change policy. In the case of Nepal, the CBT process has been initiated by the national planning body (National Planning Commission), which ensured high-level political visibility but at the same time, the later need for increased involvement of MOF underlined the general point of the latter institution’s key role. In Kenya, a collaboration between the CCPB and the MOF to commence the process has led to sustained growth in the climate finance architecture, now embedded in the policy and legal frameworks.

Political and technical leadership should be accompanied by active involvement of line ministries as agencies that will be implementing CBT. In the same vein, it is important to ensure the involvement of subnational agencies/governments, particularly where the climate change functions are devolved. This has an important added advantage of raising awareness and mobilizing action on climate change across the government. As mentioned earlier, in Nepal, where one of the government’s primary objective behind introducing CBT, was to demonstrate to all ministries the breadth and scale of existing climate change spending, emphasis was put on participation of line ministries in the process of designing the CBT procedure (Box 13). To ensure relevant sector ministries are accountable for monitoring and reporting on climate relevant activities, and not just paying lip service, it may be useful to incorporate CBT data as a key performance indicator of the institution

Continuous leadership and ownership by MOF⁴⁷ is necessary to ensure that CBT evolves together with developments and reforms in the PFM system. To ensure sustainability, CBT activities should be incorporated into the national budgeting system regulated by the MOF (e.g. included in annual budget call circulars giving budget instructions to line ministries). In Bangladesh, climate tagging was originally done by the Finance Division based on the analysis of line ministries’ planning templates. With the introduction of the new budget classification system and an integrated budget and accounting system in 2018, a new climate finance module has been embedded in the new system - adding a segment to capture data on budget allocation and expenditure against Bangladesh Climate Change Strategy and Action Plan. Under the evolved CBT

47 DBM in the case of Philippines

system, tagging will be done by line ministries with initial support of the Finance Division. In Indonesia, the CBT methodology was originally designed to work in the existing performance planning software, where line ministries assigned climate budget tags after planning⁴⁸. Since the introduction in 2017 of a new national integrated planning and budgeting system, line ministries perform tagging at the planning stage, which has to be completed before the system closes.

Ensuring appropriate institutional frameworks and allocation of responsibilities. This includes not only the division of responsibilities between the central ministries of finance and planning and the sectoral line ministries including the institution responsible for climate change policy, but also ensuring that CC is mainstreamed in the country's accountability framework. For example, ensuring that one of the parliamentary committees includes climate change as part of its mandate, and that the Budget Committee looks at Climate Change Finance as part of its mandate – and that there are parliamentary hearings on climate change finance. The existence of an institutional framework between State and non-State Accountability Actors to raise climate change policy and financing issues – including the possibility for them to play a role in climate change budget formulation and Monitoring and Evaluation.

CBT data must have credibility. Fundamental to credibility is the use of an effective, transparent and approved methodology covering all of the CBT steps – particularly identification of climate relevance, weighting of budgets and validation of the results. A formal CBT validation process is not currently being used by the majority of the case study countries, creating significant risks in the use and acceptance of data. For instance, in Nepal, where the recent large jump in climate relevant expenditure is due to an assumption on sub-national expenditure that would have benefitted from independent scrutiny. Purely technical validation by an organ of the climate change policy body is helpful but lacks the independence that can be achieved if validation is done by the Supreme Audit Institution or Non-State Actors.

Finally, the sustainability of CBT depends on whether the generated information is used for planning, budgeting and monitoring of the national climate policy. CBT will be most valuable, and more likely to be sustained, where CC expenditure reports are mainstreamed in the budget cycle and published as part of the budget reporting system; are used to inform parliamentary debate; and are published in climate expenditure reports available to the general public and Civil Society. In the Philippines, in government documents on climate finance, CBT is presented as part of longer-term plan to incorporate climate change throughout the budget cycle. Currently, the tagging information from line ministries is used to produce budget briefs to inform budget hearings, where the CCC is also present along the DBM and the national planning body. In Pakistan, MOP and MOF include climate budget analysis in the annual Pakistan Economic Survey, which guides MOF's budget preparation. Climate budget information is also incorporated in the budget circular and budget brief for the federal government. Using CBT data to show climate expenditure across all sectors at the planning and budget discussion can further the potential of CBT to strengthen coordination of climate change policies. It is also important to integrate the CBT system with the broader climate change monitoring and evaluation system – and the usefulness of CBT here will be highly related to the structure of the CBT classification, which should certainly distinguish between adaptation and mitigation, and ideally also between the more detailed themes of the NCCP and Action Plan.

48 I.e. line ministries submitted list of programmes and activities to the DG Budget, which classified expenditure items by functions and policy priorities, including climate mitigation; based on that climate tags were then reflected in the system by planning officers in line ministries (Annex 2). With the new system (KRISHNA), line ministries tag at the planning stage.



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GLOSSARY

Climate budget tagging (CBT) - a tool for identifying, classifying, weighting and marking climate-relevant expenditures in a government's budget system, enabling the estimation, monitoring and tracking of those expenditures. It includes the process of attaching a climate budget marker, such as a tag or account code, to budget lines or groups of budget lines.

Climate change adaptation – adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. (Source: UNFCCC)

Climate change mitigation - a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples include using fossil fuels more efficiently for industrial processes or electricity generation, switching to solar energy or wind power, improving the insulation of buildings, and expanding forests and other “sinks” to remove greater amounts of carbon dioxide from the atmosphere. (Source: UNFCCC)

Climate finance - local, national or transnational financing—drawn from public, private and alternative sources of financing—that seeks to support mitigation and adaptation actions that will address climate change. (Source: UNFCCC)

Climate relevant expenditure (also known as climate change expenditure) - public expenditures on activities that are assumed to be relevant to climate change based on either the stated objective (of advancing climate change adaptation and/or mitigation, and supporting activities such as awareness raising, training, policy and capacity building); or on the climate change benefits arising from the activity. The precise scope of what qualifies as climate relevant will be defined by the national climate change policy framework. To reflect in a consistent manner the various degrees, to which an expenditure is relevant (i.e. contributes) to climate action, countries develop relevance scales with corresponding weights (see: “weighting”).

Weighting – the process of a) assigning to an activity/ programme/ objective a measure of the relative degree of its climate change relevance (eg by clustering activities into groups of similar relevance); and b) applying a percentage weighting to the budget and expenditure on that activity/ programme/ objective when calculating the country's total climate relevant expenditure. Two main approaches have been used by countries – the objectives-based approach and the benefits-based approach. Typically the former is simpler, while the latter is more complex and time-consuming, but potentially more robust.

Climate actions/ climate change actions – policies, programmes and activities with explicit objectives on climate change adaptation and/or mitigation. Climate change actions are typically defined in a relevant national policy framework, such as a national climate change plan.

Climate Public Expenditure and Institutional Review (CPEIR) - a qualitative and quantitative analysis of a country's public expenditures and how they relate to climate change, its climate change plans and policies, institutional framework and public finance architecture. The definition of climate change related expenditures is tailored for each country based on a consultative process that takes into account its national priorities.

Climate Change Financing Framework (CCFF)/ Climate Fiscal Framework (CFF) – a key enabling framework to enhance national ownership of climate finance, and to ensure that internal and external financial resources are used economically, efficiently, and effectively to address the issue of climate change. The exact scope – and terminology - of a CCFF/ CFF varies from country to country, but all will typically include proposals for integration of climate change in planning and budgeting systems, and the systematic tracking and public reporting of climate spending – providing the core framework for CBT.

Green bonds – any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible projects (so-called Green Projects), and which are aligned with the four core components of the Green Bond Principles – covering use of proceeds; process for project evaluation and selection; management of proceeds; and reporting. (Source: International Capital Market Association)⁴⁹.

49 International Capital Market Association. 2018. Green Bond Principles <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>



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ANNEXES

ANNEX 1 OVERVIEW OF COUNTRIES CLIMATE POLICY FRAMEWORK AND INTERNATIONAL COMMITMENTS

Country	Main national policy & implementation framework	UNFCCC commitments - Nationally Determined Contributions (NDC)
Bangladesh	<p>National policy: The Perspective Plan (2010-2021) commits to low carbon emissions without compromising the need for accelerated economic growth and poverty reduction, and articulates the major environmental, climate change and disaster risk reduction strategies. The Climate Change Trust Fund Act 2010 (CCTFA) regulates the CCTF operations so that benefits accruing from any project financed by the CCTF reach the intended beneficiaries, enhancing their adaptability and combating long term risks. The 7th Five Year Plan (2016-2020) proposes several activities for Climate Change Adaptation (CCA), including promoting a whole-of government approach, enhancing knowledge, capacity and coordination, prioritizing programmes and projects, enhancing CCA financing, and integrating gender sensitivity in project design. Bangladesh Country Investment Plan for Environment Forestry and Climate Change 2016-2021, launched in 2017, provides a strategic framework for planning and coordination of national and international investments for environment, forestry and climate change sectors.</p> <p>Implementation plan: The 2008 Bangladesh Climate Change Strategy and Action Plan (BCCSAP), revised in 2009, has six pillars: (i) access to basic services to the poor and vulnerable groups, (ii) comprehensive disaster management, (iii) maintenance of existing infrastructure, such as river and coastal embankment, cyclone shelters and urban drainage systems (iv) research and knowledge management, (v) mitigation and low carbon development, and (vi) capacity building and institutional strengthening. A total of 44 programmes have been identified.</p>	<p>2016 NDC targets include unconditionally reducing GHG emissions by 5% by 2030 from the high emission sectors such as power, transport and industry. This can be increased to 15% with adequate international assistance (finance, technical help and capacity building).</p>
Ghana	<p>National policy: The National Climate Change Policy (NCCP), launched in 2014, aims to build a climate-resilient and climate-compatible economy while achieving sustainable development through equitable low-carbon economic growth. The NCCP has four focus areas within the social development policy area: human health, access to water and sanitation, gender issues, and migration.</p> <p>Implementation plan: The NCCP has a supporting master plan. The implementation is estimated to cost approximately USD 9.3 billion over the period 2014-2020; however, the nature and scale of spending is unclear. The master plan highlights the leading role of the Ministry of Local Government and Rural Development and the Local Government Service in implementing the national climate policy, with a significant share of resources being allocated to these institutions.</p>	<p>2015 NDC targets include lowering its GHG emissions by 15% by 2030 with domestic resources and by an additional 30 percent emission reduction if external support is available (finance, technology transfer, capacity building). The cost is estimated at USD 22.6 billion, of which USD 6.3 billion is expected to be mobilized from domestic sources and the USD 16.3 billion from international support.</p>
Indonesia	<p>The 2011 National Action Plan on Climate Change Mitigation (RAN-GRK) targets reduction of GHG by 29% with domestic funding; followed by a Presidential Regulation mandating local governments to develop local action plans to support RAN-GRK. In 2014 National Action Plan for Climate Change Adaptation (RAN-API) was adopted. The 2015 Green Growth Roadmap presents the necessary conditions for mainstreaming green growth into national planning.</p>	<p>2016 NDC targets: To reduce GHG by 29% using domestic funding and up to 41% with international support by 2020.</p>
Kenya	<p>National policy: 2010 National Climate Change Response Strategy (NCCRS) was developed to further understand the risks and required responses and guide low carbon path; draft Climate Finance Policy which provides legal and institutional framework to guide and promote: climate finance flows, tracking of climate finance, private sector participation, technology transfer, and equitable benefit sharing from climate change interventions in the country</p> <p>Implementation plan: the National Climate Change Action Plan (NCCAP 2013-2017)</p>	<p>2015 NDC targets: To reduce GHG emissions by 30% by 2030 and mainstream climate change adaptation into Medium Term Plans.</p>

