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Preface

Climate change is a grave threat to global development and shared prosperity. The poor and most vulnerable are the worst affected. Climate change impacts are expected to intensify going forward and will require decisive action by countries around the world.

Governments will need to mobilize and align resources to support the implementation of climate change policies and strategies. Climate budget tagging is a tool that can help governments integrate climate change considerations into the planning and budget process.

Climate budget tagging methodologies were originally developed with support from the United Nations Development Programme and the World Bank, drawing on the experience of tagging poverty, gender, and international development goals and climate finance reporting. Nineteen countries have now developed climate budget tagging methodologies, each adapting their approach to their particular needs, priorities, and institutional arrangements.

This report provides an overview of international experience in the implementation of climate budget tagging. It describes the broader context in which climate budget tagging operates, encompassing international climate finance reporting and sovereign green bonds. The intention is to equip practitioners with a broad understanding of the issues they need to consider in the design and implementation of climate budget tagging methodologies.

Looking forward, countries will need to align their budgets with their ambitious commitments to the Paris Agreement climate goals. This will require the mobilization of significant resources, which can be supported by climate budget tagging. Paris alignment will also require countries to make significant adjustments as they decarbonize their economies and build resilience. Climate budget tagging can help these efforts also, starting with the principle of “do no harm” by highlighting expenditures that adversely impact climate goals alongside spending that makes a positive contribution.

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Acronyms

BUR	Biennial Update Report
CBI	Climate Bonds Initiative
CPEIR	Climate Public Expenditure and Institutional Review
DAC	Development Assistance Committee (OECD)
EU	European Union
GBP	Green Bond Principles
GFLAC	Grupo de Financiamiento Climático para América Latina y el Caribe (the Climate Finance Group of Latin America and the Caribbean)
GHG	Greenhouse Gas
GSW	Government Spending Watch
HIPC	Heavily Indebted Poor Country
IDFC	International Development Finance Club
IFMIS	Integrated Financial Management Information System
INFF	Integrated National Financing Framework
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
MDB	Multilateral Development Bank
MDG	Millennium Development Goal
NDC	Nationally Determined Contribution
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
PRS	Poverty Reduction Strategy
SDG	Sustainable Development Goal
SEEA	System of Environmental-Economic Accounting
SGB	Sovereign Green Bond
SNG	Subnational Government
SOE	State-Owned Enterprise
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNFCCC	United Nations Framework Convention on Climate Change



Executive Summary

Climate change budget tagging is a government-led process of identification, measurement, and monitoring of climate-relevant public expenditures. Since the introduction of the first climate budget tagging systems in 2012, 19 national and subnational governments (SNGs) have developed climate budget tagging methodologies. This report reviews these methodologies, draws some preliminary conclusions on the strengths and weaknesses of budget tagging as a tool to support climate change policy, and suggests some lessons learned. The report also reviews the parallel development in the green sovereign bond frameworks for climate finance and their links to climate budget tagging.

Climate budget tagging builds on prior experience in tagging for other whole-of-government policy objectives, notably poverty, gender, and the international development goals outlined by the United Nations. Several countries already apply climate budget tagging alongside tags for these policy objectives. Climate budget tagging also builds on the Organisation for Economic Co-operation and Development's Development Assistance Committee Rio markers as well as the multilateral development banks' joint methodology for reporting on international flows of climate finance. The United Nations Development Programme and the World Bank have supported the development of many of the climate budget tagging methodologies through their work on Climate Public Expenditure and Institutional Reviews.

There are three essential design elements to climate budget tagging methodologies: definition of climate-relevant expenditure; definition of appropriate coverage; and estimation of climate-relevant spending.

There are two distinct approaches to the definition of climate-relevant activities and expenditures. Objective-based definitions distinguish climate-relevant activities on the basis of their intended impact. Most of the countries following this approach have applied the definitions used in the Rio markers. Policy-based definitions limit climate-relevant activities to those that are specifically referenced in national climate change policy documents. All of the definitions reviewed here include both adaptation and mitigation action. Only one of the countries reviewed identifies expenditure with adverse impacts on climate change.

Almost all methodologies cover both central government recurrent and investment budgets, though some countries tag expenditures in a limited number of key institutions. Some countries have extended their tags to local governments. Some include transfers to state-owned enterprises (SOEs). Only one country has tagged climate-relevant tax expenditures.

Countries have followed one of three approaches to the estimation of climate-relevant expenditures: limiting tagging to programs that have climate change as a primary objective; estimating the expenditures associated with the climate-relevant elements, components, or activities; and applying climate-relevance weights to estimate the fraction of program or project expenditure that is climate relevant. All of these approaches require informed judgments to assign the proportion of expenditure classified as climate relevant.

Tagging methodologies are generally developed by central finance or planning agencies, often in coordination with specialized environment and climate change institutions. Responsibility for the application of climate change tagging is almost always delegated to line ministries and agencies. Some countries report poor compliance by line ministries with the tagging procedures. Some have put validation mechanisms in place to review tagged expenditures, confirm their climate relevance, and reduce the risk of “greenwashing”—that is, the exaggeration of the climate relevance of programs and projects.

Expenditures are generally tagged during budget preparation and in this way provide information on allocations. Rarely do they cover actual expenditures. Even where tagging is integrated into financial management systems, expenditure reports are rarely presented or analyzed.

Although the regulatory framework for sovereign green bonds (SGBs) has developed in parallel to climate budget tagging, they share some common elements: both require the authorities to define eligible expenditures, and both require institutional arrangements to select and report on expenditures. Budget tagging is not a requirement for the issuance of SGBs, but a robust tagging system can be used for this purpose. Indonesia was the first country to do so, and other countries are exploring this option.

The main reported benefits of the application of climate budget tagging are awareness raising and improvements in transparency and accountability. Still, it is difficult to determine tagging’s impact on budget allocations and decision making. The process of tagging may influence allocation decisions during budget preparation. The expenditure data generated by tagging have to be analyzed if the information is to contribute to resource allocation decisions, identify financing gaps, and support resource mobilization. Moreover, linkages with the upstream and downstream aspects of expenditure management need to be strengthened if tagging is to effectively align resources with climate change policy priorities.

Although there is insufficient evidence to draw definitive conclusions on the relative performance of the different approaches, experience to date suggests a number of lessons for the design and implementation of climate budget tagging initiatives.

Lessons Learned

Define the objectives of the climate budget tagging initiative and consider alternatives. This will inform decisions on whether to embark on climate budget tagging and the design of the tagging system. In some circumstances, mainstreaming climate change through the systematic appraisal of programs and projects may be a preferred alternative.

Define the policy scope of the tagging methodology. Tagging can support multiple policy objectives. However, the multiplication of tags increases implementation costs and can hinder prioritization. Tagging is best suited to cross-cutting policies—such as climate change—that are not captured by administrative and program budget classifications.

Engage key institutional stakeholders in the design and implementation of climate budget tagging. Central finance, planning, environment, and climate agencies all play important roles.

Ensure that line agencies are actively involved. Line agencies are best placed to determine how resources should be applied to achieve policy objectives in their area of competence.

Align definitions of climate-relevant activities and expenditures with national climate change policies and strategies. This will generate information that can be used to monitor and steer policy implementation.

Identify and tag activities and expenditures that have adverse climate impacts. This is consistent with commitments to the Paris Agreement, allows stakeholders to assess trade-offs, and facilitates debate on sensitive policy issues such as fossil fuel subsidies.

Structure the tagging methodology so that it supports the implementation of national climate policy. Tag at the level of program and project components and activities where feasible. Cover all categories of expenditure, all central government agencies, and transfers to SNGs and SOEs. A quality assurance process should verify the consistent application of the methodology and policy alignment.

Embed budget tagging across the budget cycle. **Integrating tagging across the budget cycle from planning to reporting facilitates its use in resource allocation decisions.** Tracking requires automation through the integration of climate tags in financial management information systems.

Use complementary reporting systems to extend the principles of climate budgeting beyond the central government. SNGs and SOEs are important actors in climate policy. Central governments can promote climate policy goals through reporting standards and the use of conditional transfers.

Design the tagging system so that it facilitates the mobilization of climate finance. Alignment of the tagging system with the Green Bond Principles will facilitate the issuance of green finance instruments should the government decide to do so.

Generate information that decision makers need in formats they can use. Information may need to be tailored to the needs of different audiences, including line agency management, central finance and planning agencies, the central government, the legislature, the public, and civil society.

Undertake periodic expenditure reviews to test the alignment of plans and budgets with climate policy goals and impacts on climate outcomes. Reviews should consider the policy tools—information, regulation, taxation, or public spending—that can best achieve climate policy goals and the policy alignment, efficiency, effectiveness, and incidence of spending. Invest in capacity building. Raise awareness among key stakeholders of the purpose of climate budget tagging, the policy objectives that it supports, and how to use climate budget tagging information.

Promote transparency, engagement, and debate on climate policy. Climate budget tagging can inform public debate only if the information generated is publicly available. Debate on climate policy and budgets will raise awareness of budgetary trade-offs and constraints and help mobilize support for the more difficult climate policy measures.



Introduction

Climate change budget tagging is a government-led process of identification, measurement, and monitoring of climate-relevant public expenditures. Since the introduction of the first climate expenditure tagging systems in Nepal in 2012, at least 19 countries have developed climate budget tagging methodologies. However, tagging is still an emerging practice; most of the countries that currently tag their climate change-related expenditures started doing so less than five years ago. Experience with tagging is largely drawn from developing countries. Ireland was the first Organisation for Economic Co-operation and Development (OECD) country to apply a climate tag to its budget in 2018. The World Bank’s “Climate Change Public Expenditure and Institutional Review Sourcebook” (World Bank 2014) outlines early experience with tagging and discusses the conceptual challenges. More recent publications provide insight into climate expenditure tagging from the perspective of development practitioners (for example, Bird and Granoff 2016; Resch et al. 2017). A United Nations Development Programme (UNDP) guidance note outlines the process of setting up a national climate tagging system and provides summaries of several methodologies (see Bain, Nguyen, and Baboyan 2019).

The purpose of this report is to provide development practitioners and government officials with an understanding of the context and key design features of climate budget tagging initiatives. It is based on a review of 18 climate budgeting tagging methodologies as well as key informant interviews with practitioners during 2020. The review is structured into five sections. The first draws lessons from three precursors of climate expenditure tagging: poverty tagging, gender-budget tagging, and budgeting for international development goals. The second provides an overview of climate finance reporting methodologies and climate expenditure reviews supported by international organizations. The third reviews technical and institutional aspects of the climate budget tagging methodologies and practices of a number of national governments. The fourth explores links between climate budget tagging and the green bond frameworks used to mobilize climate finance. The final section discusses the benefits of and challenges in implementing a climate change tagging system and also presents lessons learned from experience in budget tagging in general and its application to climate change in particular. The report does not assess the effectiveness of climate budget tagging, as this would require a more thorough and long-term evaluation.



Budget Tagging Initiatives

Although climate budget tagging has emerged only recently, it builds on previous budget tagging initiatives focused on poverty, gender, and international development goals. All of these policies address complex development challenges that require cross-sectoral and whole-of-government interventions. Consequently, policy-relevant activities and expenditures are spread across multiple government agencies. This complicates planning, budgeting, and tracking the application of funds in budgeting systems that allocate resources to individual agencies. Tagging developed as a tool to map activities undertaken by multiple agencies toward a shared policy objective. Studies of early tagging initiatives highlight common challenges and lessons learned that are relevant to the design of climate budget tagging efforts. Poverty, gender, and the United Nations' development goals continue to be important drivers of national development policy, and tagging initiatives in these areas continue to be developed; some build on the experience of climate budget tagging, while others integrate climate budget tagging as one among multiple policy goals.

Pro-Poor Budgeting

The Heavily Indebted Poor Country (HIPC) initiative sought to increase the fiscal space for developing countries through debt reduction in order to increase public spending on anti-poverty policies. The HIPC initiative required that participating countries prepare poverty reduction strategies (PRS) that identified pro-poor interventions and expenditure programs and encouraged countries to track spending against these programs.

Pro-poor priority sectors or programs were identified based on country-specific definitions of pro-poor expenditure. Definitions were broadly framed, usually in terms of social and economic sectors, typically health, education, agriculture, water, and rural infrastructure. In some countries, pro-poor expenditure was more narrowly targeted to cover services that the poor accessed, such as primary and secondary schools, primary health care facilities, and rural water supply, and exclude those that primarily benefited those with higher incomes, such as tertiary health care and universities. In the few countries that had program classifications in place 20 years ago, the structure was used to identify pro-poor expenditures. Most countries used their administrative classification—or sector or functional classifications based on the administrative structure—as the basis for definitions of pro-poor expenditure. However, the use of country-specific definitions and methodologies prevented comparison of expenditure data across countries (Simson 2012). In some HIPCs, pro-poor expenditures were identified in budget documents and then tracked in budget execution reports and final statements. In these countries, the pro-poor expenditures constituted a virtual poverty fund (see box 1).

A 2007 World Bank study of budget and PRS integration in a sample of nine low-income countries found few linkages between poverty expenditure tracking and decision making. “Budget reports tend not to be linked to discussions of results, and PRS reports tend to offer little detail on the links between government spending, actions, and poverty outcomes” (Wilhelm and Krause 2007, 42). The study underlines the importance of national ownership, concluding that “information generated by reporting processes is often not fed into decision-making processes. Despite the fact that much of the information produced is potentially powerful for informing decisions, when reporting is done primarily to comply with donor-related or statutory requirements it will not automatically feed into policy making and public spending decisions” (Wilhelm and Krause 2007, 50).

It is unclear whether the composition of government expenditure became more pro-poor as a result of poverty expenditure tagging. There is no comprehensive evaluation of the impact of pro-poor budgeting efforts on poverty reduction. Global monitoring of pro-poor budgeting has focused on the volume of resources mobilized and allocated (inputs) and not on the results of government expenditure on poverty levels (outcomes). There have been isolated sectoral assessments of the link between expenditure and development outcomes (Simson 2012). In line with the World Bank’s findings, a 2012 review of pro-poor budgeting by the Overseas Development Institute (ODI) found scant evidence of changes in government spending: “despite this strong focus on costing and fundraising for poverty reduction policies since the late 1990s, there is surprisingly little evidence that government expenditure composition has changed in response to it. (...) While country-defined poverty-reducing expenditure has most certainly risen in per capita terms, it is not obvious whether this is due to the rapid growth in the overall resource envelope or a reallocation of resources from ‘low’ to ‘high’ priority sectors” (Simson 2012, 5).

> > >

BOX 1 - Virtual Poverty Funds

Virtual Poverty Funds were established to protect pro-poor expenditures during budget execution. Virtual Poverty Funds were applied in countries where the unpredictable or delayed release of funds hindered operational planning, leading to significant shortfalls in budget execution and the reallocation of funds away from pro-poor programs through cash rationing and virements. Virtual funds protected pro-poor expenditures by: identifying pro-poor expenditure allocations in the budget documentation using program or administrative classifications in the budget; requiring pro-poor programs to plan funds release to meet their operational needs; prioritizing pro-poor programs in funds release when there were shortfalls in government resources, and cuts in funding fell disproportionately on programs outside of the Virtual Poverty Fund; and reporting on budget execution and progress in implementation. Virtual funds served a secondary purpose in allowing donors to demonstrate the additionality of resources allocated from debt relief and budgetary support to financing pro-poor expenditures.

The evidence suggests that Virtual Poverty Funds did serve the purpose intended. In Uganda, for example, poverty fund expenditures increased from 19 percent of the budget in 1998 to 36 percent in 2003. The Poverty Action Fund also attracted significant additional external financing. However, critics argued that virtual funds departed from the principle of budget unity, fragmenting decision making, privileging some programs over others without consideration of their relative merits, hindering the effective allocation of limited resources across programs during budget implementation, and thereby leading to the inefficient allocation of resources.

Source: World Bank (2006).



Gender-Responsive Budgeting

Gender budgeting was first developed in Australia in the 1980s to analyze the impact of public expenditures on women and girls. The rationale for gender budgeting is that investment in gender equality produces positive externalities. These externalities are insufficiently internalized through the budget process or through regulatory approaches, resulting in persistent inequality. Gender budgeting takes the social benefits of gender equality into account in public expenditure decisions. Since the mid-1990s, more than 80 countries have applied some form of gender budgeting, often using tagging to identify gender-relevant expenditure and to monitor allocations.

> > >

TABLE 1 - Examples of Gender Expenditure Tagging

Country	Criteria for Gender Relevance	Classification Used	Weighting of Allocations	Coverage
Bangladesh (2006)	Contributing to at least one dimension of women's empowerment: social rights and voice; employment; productivity; and access to resources, services, and information.	Program	Rating on a five-step scale (negative, zero, low, medium, high).	All ministries
India (2008)	Expenditures a) that are 100% targeted at women or b) for which at least 30% of beneficiaries are women.	Program	None	30 ministries (out of 100)
Indonesia (2013)	Selection of activities considered especially important from a gender perspective (service delivery or capacity building and advocacy)	Program	None	9 priority ministries
Nepal (2008)	Participation; capacity building; benefit sharing; increased access to employment and income earning opportunities; and reduction in women's workload.	Program	Scoring from 1 to 20 for each of the five indicators. A cumulative score above 50 is considered directly supportive; a score below 20 is neutral.	13 ministries
Rwanda (2014)	Expenditures that focus on 1) service delivery; 2) size of the related allocation; 3) alignment with national gender and development policies; and 4) importance from a gender perspective.	Program	None	All ministries and districts
Uganda (2013)	Based on relevant policy document (sectoral strategies)	Program	Estimation of budget share for "gender and equity"	All ministries and districts

Source: Budlender (2014b).

Although direct or explicit gender equality spending is a small part of the overall budget, many government activities can be seen as indirectly contributing to gender equality and women's advancement. The cross-cutting nature of gender equality as a policy objective is inherently challenging: “all public-sector activity in all public institutions operating at all levels of government potentially has a gender dimension” (Welham et al. 2018, 13). Gender budgeting has to cover both recurrent and capital expenditures to capture spending on services used by women and girls. Where sub-national authorities play a key role in service provision, gender budgeting efforts need to extend to that level. Gender budgeting has tended to focus on expenditures; revenue issues have received little attention even though tax policy can hinder progress on gender equality (Stotsky 2016).

Studies find that ministries of finance and line ministries have complementary roles in the gender budgeting process. Strong leadership by ministries of finance results in better compliance from other agencies and better integration of gender objectives in budgets (Budlender 2014a; Stotsky 2016). Including gender objectives in budget statements and circulars supports their integration into the budgeting process and can lead to increased allocations. Line ministries must take the lead in identifying gender objectives within their sector, develop specific programs if needed, and request the budget necessary to achieve gender outcomes.

Gender budgeting has proved challenging in countries with limited capacity and underdeveloped budget classification systems, where organizational culture and political economy considerations have led to resistance and there are often competing reform objectives. Budgets using program classifications are better suited to incorporating gender-oriented objectives than those limited to administrative classifications that cannot effectively distinguish resources allocated to specific services (Stotsky 2016). The influence of ministries of finance on specific policies and expenditure choices may be limited, as they may be reluctant to engage in gender budgeting reforms if gender equality is not seen as a policy priority, outside their area of responsibility, or too complex (Welham et al. 2018). Although donors can play an important role in promoting and supporting gender-budgeting initiatives in developing countries, gender budgeting is unlikely to be sustained unless the initiative is driven by internal actors. Integrating gender aspects into budget routines—call notices, budget statements, and reports—increases the chances that the practice will be sustainable.

Evidence on the impact of gender budgeting is mixed. “Gender budgeting efforts seem to have led to meaningful

fiscal policy changes only when they had the support of the political center of fiscal decision-making” (Stotsky 2016, 25). Gender budget statements are primarily used for accountability purposes and are often drawn up after the budget allocations have been decided. Several countries produce reports comparing actual expenditure to initial allocations. The use of country-specific definitions and methodologies has prevented a comparison of gender-responsive expenditure data across countries. Few initiatives have tried to report a single figure of gender-responsive allocation or expenditure even though this kind of estimate or set of estimates for different categories may be useful in measuring trends over time. However, there is a risk in emphasizing the quantitative aspect of budget allocations: “a focus only on the amount that is allocated, without considering the activities, is likely to overstate the impact of allocations” (Budlender 2014a, 20). The level of spending on a gender-responsive program is not necessarily related to impacts and so is not necessarily a good metric for gender responsiveness.

Gender budgeting should be seen part of a wider set of reforms for gender equality (Welham et al. 2018). Focusing only on directly targeted expenditure is problematic, as it contradicts the mainstreaming objective, ignores other opportunities to promote gender equality, and underestimates the means allocated to this goal (Budlender 2014a). Public spending is not necessarily the most cost-effective public policy intervention to support gender equality, as regulations and laws may be a more efficient and effective approach.

Budgeting Tagging the International Development Goals

International development goals have sought to focus policy attention and resources on the developing world's most pressing challenges. The United Nations Millennium Development Goals (MDGs) adopted in 2000 set targets for eight development goals to be achieved by 2015. MDG 7 addressed climate change as part of an environmental sustainability agenda, and MDG 8 addressed international development finance. There was no explicit commitment regarding domestic financing of the MDGs. The 2030 Agenda for Sustainable Development adopted in 2015 expanded the development agenda to 17 goals. Sustainable Development Goal (SDG) 13 specifically focuses on climate action. SDG 17 recognizes the importance of domestic financing of the development goals, including a target for domestic resource mobilization, but again, there is no target for domestic resource

allocation in line with the SDGs. However, although the SDGs do not specifically address domestic resource allocation, there is broad recognition that significant increases in government budget allocations for social expenditures and environmental sustainability will be required to match the ambition of the objectives outlined.

Studies have highlighted the challenges in tracking MDG-related resource allocations using traditional budget systems. A 2017 International Budgeting Partnership brief analyzing data from the Government Spending Watch (GSW) initiative, which monitors MDG-related spending across developing countries, concluded that 24 out of the 72 countries monitored did not have sufficient data to allow for analysis of MDG allocations, and only 11 were identified as having budget systems strong enough to enable the meaningful tracking of MDG spending (Budlender 2017). Administrative and economic classifications were of limited use; while general allocations for health and education were relatively easy to identify in all budget documents, disaggregated data on basic education or maternal health were often not available. This level of detail was usually available only in budgets that apply a program classification. Identification of budget allocations for MDGs that map across multiple agencies was particularly challenging. Decentralization and the separation of investment and recurrent budgets further complicated tracking, especially where subnational governments (SNGs) and planning agencies used different budget classifications.

Tagging has been used to link budgets to the international development goals. Several countries, including the Dominican Republic, Peru, and Nepal, adjusted their budget classifications or introduced a specific tag to identify MDG-relevant spending in their budgets (Budlender 2017). Nepal's methodology was updated for the 2016/17 budget to include specific coding of development programs against each of the 17 SDGs (UNDP 2018c). In the state of Assam in India, line agencies estimated the share of development expenditures mapped to each SDG as part of their 2018 budget submission (UNDP 2018b). Mexico mapped its budget program structure against the SDGs and estimated the SDG-relevant share of expenditures. This is relatively straightforward for SDGs that align with existing administrative and program classifications, such as SDGs 3 for health, 4 for education, 6 for water, and 7 for energy. It is much more of a challenge for cross-cutting themes, such as SDGs 1 for poverty, 5 for gender equality, and 13 for climate change, which require tagging at the more granular level of subgoals. Programs may contribute to mul-

ti-ple SDGs, adding to the complexity of the tagging process (Mexico and UNDP 2017). Other countries have targeted specific SDGs, typically focusing on cross-cutting themes that are impossible to track using other budget classifiers. Indonesia, for instance, has developed a specific tag for nutrition (see box 2). UNDP (2020) provides guidance and an overview of approaches to SDG budget alignment.

The implementation of integrated national financing frameworks (INFFs) has sought to frame SDG budget tagging in the context of a broader development financing strategy. INFFs seek to “bring together financing and related policies most relevant to addressing a country’s financing challenges. They look at the full range of financing sources and non-financial means of implementation that are available to countries, and lay out a financing strategy to raise resources, manage risks, and achieve sustainable development priorities” (UN 2019). As of end-2020, 60 developing countries were working toward the development of INFFs. Of these, 48 have indicated that they are considering SDG expenditure reviews and SDG budget tagging as part of their INFF initiative. Most plan to take a comprehensive approach to SDG financing. The most frequently identified sector focus areas are malnutrition, education, and social protection. Eight countries identified climate change as an INFF focus area (UN Joint SDG Fund 2020).

Evidence on the impact of tagging expenditures linked to international development goals is mixed. Seyedsayam-dost (2018) argues that countries that have integrated MDGs into their national plans and budgets are no more likely to allocate government funds to social sectors than countries that have not. However, a 2015 GSW report argues that “a growing body of evidence that suggests that transparency, expenditure monitoring and accountability have contributed to increases in spending on, and results related to, the MDGs” (Martin and Walker 2015, 40). Budlender (2017, 57) finds that “more transparent countries do not on average allocate a higher share of the budget to education, health or water. However, countries which have recently improved transparency markedly have also shown sharp improvements in MDG spending allocations. Countries that have seen a strong improvement in budget transparency in the past decade have also increased MDG spending faster and seen faster MDG progress.” Although these sources suggest a correlation between transparency and allocations in support of these international development goals, there is insufficient evidence to affirm a causal link.



Climate Finance Reporting and Climate Expenditure Reviews

Climate budget tagging builds on methodologies introduced to report on climate finance and early climate tagging initiatives supported by UNDP and the World Bank. Five international reporting frameworks for climate financial information are reviewed here: the OECD's Rio markers applied to official development assistance; the European Union's (EU) methodology for monitoring climate expenditure under the European Structural and Investment Funds; the multi-lateral development banks' (MDBs) joint methodology for tracking climate mitigation finance; the United Nations Framework Convention on Climate Change (UNFCCC) reporting requirements; and the UN's System of Environmental Economic Accounting. Although there are common elements to these reporting frameworks, they have developed in parallel to serve different purposes and thus do not generate information that is directly comparable. The Rio markers and the MDB methodologies have influenced the design of national climate budget tagging systems, notably through UNDP and World Bank work on Climate Public Expenditure and Institutional Reviews (CPEIRs). Developments in international reporting on climate change finance will continue to influence the design of national expenditure reporting and budgeting systems in the context of alignment with the Paris Agreement.