Country	Main national policy & implementation framework	UNFCCC commitments - Nationally Determined Contributions (NDC)
<p>Nepal</p>	<p>National policy: Nepal's 2011 Climate Change Policy (CCP) reiterates its global commitments made in the 2010 National Adaptation Programme of Action (NAPA). The policy articulates the national vision for climate-friendly, socio-economic development, and stipulates that 80% of climate change expenditure is to be implemented at the local level. Building on the lessons learnt from NAPA - and the local equivalents, LAPA - Nepal is currently formulating its National Adaptation Plan (NAP), which takes a longer-term approach to climate change adaptation. NAP-Ag has been supporting refining tagging method in agriculture sector.</p> <p>Implementation plan: There is currently no implementation plan for CCP; it is under development.</p>	<p>2016 NDC targets include achieving 80% electrification by 2050 through renewable energy; reducing fossil fuels dependency by 50%; maintaining 40% country's area under forest coverage.</p>
<p>Pakistan</p>	<p>National policy: The National Climate Change Policy (NCCP), launched in 2013, identifies adaptation as key policy response to the impacts of climate change, while incorporating mitigation actions. The 2014 Provincial Environmental Protection Act mandated provinces to develop own climate change policies, and set up appropriate departments and units. The 2017 Climate Change Act 2017 set up (1) Climate Change Council chaired by the Prime Minister, (2) Climate Change Authority, an advisory body of Climate Change and Environment Ministers, to monitor policies in development sectors; and (3) Pakistan Climate Change fund to mobilise resources for mitigation and adaptation.</p> <p>Implementation plan: The NCCP was followed by 2013 Implementation Framework, which outlines priority actions for climate change adaptation for individual sectors over the next 20 years.</p>	<p>2016 NDC targets: To reduce Pakistan's 2030 GHG emissions by up to 20%, subject to availability of international funding support to help meet the estimated cost of USD 40 billion at current prices.</p>
<p>Philippines</p>	<p>National policy: The 2009 Climate Change Act (CCA) (amended in 2012) established (1) the Cabinet Cluster on Climate Change (CCCC) for coordination of relevant government agencies, (2) the Climate Change Commission, which serves at the secretariat to CCCC, to lead policy development and coordinate, monitor and evaluate climate response, and (3) Peoples' Survival Fund to allocate national budget for local communities and local governments to finance climate change adaptation programs and projects. The CCA requires LGUs to develop Local Climate Change Action Plans (which can be integrated into other local development plans); few have been developed as of CPEIR 2013. The 2010 National Framework Strategy on Climate Change outlines the roadmap for addressing climate change; NFSCC identifies mitigation as a function of adaptation.</p> <p>The Climate Change Act mandates that measures and policies on climate change be integrated into the government's planning and decision-making activities.</p> <p>Implementation plan: The 2011 National Climate Change Action Plan (NCCAP) was developed by CCC and is the country's policy roadmap on climate change adaptation and mitigation until 2028. It outlines government actions in the short, medium and long term, and seven thematic areas: food security, water security, ecological and environmental stability, human security, climate smart industries and services, sustainable energy, and knowledge and capacity development.</p>	<p>2015 INDC targets include reduction of GHG emissions from energy, transport, waste, forestry, and industry sectors by 70% by 2030. Full implementation of the Philippines' INDC requires support in the form of adequate, predictable and sustainable financing.</p>

ANNEX 2 OVERVIEW OF CBT DESIGN AND IMPLEMENTATION IN CASE STUDY COUNTRIES



From 2018 a 4 digit climate change budget code segment, linked to “projectised” activities, has been added to the chart of accounts to enable routine budget analysis of government expenditure across the 6 themes and 44 programmes of the Bangladesh Climate Change Strategic Action Plan (BCCSAP).

HOW ARE CC ACTIVITIES DEFINED?

- Following the OECD “Rio Markers”, the plans, policies and strategies were reviewed to reflect existing national policy framework.
- Resulting in 46 “climate relevance criteria” that include (a) ‘44 programmes identified in the BCCSAP’ under 6 thematic areas, (b) a criteria for ‘Targeted Climate Projects/Programme’ and a (c) criteria to capture ‘non-climate finance’;
- Climate relevance for Ministry Operating Budget (General, Support Activities, Special Activities, and LG Transfer) has been established on the basis of their ‘Allocation of Business’, portfolio of projects and programmes, and contribution to climate change adaptation and mitigation.

HOW ARE CC ACTIVITIES CLASSIFIED?

Into 6 thematic areas (level 1) and their 44 programmes (level 2) as set out in the national climate change strategy and action plan 2009 (BCCSAP). Note that activities are not explicitly separated into adaptation and mitigation, but one of the 6 themes is “Mitigation and Low Carbon Development”

HOW ARE CC ACTIVITIES WEIGHTED?

- Formerly (and including 2018/19) weighting has been based on a table set out in Appendix 2 of Climate Fiscal Framework 2014 which assigned % weights to types of projects and programmes. Weights were at 5% or 10% tiers, in turn grouped into 5 clusters - a) Strongly Relevant (81-100%), b) Significantly Relevant (61-80%), c) Moderately Relevant (41-60%), d) Somewhat Relevant (21-40%), e) Implicitly Relevant (6-20%), and f) Not Relevant (0-5%).
- All climate targeted projects and programmes are considered 100% climate relevant
- A new weighting methodology is now planned for implementation whereby each of the 44 programmes under BCCASP has been assigned a weight using statistical methods and based mainly on the underlying actions for each programme per BCCSAP.

BY WHAT DIMENSIONS CAN CC EXPENDITURE BE ANALYSED?

4 digit code enables analysis by BCCSAP six thematic areas and 44 programmes.

AT WHAT LEVEL ARE TAGS APPLIED?

Projectised activity - the CC budget code is a derived segment attached by line ministry budget officers when setting up projects/ activities in iBAS++ (projects/ activities are the lowest level of the operational/ programmatic segment of the budget code).

IS CBT INTEGRATED INTO BUDGET CODE?

A new climate finance module derived from climate finance tracking methodology has been embedded in iBAS++. As well as the 56 digit/ 9 segment Budget and Accounting Classification System (BACS) code, iBAS++ contains an additional derived segment of 4-digit code to capture data on budget allocation and expenditure against Bangladesh Climate Change Strategic Action Plan (BCCSAP) thematic areas and programmes.

IS CBT INTEGRATED WITH FMIS?

Yes, by means of an additional “derived” segment (see above)

WHO DOES THE TAGGING?

- Before iBAS++: Tagging done by the Finance Division based on the analysis of the line ministries’ planning templates.
- After iBAS++: Line ministries, with initial support of the Finance Division.

IS CC EXPENDITURE INCLUDED IN STANDARD BUDGET DOCUMENTS AND FINANCIAL REPORTING?

Starting with Budget 2018/19 the budget call circular has included a requirement for all Line Ministries to include a narrative report in the core annual budget documents - Ministry Medium Term Budget Frameworks (MTBF) - on the impact of each of their medium term objectives on climate change, poverty reduction and women development. And also to state as a single, unanalysed figure for each year, the total climate relevant amount included in the LM budget for each of the next 3 years (same requirement for gender and poverty themes). Figures for climate change for coming budget year are then elaborated in annual climate budget report - see below.

WHAT ADDITIONAL REPORTS ARE PRODUCED?

Annual climate budget report (climate change relevant allocations of 20 line ministries/divisions in relation to their total budget allocation; and by six thematic areas).

(The budget report 2018-19 was prepared using the new methodology and module.)



Climate budget tagging refers to the identification by the responsible unit in MOF of the relevant budget code segments for (1) policy objectives (2) MDA operations/ activities. Budget codes for policy objectives are based on the current medium-term national policy framework.

HOW ARE CC ACTIVITIES DEFINED?

- Relevant policy objectives are identified in the COA, which is based on the national climate change policy; currently: the 2018 budget and National Medium term Policy framework as developed by the National Development Planning Commission (NDPC).
- Relevant activities are identified by key word search, for which line ministries use a list of key terminology (grouped by policy themes) that has been developed by NRECC

HOW ARE CC ACTIVITIES CLASSIFIED?

By relevance

HOW ARE CC ACTIVITIES WEIGHTED?

Relevance scale from 0 to 1 (1 for highly relevant). Highly relevance score - 1 for either mitigation or adaptation. Medium relevance score - a maximum 0.5 split between adaptation and mitigation. Low relevance score - 0.2 split between adaptation and mitigation.

BY WHAT DIMENSIONS CAN CC EXPENDITURE BE ANALYSED?

- Expenditure by: climate change policy objectives; relevant MDA operations/activities (MDA-specific or generic); funding sources of those.
- Planned: adaptation / mitigation

AT WHAT LEVEL ARE TAGS APPLIED?

Unusually the tag is applied to two separate COA segments - a) policy objectives and b) operations/activities

IS CBT INTEGRATED INTO BUDGET CODE?

No

IS CBT INTEGRATED WITH FMIS?

No. Climatronic is an Excel-based tool that extracts data from IFMIS budget module and allows users to manipulate the extracted data to model scenarios and produce analyses.

IS CBT USED TO IDENTIFY CLIMATE CHANGE EXPENDITURE AT THE SUBNATIONAL LEVEL ?

No

WHO DOES THE TAGGING?

Natural Resources, Environment and Climate Change unit in the Ministry of Finance

WHO VALIDATES THE TAGGING?

Currently, there is no validation mechanism.

IS CC EXPENDITURE INCLUDED IN STANDARD BUDGET DOCUMENTS AND FINANCIAL REPORTING?

Climate budget information included in the government's annual financial report

WHAT ADDITIONAL REPORTS ARE PRODUCED?

The data is also to be published on the Climate Data Hub website managed by the Environmental Protection Agency (the website is not yet populated by data)



Two of the seven thematic tags in the GOI's national budgeting system are allocated to CC (one for mitigation, one - recently introduced - for adaptation). Tags assigned to budget outputs in the computerized system for preparing budget proposals. No weighing system.

HOW ARE CC ACTIVITIES DEFINED?

- Mitigation activities, based on Presidential Regulation 61/2011 and RAN-GRK (National Action Plan to Reduce GHG Emissions), and national and international discourse, defined as: contributing to GHG emission reduction, GHG emissions absorption, carbon stock stabilization. Adaptation defined based on RAN-API.

HOW ARE CC ACTIVITIES CLASSIFIED?

Activities with (a) direct impacts and (b) indirect impact on GHG emission reductions, carbon stock stabilization/conservation and increase the capacity to absorb GHG emissions.

HOW ARE CC ACTIVITIES WEIGHTED?

Scoring methodology to be based on costs and co-benefits or other possible indicators to prioritize future budget allocation.

BY WHAT DIMENSIONS CAN CC EXPENDITURE BE ANALYSED?

Mitigation and (from 2018/19) adaptation.

AT WHAT LEVEL ARE TAGS APPLIED?

Output

IS CBT INTEGRATED INTO BUDGET CODE?

Yes. There are currently (2018/19) seven thematic/ cross-cutting tags in the GOI's budget system (Krishna), including one for adaptation and one for mitigation.

IS CBT INTEGRATED WITH FMIS?

Yes

IS CBT USED TO IDENTIFY CLIMATE CHANGE EXPENDITURE AT THE SUBNATIONAL LEVEL ?

No

WHO DOES THE TAGGING?

Originally, under ADIK, line ministries submitted list of programmes and activities to the DG Budget, which classified expenditure items based on functions/sub-functions and national/focused priorities. Tags then applied by Planning Bureaus of each ministry. Since 2017, as ADIK was replaced by KRISNA, line ministries tag at planning stage.

WHO VALIDATES THE TAGGING?

Based on outputs tagged, MOF generates budget ceiling and budget realization data on mitigation. Mitigation budget review and verification conducted by the technical team of each ministry and communicated to the Directorate General of Climate Change Control in MoEF.

IS CC EXPENDITURE INCLUDED IN STANDARD BUDGET DOCUMENTS AND FINANCIAL REPORTING?

No (Theme codes were originally not integrated into budget execution document. 2014 LESS report recommended integrating thematic codes in the payment instruction form.)

WHAT ADDITIONAL REPORTS ARE PRODUCED?

Right now reporting on CC activities is not done formally but in a non-financial letter from line ministries to MOEF, which lists activities and their impact on GHG emission.



The original 7 segments COA were expanded by an additional segment called “analytical” segment to capture cross-cutting issues, such as climate change.