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BOX 2 - Virtual Poverty Funds

In 2018, the Indonesian Ministries of Finance and Development Planning issued tagging guidelines for expenditures related to a national plan to reduce stunting, with support from the World Bank's "Investing in Nutrition and Early Years" project. The guidelines were developed through a multi-stakeholder process, involving representatives of relevant directorates in the working group so as to ensure ownership, and drew on lessons from the climate expenditure methodology. The verification and reconciliation process used for climate tagging was applied and expanded. The methodology allocated a weight to the tagged budget items by identifying those components that directly contribute to the prevention of stunting. The stunting tag also contains information on the geographic location of the intervention. The methodology uses performance information in determining budget allocations. Budget implementation is tracked down to the component level. Semi-annual performance reports by the two ministries provide information on the budget execution rate, achievement of outputs, and the efficiency and consistency of the planned and realized budgets.

Rio Markers

The Rio markers were developed by OECD's Development Assistance Committee (DAC) to guide member state reporting on development assistance in support of the 1992 Rio Conventions on Climate Change, Biological Diversity, and Desertification. The Rio markers are intended to track the mainstreaming of environmental considerations into development cooperation rather than to quantify financial flows. The markers apply standardized definitions for all countries that allow the consolidation and comparison of data on development assistance across DAC member states. Originally, only a single environmental marker, specific markers for biodiversity, desertification, and climate change mitigation were introduced in 1998, and a climate change adaptation marker in 2010. Multiple Rio markers may be applied to the same development activity. The methodology serves as the basis for many of the current approaches to climate budget tagging.

The Rio markers' methodology scores activities based on the program objective. It distinguishes three categories: "principal," when the climate change mitigation or adaptation is explicitly stated as fundamental to the motivation, design, and funding of the activity; "significant," when climate change mitigation or adaptation is explicitly stated as an objective but is not the fundamental motivation and the activity has other objectives also; and "zero," when the activity does not target climate change mitigation or adaptation objectives. The methodology provides examples to aid in the scoring of activities.

Climate change adaptation poses a particular challenge because many development activities will contribute to resilience. The methodology recommends a three-step approach to distinguish adaptation-relevant from development activities and to justify a principal score. Activity documentation (such as project documents) must: identify the risks, vulnerabilities, and impacts related to climate variability and climate change; outline how the project intends to address them; and demonstrate a clear and direct link between the identified risks, vulnerabilities, and impacts and the specific project activities.

OECD consolidates information on the share of development finance aligned with the Rio commitments based on member states' reports. DAC members typically report on commitments of funds. The methodology does not translate the scoring of activities into a percentage of the activity budget considered climate relevant, nor does it aggregate the amount of climate-relevant development finance.

Self-reporting by donors in the absence of independent quality control leads to considerable variation in the quality of information. An evaluation of 5,200 aid projects tagged as adaptation relevant by donors found that over 70 percent were not clearly related to adaptation or lacked the information needed to be categorized. The proportion of projects that were "over-coded" or "greenwashed" varied from 42 percent to 100 percent across donors (Weikmans et al. 2017).

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BOX 3 - Rio Marker Definitions of Climate Change Mitigation and Adaptation-Related Activities

Mitigation. An activity should be classified as related to climate change mitigation if it helps to stabilize 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. Criteria for eligibility are that the activity contributes to: a) the mitigation of climate change by limiting anthropogenic emissions of GHGs, including gases regulated by the Montreal Protocol; b) the protection and/or enhancement of GHG sinks and reservoirs; c) the integration of climate change concerns with the recipient countries' development objectives through institution building, capacity development, and/or strengthened regulatory and policy frameworks or research; or d) developing countries' efforts to meet their obligations under the UNFCCC.

Adaptation. An activity should be classified as related to climate change mitigation if it intends to reduce the vulnerability of human or natural systems to the current and expected impacts of climate change, including climate variability, by maintaining or increasing resilience through an enhanced ability to adapt to or absorb climate change stresses, shocks, and variability and/or a reduced exposure to them. This encompasses a range of activities from information and knowledge generation to capacity development, planning, and the implementation of climate change adaptation actions. An activity is eligible for the climate change adaptation marker if: a) the climate change adaptation objective is explicitly indicated in the activity documentation; and b) the activity contains specific measures targeting the definition above.

Source: quoted from OECD DAC (n.d.).

European Union Common Methodology

The EU introduced a common methodology for tracking and monitoring climate expenditure under the European Structural and Investment Funds for its 2014–2020 multi-annual financial framework. The EU methodology supports a political commitment to “mainstream” climate change and allocate at least 20 percent of the EU budget in support of action to mitigate and adapt to the impacts of climate change. The five structural funds represent more than 43 percent of the EU budget. Expenditure is tracked at all stages of the programming cycle: indicative allocations; implementation and monitoring based on commitments; and review based on paid expenditures. Climate-relevant expenditure is assessed at the level of funds, programs, and projects covering only EU funds, excluding the required national contribution.

The common methodology is based on the OECD Rio markers, with program and project expenditures weighted based on the objective involved. A 100 percent climate marker applies to expenditure that supports climate action as the primary objective, where climate action is fundamental to the design and impact of the activity. A 40 percent climate marker applies to expenditure in which climate action is a significant but not the primary objective, where climate action is important but not the principal reason for undertaking the activity. A 0 percent climate marker applies to expenditure that does not target climate action. Climate-relevant expenditure is calculated by multiplying total program or project expenditure by the weight. Climate-relevant expenditure can then be aggregated. The methodology is supported by fact sheets that provide details and examples of the application of the climate markers in each of the structural and investment funds (EU 2016).

Multilateral Development Banks’ Joint Methodology

The MDBs’ joint methodology adopts elements of the Rio markers approach but differs in that it applies an activity-based rather than an objective-based criteria for the identification of climate-relevant finance. The MDBs’ Joint Report on Climate Finance tracks financial flows from MDBs to support climate change action in developing economies and emerging economies in transition. The first report in 2011 covered only climate finance, but since 2014, the report has cov-

ered the MDBs’ development finance. In 2015, the MDBs and the International Development Finance Club (IDFC) agreed on a set of Common Principles to guide reporting.

The Joint Report applies the Rio markers’ definitions of climate mitigation and adaptation, complemented by a prescriptive list of eligible mitigation activities. The criteria for the selection of eligible activities are the same as those used by the Rio markers, but the activities are restricted to a prescriptive list of actions—in contrast to the markers’ indicative list—that are compatible with low-emission pathways under the Paris Agreement: renewable energy; low carbon and efficient energy generation; energy efficiency; agriculture, aquaculture, forestry, and land use; non-energy greenhouse gas (GHG) reductions; waste and wastewater; transport; low-carbon technologies; and cross-cutting issues.

Estimation of climate-relevant finance is activity based, assessing the type of activity to be executed, not its purpose, objectives, funding source, or actual results. Climate-relevant finance is estimated at the level of project components or subcomponents, actions, or activities. Reporting is ex ante, at the point of financial commitment. The World Bank refers to these climate finance commitments as “climate co-benefits,” that is, financing that has a development purpose that will also contribute to the achievement of climate change objectives. The MDBs report annually on the aggregate amount of climate-relevant finance and share of climate-relevant items in total development finance.

The World Bank sets annual targets for the aggregate share of climate-relevant finance. Targets cascade from the organization level to individual business units and are closely monitored by senior management, creating incentives for business units to maximize the climate co-benefits associated with individual operations. Given these strong incentives to maximize climate co-benefits, independent quality assurance is needed to avoid “greenwashing” and ensure rigorous application of the methodology.

MDBs are currently considering how to adjust the reporting methodology to ensure alignment with the Paris Agreement’s climate goals. The IDFC has proposed core principles to guide these institutions in their Paris alignment (see box 4). Application of these principles to financial reporting would require agencies to report on activities that have adverse climate impacts (i.e., that result in a net increase in GHG emissions or support a negative list of non-aligned activities) as well as those that support adaptation and mitigation objectives.

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BOX 4 - Paris Alignment

The goals laid out in Article 2.1 of the Paris Agreement are: holding the increase in the global average temperature to well below 2 degrees C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 degrees C; increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low GHG emissions development; and making finance flows consistent with a pathway toward low GHG emissions and climate-resilient development (UN 2015b).

The IDFC, made up of national and regional development banks, proposes three principles to guide financial institutions' Paris alignment (see Clark et al. 2019).

- **Do No Harm:** activities should neither hinder nor be counterproductive to the achievement of the climate goals and should be consistent with long-term national sustainable and low-GHG, climate-resilient development pathways.
- **Support Paris-Consistent Climate Co-Benefits:** whenever possible, institutions should prioritize activities with direct or indirect mitigation and adaptation co-benefits that are consistent with the national attainment of the long-term goals of the Paris Agreement.
- **Foster Transformative Outcomes:** whenever possible, institutions should prioritize activities with “transformative outcomes” that reduce the barriers to and support the large-scale, systemic, and structural changes needed for, the transition of economic, social, and natural systems across and within national economies.

OECD (2019) guidance for development cooperation is broadly consistent with these principles, stressing the importance of countries' determination and ownership of their development pathways and alignment with nationally determined contributions and national low GHG emission development strategies.

UNFCCC Reporting

The UNFCCC reporting regime focuses on international flows of climate finance rather than reporting on national governments' climate-relevant expenditures. All parties submit national communications every four years. In addition, since 2014, Annex 1 (mainly high-income) countries are required to submit biennial update reports (BURs) to the UNFCCC secretariat, including information on climate change financing for developing countries. Annex 1 countries are not required to report on domestic climate change-related expenditure. Most DAC countries use data generated from the Rio markers methodologies for their UNFCCC reports, applying coefficients as weights to determine the share of climate-relevant finance. Activities scored as principal are typically reported at 100 percent. In the absence of a common standard, the weight assigned to activities scored significant varies across countries. As such, data on climate finance reported through the UNFCCC are not strictly comparable.

Developing (non-Annex 1 countries) should submit BURs that provide information on financing received from others, and least developed countries and small island developing states report “at their own discretion.” Reporting is incomplete: 16 of the 39 non-Annex 1 BURs submitted to the UNFCCC as of 2018 provided information on climate financing received (UNFCCC 2018). There is no requirement for non-Annex 1 countries to report on climate change-related domestic expenditure. Nevertheless, four developing countries have provided information on domestic expenditures in their BURs, and three have reported on domestic expenditures through their national communications (see box 5).

UNFCCC may draw on the information provided in BURs and other sources to inform the preparation of Global Stocktakes that cover all finance flows, means of implementation, and support. These reports are generated for the purposes of monitoring progress in collective action rather than the activities of individual member states.

BOX 5 - Reporting on Domestic Expenditures to the UNFCCC

There is no requirement for countries to report on climate change–related expenditure under the UNFCCC or the Paris Agreement. However, there may be benefits for countries to do so in terms of identifying funding gaps, mobilizing international resources, and better aligning these resources with national priorities. Bangladesh, Colombia, and Indonesia have submitted national communications that report on public expenditures since setting up tagging systems. Indonesia’s 2017 national communication reports on public expenditure for mitigation activities in the five priority sectors under its climate budget tracking system (Indonesia 2018a). Bangladesh’s 2018 national communication refers to climate-relevant expenditures identified in the 2013 CPEIR. It also briefly presents the national climate expenditure tracking framework but does not provide updated figures generated by the system (Bangladesh 2018a). Only the national communication submitted by Colombia in 2017 provides detailed and comprehensive information on the climate expenditure tracking methodology and climate-relevant investments by ministry, sector, subnational entity, and revenue source (Instituto de Hidrología, Meteorología y Estudios Ambientales 2017).

Environmental Finance Statistics

The System of Environmental-Economic Accounting (SEEA) provides a statistical framework for the classification of and reporting on environmental activities, products, expenditures, and other transactions. SEEA applies the accounting concepts and practices of the System of National Accounts; as such, it is fully compatible with economic data generated for national accounts and the functional and economic classifications of the Government Finance Statistics used in many national budget systems. Adopted in 2012, SEEA will eventually be implemented progressively by all national authorities, and in 2017, 69 countries had programs for environmental-economic accounting. SEEA distinguishes two broad types of environmental activity based on their primary purpose: environmental protection and resource management (UN 2014). SEEA does not capture all climate change expenditures; mitigation activities are included, sequestration is covered in principle but not yet in practice, and most adaptation expenditures are excluded altogether because their primary purpose is to protect people and assets rather than the environment.

The UN Economic Commission for Europe (UNECE) Conference of European Statisticians has proposed a complementary set of 39 core climate change–related indicators. These indicators include the share of climate change mitigation and adaptation expenditure relative to GDP (UNECE-CES 2017). Climate change mitigation and adaptation expenditures have yet to be defined, however. Building on the UNECE proposal, the United Nations Statistics Division is leading work on the development of a global set of climate change statistics and indicators. When rolled out, the statistical approaches will provide the basis for a harmonized definition of climate-relevant expenditures. Statistical definitions of these expenditures will complement rather than replace definitions introduced to support climate budget tagging.