The 8th segments is made up of 4 digits: a “cause” component (two digits), a division component (one digit), and an area component (one digit).

Example: Climate change is coded under 01-00 at cause level using two digit space. Mitigation and adaptation are then coded as 0110 and 0120 at division level using the three digit space. Finally, principle and significant are then coded for each mitigation and adaptation as 0111/0112 and 0121/0122 at area level using the full 4 digit.

HOW ARE CC ACTIVITIES DEFINED?

For an activity to qualify to be categorized as climate relevant expenditure, funds incurred or invested must:

- a. address one or all the climate change risk mitigation or proofing category e.g. adaptation, mitigation or enabling environment (climate awareness, training, policy and capacity building) as per the definition given by OECD
- b. more than 25% of the funding must go to one or all the above climate risk mitigation or proofing category
- c. actual incremental or additional financing need not be demonstrated but there must be certainty that funds have been used for a) above.
- d. outcome/output must be increased resilience, reduced emissions or more awareness on climate change
- e. technical and finance officer must agree on the above
- f. each sector should have some guidelines on how to arrive at CRE and CF

HOW ARE CC ACTIVITIES CLASSIFIED?

By relevance

HOW ARE CC ACTIVITIES WEIGHTED?

Principle activity if >60%; significant if 40-60%; <40% insignificant

BY WHAT DIMENSIONS CAN CC EXPENDITURE BE ANALYSED?

Adaptation/mitigation or climate-relevant; related issues; location

AT WHAT LEVEL ARE TAGS APPLIED?

Programme and activity

IS CBT INTEGRATED INTO BUDGET CODE?

Yes

IS CBT INTEGRATED WITH FMIS?

Yes

IS CC EXPENDITURE INCLUDED IN STANDARD BUDGET DOCUMENTS AND FINANCIAL REPORTING?

Budget submitted to the parliament: 2018-19 Budget Policy Statement technical annex



Climate tag is manually inputted in the budget database for each relevant programme; along with other themes.

HOW ARE CC ACTIVITIES DEFINED?

CPEIR identified 83 climate-relevant programmes across relevant ministries. During development process, CFWG defined 11 categories of programmes covering the range of relevant sectors and types of activities (service delivery and policy development).

HOW ARE CC ACTIVITIES CLASSIFIED?

Currently, climate change expenditures are not classified

HOW ARE CC ACTIVITIES WEIGHTED?

Following the existing gender-sensitive budgeting the relevance score is assigned at the programme-level based on the share of the sum of CC activity budgets, (a) highly relevant if more than 60%(b) relevant if 20-60% (c) neutral if less than 20%.

BY WHAT DIMENSIONS CAN CC EXPENDITURE BE ANALYSED?

Relevance (highly relevant, relevant, neutral)

AT WHAT LEVEL ARE TAGS APPLIED?

Programme

IS CBT INTEGRATED INTO BUDGET CODE?

No

IS CBT USED TO IDENTIFY CLIMATE CHANGE EXPENDITURE AT THE SUBNATIONAL LEVEL ?

No. Transfers to subnational level are presented as a lump sum

WHO DOES THE TAGGING?

Ministry planning officers, in consultation with department and sections, assign tags manually in the computerised system for line ministry budget preparation (LMBIS), where two columns are added in the budget sheet at activity level: (1) whether the activity is climate relevant; (2) activity budget. All activity budgets are summed and based on the share against the total programme budget, relevance score is assigned to the programme. In the budget sheet of budget management information system (BMIS), one column is added for the climate code (according to its relevance score)

WHO VALIDATES THE TAGGING?

Currently, there is no validation mechanism

IS CC EXPENDITURE INCLUDED IN STANDARD BUDGET DOCUMENTS AND FINANCIAL REPORTING?

MOF includes climate budget in Consolidated Financial Statements (by ministry/function/district), Economic Survey Report, and as annex in the Red Book.

WHAT ADDITIONAL REPORTS ARE PRODUCED?

Citizens Climate Budget (published by local NGO)



Climate tag is as an element enabled in a module of the financial management software that allows additional mapping beyond existing COA elements. Climate tag is attached to the characteristics of one of the segments of the account code (cost centre, which are mostly projects).

HOW ARE CC ACTIVITIES DEFINED?

2015 CPEIR identified a list of activities under various sectors

HOW ARE CC ACTIVITIES CLASSIFIED?

(a) adaptation, (b) mitigation, (c) supporting areas (not sector-specific; e.g. capacity building, awareness raising, international cooperation); federal level only: (d) joint adaptation mitigation

HOW ARE CC ACTIVITIES WEIGHTED?

By levels of contribution to adaptation or mitigation: (a) high (>75%): clear primary objective; (b) medium (50-74%): either secondary objectives or programmes with a range of not-easily separated activities, some of which are directly relevant; (c) low (25-49%) indirect contributions; (d) marginal (<25%)

BY WHAT DIMENSIONS CAN CC EXPENDITURE BE ANALYSED?

Adaptation/mitigation; local/foreign funding; levels of contribution/relevance

AT WHAT LEVEL ARE TAGS APPLIED?

Entity (cost centre)

IS CBT INTEGRATED INTO BUDGET CODE?

No. Climate change added as one of the elements in a module of SAP used for multi-year planning, which allows additional mappings beyond the five elements of COA. The tag is thus attached to the characteristics of the COA segment (here: cost centre). For updating the tags: the module automatically extracts selected information from IFMIS, including new cost centres.

IS CBT INTEGRATED WITH FMIS?

No

IS CBT USED TO IDENTIFY CLIMATE CHANGE EXPENDITURE AT THE SUBNATIONAL LEVEL ?

Yes

WHO DOES THE TAGGING?

MOCC regularly reviews the list of newly created cost centres and notifies CGA with the list identified as relevant to climate change. CGA inputs climate change attributes the IFMIS. This is an interim arrangement. The plan is for MOCC to apply the tags once its capacity is strengthened on using IFMIS.

WHO VALIDATES THE TAGGING?

A technical committee in MOCC was created to periodically review the accuracy of tagging.

IS CC EXPENDITURE INCLUDED IN STANDARD BUDGET DOCUMENTS AND FINANCIAL REPORTING?

MOF presents a summary of information in its annual budget documents detailing reforms related to climate change finance. Pakistan Economic Survey, which informs government planning and budgeting, includes a chapter on climate change.

WHAT ADDITIONAL REPORTS ARE PRODUCED?

MOF's recommendation for MOCC to produce monthly or quarterly reports to the Climate Change Authority – status unclear



THE PHILIPPINES

A typology of 247 activities structured under the priorities and sub-priorities of the NCCAP is used to identify climate relevant expenditure. Expenditure is not “weighted” - 100% of activities deemed climate relevant is booked as climate expenditure, plus all expenditure on Programs, Activities and Projects (PAPs) where one of the PAP’s main objectives explicitly addresses climate change. The 247 activity typology is captured when ministries input the annual budget through a 6 character budget code, but there is no automated link to IFMIS accounting system.

HOW ARE CC ACTIVITIES DEFINED?

General definition and guidelines are specified in the Joint Memorandum Circular, based on JMDB

HOW ARE CC ACTIVITIES CLASSIFIED?

DBM/CCC Joint Memorandum Circular’s climate change typology lists activities grouped into strategic priorities based on NCCAP (and under those, into sectors and instruments/ sub-sectors); divided into adaptation / mitigation.

CCC updates activity-level typology annually based on submissions of proposed revisions/updates from line ministries.

The coding of the typology is consistent with UACS.

Note from 2015 published dataset: “Most PAPs were coded with a single CC typology based on the primary CC objective. In a few instances, NGAs included multiple typology codes. These PAPs will be revised in conjunction with the 2016 for forward compatibility.” Later years have not been published as datasets, although the details are basically the same as the tables in the national budget except dataset includes a) breakdown of agencies within departments; b) proportion of agency’s total budget on PAPs tagged as CC; c) proportion of underlying budget of tagged PAPs that is CC relevant [check how this is done]; d) split by agency of CC exp by strategic priority.

HOW ARE CC ACTIVITIES WEIGHTED?

If at least one objective/outcome is an adaptation or mitigation measure, based on the JMC, the entire programme or project budget is tagged. If only specific components are adaptation or mitigation measures, only the budgets of those specific components are tagged.

BY WHAT DIMENSIONS CAN CC EXPENDITURE BE ANALYSED?

Adaptation/mitigation NCCAP priority, sector, instrument/ sub-sector and activity

AT WHAT LEVEL ARE TAGS APPLIED?

Projects/activities/programmes

IS CBT INTEGRATED INTO BUDGET CODE?

Yes

IS CBT USED TO IDENTIFY CLIMATE CHANGE EXPENDITURE AT THE SUBNATIONAL LEVEL ?

Yes

WHO DOES THE TAGGING?

(1) Tagging during budget preparation: Using the Joint Memorandum Circular (JMC) as reference, line ministries tag by filling in the form (BP form BP 201F/DBM form 712) in OSBP system, identifying (a) P/A/Ps that explicitly address adaptation, mitigation, or both, (b) climate change components of P/A/Ps with corresponding component code (activity-level typology); each component budget is disaggregated into personnel services, maintenance and other operating services, financial expenses, and capital outlays.

In addition, they submit a quality review and assurance (QAR) form to the Climate Change Commission (CCC) via e-mail, to list objectives and coverage of the tagged P/A/Ps, and links with adaptation/mitigation. Climate Budget Briefs are developed for use during the technical budget hearings, joined by CCC.

Tagging (2) once the National Expenditure Plan (NEP) is proposed to Congress, and (3) once the General Appropriations Act (GAA) is approved: line ministries retag and manually submit the forms to DBM to reflect any changes in NEP and GAA.

Using the Joint Memorandum Circular (JMC) as reference, line ministries tag by filling in the form (BP form BP 201F/DBM form 712) in OSBP system, identifying (a) P/A/Ps that explicitly address adaptation, mitigation, or both, (b) climate change components of P/A/Ps with corresponding component code (activity-level typology); each component budget is disaggregated into personnel services, maintenance and other operating services, financial expenses, and capital outlays.

WHO VALIDATES THE TAGGING?

Climate Change Commission (based on Quality Assurance Review forms submitted by line ministries)

IS CC EXPENDITURE INCLUDED IN STANDARD BUDGET DOCUMENTS AND FINANCIAL REPORTING?

The approved climate change expenditures are published in the government’s Open Data portal, the President’s Budget Message and the Technical Notes reported to the Congress.

Climate expenditure information is included in technical notes on the proposed budget. In 2018, it was reported as part of the chapter on development priorities, under the section “Ensuring Ecological Integrity, Clean and Healthy Environment”.

Climate change is mentioned in the “People’s Budget” for 2016, published by DBM.

ANNEX 3 OPTIONS FOR CBT DESIGN BASED ON ANALYSIS OF PFM FEATURES IN PAKISTAN

In Pakistan, the Ministry of Finance (MOF) conducted the following analysis in 2015 to inform the design of the CBT. Based on the parameters set out by some of the key features of the PFM system: (1) the Chart of Accounts structure and authorisations to update its elements; (2) Available systems to show additional mappings beyond COA elements; and (3) IT system coverage and its data limitations). Based on these, four options were drawn on how to attach the climate tag/code to the existing account code (Table A). Option 3 was selected.

1. THE CHART OF ACCOUNTS' ELEMENTS AND AUTHORISATIONS TO UPDATE THEM

Pakistan's COA has five elements:

- (1) **Entity** (organisational setup) - authorisations given to users of both the budget and expenditure servers. At the time of opening of new entity structure (e.g. a new cost-centre⁵⁰), it is mapped with function and fund elements.
- (2) **Function** (COFOG) - the COFOG based master data was uploaded in 2002 with the approval of the office of the CGA and the Auditor General.
- (3) **Object** (economic) - new object element can only be opened with the approval of the CGA at the central level.
- (4) **Fund** (votes) - the users of budget servers update fund element at the time of budget preparation.
- (5) **Programme** (projects) – this element while available in the IFMIS is not populated with any data. In the IFMIS, the entity element is mapped (one to one) with function and fund elements.