Climate Change Expenditure and Institutional Reviews

Early climate budget tagging initiatives originated in CPEIRs undertaken with UNDP and World Bank support. Public expenditure and institutional reviews (PEIRs) evaluate and inform the alignment of public spending with a country’s development needs and objectives. The World Bank advocates a PEIR approach that assesses six key dimensions of public expenditure: fiscal sustainability, strategic resource allocation, the role of government, the efficiency and effectiveness of spending, the incidence of spending, and the capability of institutions and the alignment of incentives. This framework tests the consistency between intended and actual outcomes of public expenditure policies (Pradhan 1996). In principle, CPEIRs apply this analytical framework to national climate policy (World Bank 2014). In practice, most CPEIRs have been exploratory studies that focus almost exclusively on the identification of climate change–relevant expenditures.

CPEIRs developed methodologies to support the identification of expenditures drawing on elements of the Rio markers’ objective-based and/or MDBs’ activity-based approaches. This analysis served to raise awareness of climate change issues in central finance and planning agencies and demonstrated the potential of tagging as a tool for integrating climate change into plans and budgets. Many of the CPEIRs recommended that national authorities follow up with climate change budget tagging initiatives that would institutionalize the process for identifying climate-relevant expenditures and facilitating tracking through the budget process. Both the World Bank (2014) and UNDP (2015a) have issued guidance on the design and implementation of CPEIRs.



Climate Budget Tagging

Climate budget tagging is a government-led process of identification, measurement, and monitoring of climate-relevant public expenditures. Countries have developed climate budget tagging methodologies to meet their particular needs, taking into account their policy priorities, budget practices, and institutional arrangements. This section provides an overview of these methodologies, covering three essential design elements: definition of climate-relevant expenditure; definition of the appropriate coverage; and estimation of climate-relevant expenditures. The overview explores how countries have assigned roles and responsibilities for tagging across institutions, put in place arrangements for quality assurance, and integrated climate tagging into their budget process. The overview is based on a review of 19 national climate budget tagging methodologies and key informant interviews with practitioners during 2020. Summaries of the climate budget tagging methodologies reviewed are available in a separately published technical annex.

Climate Budget Tagging Initiatives

First launched in 2012, the pace of adoption of climate budget tagging has accelerated over the past five years. Table 2 tracks the development of climate budget tagging initiatives. The early adopters—Nepal, Cambodia, Indonesia, and the Philippines—were all developing countries acutely vulnerable to climate change. Most of the developing country initiatives have built on methodologies proposed by CPEIRs implemented in collaboration with UNDP and the World Bank.¹ Ireland was the first OECD country to adopt climate change budget tagging as part of a broader green budget initiative in 2018, followed by France in 2020. The state of Odisha in India is the first SNG to apply a specific climate budget tagging methodology, though the state of Assam had already included a climate tag as part of its SDG budget tagging system.

Climate budget tagging is used to support budget preparation and expenditure reviews. Of the 19 initiatives reviewed, 16 generate information on proposed resource allocations during budget preparation, and three (Cambodia, Colombia, and Ethiopia) produce information on actual resource allocations for expenditure reviews that are not part of the budget preparation process. Those countries that use tagging to support budget preparation have applied the methodology each year since climate budget tagging was first introduced, with the exception of Moldova, which developed a methodology that has yet to be applied. Cambodia has used tagging to prepare a climate expenditure review each year, Colombia and Ethiopia have applied tagging only once, and Ethiopia intends to undertake periodic reviews.

1. A partial list of countries that have prepared CPEIRs and gone on to develop budget tagging methodologies is included in Table 2. Countries that have prepared CPEIRs but have not gone on to adopt budget tagging include: Morocco (2013) with World Bank support; and Samoa (2012), Fiji (2015), Vanuatu (2015), and Tonga (2015) with UNDP support. Fiji is currently working on a budget tagging methodology, Armenia is preparing a CPEIR and a budget tagging system, and Bhutan, Lao PDR, the Dominican Republic, and the Bahamas are all considering possible budget tagging initiatives.

Several of the countries that have adopted climate budget tagging already had experience with tagging whole-of-government policy commitments. Bangladesh introduced tags for poverty and gender in its FY2010 budget and a tag for children in FY2016 before introducing its climate tag in FY2018. Colombia tags expenditure for internally displaced people and for victims of conflict, Ecuador for equality, and Indonesia for nutrition. Nepal and Mexico tag against all SDGs. Familiarity with the principles and practices of tagging has facilitated the adoption of climate budget tagging methodologies.

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TABLE 2 - Evolution of Climate Change Budget Tagging

Country	CPEIR (year)	Tagging Supported by	Fiscal Years Budget Tagging Applied	Application
Nepal	2011	UNDP	2013–present	Budget
Cambodia	2012	UNDP	2013–present	Review
Indonesia	2012	WBG	2014–present	Budget
Philippines	2013	WBG	2015–present	Budget
Ecuador	2017	UNDP	2016–present	Budget
Ghana	2015	UNDP	2016–present	Budget
Moldova	2017	UNDP	Not yet applied	Budget
Colombia	2018	WRI	2017	Review
Ethiopia	2014	WBG	2017	Review
Honduras	2016	UNDP, GEF	2017–present	Budget
Nicaragua	2015		2017–present	Budget
Pakistan	2015 and 2017	UNDP	2017–present	Budget
Kenya	2016	UNDP, UNEP	2017–present	Budget
Bangladesh	2012	UNDP	2018–present	Budget
Ireland			2019–present	Budget
Uganda	2013	WBG	2019–present	Budget
Odisha (India)			2020	Budget
France			2021	Budget
Mexico			2021	Budget

The objectives of climate budget tagging vary across countries, though for many developing countries resource mobilization figures prominently among their motivations. The stated objectives generally include some combination of the need to: raise awareness and communicate climate change policy; align budget allocations with climate change policy priorities by integrating climate change in planning and budgeting; enhance accountability and transparency by reporting on climate-related expenditures; identify financing gaps and investment opportunities; mobilize domestic and international finance; and report on climate finance in the context of international commitments (World Bank 2014; UNDP 2015a). Many of the countries reviewed indicate that they intend to use climate budget tagging to support resource mobilization. To date, only Indonesia has used the climate budget tagging system as the basis for a sovereign green bond (SGB) and green sukuk, and Mexico has used its SDG tagging system to support the issuance of an SDG bond.

Climate budget tagging initiatives vary depending on country circumstances. Most developing countries' tagging methodologies cover both adaptation and mitigation, though with much greater emphasis on adaptation. Indonesia initially focused on mitigation, but subsequently expanded tagging to encompass adaptation. Honduras and Nicaragua, both vulnerable to extreme weather events, give particular emphasis to disaster risk reduction. Nicaragua's tagging methodology refers to the UNFCCC Warsaw International Mechanism for Loss and Damage related to Climate Change Impacts. France integrates climate mitigation and adaptation in a broader green budget tagging initiative that also encompasses water resource management, circular economy, pollution abatement, and the protection of biodiversity.

Definitions and Taxonomies

Climate budget tagging requires a definition of climate-relevant activities and expenditures. Climate relevance implies a distinction between climate change and expenditures for other development purposes. This distinction is not always clear; many activities, such as agricultural extension, flood protection, reforestation, and renewable electricity generation, for instance, may serve both development and climate change policy purposes. Tagging methodologies have sought to distinguish between climate-relevant and development expenditures following two approaches. Objective-based definitions distinguish climate-relevant activities on the basis of the intended impact of the activity. Most of the methodologies following this approach have applied the definitions used in the Rio markers. Policy-based definitions limit climate-relevant activities to those that are specifically referenced in national climate change policy documents. Some countries have adopted a mixed approach, and some have used indicative, prescriptive, and negative lists of climate-relevant activities to complement definitions.

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TABLE 3 - Evolution of Climate Change Budget Tagging

Objective-Based Definition	Policy-Based Definition
Cambodia (OECD Rio markers) Colombia (OECD Rio markers and GFLAC definition) Ethiopia (OECD Rio markers and reference to national strategies and sectoral plans) France (own definitions consistent with EU taxonomy) Honduras (own definition, aligned with OECD Rio markers) Indonesia (aligned with OECD Rio markers, indicative list) Ireland (aligned with ICMA GBP) Nicaragua (own definition, based on IPCC/UNFCCC focus on loss and damage, and disaster risk management) Kenya (OECD Rio markers, indicative list)	Bangladesh (44+6, based on policy) Ecuador (15 categories, 3–6 specified activities for each) Ghana (list of policy objectives and operations) Nepal (11 climate change–related categories defined by working group) Pakistan (11 tasks/sectors from policy, indicative activities)
Mixed Approach	
Moldova (intent, type of activity, or part of policy; classification according to activity category) Philippines (objective; classification according to policy) Uganda (objective; classification according to type of policy responses and specific strategy)	

Although some countries have applied the Rio markers directly, others have adapted the marker definitions to their particular needs. Indonesia initially considered only mitigation activities in its definition. Honduras tags disaster risk reduction expenditures as a distinct category separate from adaptation. Nicaragua based its definition on that of the Intergovernmental Panel on Climate Change (IPCC) and has a separate tag for expenditures associated with climate-induced losses and damages, following the definition used by the UNFCCC Warsaw International Mechanism. Others have made reference to national policy and included indicative lists of activities. Colombia has based its definitions on those developed by GFLAC (Grupo de Financiamiento Climático para América Latina y el Caribe, the Climate Finance Group of Latin America and the Caribbean), a civil society initiative. Ireland applied the definition that it had used in its green sovereign bond issue, which followed the definition of the International Capital Markets Association (see below).

Policy-based definitions restrict the designation of climate-relevant activities to those identified in the countries' climate change policy documents. Five of the 15 methodologies reviewed use policy-based definitions. A list of climate-relevant categories, programs, or activities is derived from or aligned with a national climate change policy or action plan. In Bangladesh, for example, expenditures contributing to one of the six thematic areas or one of the 44 programs under the national climate change policy are considered relevant and tagged. As policy changes, so too will the definitions. This allows governments to introduce new climate-relevant categories, programs, and activities when needed and to discontinue them when they are no longer relevant. However, this flexibility hinders comparisons across time. Given that each country applies its own definition, it is not possible to aggregate or compare data on climate-relevant expenditures across countries.

Some countries have combined the objective- and policy-based definitions of climate relevance. In the Philippines and Uganda, the definition starts from an objective-based definition and then as a second step, aligns programs and activities with specific climate change policies. Moldova's methodology proposes to screen expenditures based on their intent, the type of activity, or their inclusion in the National Low Emission Development Strategy and then classify them along a typology of policy objectives and lines of intervention.

France's 2021 budget broke new ground by integrating climate change into a wider range of green objectives in its budget tagging methodology. The process covers six environmental objectives applied in the EU Classification System for Environmentally Sustainable Activities used for the financial sector: climate change mitigation; climate change adaptation; water and marine resources; circular economy, waste prevention, and recycling; pollution prevention and control; and protection of healthy ecosystems (see box 6). Activities are tagged against each objective separately and thus may have multiple green tags.

Several countries use taxonomies, that is, indicative or prescriptive positive lists of climate-relevant activities as part of their tagging methodology. Indicative taxonomies are not exhaustive. Activities that are not specified on the list can still be tagged as relevant if they correspond to the standardized relevance definition or are aligned with the policy objectives and operations. This follows the practice of the OECD Rio marker guidance (OECD n.d.), which includes an indicative list of activities to support the screening and tagging of projects that is neither exhaustive nor prescriptive. Prescriptive taxonomies exclude activities that are not listed. Ecuador, Moldova, and the Philippines have issued prescriptive lists of climate-relevant expenditures. In Ecuador, a list of 15 categories with three–six activities each underpins the tagging of environmentally relevant expenditures. In Moldova, climate-relevant activities must be contained on one of two prescriptive lists: one for mitigation, one for adaptation. Similarly, in the Philippines, eligible expenditures must map to a list that currently includes 247 activities. The Philippines' prescriptive list may be updated periodically.

Several countries apply lists of activities that are specifically excluded from climate tagging. In Ecuador, the list of exclusions comprises a range of activities and subcategories of expenditure items that include drinking water, irrigation, infrastructure, furniture, travel costs, audit costs, and office supplies. Colombia specifically excludes activities with a disproportionate negative effect on the environment or society, even if they contribute to significant emissions reduction or have adaptation benefits, such as nuclear and large-scale hydroelectric power plants and fracking.

France is the only country to tag expenditures on activities that have an adverse impact on the environment. Following the French methodology, activities are ranked in five categories: 3 is "very favorable," where the principal objective is environmental or it contributes to an environmental service; 2 is "favorable," without an environmental objective but with an environmental impact; 1 is "favorable but controversial," where the favorable impact in the short term may entail long-term risks; 0 is "neutral," without a significant environmental impact; and -1 is "unfavorable," where the expenditure adversely impacts at least one environmental objective without having any favorable impact. "Unfavorable" expenditures identified in France's 2021 budget include subsidies for fossil fuels, tax expenditures for airlines and shipping, and energy-intensive manufacturing, construction, and agroindustry. Although the extension of tagging to encompass adverse environmental impacts increases its complexity, it also provides a more comprehensive and balanced picture of the environmental and climate change impact of public spending. This approach is consistent with Paris alignment in that it identifies expenditures on activities that hinder or are counterproductive to the achievement of climate goals.

Countries should consider aligning definitions of climate-relevant activities across the public and private sectors. Several countries' financial sector regulators have put in place green taxonomies to classify economic activities based on their contribution to sustainability and climate change objectives (see box 6). France's categories of green expenditures are consistent with the EU taxonomy. Colombia is currently considering a more cohesive methodology for budget tagging and green taxonomy that would harmonize definitions of green activities across the private and public sectors.



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BOX 6 - Green Taxonomies for the Financial Sector

Green taxonomies have been developed by financial market regulators to classify economic activities based on their contribution to sustainability and climate change objectives. Green activities typically encompass climate change and other environmental challenges, such as natural resource conservation, biodiversity conservation, and pollution prevention and control. Taxonomies support green private sector investments by providing a credible basis for green bond investors and lenders to identify green financial products and activities. There are several national green taxonomies in operation: China adopted its taxonomy in 2015; France in 2016 as part of a green labeling scheme; Bangladesh in 2017 (updated in 2020); Mongolia in 2019; and the EU in 2020.

The EU Classification System for Environmentally Sustainable Activities identifies six environmental objectives and associated activities. These are: climate change mitigation; climate change adaptation; sustainable use and protection of water and marine resources; transition to a circular economy, waste prevention, and recycling; pollution prevention and control; and protection of healthy ecosystems. Qualitative and quantitative thresholds are used in technical screening to identify green activities. Selection of climate change mitigation activities is based on the emissions footprint. For adaptation, the screening criteria consider the location and context-specific vulnerability of an economic activity, the system the activity is in, and its expected lifetime (CBI 2019).

The World Bank recommends that national authorities follow a six-step process in designing their green taxonomies. (1) Define strategic goals, taking into consideration both environmental and market development considerations. (2) Specify sectors that are expected to deliver on the objectives. (3) Identify intended taxonomy users and beneficiaries, their roles, and ideally, their respective responsibilities in the implementation and use of the taxonomy. Although the focus is on financial markets, taxonomies may also be applied by the public sector, notably when issuing SGBs. (4) Assess and select specific investments in the sectors that contribute to the designated environmental objectives, ideally considering the expected performance of these investments in connection to national environmental targets (such as decarbonization). (5) Select environmental objectives relevant to the country's sustainable development priorities and agenda. (6) Outline reporting guidelines for market actors applying the taxonomy (World Bank 2020).

Coverage

The second element of a climate tagging methodology is its coverage. The broad categories to consider in determining coverage are: the sectors or institutions that will participate in tagging; the budget categories to cover, typically recurrent and capital (investment) but also potentially both direct expenditures, tax expenditures, and revenues; and the off-budget entities to include, the most important of which are usually SNGs and state-owned enterprises (SOEs). The broader the coverage, the more comprehensive the picture of climate-relevant expenditures and the more effectively resources can be aligned with policy objectives.

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TABLE 4 - Coverage

Selected Sectors, Ministries, and Agencies Only	All Sectors, Ministries, and Agencies Included	Investment Budget Only	Investment and Recurrent Budget Included	Tax Expenditures Included	Subnational Transfers/ Budgets Included	Transfers to SOEs or Autonomous Bodies Included
Bangladesh Cambodia Colombia Ethiopia Indonesia Odisha (India) Pakistan	Ecuador Ghana France Honduras Ireland Kenya Moldova Mexico Nepal Nicaragua Philippines Uganda	Ireland Mexico Moldova Nepal Odisha (India)	Bangladesh Cambodia Colombia Ecuador France Ghana Honduras Indonesia Kenya Nicaragua Pakistan Philippines Uganda	France	Bangladesh (transfers) Colombia Ecuador Ghana Honduras (de-concentrated) Kenya Nepal (block grants) Pakistan Philippines Uganda	Ecuador France Pakistan Philippines

Most of the tagging methodologies reviewed cover central government expenditure across all sectors and entities. Nepal and Nicaragua have gradually expanded their tagging systems to cover all central government entities. Uganda is following a similar progressive approach. Some countries tag only the sectors and entities considered most relevant to climate change action. Initially, Indonesia tagged only the sectors and corresponding ministries that fall under the National Action Plan for Greenhouse Gas Emissions Reduction. Subsequently, tagging expanded to cover adaptation activities.

Most methodologies tag both recurrent (operational) and investment (development) expenditures. Nepal generally excludes recurrent expenditures but leaves it to the discretion of line ministries to tag them if they finance what is considered a development activity. Moldova's methodology allows the tagging of recurrent expenditures only if they are directly climate relevant and only during the first year. All other countries tag both investment and recurrent expenditures. Donor

funding is captured only where it is reflected on budget. This can be a significant omission in developing countries, where donors finance a significant share of investment. Cambodia has established a reporting system for off-budget donor funds using their aid management platform, with tagging based on donors' own reporting and with no further validation.

In all of the countries reviewed, climate tagging focuses exclusively on direct expenditures and excludes tax expenditures and subsidies. This is a significant omission. Recent assessments by France and Finland identified tax expenditures as an important instrument for financing climate policy and the principal instrument for financing expenditures with adverse climate impacts. It is in marked contrast to the practice with SGBs, which have a wider coverage, encompassing subsidies and tax expenditures. SGB frameworks include subsidies in Chile, Fiji, Indonesia, Ireland, the Netherlands, Nigeria, and Poland, while Belgium and France also explicitly include tax expenditures.

Almost half of the methodologies reviewed also apply to SNGs directly. SNGs account for a substantial share of expenditure in most countries, averaging just over 10 percent of public expenditure in low-income countries and increasing to nearly 40 percent in high-income countries. They are usually assigned critical land use management, urban services, and transport, water, and environmental management functions, and they are often the first line of defense in dealing with disasters. Integration of SNGs into tagging systems may be particularly challenging where local authorities are autonomous or not required to apply national budgeting and financial reporting standards, or where capacity constraints limit their ability to comply. In Nepal, only the transfers from central government to subnational entities are tagged. In the Philippines, all 1,760 local government units are required to tag their annual investment plans, covering funds from the central government, own resources, and donor funding. However, compliance by local government entities is patchy, largely due to limited capacity and weak incentives.

Only Ecuador, Pakistan, and the Philippines tag transfers from the central government to SOEs. SOEs are active in sectors that are a major source of GHG emissions, such as energy, transport, and water supply. SOEs also provide infrastructure services that are critical for resilience to extreme weather events and climate change. However, budget tagging may not be the most effective mechanism for focusing SOEs' attention on climate policy issues, which can be better achieved by incorporating climate risks, objectives, targets, and indicators into their statement of corporate intent and performance contracts and by applying sustainability reporting standards. However, budget tagging of transfers can provide information on the alignment of SOE operations with climate policy objectives.

Estimation

The System of Environmental-Economic Accounting (SEEA) provides a statistical framework. The third element of a climate tagging methodology is an estimation of the share of expenditures that are climate relevant. Estimation is necessary because programs and projects that are primarily intended to achieve climate-related objectives may include activities or deliver outputs and outcomes that are not climate relevant,

and conversely, programs and projects that are primarily intended to achieve a development objective may include activities or deliver outputs and outcomes that are climate relevant. Countries have followed one of three approaches: limiting tagging to programs that have climate change as a primary objective; considering all programs and projects and estimating the expenditures associated with the climate-relevant elements, components, or activities; and applying climate-relevance weights to estimate the fraction of program or project expenditure that is climate relevant.

Some countries consider only those programs and projects that have climate change as their primary objective and consider all of these expenditures to be climate relevant. Colombia and Ireland follow this approach, tagging all expenditures under programs that identify climate change as a main objective. This narrows the range of activities considered climate relevant, excluding any climate co-benefits of development programs.

The most common approach estimates the climate-relevant expenditures associated with program and project elements, such as components, activities, and outputs. The level of granularity for tagging and estimation varies. The most granular drill down from program, projects, and components to activities and outputs and eventually to inputs. This approach generates an estimate of the incremental cost of climate-relevant activities in development programs and projects. The MDBs' joint methodology follows this approach (see above). The Philippines tags expenditures of the components that address climate change when the main objective of the program or project is not climate change related. Indonesia tags and estimates climate-relevant expenditures at the output level. Nicaragua tags activities and works under programs. Indonesia tags and estimates climate-relevant expenditures at the output level. France applies the tag at the lowest level of the program budgeting framework: "actions" and in some cases "sub-actions." Nepal applies a variant of this approach, calculating the share of climate-relevant expenditures within a program by identifying climate-relevant budget lines. Based on how large this share is, programs are tagged as either highly climate relevant (more than 60 percent), climate relevant (20–60 percent), or neutral (less than 20 percent). Nepal's budget reports present the total amount allocated to programs under each of these three categories.

TABLE 5 - Estimation

Program	Program Element	Relevance Weight	Weight and Cost
Colombia Ireland	Ecuador Ethiopia France Indonesia Kenya Nepal Nicaragua Philippines Uganda	Cambodia Ghana Honduras Mexico Moldova Odisha (India) Pakistan	Bangladesh

Relevance weights are used to estimate the share of climate-relevant expenditures at program and project level without looking at the composition expenditures. Weighting methodologies assign a proportion of the total budget for programs, projects, or activities to categories based on climate relevance. The OECD Rio marker methodology distinguishes three categories of climate-relevance: “not targeted,” “significant,” and “principal.” Ghana, Moldova, and Cambodia also distinguish three categories of climate relevance, and each methodology assigns a different weight to these categories. In Ghana, actions with a clear focus on climate change adaptation or mitigation are classified as highly relevant and weighted at 100 percent; actions that have links to climate change objectives are considered of medium relevance and weighted at 50 percent (which can be split between adaptation and mitigation at 25 percent each); and actions that are related to the medium relevant expenditures but not directly linked to climate change are considered low relevance items and weighted at 20 percent (which may be split 10 percent each between adaptation and mitigation). In Cambodia, the weights applied to the relevance categories are 80, 50, and 25 percent, and in Moldova they are 70, 50, and 25 percent.

Bangladesh follows a multi-step “objective-based cost component approach.” Bangladesh applies a climate-relevance weight to all expenditures. The weight is the percentage of total expenditure for each climate intervention minus the share of the expenditure that would take place under a business-as-usual scenario. For example, the development of seed production, storage, and supply systems is considered 100 percent climate relevant, but 40 percent of the expenditure would take place in the absence of climate change and so the weight assigned is 60 percent. The weight for the overall program (a four-digit code) is given by subtracting the sample standard deviation from the maximum intervention weight. Projects can be mapped to up to three climate-relevance criteria. The climate-relevance criteria map to the 44 programs and six thematic areas under the national climate change strategy. For programs addressing more than one relevance criterion, the program relevance weight is calculated by applying the weighted reciprocal rank formula to distribute expendi-

ture among the criteria (for three criteria, the weights are 0.55, 0.27, and 0.18; for two criteria they are 0.67 and 0.33).

Countries that tag multiple policy issues need to consider whether more than one tag can be applied to any given expenditure. Application of a single tag requires officials to select the most relevant policy objective and ignore other objectives to which a program may contribute. The alternative is to apply multiple tags, as Ecuador, Kenya, Mexico, and Nepal do during budget preparation. Use of multiple tags reflects the cross-cutting nature of many climate change and development programs and projects but significantly increases the effort required for tagging. France applies tags for six environmental objectives in its budget tagging methodology.

The choice of estimation method should be informed by the intended application as well as practical considerations, such as the level of effort required and compatibility with budget practices. Where the intention is simply to identify climate-relevant programs and projects, granular analysis of program and project components and activities is unnecessary. Weighting based on a review of program and project objectives can generate a rough estimate of climate-relevant expenditures by program, institution, and sector. This may be sufficient to assess the alignment of resource allocations with climate policy objectives, monitor changes in allocations over time, and link climate finance to climate-relevant activities. Where the intention is to integrate climate-relevant activities into program and project design or to apply targets for climate-relevant expenditures, a granular review of program and project elements is needed. However, the more granular the analysis, the greater the effort required in the estimation of climate-relevant expenditures. The underlying budget classification will ultimately determine the level of granularity that is feasible: expenditures can be tagged to components, activities, and outputs only if the budget classification breaks down expenditures to this level. Where the budget classification does not provide granular breakdown of program elements, weighting by program objectives is the only viable estimation method.

Institutional Roles

Tagging methodologies are typically developed by central finance agencies, often in collaboration with specialized environment or climate change institutions. In Honduras, the methodology was developed jointly by the Ministry of Finance's public investment department and the Ministry of Environment. In Nepal, the National Planning Commission led an inter-ministerial working group that included, among others, representatives from the Ministries of Finance, Environment, and Local Development. Where responsibility for budgeting, planning, and accounting is split across different agencies, tagging systems developed by only one may not be fully integrated into planning and budgeting procedures. In Pakistan, the Ministry of Planning is not directly involved in the tagging. In Colombia, the expenditure review methodology was developed by the National Planning Department but has not been adopted by the Ministry of Finance. Some countries have planning, finance, environment, and key line agencies. None of the countries reviewed had established formal arrangements for collaboration with national civil society organizations for climate tagging during the budget process.