Users at the district level are not authorised to change or update budget classification mapping.

It was decided that the climate tag was to be attached to the entity element, which in the current setting is the most suitable level for identifying climate change objectives.

2. AVAILABLE SYSTEMS FOR ADDITIONAL MAPPINGS BEYOND COA ELEMENTS

The **pro-poor** expenditure tagging was added in the IFMIS as a “mapping” that was not part of the standard COA. The office of the CGA mapped specific pro-poor sectors with function element of the COA as a one-time exercise. It **does not include percentage allocations**. Whenever a new entity element (e.g. a cost-centre) is opened in the IFMIS the people who have authorisations (in budget server or expenditure server) also assign the related function code.

The MOF and the CGA defined additional mappings in a separate module of SAP called ‘Business, Planning and Consolidation’ (BPC). In addition to the 5 elements of COA, this system allows the following elements: (1) Executive Authority; (2) Principal Accounting Officer; (3) Log-frame (Goal, Outcomes, Outputs – and office responsible).

Each cost-centre is mapped with the above three structures and there is also a requirement to allow percentage allocations - i.e. one cost-centre can cut across two or more outputs. The mappings would be initially updated by the MOF for at least a year, and then gradually decentralised to line Ministries when there is enough capacity.

Out of these two models, introducing the climate tag as an additional mapping in the BPC module of SAP was better suited, given that the pro-poor expenditure tagging did not allow for assigning a weight.

50 A cost-centre is of two types; (i) controlling cost-centre – this is a high level cost-centre and is usually associated with a drawing and disbursing officer, and (ii) a spending cost-centre which falls under the controlling cost-centre. Budget is prepared at controlling cost-centres and expenditure takes place at the level of spending cost-centre. There are a number of cost-centres that both controlling as well as spending. A public investment project is also defined as a cost-centre in the current implementation of IFMIS.

3. IFMIS DATA AND ITS LIMITATION

IFMIS is installed at Federal Government, four Provincial Governments and three Special Areas, and Districts (in district treasuries, and accounting offices). At the level of Federal and Provincial Governments, two-server architecture is followed. This means that there is a separate server for budget, and separate for expenditure. The former is placed in the Federal Ministry and provincial Departments of Finance, and the latter in the Accountant General's offices.

In the Federal Government, 50-60% of the development budget is shown as a single-line in IFMIS. The main reason for single-line information is that the projects are executed by autonomous or semi-autonomous organisations⁵¹ and the Government provides them with single-line grants.

Similarly, at the provincial level, a sizeable chunk of projects is shown as single-line either as a 'block allocation' or as an 'umbrella project' (e.g. a single project that may undertake infrastructure building in a number of similar types of sectors).

This limitation is likely to have significant impact on climate change coding. CPEIR study has taken the approach of gathering the budget and expenditure information from outside the IFMIS system.

There are two ways to overcome this limitation; (i) activate Project Systems module of SAP that requires update of all projects either before or in parallel to detailed climate change coding exercise, or (ii) maintain a separate out of the system coding structure.

Option 3, which was chosen in the end, addressed this limitation as the BPC module allowed for (a) including all projects even if the budget in SAP is a single line; and (b) assigning percentage to the expenditure tagged.

⁵¹ These include Water and Power Development Authority (under Ministry of Water and Power), Higher Education Commission (under Ministry of Federal Education and Professional Training), Pakistan Atomic Energy Commission (under Cabinet Secretariat), Pakistan Railways (under Ministry of Railways), Public Works Department (under Ministry of Housing and Works), National Highway Authority (under Ministry of Communications).

TABLE A. OPTIONS FOR CBT DESIGN (IN TERMS OF THE WAYS TO ATTACH THE CLIMATE TAG/CODE TO THE EXISTING ACCOUNT CODE)

Option	Description	Advantages	Disadvantages
(1) Use the function classification mapping:	<p>The GFSM does not contain 'climate change' as an element / code. The closest code is 'environment protection' but its sub-elements do not fulfil the requirements of climate change coding. In this instance, there are two options:</p> <ol style="list-style-type: none"> 1. Create a new function code by the name of 'climate change', with sub-codes: mitigation and adaptation. 2. Change the name of 'Environment Protection' function to 'Environment Protection and Climate Change' and include mitigation and adaptation as minor and detail functions. 	The easiest to implement.	An update of existing mapping of entity element (e.g. projects / cost-centres) would be required. E.g. a water dam is currently mapped with the function: Economic Affairs -> Agriculture, Forestry, Fishing and Hunting. Since there is currently one-to-one mapping between entity and function, changing mapping of a water dam can create resistance from the Government and the IMF.
(2) Create a new classification element in IFMIS	A new 'climate change' element can be created in the IFMIS. Every line item (entity element) will be mapped. A user with right authorisation in IFMIS will have to map the following elements at the time of opening of a new cost-centre: Cost Centre ► Function ► Fund ► Climate Change	This option is likely to receive less resistance from the Government, as it would not impact the standard COA.	<ul style="list-style-type: none"> • This option needs analysis of whether this can be done in the current version of SAP, which does not use the new general ledger feature that allows cross groupings and multi-dimensional reporting. • It may add some complexity for the end user at the time of opening up a new cost-centre.
(3) Create a climate change coding structure in Business Planning and Consolidation (BPC) module of SAP	<p>Under this option the climate change coding structure is developed outside the main SAP system in an attached module called BPC. Each cost-centre is mapped against three areas;</p> <p>(i) Executive Authority, (ii) Principal Accounting Officer, and (iii) Log-frame sub-divided into; goal, outcomes, outputs. The system can be modified to allow fourth type of mapping: (iv) Climate change sub-divided into mitigation and adaptation, and local and foreign funding.</p>	<p>This option is likely to receive less resistance from the Government as it would not impact the main COA and the mapping will also not be part of the main SAP⁵² system. The BPC system can be configured to allow two additional required features:</p> <ol style="list-style-type: none"> 1. All the projects even though the budget in SAP is single-line, 2. Percentage contribution. 	<ul style="list-style-type: none"> • Detailed projects lists will require active involvement of Planning Commission, and provincial Planning & Development departments – who have not used IFMIS and may refuse to undertake this responsibility, • In the current configuration of BPC, the estimation of the percentage contribution requires a lot of technical expertise, • Initial understanding is that the Ministry of Finance will maintain the master data while over the course of months, the responsibility will be devolved down to the line Ministries. This option needs further thinking and understanding of capacity at the level of line Ministries.
(4) Maintain Climate Change coding out of the IFMIS and BPC systems	Under this option, a separate mapping table can be maintained outside the main IFMIS/BPC system. The separate mapping can be created in a database, which can be populated by data from IFMIS on periodic basis.		<ul style="list-style-type: none"> • Expertise will be required at a central location to maintain and update mappings. Since hundreds of new cost-centres are opened up each year in different IFMIS servers, it would eventually become unmanageable to maintain and update this information on regular basis, • Information can be challenged by the MOF and MOP of who might not trust the information produced outside the main IFMIS system.

52 Main SAP system means the Transaction Processing System. BPC while part of SAP is a planning and consolidation software and runs over a business warehouse – or an Analytical Processing System.

ANNEX 4 EXAMPLES OF APPROACHES TO CAPTURING EXTERNAL FUNDING OUTSIDE OF THE GOVERNMENT SYSTEM

The following are examples from case study countries of different approaches to capturing external funding outside of the government system.

In Ghana, the government collects data on external climate funding to CSOs and private sector manually through a bi-annual survey. While the government aims to ensure that all donor funds are in future recorded through the government's financial management system (Ghana Integrated Financial Management Information System - GIFMIS), in the meantime, the Natural Resources, Environment and Climate Change (NRECC) unit at the MOF, responsible for tracking climate expenditures, developed a survey for the Environment Protection Agency (EPA) to collect data on international climate financing to CSOs and private sector. (For the procedure and templates see Annex 5)

Further details: Ministry of Finance. 2018. Climate Change Budget and Finance Tracking Manual (pp. 20-22)

In Kenya, donor funding to central government is captured as co-finance, while donor funding to counties has to be signed off by the Treasury. In future, the government plans to issue a separate climate finance report that would cover expenditures in non-state sectors.

In Indonesia, the government revised its regulation on foreign loans and receiving grants in 2011 to require all international actors providing external financing outside the Treasury to be reported to the MOF as part of state budget reporting. The regulation categorises grants into “planned” (transferred to the Treasury before being passed to government agencies) and “direct” (transferred directly to the government agencies, which are then reported to the MOF as revenues). However, the compliance with the regulation was undermined by weak understanding of and confusion over the reporting requirements (e.g. who should report on the expenditure, development partners/donors or central agencies), resulting in discrepancies between MOF records and that of development partners/donors.

Further details: Ministry of Finance and Climate Policy Initiative. 2014. The Landscape of Public Climate Finance in Indonesia (pp. 14-15)

ANNEX 5 EXAMPLE OF MANUAL COLLECTION OF DATA ON EXTERNAL CLIMATE FINANCING IN GHANA USING SURVEYS TO CSOS AND PRIVATE SECTOR

STEP 1	EPA maps international climate fund inflows to CSOs, research institutions/universities and private sector with the current CBT budget codes for climate relevant MDA activities and climate policy objectives
STEP 2	EPA compiles a list of possible recipients of international climate finance and assigns them unique identification numbers to track them over time
STEP 3	EPA administers the survey bi-annually via an online survey platform or e-mail
STEP 4	EPA verifies the collected information (at the initial stage, this completeness of data is checked on source, scope, outputs, status of the funding, with further information to be collected in coming years).

TEMPLATE 1. SURVEY INSTRUMENT TO TRACKING CLIMATE FINANCE IN THE PRIVATE SECTOR AND CSOS

1. Name of initiative/project/Action

2. Recipient or implementing organisations

3. Timeframe	Start date	End date
4. Sponsor/donor of initiative	Channel of supports (Bilateral/ Multilateral)	
5. Approved Amount (Currency)	Amount Received (currency)	Co-finance (if any)

6. Type of project/initiative/action (mitigation, adaptation, enabling activity etc)

7. Key activities of the initiative	Objectives
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8. Major Achievements

9. Major Impacts

10. Remarks

11. Contact Person

12. Email/Phone No.

TEMPLATE 2. CHECKLIST FOR VERIFICATION OF CLIMATE FINANCE DATA.

Source completeness check (tick applicable ones)	Yes	No	Comments
1. Is donor country name reported?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Name of recipient institution	<input type="checkbox"/>	<input type="checkbox"/>	
3. Sector of recipient institution	<input type="checkbox"/>	<input type="checkbox"/>	
4. Name of donor institution	<input type="checkbox"/>	<input type="checkbox"/>	
5. Name of donor international foundation	<input type="checkbox"/>	<input type="checkbox"/>	
6. Name of market if applicable	<input type="checkbox"/>	<input type="checkbox"/>	
7. Type of donor institution	<input type="checkbox"/>	<input type="checkbox"/>	
8. Channel of inflows	<input type="checkbox"/>	<input type="checkbox"/>	
9. List of intermediary institution if it is applicable	<input type="checkbox"/>	<input type="checkbox"/>	
10. Government-to-government arrangement	<input type="checkbox"/>	<input type="checkbox"/>	

Scope completeness check (tick applicable ones)	Yes	No	Comments
1. Type of climate inflows (Loan, Grant or mix etc)	<input type="checkbox"/>	<input type="checkbox"/>	
2. Start and end dates	<input type="checkbox"/>	<input type="checkbox"/>	
3. Amount committed (\$)	<input type="checkbox"/>	<input type="checkbox"/>	
4. Amount disbursed (\$)	<input type="checkbox"/>	<input type="checkbox"/>	
5. Non-monetized inflows	<input type="checkbox"/>	<input type="checkbox"/>	
6. Co-finance component	<input type="checkbox"/>	<input type="checkbox"/>	
7. In-kind financing	<input type="checkbox"/>	<input type="checkbox"/>	
8. Type of project support (investment, capacity building, reporting etc.)	<input type="checkbox"/>	<input type="checkbox"/>	

Output completeness check (tick applicable ones)	Yes	No	Comments
1. Procurement activities reported	<input type="checkbox"/>	<input type="checkbox"/>	
2. Beneficiaries	<input type="checkbox"/>	<input type="checkbox"/>	
3. Levels of implementation	<input type="checkbox"/>	<input type="checkbox"/>	
4. Percentage of inflows	<input type="checkbox"/>	<input type="checkbox"/>	
5. Impactful outcomes	<input type="checkbox"/>	<input type="checkbox"/>	

Status completeness check (tick applicable ones)	Yes	No	Comments
1. Extent of implementation	<input type="checkbox"/>	<input type="checkbox"/>	
2. Envisaged beneficiaries	<input type="checkbox"/>	<input type="checkbox"/>	
3. Development benefits	<input type="checkbox"/>	<input type="checkbox"/>	
4. Expected CO ₂ savings	<input type="checkbox"/>	<input type="checkbox"/>	

Source: Ministry of Finance. 2018. Climate Change Budget and Finance Tracking Manual

ANNEX 6 OECD-DAC DEFINITION AND CRITERIA OF CLIMATE CHANGE ACTIVITIES

OECD-DAC RIO MARKERS DEFINITIONS

Mitigation	An activity contributes to the objective of stabilisation of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration.
Adaptation	An activity intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience.