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TABLE 6 - Institutional Roles

Led by Central Finance Agency	Led by Central Planning Agency	Involvement of Environment or Climate Change Agency	Tagging Centralized	Tagging by Line Agency	Quality Assurance
Bangladesh Cambodia Ecuador Ethiopia France Ghana Honduras Indonesia Ireland Kenya Mexico Moldova Nicaragua Pakistan Philippines Uganda	Colombia Nepal	Cambodia Colombia Ecuador France Ghana Honduras Indonesia Kenya Mexico Moldova Nepal Odisha (India) Pakistan Philippines Uganda	Bangladesh France Ghana Honduras (currently) Ireland Cambodia Colombia Ethiopia Odisha (India) Pakistan	Ecuador Honduras (from 2021) Indonesia Kenya Mexico Moldova Nepal Nicaragua Philippines Uganda	Indonesia Ireland Moldova Philippines Uganda

Specialized environment and climate change agencies play a role in validation, capacity building, reporting, and analysis. In Moldova's proposed methodology, the National Climate Change Committee is designated to review the tags applied by sectoral agencies. In Pakistan, the Ministry of Climate Change defines the climate-relevance criteria and produces analysis and reports of the tagging data. In Uganda, the Ministry of Water and Environment advises ministries, departments, and local governments on the application of the tagging and compiles and consolidates information to inform budget hearings. In the Philippines, the budget and planning units of all agencies are trained each year, and the Climate Change Commission has set up a help desk to advise agencies and local governments when applying the methodology.

Most countries delegate responsibility for applying the tagging methodology to line agencies. Line agencies provide tagging data in their budget submissions, either by entering the data into the planning and budgeting information system or by

completing a separate manual process. Delegation of responsibility for tagging to line agencies ensures that climate relevance is assessed by those most familiar with the objectives and scope of the planned activities. Line agencies' active participation in tagging requires officials to consider climate change impacts, policy, and links to resource allocations, thereby helping raise the profile of climate policy considerations and mainstream climate action. Some countries have centralized responsibility for tagging during the development stage in order to test the methodology and then sought later to shift responsibility to line agencies. Honduras currently applies tags centrally but intends to decentralize this function in 2021. Bangladesh and Ghana have retained responsibility for tagging at the central level. Centralized tagging during budget preparation is possible where programs are already tagged in the budget information system. Countries that apply climate tags ex post for the purpose of expenditure reviews, including Cambodia, Colombia, and Ethiopia, centralize responsibility for tagging. In these countries, line agencies are not directly involved in the process of tagging climate expenditures.

Quality Assurance

Delegation of responsibility for tagging does, however, increase the risk that the methodology is not applied consistently across agencies. Agencies may not comply with their obligation to tag or may do so superficially or incorrectly. Where there are incentives to increase the share of climate-relevant expenditure, agencies may “greenwash” programs and projects, relaxing the criteria to expand the share of expenditures reported as climate relevant.

Indonesia, Moldova, the Philippines, and Uganda provide for a quality assurance or validation mechanism in their methodologies. In Indonesia, expenditures are initially tagged by the Echelon II units/directorates’ work teams. Tagging is verified in reconciliation meetings between line agencies and the Climate Change Secretariat of the Ministry of National Development Planning. Tagging is then validated by the Ministry of Environment and Forestry for consistency with the nationally determined contribution (NDC) and endorsed by the Ministry of Finance before the budget is submitted for legislative approval. In the Philippines, agencies are required to document the climate objective, outcome, and relevance of the tagged expenditure. The forms are reviewed by the Climate Change Commission in terms of tagging consistency over time (previous, current, and future fiscal year) and the climate responsiveness of the tagged programs. Programs that do not

meet the criteria can be excluded after consultation with the government agency. Unfortunately, increased demands for information to satisfy quality assurance requirements led to a sharp reduction in the number of agencies that tagged expenditures because they did not have the capacity to cope with the expanded workload. In Uganda, budget entities fill in a Quality Assurance and Review form together with their budget proposals. The form provides supporting information for the tagging, including information on climate-relevant objectives and outputs. The Climate Change Department reviews tagging and suggests adjustments based on the forms.

Budget Process

Budget guidelines and call circulars typically provide guidance on budget tagging and its application in the budget process. Uganda’s budget call circular requires ministries to mainstream climate change when they formulate plans, programs, and budgets. Bangladesh requires agencies to explain how projects and programs address or contribute to climate change. The Philippines requires agencies to demonstrate relevance to national climate policy objectives using a standard format. Pakistan includes information on climate change in the budget call circular, the economic survey, and the budget brief.

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TABLE 7 - Budget Process

Tagging during Budget Preparation	Tagging after Budget Preparation	Manual Tagging	IFMIS Tagging	Climate in Budget Documents or Annexes	Climate Citizens Budget	Reporting on Actual Expenditures
Bangladesh Ecuador France Honduras Ireland Mexico Moldova Nepal Nicaragua Odisha (India) Pakistan Philippines Uganda	Cambodia Colombia Ethiopia	Cambodia Colombia Ethiopia France Ireland Mexico Moldova Nepal Odisha (India)	Bangladesh Ecuador Ghana Honduras Indonesia Kenya Nicaragua Pakistan Philippines Uganda	Bangladesh Ecuador France Honduras Indonesia Ireland Mexico Nicaragua Nepal Odisha (India) Philippines	Bangladesh	Bangladesh Cambodia Nicaragua Uganda (planned)

Most countries tag expenditures during budget preparation. In Nepal, for example, planners in line ministries prepare budget sheets for each program and its activities. There are two climate change–specific columns in the budget sheet format: the first indicates the climate relevance of each activity (yes/no) and the second the budget amount allocated to the respective action. The budget share of climate-relevant activities in the overall program budget determines the climate-relevance level of the initiative. Programs are then tagged accordingly in the general National Planning Commission budget sheet, where an additional column for the climate tag has been added. In Pakistan, the tagging is applied after budget approval when cost centers are created in the integrated financial management information system (IFMIS). Cambodia, Colombia, and Ethiopia apply the tagging ex post, after the completion of the budget process, in order to generate a review of climate-relevant expenditures. Cambodia’s Ministry of Economy and Finance publishes annual Climate Public Expenditure Reviews analyzing budget data and donor funds.

Many countries have included the climate tags in the coding structure for their IFMIS. Countries usually start with manual tagging, whereby information on climate tags is entered on paper forms or spreadsheets, and then integrate climate tags into their budget information system once the design of the methodology is established. In most of these cases, line agencies enter the relevant codes when entering their budget data (see box 7). In Bangladesh and Ghana, specific codes are pre-tagged by the central finance agency so that climate tags are applied automatically when entering budget data.

None of the countries reviewed sets targets for climate-relevant expenditures, presents specific climate-related appropriations, or applies climate-related expenditure envelopes within their budgets. Agencies integrate climate-related activities and expenditures within their overall budget envelopes. Consequently, the allocations to climate-relevant expenditures are purely indicative, and there is no immediate incentive for agencies to increase those expenditures. Only Honduras restricts reallocation from climate-relevant to other expenditures during budget execution (with the exception of disaster response), thereby protecting climate change allocations during implementation. Nepal categorizes programs as priority 1, 2, and 3 and provides priority 1 programs with privi-

leged access to cash releases when there are revenue shortfalls. However, climate change relevance is only one among many criteria for determining priority and a large share of the budget falls into this priority category (UNDP 2018c). The MDB joint methodology requires reporting only at the commitment of funds and does not capture information on the actual application of climate expenditure.

Climate-relevant allocations are reported as part of the budget in about half of the countries reviewed. Ecuador, Indonesia, Nicaragua, and Nepal present climate expenditure as annexes to their annual budget documents. In Bangladesh, the Ministry of Finance presents both a comprehensive annual Climate Finance Report and a simplified annual Citizens’ Climate Budget. The Philippines produces climate budget briefs for key agencies as well as a national climate budget document. Climate budgets in Honduras are presented in a separate analytical report, including detailed budget tables of all climate-relevant activities.

Countries that tag climate-related expenditures in their financial management systems can track budget execution, but thus far, few countries do so. Only Bangladesh produces budget execution reports on climate projects and programs. The Climate Budget Report provides information on the allocation, revised allocations, and actual expenditure overall by ministry, program, and thematic areas (overall and by ministry). Nicaragua reflects climate expenditures in the general budget liquidation report, which is subject to audit by the General Comptroller and is submitted to the National Assembly. As tagging systems are consolidated, efforts should shift from the rollout and capacity-building process to reporting and data analysis of actual expenditures and impact.

Among the countries reviewed, only Bangladesh has systematized climate performance audits for tagged projects. The Office of the Comptroller and Auditor General has adapted the guidelines of the International Organization of Supreme Audit Institutions (INTOSAI) to country-specific requirements and to date has audited two climate-tagged projects. In the Philippines, climate-relevant expenditures are subject to compliance audits but not performance audits. Discussions on the involvement of the Commission on Audits in the budget tagging system are ongoing.



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BOX 7 - Coding for Climate Tags

Ecuador uses a six-digit thematic code in its IFMIS (e-SIGEF). The first two digits classify the expenditure as either equality or environment related. The second two digits identify the category of the expenditure, and the last two digits refer to the type of activity. Expenditures can be assigned to only one theme.

Kenya introduced an extended four-digit segment in the IFMIS's standard chart of accounts to tag specific expenditures that inform cross-cutting policy areas, such as information and communications technology, HIV, and climate change. The first two digits refer to the subject of the tagging (such as climate change), the third shows the focus (adaptation, mitigation, or both/cross-cutting), and the fourth the relevance level (principal, significant, or not targeted).

In the Philippines, the climate change expenditure tagging typology code applied to line items has six digits: the first identifies the activity as either adaptation or mitigation; the second allocates it to one of the seven priorities under the National Climate Change Action Plan; the third allocates it to a subpriority under the respective strategic priority; the fourth identifies the type of instrument deployed (policy and governance; research and development; knowledge, capacity building, and training; action delivery); and the last two identify the specific activity.

Uganda created a five-digit code in its planning and budgeting system. The first digit indicates the objective of the National Climate Change Policy; the second and third identify the sector; the fourth specifies the type of policy response; and the fifth identifies the specific strategy/activity.



Sovereign Green Bonds

SGBs are debt securities issued by governments that are used to finance activities with defined environmental benefits. The market for SGBs has developed in parallel to the development of climate budget tagging. The first green bond was issued by the World Bank in 2008, and the first SGB followed in 2016. Since then, as of December 2020, 17 national authorities had issued green bonds.²

Although the SGB framework and climate tagging methodologies have developed separately, they share some common elements. Both require the authorities to define eligible expenditures and to put in place institutional arrangements to select and report on expenditures. A budget tagging system is not a requirement for the issuance of SGBs but can be used for this purpose. Indonesia was the first country to do so, while Mexico has used budget tagging to support its SDG bond issue and other countries are exploring this option.

2. As of December 2020, sovereign issuances of green bonds were Poland (2016, 2019), France (2017), Fiji (2017), Nigeria (2017), Belgium (2018), Lithuania (2018), Ireland (2018 and 2019), Indonesia (2018, 2019, and 2020), Korea (2019), the Netherlands (2019), Chile (2019, 2020), Hungary (2020), Sweden (2020), Thailand (2020), Germany (2020), and Egypt (2020). The Hong Kong Special Administrative Region of the People's Republic of China also issued a green bond in 2019. Seychelles issued the first blue bond in 2018, a subcategory of the green bond, which finances marine and ocean-based projects that have positive environmental, economic, and climate benefits. Mexico (2020) issued an SDG bond that includes climate change as one of 11 selected SDGs.

Green Bond Principles and Standards

All SGB issuances to date have adhered to the voluntary Green Bond Principles (GBP). Developed in 2014 by a consortium of investment banks, the GBP seek to promote disclosure, transparency, and integrity in the development of the green bond market. The International Capital Markets Association serves as the GBP secretariat, providing guidance on green bond issues and periodically updating the GBP, most recently in 2018. The GBP focus on the use of proceeds, recommending the procedures and disclosures that issuers lay out in a green bond framework. The GBP have four core components:

- **Use of proceeds.** Proceeds should finance green projects that provide environmental benefits that are assessed and, where feasible, quantified by the issuer. The GBP recognize broad categories of eligible activities: climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation, and pollution prevention and control. The GBP include an indicative list of the most common activity categories. Issuers are encouraged to consider international and national taxonomies that provide further guidance as to what may be considered green and eligible by investors (see box 6 above).
- **Project evaluation and selection.** Issuers should communicate: environmental sustainability objectives; the process for selection of projects; and any related eligibility criteria, such as exclusions and ways to manage environmental and social risks. Issuers are encouraged to frame this information in the context of their sustainability objectives and strategy.
- **Management of proceeds.** The net proceeds of the green bond should be segregated into a specific account or otherwise tracked to provide assurance that the funds are used for the purposes intended. The GBP recommend that an auditor or third party verify the application of funds.
- **Reporting.** Issuers should report annually on projects, amounts allocated, and expected impacts. If there are a large number of projects, reports can be presented on a portfolio basis. The GBP recommend the use of qualitative and, where feasible, quantitative performance measures.