OECD-DAC RIO MARKERS EXAMPLES OF CLIMATE CHANGE ACTIVITIES BY SECTORS

MITIGATION

OECD Definition: An activity should be classified as climate change mitigation related if it contributes to the objectives of stabilisation of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration (OECD, 2011)

Sector	Example activities
Forestry	Protection and enhancement of sinks and reservoirs of GHGs through sustainable forest management, afforestation and reforestation
Water and sanitation	Methane emission reductions through waste management or sewage treatment
Energy Transport Industry Agriculture	GHG emission reductions or stabilisation in the energy, transport, industry and agricultural sectors through application of new and renewable forms of energy, measures to improve the energy efficiency of existing machinery or demand side management (e.g. education and training)

ADAPTATION

OECD Definition: An activity should be classified as adaptation-related if it intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience (OECD, 2011)

Sector	Example activities
Enabling activities	Supporting the development of climate change adaptation-specific policies, programmes and plans
Policy and legislation	Capacity strengthening of national institutions responsible for adaptation
Agriculture	Promoting diversified agricultural production to reduce climate risk
Energy	Strengthening of energy transmission and distribution infrastructure to cope with the expected impacts of climate change
Forestry	Securing local rights and systems for the sustainable and long-term utilisation of the forest in order to increase resilience to climate change
Health	Strengthening food safety regulations; developing or enhancing monitoring systems
Transport	Building protection from climate hazards into existing transport infrastructures (e.g. Disaster Risk Reduction measures)
Water and sanitation	Monitoring and management of hydrological and meteorological data

Source: Handbook on OECD-DAC Climate Markers (OECD, 2011)

ANNEX 7 MDB JOINT APPROACH DEFINITIONS OF CLIMATE CHANGE MITIGATION AND ADAPTATION

MDB JOINT APPROACH DEFINITIONS

Mitigation	Climate change mitigation promotes efforts to reduce, limit, or sequester greenhouse gas (GHG) emissions to reduce the risk of climate change. However, not all activities that reduce GHGs are eligible to be counted towards MDB mitigation finance. Mitigation finance is based on a list of activities that are compatible with low-emission pathways.
Adaptation	Climate change adaptation aims to lower the current and expected risks or vulnerabilities posed by climate change. For a project to be counted towards MDB adaptation finance, it must: <ul style="list-style-type: none"> • set out the climate vulnerability context of the project • make an explicit statement of intent to address climate vulnerability as part of the project, and • articulate a clear and direct link between the climate vulnerability context and the specific project activities.

MDB JOINT APPROACH EXAMPLES OF MITIGATION ACTIVITIES BY SECTORS (EXCERPT)

Category	Sub-category	Eligible activities
Waste and wastewater	Wastewater	Portion of treatment of wastewater that reduces methane emissions (only if net GHG emission reductions can be demonstrated and if not a compliance requirement to meet, for example, a performance standard or safeguard requirement)
	Solid waste management	<ul style="list-style-type: none"> • Waste management projects that capture or combust methane emissions • Waste-to-energy projects • Waste collection, recycling and management projects that recover or reuse materials and waste an inputs into new products or as a resource (only if net emission reductions can be demonstrated)
Transport	Urban transport modal change	<ul style="list-style-type: none"> • Urban mass transit • Non-motorised transport (bicycles and pedestrain mobility)
	Transport-oriented urban development	<ul style="list-style-type: none"> • Integration of transport and urban development planning (dense development, multiple land-use, walking communities, transit connectivity, and so on), leading to a reduction in the use of passenger cars • Transport and travel demand-management measures dedicated to reducing pollutant emissions, including GHG emissions (such as high-occupancy vehicle lanes, congestion charging or road pricing, parking management, restriction or auctioning of license plates, car-free city areas, low-emission zone)
	Inter-urban transport	<ul style="list-style-type: none"> • Railway transport ensuring a modal shift or freight and/or passenger transport from road to rail (improvement of existing lines or construction of new lines) • Waterways transport ensuring a modal shift of freight and/or passenger transport from road or air to waterways (improvement of existing infrastructure or construction of new infrastructure)
	Infrastructure for low-carbon transport	Charging stations and other infrastructure for electric vehicles, hydrogen or dedicated biofuel fueling
Low-carbon technologies	Products or equipment	Projects producing components, equipment or infrastructure dedicated to the renewable and energy efficiency sectors, or low-carbon technologies
	Research and development	Research and development or renewable energy or energy efficiency technologies, or low-carbon technologies

MDB JOINT APPROACH EXAMPLES OF ADAPTATION ACTIVITIES BY SECTORS (EXCERPT)

Sector/topic	Sub-category/topics	Possible vulnerability to climate change	Potential adaptation activities to address stated vulnerability
Waste and wastewater systems	Water supply	Increased risk of flooding of well fields leading to contamination	Well fields relocated away from floodplains, raised well heads
	Wastewater infrastructure/management	Increased exposure to damage and storm-water overload due to coastal flooding and sea-level rise	Protection of wastewater infrastructure from increased flooding
	Water resource management	Reduction in river water levels and flows due to reduced rainfall	Improved catchment management planning and regulation of water abstraction
Crop production and food production	Primary agriculture and food production	Increased variability in crop productivity due to increased climate variability	Investments in research and development of crops that are more resilient to climate extremes and change
Other agricultural and ecological resources	Agricultural irrigation	Increasing drought, including seasonal droughts and shorter rainy seasons	Supplemental irrigation, multicropping systems, drip irrigation, levelling and other approaches and technologies that reduce the risk of large crop failures
	Forestry	Increased frequency of forest fires and pest or disease outbreaks	Improved management of forest fires and pest or disease outbreaks
	Livestock production	Decrease in forage quantity or quality due to the effects of increasing extreme weather events	Increased production of adequate fodder crops to supplement rangeland foraging
	Fisheries	Loss of marine/lake/river fish stocks due to changes in water flows, water temperatures, acidity levels or other climate-induced pressures	Adoption of sustainable fisheries and aquaculture techniques to compensate for the reduction in local fish supplies
	Ecosystems or biodiversity (including ecosystem-based flood-protection measures)	Drought leading to loss of wetlands and livelihoods or biodiversity	Establishment of core protected areas and buffer zones for sustainable use of biodiversity and water to meet livelihood needs in more extreme droughts
Industry, manufacturing and trade	Manufacturing	Historic standards for the key parts of equipment which are rendered inappropriate under new climate conditions	Design of climate-resilient equipment, such as more stable cranes for harbours in cyclone zones
	Food processing, distribution and retail	Increased risk of food poisoning and/or spoilage due to increased temperatures	Improved refrigeration or other changes in food processing and/or distribution that address more extreme heat
	Trade	Disruption of national trade due to climate-related disasters	Establishment of alternative trade routes in case of disruption to main route

Source: 2016 Joint Report on Multilateral Development Bank's Climate Finance

ANNEX 8 STANDARD CPEIR TYPOLOGY

Typology as used in the joint UNDP/World Bank supported CPEIR in Vietnam		
Pillar	Category	Task
Policy and Governance	PG1: A national framework for adaptation and risk reduction	PG1.1 Develop climate change adaptation guidelines and technical regulations PG1.2 Develop/adjust policy, planning and mechanism for climate change response and implementation across government, enterprises and communities PG1.3 Manage and monitor implementation of adaptation policies
	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 PG2.2 Develop/ adjust sectoral plan and coordinate implementation among departments, enterprises, and provinces PG2.3 Manage and monitor implementation of Mitigation policies
	PG3: Action Plan Impact Assessment at national, provincial, and sector level to translate policy and governance into activity and delivery	PG3.1 Action and Sector Plans PG3.2 Climate change Impact assessments PG3.3 Climate change Capacity building
	PG4: Legal framework to implement climate change policy (all elements of climate change/green growth policies)	PG4.1 Mitigation instruments PG4.2 Adaptation instruments PG4.3. Mitigation and Adaptation Instruments
	PG5: International cooperation, integration and diversification and strengthening of climate change investment effectiveness	PG5.1 Strengthen cooperation and partnership with international community on climate change issues PG5.2 Effective management and coordination of foreign and domestic investment
Scientific, Technical and Societal Capacity (ST)	ST1: Develop science & technology as a foundation for formulating policies, assessing impacts and identifying measure on climate change adaptation and mitigation	ST1.1 Information and database development ST1.2 Hydrometeorology and early warning system and climate change projection ST1.3 Biological & genetic resource strengthening ST1.4 Survey and assessment on climate change impacts ST1.5 Technology for energy efficiency and low GHG emission
	ST2: Improve awareness of climate change	ST2.1 Climate change awareness building in curriculums of primary to higher education establishments ST2.2 Awareness of climate change in diverse education and training initiatives for post-school aged earners
	ST3: Develop community capacity for responding to climate change	ST3.1 Support livelihood building for communities in the context of climate change ST3.2 Capacity across whole community in climate change response
Climate Change Delivery (CCD)	CCD1: Natural resources	CCD1.1 Coastal protection and coastal dykes CCD1.2 Saline intrusion CCD1.3 Irrigation CCD1.4 River dyke and embankments CCD1.5 Water quality and supply CCD1.6 Rural development and food security CCD1.7 Forest development CCD1.8 Fisheries & aquaculture CCD1.9 Biodiversity & conservation

Typology as used in the joint UNDP/World Bank supported CPEIR in Vietnam		
Pillar	Category	Task
Climate Change Delivery (CCD)	CCD2: Resilient society	CCD2.1 Public health & social service
		CCD2.2 Education and Social Protection
		CCD2.3 Residential and city area resilience
		CCD2.4 Transport
		CCD2.5 Waste management and treatment
		CCD2.6 Disaster specific infrastructure
		CCD2.7 Strengthening disaster risk reduction
	CCD3: Enterprise and production	CCD3.1 Energy generation
		CCD3.2 Energy efficiency
		CCD3.3 Infrastructure and construction
		CCD3.4 Industry & trade
		CCD3.5 Tourism

Source: CPEIR Methodological Guidebook (UNDP, 2015)

ANNEX 9 BANGLADESH CLIMATE RELEVANCE CRITERIA (TO 2018)

Activity relevance	Type of project/programme	Climate weight
Strongly relevant (climate-dimension weight 75%-100%)	<ul style="list-style-type: none"> Managing climate change risks Projects which directly address one or more of the BCCSAP thematic areas 	100%
	<ul style="list-style-type: none"> Investment in disaster early warning system – flood, cyclone, storm surge, early flood, flash flood, excessive rainfall, drought Renewable energy – solar, wind, biofuel and other sources 	90%
	<ul style="list-style-type: none"> Afforestation and reforestation – coastal plantation, social forestry, and forest conservation Construction, maintenance and rehabilitation of coastal polders 	80%
	<ul style="list-style-type: none"> International and regional framework convention on climate change and desertification Construction, maintenance and rehabilitation of flood protection embankments Recruitment of volunteers for flood and cyclone preparedness programmes Innovation and transfer of improved technologies for climate change adaptation and mitigation e.g. low carbon emission and energy saving technology 	75%
Significantly relevant (climate-dimension weight 50–74%)	<ul style="list-style-type: none"> Water supply and sanitation programmes in climate vulnerable areas, etc. Rehabilitation of infrastructures affected by natural disasters and livelihood improvement Improvement and extension of climate resilient crop varieties Promotion of climate adaptive livelihood 	70%
	<ul style="list-style-type: none"> Land stabilization and protection of coastal areas Excavation and re-excavation of canals and river dredging for flood control and removal of waterlogging problems Ensure food security through increased production of agriculture (crop, fisheries and livestock) Improved irrigation and development of infrastructure for increased production of agricultural commodities Crop diversification and intensification in climate vulnerable areas (Haor, Barind areas, etc.) 	60%
	<ul style="list-style-type: none"> Management of disaster preparedness, construction of cyclone and flood shelters, etc. Curriculum development for climate change and disaster management Development and updating of national and sectoral plans on climate change Institutional capacity building for climate resilience Preparatory studies for adaptation against sea level rise, environmental assessment, energy efficiency, etc. Strengthening gender consideration in mainstreaming climate change Social safety net programmes – FFW, VGD, VGF Supply of safe drinking water in emergencies due to climate change and natural disaster 	50%

Activity relevance	Type of project/programme	Climate weight
Somewhat relevant (climate-dimension weight 25–49%)	<ul style="list-style-type: none"> • Biodiversity (plants, fish, wildlife) and ecosystem conservation • Sustainable management of wetlands and natural resources • Integrated water resources management • Integrated agriculture development programme • Social forestry programme • Poverty reduction programme in climate vulnerable and disaster-prone areas • Improved energy efficiency in production and consumption of energy e.g. CNG, LNG 	45%
	<ul style="list-style-type: none"> • International and regional cooperation in relation to environment, ecosystem and biodiversity • Integrated pest control for agriculture • Production and storage of climate resilient seeds and development of demonstration plots • Development of small-scale climate resilient infrastructure (housing, bridge, culvert, drainage system, etc.) in climate vulnerable areas 	40%
	<ul style="list-style-type: none"> • Reduction of air, water and land pollution and resolution of other environment-related problems • Toxic waste management • Climate resilient township development in climate vulnerable areas • Improvement of water and drainage system in urban areas • Awareness raising of farmers on climate change • Disaster preparedness programmes –capacity building for development of emergency plans • School feeding programmes 	30%
	<ul style="list-style-type: none"> • Institutional capacity building for improving quality of environment and ecosystem • Adaptation against climate change in different sectors – agriculture, water, ecosystem, infrastructure, human resources development • Development and updating of national and sectoral plans for energy, environment and ecosystem • Establishment of eco-park and game reserve • Research, planning and information management for environment, ecosystem, and protection of biodiversity 	25%
	<ul style="list-style-type: none"> • Promotion and development of eco-tourism • Social protection and health • Development of storage facilities – crop, seeds, and fertilizer • Development of marketing and value chain of agricultural commodities • Post-disaster relief and rehabilitation programmes 	20%
Implicitly relevant (climate-dimension weight 5%–24%)	<ul style="list-style-type: none"> • Strengthening good governance • Improvement of primary and mass education • Protection of river banks and soil erosion along coastal belts • Gas-based power generation 	10%
	<ul style="list-style-type: none"> • Knowledge management – library, documentation, digital archive • Development of sustainable small-scale infrastructure • Block allocation • Stipend programme 	5%
	<ul style="list-style-type: none"> • All other programmes not related to climate adaptation, mitigation and poverty reduction • Activities those are harmful for the environment, climate and ecosystem • Infrastructure development which affects drainage system, causes waterlogging and flooding, and damages agricultural land 	0%
Not relevant (climate-dimension weight less than 5%)		

ANNEX 10 EXAMPLE OF CBT PROCEDURE (THE PHILIPPINES)

Guidelines to line ministries on tagging climate expenditure during budget preparation are provided in the Joint Memorandum Circular (JMC) issued by the Department of Budget and Management (DBM) and the Climate Change Commission (CCC), and outline the following steps:

STEP 1 Identify Projects/activities/programmes (P/A/Ps) with climate-related adaptation and mitigation expenditures

Refer to the definitions of Adaptation and Mitigation in JMC (not the typology), and review if the P/A/Ps explicitly address climate change. Answer can be adaptation, mitigation, both, or none.

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

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

STEP 2 Determine the climate change component/s within the P/A/Ps using climate change typologies

Compare component against the JMC typology list and identify the corresponding code for the component (activity-level typology). If code is not found, consult Help Desk.

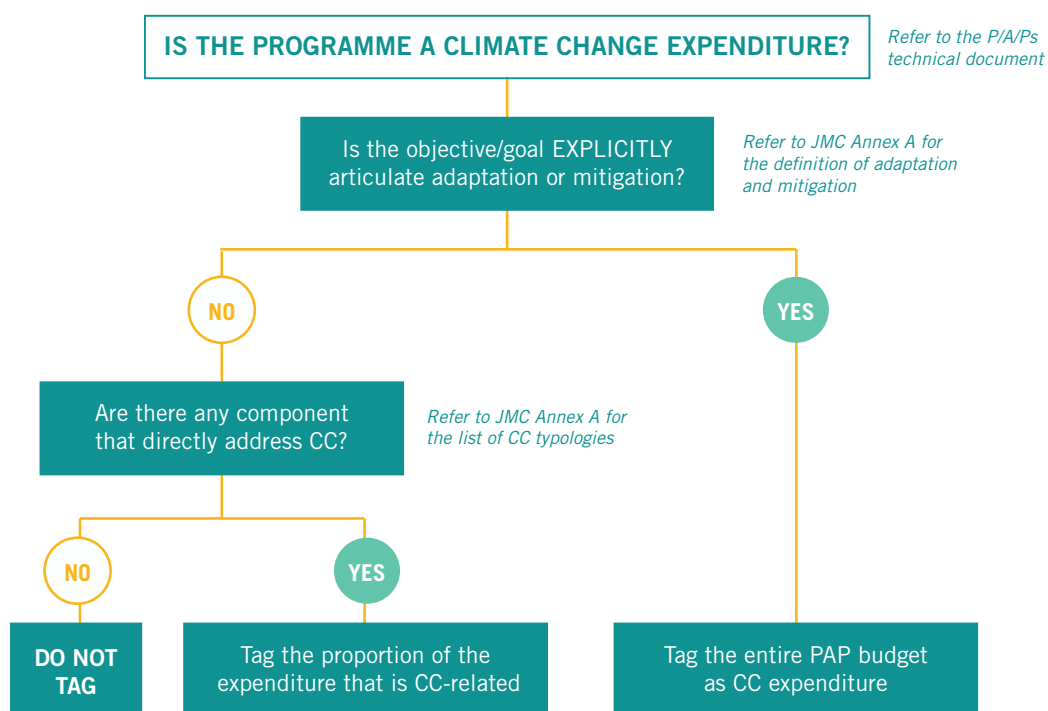
STEP 3 Specify the amount of tagged climate change component

Disaggregate the amount into personnel services (PS), maintenance and other operating services (MOOE), financial expenses (FinEx), and capital outlays (CO).

STEP 4 Identify and tag in Online Submission of Budget Proposal (OSBP)

Encode the amount and codes in the Online Submission of Budget Proposals (OSBP) system.

FIGURE A. VISUAL SUMMARY OF STEPS 1-4



In addition, line ministries submit a quality assurance and review (QAR) form to the CCC via e-mail, to list objectives and coverage of the tagged P/A/Ps, and links with adaptation/mitigation. Climate

FIGURE B. QUALITY ASSURANCE AND REVIEW FORM

PAP (1)	CC typology used (2)	Main objective (3)	CC objectives (4)	Climate risks being addressed (5)	Climate information used (6)

- (1) Indicate the P/A/P tagged as climate change adaptation or mitigation.
 - (2) Identify the corresponding activity-level typology.
 - (3) Indicate the main objective of the P/A/P. (Refer to the P/A/P technical document)
 - (4) Identify objectives that are relevant to climate change adaptation and mitigation. (Refer to the Joint Memorandum Circular definition)
 - (5) Memorandum Circular definition)
 - (6) Identify climate risks being addressed. (Refer to the JMC)
 - (7) Identify climate information used. (Refer to the JMC)
- (*The QAR form for LGUs has additional columns for various LGU-level plans)
- (7-11) Put an 'X' in the columns if the tagged P/A/P is included or contributes to the identified LGU plan.
- (12) Put an X under the column when the P/A/P has not been identified in any of the plans identified in columns 7-11.

ANNEX 11 CPEIR CLIMATE RELEVANCE INDEX

Level	Weights	Rationale
High relevance	Weighting more than 75%	Clear primary objective of delivering specific outcomes that improve climate resilience or contribute to mitigation
Medium relevance	Weighting between 50% to 74%	Either (i) secondary objectives related to building climate resilience or contributing to mitigation, or (ii) mixed programmes with a range of activities that are not easily separated but include at least some that promote climate resilience or mitigation
Low relevance	Weighting between 25% - 49%	Activities that display attributes where indirect adaptation and mitigation benefits may arise
Marginal relevance	Weighting less than 25%	Activities that have only very indirect and theoretical links to climate resilience

Source: Adopted from UNDP 2015 CPEIR Methodological Guidebook

ANNEX 12 WEIGHTING: EXAMPLES OF COUNTRY PRACTICES



BANGLADESH

NEW APPROACH (FROM 2018/19):

In summary, each of the 44 programmes under BCCASP has been assigned a weight using statistical methods and based mainly on the underlying actions for each programme per BCCASP.

In detail, weights are assigned by applying the relevance criteria (the programmes of the BCCASP) in the following steps:

- Identify key relevant interventions under each climate relevance criteria – these are mainly the underlying actions identified in the BCCASP against each of the 44 programmes;
- Rate each of those interventions in terms of (a) Climate Sensitivity, and (b) climate change Relevance. The Relevance Weight for key interventions (c) are then calculated by deducting the assigned weight for climate sensitivity from the weight for climate change dimension of an intervention. ‘Sensitivity’ is the usual amount of unintended climate financing that is subsumed in the ‘business as usual’ (BAU) development financing; ‘Relevance’ is the expected amount of climate finance compared to the BAU development financing for resilience. It is considered that not all the activities are equally relevant as vulnerability varies across the places and production systems. The difference between the ‘Relevance’ and ‘Sensitivity’ percentage determines the required additional financing for certain activities.
- For multiple interventions under a climate relevance criteria, the climate relevance weight for the criteria is calculated by subtracting the standard deviation of the selected interventions relevance weights from the maximum relevance weight of the interventions. Formulas to calculate climate relevance weight can be found in the country’s detailed guidance - *Climate Public Finance Tracking (Approach and Methodology) April 2018*.
- The result of the previous step is a single, composite, percentage weight for each of the 44 climate relevance criteria.
- Where a project or programme matches more than one relevance criteria, the budget desk officers can select up to three climate relevance criteria (including the ‘non-climate finance’ criteria, if deemed fit) against a project or programme based on the amount of budget allocation for each relevance area (descending order). The project/programme relevance is then calculated using one of the formulas from the previous step.
- The overall project or programme relevance worked out in the step above is distributed among the multiple matching relevance criteria according to the weighted amount of budget allocation for each relevance area – the weighting here is based on the reciprocal rank of each criteria.



NEPAL

CURRENT APPROACH:

Ministry-level planning officers assign tags in consultation with department and sections. This is guided by the list of 11 categories of programmes (covering a range of relevant sectors and types of activities) defined by the Climate Finance Working Group based on 83 climate-relevant programmes identified in the CPEIR.