The GBP recommend that issuers appoint external reviewers to confirm alignment of their green bonds and/or green bond framework with the four core components and the environmental features of the activities to be financed. The GBP distinguish four types of external review:

- **Second-Party Opinion.** An independent institution with environmental expertise assesses the alignment of the issuer's overall strategy and policies, and the activities intended for use of proceeds, with the GBP. All but two of the 12 SGB issuances reviewed were endorsed by a second-party opinion. These are usually commercial environmental, social, or governance service providers. Mexico's sovereign SDG bond also received an opinion from UNDP on the framework's alignment with the SDGs.
- **Verification.** An independent institution verifies alignment against a designated set of criteria. The verification may cover business procedures for the allocation and tracking of proceeds and/or environmental impacts.
- **Certification.** The green bond and/or green bond framework is certified against a recognized external green standard by an accredited third party. Two of the SGB issuances, Nigeria and the Netherlands, have been certified, in both cases following the Climate Bonds Initiative (CBI) certification scheme. Certification applies a specific taxonomy and assessment criteria to determine program project eligibility. These criteria are more demanding than those of the GBP and are focused on the alignment of investments with the global two-degree target (see box 8).
- **Rating.** The green bond and/or associated green bond framework is assessed by qualified third parties using an established rating methodology. The rating may focus on environmental performance, alignment with the GBP, or another benchmark, such as a two-degree climate change scenario.

There are initiatives underway to standardize the taxonomies and governance arrangements for the green bond market encompassing both private and public issuance.

The International Organization for Standardization (ISO) has started work on ISO 14030 Environmental Performance of Green Debt Instruments. The standard draws on the GBP and CBI. It seeks to harmonize the definition of green bonds and specify requirements for the evaluation of the environmental performance of the assets they finance. Harmonization can strengthen market integrity by ensuring transparency and the consistent application of the same standards and can also increase liquidity by expanding the pool of comparable investment products, thereby facilitating access to large institutional investors. Harmonization will have implications for the design of SGBs, notably in terms of more rigorous criteria for the selection of eligible green activities and impact reporting requirements.

BOX 8 - Climate Bonds Initiative Standard and Certification Scheme

The Climate Bonds Initiative (CBI) is an international “fair trade–like” labeling scheme for green bonds that finance low-carbon, climate-resilient infrastructure investments. Established in 2010, the CBI seeks to provide the green bond market with the trust and assurance to mobilize the resources needed to achieve the goals of the Paris Agreement. The methodology is made up of two parts: the standard detailing management and reporting procedures; and sector criteria detailing the requirements that assets must meet to be eligible for certification. Certification criteria are underpinned by the Climate Bonds Taxonomy that is based on research from the IPCC and the International Energy Agency, as well as an extensive consultative process.

The taxonomy identifies the assets and projects needed to deliver a low-carbon economy (mitigation) and two types of resilience investments (adaptation). The screening indicator to determine if the asset is certifiable is a function of the asset’s GHG emissions performance and its consistency with the two-degree global emissions reduction target. The framework divides each sector into subsectors and categorizes by asset type, asset specifics, and whether the asset is “two-degree compliant.” The two types of climate resilience (adaptation) investments are: asset focused, where the intention is to maintain or enhance the resilience of an asset or activity to climate change, and system focused, where the intention is to deliver climate-resilience benefits to the broader system beyond an asset’s or activity’s performance over its design lifespan. Issuers are expected to demonstrate that for the assets and activities financed from the bond, they understand the climate risks; have undertaken risk-reduction measures that consider the inherent uncertainties around climate change; can deliver resilience benefits over and above addressing identified risks (for system-focused investments); and are undertaking regular evaluation of the asset’s and/or system’s climate-resilience performance.

Sovereign Green Bond Frameworks

Although all of the SGB frameworks adhere to the GBP’s definition of eligible green activities, there is wide variation in the categories included, reflecting differing policy priorities. All of the definitions include some or all of the broad categories of green activity listed by the GBP. However, some frameworks focus on mitigation (Hong Kong, Nigeria, Poland, and Chile), some include broad definitions of adaptation (France, Ireland, and the Netherlands), while others have highlighted issues of disaster resilience (Fiji, Indonesia) or provide for broad transversal initiatives that support a range of green policy objectives (France). Most of the frameworks include specific exclusions for activities related to fossil fuels and nuclear and large hydropower. Chile includes a specific exclusion for deforestation and the degradation of forests. France’s framework provides indicative allocations of the proceeds by sector. Several of the more recent issuances have integrated green activities as part of a broader thematic bond. For example, South Korea’s sustainability bond encompasses social outcomes, Ecuador and Guatemala focus on social programs, and Mexico encompasses all 17 of the SDGs and covers expenditures only in the poorest municipalities.

All of the SGB frameworks cover a wide range of expenditures. Chile’s framework has perhaps the broadest coverage, including: tax expenditures (subsidies and tax exemptions); operational expenditures (funding for state agencies, local authorities, and companies instrumental to deploying the country’s climate and environmental strategy); investments in real assets (land, energy efficiency, infrastructure) and maintenance costs for public infrastructure; intangible assets (research and innovation, human capital and organization); and capital transfers to public or private entities. Most frameworks allow proceeds to be allocated both for financing and refinancing of eligible expenditures and recent, current, and future expenditures. This addresses the risk that the current portfolio of eligible programs and projects is insufficient to absorb all the proceeds of the green bond. Frameworks also include specific provisions to ensure that financing from green bonds is in addition to green finance from other sources, thereby avoiding double counting by excluding the activities of agencies, SOEs, and SNGs that are financed from other green funds. Domestic revenues that are earmarked for green activities are also included, such as Fiji’s Environment and Climate Adaptation Levy or France’s subsidies to renewable energies financed from an earmarked tax on energy.

None of the frameworks reviewed refer to the estimation of green expenditures. Frameworks typically consider all of the expenditures associated with green programs and projects to be relevant and eligible. However, Fiji's framework notes that the proceeds of the green bond may be allocated to projects that may be fully or partially eligible without providing details of how the eligible expenditures will be identified.

Responsibility for the SGB framework and management of proceeds typically rests with the central finance agency. Although central finance agencies' debt management offices typically take the lead in coordinating SGB issuance, development and implementation of the SGB framework requires coordination across core public financial management functions. Many of the frameworks establish inter-ministerial committees to guide the selection of eligible projects, usually with representation of environmental and sector agencies (Chile, Fiji, Ireland, the Netherlands). Some countries have segregated the proceeds in a dedicated account (Fiji, Nigeria, Poland), while others have retained proceeds in a subaccount of the single treasury account (Ireland, the Netherlands, Chile).

SGB frameworks provide for both financial and impact reporting. Financial reports are typically provided annually up to the point at which the proceeds of the green bond have been fully allocated. Several commit to an independent, external audit of the allocation of proceeds (Fiji, France). All of the frameworks commit to the provision of periodic impact reports, at least through to the allocation of proceeds and some through the tenor of the green bond. This can be an extended period; the average tenor of the 28 SGBs issued between 2016 and June 2020 was 11.8 years, with a minimum of five years and a maximum of 31 years. Some of the frameworks

provide extensive lists of potential output, outcome, and impact indicators (Belgium, Chile, Hong Kong, the Netherlands). France has established a Green Bond Evaluation Council of independent experts to oversee the impact reporting and to commission independent evaluations.

Indonesia uses its climate budget tagging system as the basis for its green bond and green sukuk, with additional commitments on tracking the allocation of proceeds, impact reporting, and independent third-party assurance. Indonesia's framework includes a list of eligible sectors, identifies exclusions, and provides a brief overview of the institutional coverage and process of budget tagging. This includes a quality assurance process whereby the environmental benefits of each project are assessed by the individual ministries together with the Climate Change Secretariat of the Ministry of National Development Planning (BAPPENAS), validated by the Ministry of Environment and Forestry to be consistent with Indonesia's NDC, and endorsed by the Ministry of Finance as "tagged" for budget allocation. The Ministry of Finance selects tagged projects that fall into one or more of the eligible sectors and have a project development timeline consistent with the tenor of the green bond or green sukuk. An allocation register tracks the projects financed from proceeds, and an annual report includes a brief description of the projects and proceed allocations and an estimation of their beneficial impacts. Reporting is expected to include measures of the reduction in GHG emissions, decrease in resource consumption, and number of parties that benefit from the projects funded. The Ministry of Finance commits to engaging an independent third party to provide assurance on its annual green bond and green sukuk report and compliance with the framework.



Benefits, Challenges, and Lessons Learned

Given that climate tagging was introduced only very recently and in some cases is still not fully rolled out, it is too early to conclusively assess its impact on budgets, climate policy, and policy outcomes. An initial assessment of benefits and challenges is presented below, based on a review of the design features of the different methodologies, key informant inputs, and some preliminary studies. Lessons learned from the experience of climate tagging and the broader—and more thoroughly studied—experience with budget tagging in support of poverty, gender, and international development objectives are presented in the final section.

Benefits

Climate tagging does increase awareness of climate change issues in central finance and line agencies. In several countries, the introduction of a tagging system has been part of a broader effort to mainstream climate action and has contributed to a better understanding of climate change–related challenges. Awareness raising seems to be more pronounced in countries where climate tagging is delegated to line agencies and departments and accompanied by capacity-building measures. Presentation of information on climate change, along with resource allocations in support of climate change policies in official budget documents, raises the profile of climate policy and awareness within government and the legislature and among civil society.

Climate tagging helps communicate a government’s commitment to climate change action, enhances transparency, and enables accountability. Roughly half of the country cases reviewed reported climate-relevant expenditures in budget documents, annexes, or separate reports. Bangladesh and Nepal publish citizen climate budgets, and in Cambodia, a nongovernmental organization has published a citizen climate budget based on the government’s climate public expenditure review. Tagging can support accountability; in Bangladesh, civil society organizations regularly review information on the impact of climate expenditures.

It is unclear to what extent climate tagging informs and has an impact on program design. Typically, programs and projects are tagged after they have been approved—too late to inform design and rationalizing rather than informing resource allocation. That said, tagging helps to raise the profile of climate change issues and generates information that can be used to assess the alignment of programs and projects with climate objectives. Awareness may contribute to adjustments in program and project design that are not documented in the formal budget approval process.

There is mixed evidence on the impact of climate tagging on resource allocation. Most countries have reported an increase in climate expenditures after the introduction of the tagging methodology. However, this seems to be because line agencies apply the climate tag to a wider range of programs rather than a systematic reallocation of resources to climate change objectives. In some cases, tagging may have created incentives for “greenwashing,” where a

program's impact on climate change is exaggerated in order to boost the share of climate-relevant expenditure. In Nepal, where tagging has been applied since 2013, there are significant year-on-year variations in climate-relevant expenditures, suggesting that the methodology is still not applied consistently. Nonetheless, reporting on climate-relevant expenditures and monitoring trends at the agency level does seem to raise the profile of climate policy in the budget process and may boost agencies' expenditure on climate-relevant programs.

The identification of climate-relevant programs can help mobilize funding from external sources. In the Philippines, government agencies have reportedly used the information generated from tagging to approach donors interested in funding specific climate change activities. Tagging can be used to identify a portfolio of climate-relevant programs and expenditures for external financing. To date, only Indonesia has used tagging to support the issuance of an SGB; however, other countries are developing tagging alongside their green bond frameworks. With support from the World Bank, Kenya's national treasury is creating a system to assist in the selection, tracking, and monitoring of a pipeline of green projects and assets to be financed by the green bond.

Challenges

Budget tagging is often constrained by the limitations of the budget system. Administrative classifications, or functional classifications derived from the administrative classification, cannot provide the information needed to align budgets with climate policy objectives. Tagging is only practicable where budget classifications identify programs and projects. Tagging is most effective when the budget classification allows tagging at the level of such program elements as components, activities, and outputs.

Climate tagging—as currently practiced—puts too much emphasis on the quantification of climate-related expenditures, with inadequate consideration of policy alignment, efficiency, and effectiveness. Although tagging identifies the financial inputs associated with climate-relevant programs, information on the amount of budgeted climate-relevant expenditure alone does little to inform policy or oversight. Indeed, excessive focus on spending can lead to an expenditure bias, neglecting consideration of the relative merits of regulation, taxation, and expenditure as instruments to achieve policy goals. It encourages stakeholders to consider expenditure as a metric of achievement—that more is better—rather than efficiency and effectiveness. Attention tends to focus on allocation rather than implementation and outcomes.

Few methodologies track actual expenditures; even if tagging is integrated into financial management systems and reporting is relatively straightforward, it is rarely done. None of the countries reviewed systematically present information on the outputs and outcomes of climate initiatives alongside information on tagged expenditures. Although CPEIRs preceded and informed the introduction of climate tagging in many countries, few have followed up with reviews once tagging methodologies have been put in place. Where CPEIRs do exist, their preparation has relied heavily on external assistance, with limited involvement of central finance and line agency budget officials. Consequently, few countries have undertaken a systematic analysis of expenditure allocations and alignment between climate-relevant expenditures and climate policy objectives. Some countries are beginning to address these concerns; Bangladesh has undertaken two performance audits for climate-tagged projects and Pakistan will introduce climate performance audits, but much more systematic effort needs to go into using the data generated from climate budget tagging to inform policy, planning, and budgeting.

There are significant omissions in the coverage of many tagging methodologies. SNGs and SOEs play an important role in climate policy, and their activities have significant impacts on climate outcomes. Some methodologies include information on transfers to SNGs, but few countries have applied tagging systematically to SNG expenditures. Recent assessments by France and Finland have identified tax expenditures as an important instrument in financing climate policy and the principal instrument in financing expenditures with adverse climate impacts. Expansion of tagging to include tax expenditures is feasible only where tax expenditures are already reported systematically. Unfortunately, that is not the case in most developing and many high-income countries. External financing is typically only captured when funds are channeled through the budget and treasury system, unless specific arrangements are made—as in Cambodia—to capture off-budget donor funds.