The tag and weight is applied at the programme level based on the aggregation of the budget of relevant activities under it:

- Ministry-level planning officers assign the tags manually in the computerised system for line ministry budget preparation (LMBIS), where two columns are added at activity level to indicate: (1) whether the activity is climate relevant; (2) activity budget.
- The budgets for every activity marked as relevant are summed, and the total expressed as a percentage of the total budget for that programme. The programme is then marked as: (1) highly relevant if more than 60% by value of underlying activity budgets are relevant; (2) relevant if 20-60%; or (3) neutral if less than 20%.
- Budgets which are not built up by activities (eg pay budgets) are not treated as climate relevant.

CURRENTLY PILOTED NEW APPROACH (TESTED BY THE MINISTRY OF AGRICULTURE):

The 11 categories are unpacked into seven agriculture specific typologies for defining climate relevance of programmes and the activities under them. The relevance of an activity is assessed based on the following three non-financial factors:

- (1) the degree to which an activity targets the correct beneficiaries;
- (2) whether it links to a climate change policy;
- (3) whether it is based on a climate risk assessment.

If an activity satisfies two or more of these points it is classified as “highly relevant”; and if it satisfies only one, it is classified as “relevant.” The expectation is that this approach will help create demand for information for which there are other government institutions generating vulnerability information. With this, demand and supply of information can begin to take shape in course of time.



The Natural Resources, Environment and Climate Change unit under MOF and Environment Protection Agency tag relevant **policy objectives codes** in the COA. Relevance is based on the National Climate Change Policy Master Plan 2015-2020.

MDAs (at this stage with MOF and EPA support) also tag their **activities/operations**. This is based on a reference terminology list drawn from the NCCP:

- MDAs first determine whether any of the key words are included in activity descriptions in the budget document.
- If so, they check whether the wording in the budget document matches that in the terminology list. The activity is relevant if it matches the description in the terminology list and otherwise, discarded as not relevant.

Policy objective codes are weighted based on their perceived input on climate change. Accordingly, a percentage weight is applied to the gross expenditure – 100% for high relevance, 50% for medium relevance and 20% for low relevance. Each policy objective is also assigned to either adaptation or mitigation. Where a policy objective relates to both adaptation and mitigation, the weighted budget is split between the two. (The same weighting method was applied to MDA operations.)

- **High relevance** (the stated primary objective of the expenditure is to deliver specific outcomes that are directly climate change related) – **score 1**.
- **Medium relevance** – can be readily linked to actions listed under one or more programme and focus areas of the 2015-2020 National Climate Change Policy Master Plan. In addition, the policy objective, as stated in the Ghana Shared Growth and Development Agenda (GSGDA) II, 2014-2017, refers to climate change – **maximum 0.5 split between adaptation and mitigation**.
- **Low relevance** – as for medium relevance, except that there is no reference to climate change under their policy objective description in the Ghana Shared Growth and Development Agenda (GSGDA) II, 2014-2017 – **maximum 0.2 split between adaptation and mitigation**.

So, for example, all high relevant Policy Objective Budget Codes have 100 per cent of the funding classified as being climate change relevant for the purpose of determining the overall climate change budget.



Indonesia has not yet introduced a weighting methodology (citing the need for more time to build consensus as the reason). The tagging methodology (2014 LESS report) distinguishes between expenditures with direct and indirect impact but it is unclear whether this is captured in the tag (i.e. the electronic form line ministries fill in).

Climate (mitigation) tag is applied at the output level. Since 2017 (since the introduction of KRISNA, a new national integrated planning and budgeting system), line ministries apply the tag at the planning stage.

The Presidential Regulation 61/2011 and RAN-GRK defines mitigation activities as contributing to GHG emission reduction, GHG emissions absorption, and carbon stock stabilization. Mitigation is further classified into two types of activities related to climate mitigation:

- Core activities – that can immediately reduce emissions/increase the absorption of GHG;
- Supporting activities – that do not have immediate impact on emission reduction but are important to support the implementation of core activities.

Based on the Presidential Regulation and RAN-GRK on mitigation, the 2014 LESS report defines expenditures with direct impact on climate mitigation as follows:

- An expenditure item has a direct impact on climate mitigation if it finances an activity with an output that can directly reduce or absorb GHG emissions or stabilize carbon stocks.
- The output of an activity that has a direct impact on climate mitigation can be converted to GHG equivalent unit for carbon dioxide emission or absorption.

Given the latter point, the 2014 LESS identifies several categories of activities that are not included in RAN-GRK (see the table on pp. 10-11) and reclassifies some as having indirect impact (as its output cannot be converted to GHG equivalent unit etc.)



2015 CPEIR identified a list of activities under various sectors

Climate tag is applied to the characteristics of entity element (cost centre) in a module to SAP. The module has been configured to allow climate tag as an additional mapping, sub-divided into mitigation/adaptation; local/foreign, funding; percentage contribution (i.e. relevance). In the Pakistan COA cost centres are mainly projects – and clusters of cost centres form programmes.

MOCC regularly reviews the list of newly created cost centres and notifies CGA with the list identified as relevant to climate change. CGA inputs climate change attributes the IFMIS. This is an interim arrangement. The plan is for MOCC to apply the tags once its capacity is strengthened on using IFMIS.

The levels of contribution to adaptation or mitigation are assigned based on the review of programme/project objectives:

- high (>75%): clear primary objective;
- medium (50-74%): either secondary objectives or programmes with a range of not-easily separated activities, some of which are directly relevant;
- low (25-49%) indirect contributions;
- marginal (<25%).

A technical committee set up in MOCC periodically reviews the accuracy of tagging.



DBM/CCC Joint Memorandum Circular's climate change typology lists activities grouped into strategic priorities based on NCCAP (and under those, into sectors and instruments/sub-sectors⁵³); divided into adaptation/mitigation. CCC updates activity-level typology annually based on submissions of proposed revisions/updates from line ministries.

Climate tag is applied to projects/activities/programmes (P/A/Ps).

Tagging during budget preparation:

Using the Joint Memorandum Circular (JMC) as reference, line ministries tag by filling in the form in OSBP system, identifying:

- P/A/Ps that explicitly address adaptation, mitigation, or both ► i.e. If at least one objective/outcome is an adaptation or mitigation measure, based on the JMC, the entire programme or project budget is tagged.
- climate change components of P/A/Ps with corresponding component code (activity-level typology) ► i.e. If only specific components are adaptation or mitigation measures, only the budgets of those specific components are tagged.

Each component budget is disaggregated into personnel services, maintenance and other operating services, financial expenses, and capital outlays.

In addition, they submit a quality review and assurance (QAR) form to the CCC via e-mail, to list objectives and coverage of the tagged P/A/Ps, and links with adaptation/mitigation. Climate Budget Briefs are developed for use during the technical budget hearings, joined by CCC.

Tagging (2) once the National Expenditure Plan is proposed to Congress, and (3) once the General Appropriations Act is approved: line ministries retag and manually submit the forms to DBM to reflect any changes in NEP and GAA.

51 Instruments are e.g. policy development and governance; research, development and extension; knowledge sharing and capacity building; action delivery

ANNEX 13 DIMENSIONS OF BUDGET TAGGED IN CASE STUDY COUNTRIES

Country	Budget presentation	Budget code structure	Climate tag
Bangladesh		<p>The 2018 Budget and Accounting Classification System (BACS) has nine segments (56 digits):</p> <ul style="list-style-type: none"> • four core “posted” segments of 37 digits: the Organisation (13), Program (9), Fund (8) and Economic (7) segments. Posted segments involve a user of the system describing their transaction at the time it is entered into the system; • two new posted segments: the Mode of Payment (1 digit) and the Location (9 digits); • three “derived” segments: Authorisation (1), Function (COFOG) (4) and Budget Sector (4). Users do not need to enter coding for these; they are produced automatically by the system. 	<p>The climate tag has been captured in an additional segment outside the nine segments. This was made possible because the new BACS is flexible and allows for horizontal and vertical expansion.</p>
Ghana	<ul style="list-style-type: none"> • The 2011 budget format reflects economic and administrative classifications. • Expenditure ceilings were provided on administrative basis. • Budget presentation reflects functional categories (an aggregation of a few MDAs through the use of mapping tables) 	<p>The 2018 COA has up of 12 segments: (1-3) Institution; (4-8) Type and Source of Funding; (9-13) Function of Government; (14-23) Organisation; (23-28) Policy Objectives; (29-36) Programme / Sub-programme objective; (27-33) Project; (34-39) Activity/Operations; (40-46) Location; (47-55) two spare segments; (56-62) Natural Account.</p>	<p>Policy objectives and activities</p>
Indonesia		<p>Structure: programme, activities, output, component, detailed expenditures.</p> <p>Central government financial reports produced by FMIS (12 segments and 62 digits of COA covering all budget items) allows direct comparison between budget and actuals.</p> <p>Differences in the COA used in subnational government require a conversion table to reconcile with government accounting standards (SAP).</p>	<p>Output of an activity under a program. The country’s budget and performance reporting system incorporates a series of thematic tags – two of which were used for CC (adaptation and mitigation). No change was made to COA.</p>
Kenya		<p>The COA has a total of 7 segments (41 digits): Class, Vote, Administrative, Source of Funding, Programmes, Economic Items, Geographical location</p>	<p>The original seven segments COA were expanded by an additional segment called “analytical” segment to capture cross-cutting issues, such as climate change</p>

Country	Budget presentation	Budget code structure	Climate tag
Nepal	The Red Book, the national budget is presented by ministry; department and programme; recurrent/ capital; and then economic line item. While the budget is prepared using an activity analysis, activities and outputs are not captured in the budget presentation (or in the expenditure system and reporting). As well as the proposed budget for the new year, the Red Book includes the revised budget for the current year and the previous year’s actual expenditure by budget line.	The COA introduced in FY2011/12 has four main segments - administrative, economic, functional classifications and sources of financing. The administrative segment comprises 7 numeric characters: (1-3) Ministries or Constitutional bodies, (4-6) department, office and project, (7) type of budget (recurrent/ capital). Per CCF: “Recently, the government issued new COA for all level of governments [central, provincial and local] with different legal provisions”.	Programme (based on climate relevance of activities). Note: in Nepal, programmes appear as entities in the functional classification, underneath the parent ministry and division.
Pakistan		COA has four dimensions: economic, functional GFSM, entity (government hierarchy/structure), appropriation (a group of cost centres)	Tagged in the business reporting system (not main FMIS) to entity/ cost centre – which is similar to project in other countries.
Philippines	The National Expenditures Program (NEP) presents the budget by ministry (“Department”), departments (“agencies”), programme, regional units; and economic line item. Strategic objectives (sector and organizational outcomes) are specified and performance information provided (achieved and targeted)	Unified Account Coding Structure (UACS) adopted from 2014 for budget formulation, execution, and reporting. (54-digit UACS code: (1-8) Funding Resource; (9-20) Organisation; (21-29) Location; (30-44) MFO/Programme, activity, projects; (45-54) Object code)	The tag is applied in the budgeting system (6 character code) but not in the expenditure IFMIS – manual mapping is required at summary level.

ANNEX 14 EXAMPLES OF CBT ARRANGEMENTS AT SUBNATIONAL LEVEL



DEVOLVED CLIMATE CHANGE FUNCTION

Pakistan has a federal system of governance. The 18th Amendment of the Constitution implicitly devolved climate change function to provinces by devolving the MOE functions. A federal MOCC was established in 2011⁵⁴. A degree of confusion over mandates exists due to the specification in the Provincial Environmental Protection Act (2014) that provinces were to develop own climate change policies and set up respective departments and units.⁵⁵

ACCOUNTS STRUCTURE AND BROADER PFM CONTEXT

Despite the country's federal system, Pakistan's PFM structure is highly centralized. Controller General of Accounts (CGA) through an extensive network of offices makes payments, maintains accounts, and prepares annual financial statements.

All tiers of the government (though not state-owned enterprises) use central IFMIS for budgeting and expenditure management with a unified COA. MOF has recently introduced a separate module of SAP "Business, Planning and Consolidation" (BPC) to allow mapping elements, such as climate change (Annex 2 and Annex 3).