Until very recently, tagging methodologies ignored expenditures on activities that have an adverse impact on climate outcomes. Alignment with the Paris Agreement will require countries to curtail activities and expenditures that have adverse climate impacts, such as subsidies for fossil fuels, programs that lead to the degradation of native forests, and agricultural supports that result in unsustainable land use practices. The reduction of harmful expenditures is an essential element of climate change policy and should go hand in hand with the allocation of resources in support of climate policy objectives. Analyses in Finland and estimations in Indonesia have shown that harmful expenditures are significant. France is the first country to tag environmentally harmful ex-

penditures systematically in the tagging methodology applied to its 2021 budget. Almost three quarters of the outlays with adverse environmental impacts were tax expenditures.

Tagging has focused on the expenditure side of the budget, with inadequate consideration given to revenues as a tool for climate change policy. Tagging could be used to identify revenues that contribute to climate change objectives by reducing GHG emissions, increasing GHG sequestration, and increasing resilience. These include, among other revenue: carbon taxes; taxes, levies, and fees on fossil fuels, vehicles, and fossil fuel-powered transport; and royalties, licenses, and fees from the exploitation of forests, water, and other environmental assets. Identification of climate-relevant revenues facilitates analysis and debate on tax policy and helps track the shift of the tax burden from economically and socially beneficial activities, such as labor and the investment climate, to those that are economically and socially harmful, such as GHG emissions, pollution, and the degradation of environmental assets. Tagging could facilitate the earmarking of climate-relevant revenues to climate-relevant expenditures. Although earmarking is not appropriate in all contexts, in some circumstances it may strengthen public acceptance for revenue policy measures by demonstrating a direct link between climate-relevant revenues and climate-relevant expenditures. Many countries already earmark climate-relevant revenues, for example, Fiji's Environment and Climate Adaptation Levy and France's subsidies to renewable energies financed from an earmarked tax on energy.

Tagging can represent a significant burden on budget officials. This is especially the case when tagging is decentralized to line ministries, subnational entities are required to tag, and multiple thematic tags are applied. The more granular the tagging methodology, the more resources that are required to introduce and sustain it. Limited technical capacity, high staff turnover, and overstretched human resources can undermine compliance with tagging and data quality, especially in the absence of a validation process. Complex and costly tagging systems, particularly in the absence of strong political ownership, are unlikely to be sustained without ongoing external financial and technical support.

Lessons Learned

Although there is insufficient evidence to draw definitive conclusions regarding the relative performance of different approaches to climate tagging, experience to date suggests a number of lessons for the design and implementation of climate budget tagging initiatives. These

lessons encompass institutional arrangements, the design of tagging systems, the use of tagging data to inform policy, and the institutional context of tagging initiatives. Specific recommendations for the design of tagging methodologies and institutional arrangements will depend on the objectives of the tagging system and the institutional and policy context.

Define the objectives of the climate budget tagging initiative and consider alternatives. A hierarchy of objectives can inform decisions on whether to embark on a budget tagging initiative and the design of the tagging system. Tagging can help focus attention on climate considerations in the design of programs and the allocation of resources. It can help the government allocate resources toward climate change policy objectives and track implementation and also allows the government to set resource allocation targets. Some of these objectives can be realized without climate budget tagging. Systematic appraisal of programs and projects to assess climate vulnerabilities and impacts will facilitate the integration of appropriate climate policy measures in program and project design (see box 9). Systematic appraisal raises awareness on climate issues within government, aligns resources with climate policy objectives, identifies financing gaps, and can be used to mobilize financing. However, systematic appraisal will not identify specific climate-relevant activities and expenditures because climate considerations are embedded in all programs and projects. Nor will it allow the authorities to define and track a specific budgetary commitment for financing its climate change objectives.

Define the policy scope of the tagging methodology. Climate change will be only one of many government policy priorities. Tagging methodologies can be extended across multiple policy objectives; Mexico and Nepal, for example, tag programs against all 17 SDGs. Tagging against multiple policy objectives acknowledges their interdependence, though it does also increase the complexity and administrative burden of the tagging process. Furthermore, it is difficult to translate policy objectives into budget allocations when there are too many priorities. Tagging is best suited to cross-cutting policy objectives, such as poverty, gender, nutrition, and climate change, that are not captured by the administrative and program budget classifications usually used to guide resource allocation in the budget process.

Engage key institutional stakeholders in the design and implementation of climate budget tagging. Central finance agency leaders are critical to the success of tagging initiatives because they alone have the authority to enforce tagging across all public agencies through the entire budget process. Planning agencies link tagging to the development strategy

and ensure a consistent approach across investment and recurrent budgets where these are managed separately. Environment and climate agencies can verify alignment with national climate change objectives and international commitments. Audit institutions can play a role in quality assurance and reinforce climate change policy commitments through a review of financial statements and climate-relevant programs and projects.

Ensure that line agencies are actively involved. Line agencies are best placed to determine how resources should be applied to achieve policy objectives in their area of competence. They will invest time and effort in budget tagging if there are incentives to do so. Scrutiny of tagged expenditures by central finance and planning agencies, the center of government, and the legislature will signal the importance of climate budget tagging to line agency management. Incentives are stronger still where tagged expenditures benefit from privileged access to resources during budget preparation and in the allocation of cash releases during budget execution. However, following Goodhart's Law, such incentives will lead to a deterioration in the quality of tagging, as line agencies "greenwash" activities to make them appear more climate relevant unless rigorous quality assurance procedures are in place.

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BOX 9 - Mainstreaming Climate Change in Program Appraisal and Evaluation

The United Kingdom's Green Book provides guidance on how to appraise proposals that concern public spending on programs and projects, taxation, amendments to regulations, and changes to the use of existing public assets and resources. Appraisal follows five steps: presentation of the rationale for the intervention, which includes objectives and intended outcomes; review of a long list of different approaches to generate a short list of viable options; economic appraisal of the short list to identify the option that provides the best balance between the costs, benefits, and risks; monitoring during implementation; and ex post evaluation. Climate change vulnerability and policy considerations are assessed at each of these steps. The rationale for intervention considers climate vulnerabilities and policy objectives. The review of options examines the expected effects and impacts of climate change, where necessary providing an assessment across multiple climate scenarios. Monitoring and evaluation considers climate change impacts.

Source: United Kingdom (2018, 2020).

Align definitions of climate-relevant activities and expenditures with national climate change policies and strategies. Methodologies that align definitions of climate relevance with national policies are most likely to generate information that can be used to monitor and steer policy implementation. Definitions of climate-relevant expenditures should be sufficiently narrow to allow for meaningful prioritization. This is particularly important for adaptation, which can otherwise encompass a wide range of development expenditures. Policy alignment can be challenging. Where climate policy documents are high-level statements with extended time horizons, they are unlikely to translate directly into budgetary agendas. Programs are more likely to be identified when governments have prepared medium-term climate plans or integrated climate change policy into their routine planning instruments. Policy alignment can be an iterative process. Climate expenditure reviews can identify programs and activities with mitigation and adaptation impacts, and these can be assessed against climate change policy statements before the specific programs and activities are selected that will be tagged as climate relevant.

Identify and tag activities and expenditures that have adverse climate impacts as well as activities that are aligned with climate policy goals. Alignment with the Paris Agreement will require countries to curtail activities and expenditures that have adverse climate impacts. The identification of these programs allows stakeholders to assess trade-offs and helps provoke debate. When governments present aggregate values for climate-relevant spending, information about expenditures with negative impacts allows for a more balanced assessment of the budget's climate outcomes.

Structure the tagging methodology so that it supports the implementation of national climate policy. Methodologies that tag at a granular level by program, project, and component are more likely to generate the information needed to integrate climate policy considerations into program and project design. Tagging should cover all climate-relevant expenditures, encompassing all outlays and all central government agencies and transfers to SNGs and SOEs. A central quality assurance process should verify the selection of climate-relevant programs and projects to ensure consistency with

national policy. Monitoring and reporting systems should capture information on outputs and outcomes as well as inputs. Information on results allows decision makers to determine whether public spending has the intended impact and is delivering value for money.

Embed budget tagging across the budget cycle. If tagging is to inform resource allocation decisions, it will have to be embedded across the budget cycle in the medium-term expenditure framework, budget call notices and guidelines, budget documents submitted to the legislature, and budget execution and audit reports. Tagged expenditures should be tracked through the budget process. Reports on the execution of climate-relevant expenditures allow decision makers to determine whether resources are being applied as intended and to take corrective action. Tracking requires automation. Once methodologies have been tested, climate tags will need to be included in the budget code strings used in financial management information systems.

Use complementary reporting systems to extend the principles of climate budgeting beyond the central government. In unitary states and countries where central finance and planning authorities have the authority to standardize budgeting and financial reporting practices across all levels of government, directives on climate budget tagging can be rolled out to SNGs, albeit with some adjustment to accommodate differences in functional mandates and institutional capacity. Where SNGs are autonomous, central governments may be able to create incentives for them to adopt climate budget tagging approaches by linking compliance to specific fiscal transfers or by promoting voluntary climate reporting standards. Although it is important to engage SOEs in climate policy and reporting, budget tagging is unlikely to be the most effective tool for doing so. Instead, SOEs can be encouraged to consider climate vulnerabilities and policy objectives in their strategic planning by integrating resilience and mitigation targets into performance contracts, thus requiring the SOEs to identify climate risks and comply with sustainability reporting standards.

Design the tagging system so that it facilitates the mobilization of climate finance. Alignment of the tagging system with the GBP will facilitate the issuance of green finance instruments should the government decide to do so. The GBP require tagging systems to: ensure that eligible activities and exclusions are consistent with the GBP eligible sectors and activities; report on the allocation and application of the proceeds of the green bond; and report on program and project impacts. Compliance with the GBP is subject to independent third-party assurance. Ongoing initiatives to harmonize green

bond market standards are likely to strengthen the criteria for the selection of eligible activities, notably in terms of ensuring that investments are aligned with the Paris Agreement. They will also require more rigorous impact reporting. This should not be an insurmountable hurdle for sovereign issuers, as both Nigeria and the Netherlands have already met robust certification requirements. Harmonization of budget tagging with green bond market standards will help strengthen the market for green finance. It can also serve as a policy tool, guiding private investment toward low-carbon sectors, encouraging private investors to invest in climate resilience, and aligning public and private partnerships in green infrastructure.

Generate information that decision makers need in formats they can use. Tagging policy-relevant expenditures will influence decision making only when there is a conscious effort to use the information generated in the policy process, budget preparation, and management of budget execution. Specific routines and templates will have to be put in place to ensure that the information generated through tagging is available to decision makers at a time and in a format that is useful to them. This may require information to be tailored to the needs of different audiences, including line agency management, central finance and planning agencies, center of government, and the legislature.

Undertake periodic expenditure reviews to test the alignment of plans and budgets with climate policy goals and impacts on climate outcomes. Expenditure reviews are undertaken outside of the budget process to allow time for data collection and analysis. They provide an opportunity to stand back and examine evidence on policy impacts, to communicate progress in policy implementation, and to debate policy options. Reviews should consider the role of the state, the private sector, and households in the achievement of climate policy objectives and also the appropriate policy tools—information, regulation, taxation, or public spending—for these interventions. They should identify revenues and expenditures that are aligned with climate policy objectives and those that have adverse climate impacts. Ideally, reviews should assess key programs from the perspective of their alignment with climate policy goals, the efficiency and effectiveness of spending, and the incidence of spending. Reviews can also assess the institutional capacity and alignment of incentives to identify measures that may strengthen performance. They may be undertaken with the assistance of external partners, including academia, civil society organizations, and development partners.

Invest in capacity building. Capacity building will be needed to raise awareness of the purpose of climate budget tag-

ging, the policy objectives that it supports, and ways to use the information generated. Successful implementation will require extensive training of budget officials in central finance, planning, and line agencies. Some countries run refresher training courses each year as part of the budget routine. Capacity building can extend to stakeholders beyond the executive engaged in the budget process, such as the legislature, oversight institutions, and civil society. Tagging initiatives that are supported by external partners should be mindful of the capacity constraints of, and competing demands on, government officials, particularly those at central finance agencies.

Promote transparency, engagement, and debate on climate policy. The information generated through climate budget tagging can raise awareness beyond government only if it is publicly available. Information on climate budget allocations and execution can be integrated into all of the key bud-

get documents: the pre-budget statement, executive's budget proposal, enacted budget, citizen budget, in-year reports, mid-year reviews, financial statements, and audit reports. Timely publication of all of these documents is a generally accepted transparency standard (IBP 2019). Integration of information on climate policy and climate-relevant revenue and expenditure measures helps to mainstream climate change in the policy discourse. This encourages government agencies to consider how their activities contribute to climate policy goals. Reporting on climate-relevant expenditures reveals whether the government has lived up to its policy commitments and enables civil society scrutiny. Governments can promote debate on climate change policy and resource allocations by organizing consultations and forums. Debate will raise awareness of the trade-offs and constraints on government policy and help mobilize support for the more difficult climate policy measures.



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