ARRANGEMENT FOR CBT AT SUBNATIONAL LEVEL

The government is moving towards expanding the system to provincial governments by mirroring the federal arrangement. Currently, two provinces have tagged their expenditures with UNDP's support. It appears that while generally, planning departments express high interest very in reporting on SDGs, support needs to be strengthened among environment departments.

Replicating the current federal arrangement (including tagging of entities/cost centres) requires the CGA involvement in rolling out the system at the provincial level. Given the unified COA, this is not difficult but nevertheless requires CGA to formulate a module, install it on the computer system and train provincial planning departments.

54 CCFF 2017
55 CPEIR 2017



DEVOLVED CLIMATE CHANGE FUNCTION

The Philippine Climate Change Act of 2009 mainstreams climate change in policy formulation and development planning of all units of government. It specifies LGUs' role in the formulation, planning, and implementation of Local Climate Change Action Plans (LCCAP) in their respective areas, consistent with the provisions of the Local Government Code and the National Climate Change Action Plan.

ACCOUNTS STRUCTURE AND BROADER PFM CONTEXT

The Philippines adopted the Unified Account Coding Structure (UACS) from FY2014 for budget formulation, execution, and reporting. As of 2014 – when the CBT procedure was first introduced at the subnational level, the UACS was not yet rolled out to LGUs.

While IFMIS was (in 2016) under development,⁵⁶ implementing agencies use various ICT systems or manual processes. LGUs use the Electronic Budget System (eBudget) following the procedures outlined in the 2016 Budget Operations Manual for LGUs.

The budgeting process at the local government (the process is the same at province and city/municipality level) is as follows: Local Chief Executive issues the budget call around mid-June. Based on consultations, ministries prepare and submit proposals. Following budget hearings, Executive Budget Order is prepared for submission to Local Sanggunian (local council) for approval by middle of October. Enacted appropriation ordinance is submitted to DBM for review (cities and municipalities submit to Provinces).

ARRANGEMENT FOR CBT AT SUBNATIONAL LEVEL

CCC targets for 2017 include one on the "percentage of LGUs that tagged their mitigation activities, plans, and programs in the Annual Investment Plan". The target is for "5% increase of LGUs that have tagged their mitigation activities, plans, and programs in the Annual Investment Plan."

A Joint Memorandum was issued by the DBM, Climate Change Commission and Department of Interior and Local Government (DILG) in 2014 (and amended in 2015) on the procedure for LGUs.

Annual Investment Program form, prepared by the Local Finance Committee for approval of Local Sanggunian, has columns for climate change P/A/Ps (adaptation/mitigation /CC typology code) and is accompanied by Local Climate Action Plan form (with target output and estimated cost).

56 Line ministries prepare budgets in the Online Submission of Budget Preparation (OSBP) system; DBM uses Budget Preparation Management System (BPMS) and the Government Manpower Information System (GMIS), and the Commission on Audit - National Government Accounting System (NGAS).

The forms are submitted to the DILG and DBM, with an electronic copy to the CCC along with the QAR form.

FIGURE A. ANNUAL INVESTMENT PROGRAM (AIP) FORM

CY _____ ANNUAL INVESTMENT PROGRAMME (AIP)					
As of _____					
Province/City/Municipality/Barangay:					
	AIP Reference code (1)	General Services (1000)	Social Services (3000)	Economic Services (8000)	Other Services (9000)
	Programme/Project/Activity Description (2)				
	Implementing Office/Department (3)				
Schedule of Implementation	Start Date (4)				
	Completion Date (5)				
	Expected Outputs (6)				
	Funding Source (7)				
Amount (in thousand pesos)	Personal Services (PS) (8)				
	Maintenance and Other Operating Expenses (MOOE) (9)				
	Capital Outlay (CO) (10)				
	Total (8+9+10) (11)				
	Climate Change Adaptation (12)				
	Climate Change Mitigation (13)				
	CC Typology Code (14)				
Prepared by:			Attested by:		
_____		_____		_____	
Planning Officer		Budget Officer		Local Chief Executive	

Columns 12 to 14 – Amount of Climate Change P/A/Ps:

Indicate the amount pertaining to P/A/Ps for Climate Change Adaptation (CCA) and Climate Change Mitigation (CCM) under Columns 12 and 13, respectively. (...) The entire cost of the P/A/Ps is reflected as Climate Change expenditure if the program/project profile indicates that the primary goal/objective of the PPA is to provide a direct adaptation or mitigation response. If CCA or CCM is not the primary objective of the PPAs, only the cost of specific components of the PPA that match those listed in the CC Typologies is reflected.

Source: Department of Budget and Management, Climate Change Commission, Department of the Interior and Local Government. Joint Memorandum Circular No. 2015-01. Revised Guidelines for Tagging/Tracking Climate Change Expenditures in the Local Budget



In Indonesia, subnational-level Climate Public Expenditure Review (CPER) was conducted for a sample of two provinces, Jambi and Central Java, and the Special Region of Yogyakarta. The findings and analysis generated the following conclusions and recommendations for the Government of Indonesia:

CONCLUSION

1. On average, there was an increase in the budget for climate change mitigation actions in the three provinces from 2010 to 2013. Significant budget increases occurred in 2012-2013. This shows sub-national government's commitment to climate change increased after the issuance of Presidential Regulation No. 61/2011 on RAN-GRK by the Central Government and Governor Regulations on RAD-GRK by the regional government in 2012.
2. Based on the amount of budget allocation and the number of activities in each climate change mitigation sector relevant to RAD-GRK document in the three provinces, the implementation of climate change mitigation actions have not adequately followed the priorities of the mitigation sectors stated in the RAD-GRK. In addition, the results of the budget analysis also showed that there are activities, including climate change mitigation core and supporting activities, which are not listed in the RAD-GRK.
3. The budget analysis identified various types of activities, including climate change mitigation activities, which vary between cases of Jambi, Central Java and Yogyakarta. Climate change mitigation activities are found across tasks, functions, organizations and programs.
4. The existing budget tagging system is insufficient to identify activities related to climate change mitigation. However, the general patterns of budget codes can be used as a guide to tag mitigation activities, such as codes for tasks, organizations, programs and activities that often come up related to climate change mitigation.

RECOMMENDATIONS

Recommendations for improvement based on the analysis of the budget allocation for climate change mitigation in the three provinces are as follows:

1. Climate change mitigation budget tagging mechanism
 - a. For the purposes of monitoring the sub-national government budget, the Ministry of Home Affairs and the Ministry of Finance need to develop a climate change mitigation budget tagging system mechanism to identify budget and activities related to climate change mitigation.
 - b. The Ministry of Home Affairs and the Ministry of Finance can use several options of sub-national government budget tagging, one of which is budget tagging at activity level with a proposed addition of "theme" for the activity. At activity level, budget expenditures can be traced on a regular basis. Descriptions of budget tagging options will be developed in the next study.
 - c. Further discussion with the Directorate General of Fiscal Balance, Ministry of Finance and Ministry of Home Affairs is needed to discuss thematic budget tagging options for the sub-national government budget.
 - d. Grouping of activities based on activity account codes can be used by the provincial government and updated regularly to assist budget tagging related to climate change mitigation specific to a region, but can not be used as a general pattern of mitigation activities in all regions.
2. Evaluation of the implementation of the RAD-GRK
 - a. The implementation of the RAD-GRK needs to be evaluated against the sub-national government budget, as several activities were not included in the RAD-GRK.
 - b. The sub-national governments need to review the budget allocation for climate change mitigation and adjust with priority sectors, which have the highest emissions reduction contribution.
 - c. Reporting in the PEP report must be aligned to activities in the subnational government budget to ensure alignment with RAD-GRK in each province.

Source: Ministry of Finance Republic of Indonesia. 2016. Climate Public Expenditure Review (CPER) in the Provinces of Jambi, Central Java, and the Special Region of Yogyakarta.

ANNEX 15 INCORPORATING GENDER AND POVERTY IN CLIMATE EXPENDITURE ANALYSIS

The aim of incorporating gender and poverty in the analysis of public climate expenditure is to assess the extent to which climate spending reflects policies to address the particular climate risks related to poverty and gender inequality.

Depending on the availability and level of disaggregation of public expenditure on gender and poverty (or other) thematic tagging, different options are available for conducting the analysis. The following options for climate expenditure analysis that incorporates gender-sensitive and pro-poor expenditures (Table A) were developed for CPEIR.

While CPEIR relies on manual collection of climate expenditure data, CBT generates that data routinely.

The options range from producing the results at the aggregate, ministry-level (Option 1) to the disaggregated, project-level (Option 3). Option 2 assumes that there is no gender/poverty budget available and that therefore the process would need to incorporate conducting the additional analysis. Countries that already implement gender and pro-poor tagging (i.e. have the relevant expenditure data at the project level) can consider 3.

TABLE A. OPTIONS FOR INCORPORATING GENDER AND POVERTY IN CLIMATE EXPENDITURE ANALYSIS

Options for analysis	Option 1: Implement CPEIR drawing on existing Gender and Poverty Budget/ expenditure analysis at the ministry level	Option 2: Implement CPEIR incorporating the implementation of gender and poverty budget analysis	Option 3: Implement CPEIR drawing on existing poverty and gender analysis of the budget / expenditures to project levels
Data requirements			
Climate impact assessments available	Yes	Yes	Yes
Gender and poverty analysis of climate risk carried out and sectors mapped	Yes	Yes	Yes
Budgetary codes can be collected from COA	Yes	Yes	Yes
Detailed project level data available	No	Yes – collected and tabulated for both development and non-development expenditure	Yes – collected and tabulated for both development and non-development expenditure
Climate weights assigned and climate expenditure tagged by budget institution.	Yes	Yes	Yes
Gender and poverty budget	Gender and poverty budget/ expenditure analysis with ministry-wise data is available.	Not available	Gender and poverty budgets are already available with project level expenditure data.
Implications of the Option	This will provide a range within which each ministry's expenditure can be attributed as pro-poor and gender sensitive. (see below)	Need to prepare gender and poverty budget / expenditure analysis at the project and/or ministry level using weights determined through a consultative process (e.g. expert workshop).	Poverty and gender incidence of climate public expenditure can be estimated through aggregation from project level data in this case. This will provide the most comprehensive assessment of poverty and gender impact of climate public expenditure.

Climate Relevant Expenditures with Poverty and Gender Co-Benefits: Calculating the Overlap Range

Minimum Climate Relevant Expenditures with Poverty/Gender Co-Benefits:

1. Calculate the percentage of expenditures in a ministry that are not climate relevant;
2. Calculate the difference between the percentage of poverty/gender relevant expenditures and non-climate relevant expenditures;
3. If the difference is negative (poverty/gender weight is smaller than non-climate weight), we assume that all poverty/gender relevant expenditures overlap with non-climate expenditures (worst case scenario). Therefore, the minimum percentage of climate change expenditures that overlaps with poverty/gender is zero;
4. If the difference is positive (poverty/gender weight is bigger than non-climate weight), then even if all the non-climate expenditures are poverty/gender positive, a minimum of climate relevant expenditures must have some gender significance and it will be calculated as the difference between the percentage of poverty/gender relevant expenditures and non-climate relevant expenditures.

Maximum Potential Climate Relevant Expenditures with Poverty/Gender-Co Benefits:

1. If the climate relevant weight is higher than the poverty/gender weight, we then assume as a best case scenario that all the poverty/gender expenditures are within climate expenditures, then the maximum estimate for poverty/gender responsive climate expenditures could be derived using simply the poverty/gender weight.
2. If the climate relevant weight is lower than the poverty/gender weight, we then assume as a best case scenario that all the climate expenditures are within poverty/gender expenditures, then the maximum estimate for poverty/gender responsive climate expenditures could be derived using simply the climate weight.

For the example of the application of this method using data from Bangladesh see: UNDP. 2014. Incorporating Gender and Poverty Analysis in the Climate Public Expenditure and Institutional Review: A Methodological Note (pp. 31-38)

Source: UNDP. 2014. Incorporating Gender and Poverty Analysis in the Climate Public Expenditure and Institutional Review: A Methodological Note (pp. 30-38)

