

# Moving Toward Climate Budgeting

Policy Note



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## SUMMARY

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Climate change action by countries—both mitigation measures and adaptation measures—requires planning over a long horizon in the face of uncertainty as well as, for many governments, costly financing in the near term. While flows of international climate finance have grown in recent years, it has become ever more clear that countries need to consider all policy instruments. This includes funding from diverse sources within a consistent framework. Climate change is going to affect, in particular, the core business of finance ministries related to fiscal policy, government budgets, and public debt. This note focuses on public expenditure management for climate actions rather than the full spectrum of finance ministry responsibilities. Budgeting for climate action is a complex challenge, but good practice is emerging. It is firmly rooted in the traditional principles of public expenditure management. Most recent experience has been captured in the Climate Change Public Expenditure and Institutional Review Sourcebook. This note is the accompanying piece to the sourcebook.

Overall, climate finance flows fall short of needs. Most funding is raised and spent within the same country, and flows from richer to poorer countries are modest. Developing countries have generally been reliant on public funding and have been less successful in attracting both domestic and foreign private investment. The shortfall in international public financing for climate action and the failure to create enabling conditions for private finance has pushed domestic public funding of climate actions to the forefront. Long term, policy reforms will be needed to attract much larger financial resources from the private sector to relieve the pressure on public coffers. In the meantime, given the urgency of the sizeable expenditures necessary in many countries, careful planning and good management of public expenditure will be critical.

National planning now stands at the center of climate action, and will increasingly feature the integration of UNFCCC requirements into national processes and Intended Nationally Determined Contributions that are expected to form the basis for climate

change planning after 2020. Governments will be critical actors in climate planning and investment, with finance ministries having key responsibility.

Climate change planning shares some common challenges with other national policy objectives where multiple interests need to be managed—but also presents some unique complexities. These include the need for a multi-sectoral response; uncertainty around future climate damages; and uncertainty about national obligations to global emissions mitigation. As with other complex policy and fiscal challenges, development strategies will likely fail to translate into plans without the finance ministry's active involvement in integrating climate actions into long-term budget planning. One way to start moving toward climate budgeting is to conduct a Climate Change Public Expenditures and Institutional Review (CCPER).

CCPERs can make unique contributions beyond the benefits of traditional public expenditure and institutional reviews by evaluating the effectiveness and efficiency of climate-related public spending and the alignment of expenditures with a country's needs and objectives. They can respond to specific public expenditure policy and management challenges posed by climate change, such as decision making under uncertainty, disaster risk management, and diverse budget classification of climate-related activities. These reviews also survey the processes of budget and expenditure planning and identify entry points for other instruments of climate policy.

This policy note presents several measures of immediate interest to finance ministries for better fiscal planning and expenditure management of climate actions. Drawing on the sourcebook, the note highlights three general areas of financial and expenditures management where improved practice will better prepare finance ministries to deal with the fiscal implications of climate change: (i) including climate change as a long-term objective in the national budget and expenditure framework; (ii) improving

financial tracking and performance accountability by spending agencies; and (iii) strengthening government financial management systems to efficiently use external climate finance. Targeted at the climate budget, these actions will also promote financial discipline and overall lead to more efficient and strategic public spending. This policy note provides finance officials with seven detailed recommendations based on the experience of World Bank client countries.

### **Seven Recommendations for Ministries of Finance**

1. Incorporate climate change into longer-term budget frameworks to allow for planning and adjustment of spending across programs.
2. Send an early and clear signal of the importance of climate action through the budget process.
3. Use interagency committees to help mainstream climate initiatives into the plans of line agencies and to allocate resources in balance with other priorities.
4. Require more comprehensive reporting at the subnational level and among state-owned enterprises.
5. Identify and monitor all off-budget expenditures.
6. Identify all externally funded initiatives and establish uniform reporting practices to give a complete picture of climate expenditures.
7. Respond strategically and effectively to the emerging requirements of external donor funds.



## THE CHALLENGES OF FINANCING CLIMATE CHANGE ACTIONS

**Climate change action by countries—both mitigation measures and adaptation measures—requires planning over a long horizon in the face of uncertainty as well as, for many governments, costly financing in the near term.** While the need for climate action varies, for almost all countries the response will reach across many economic sectors and will require a transformation of the economy over the decades to come. This complexity is amplified by uncertainty around the impact of climate damages as well as uncertainty about national contributions to global mitigation. Climate investments often pose substantial up-front costs, with benefits accruing only later; this is true whether they are adaptation interventions aiming to protect tomorrow's welfare from climate damage or mitigation actions designed to reduce greenhouse gas emissions while preserving production.

For governments, climate change action is a particularly challenging planning problem that seemingly threatens the growth and poverty reduction agenda and requires a coordinated multi-stakeholder response. Facing the dilemma of lock-in for long-lived assets, both public and private sectors would like to make well-informed decisions, choosing optimal investments within financing constraints. To date, those constraints have been loosened only marginally by the establishment of international climate finance.

**While flows of international climate finance have grown, countries need to consider all sources of funding within a consistent framework.** A special feature of climate change planning is the need to consider the international policy setting and the related availability of external financing for certain groups of countries under the global climate finance and carbon finance architecture. Overall global climate finance flows are estimated to have reached about \$359 billion as of 2012, a significant

achievement but still far below estimates of investment needs. The shortfall in international public financing for climate action and the failure to create enabling conditions for private finance has pushed domestic public funding and government action on the climate agenda to the forefront. Governments need to set out coherent strategies and plans for national climate action that set priorities over a long horizon and implement a diverse mix of policy instruments that will attract much larger financial resources available in the private sector. This will decrease the pressure on public coffers in the future. In the meantime, however, given the urgency for sizeable expenditures in many countries, good expenditure management will be critical, and finance ministries will need to be centrally involved.

**Climate change will affect the core business of finance ministries.** In most countries, these ministries' mandate includes a range of responsibilities related to fiscal policy and the government budget. Managing public debt, administering state assets and liabilities, and overseeing the financial system are also common. For ministries of finance, climate change is likely to impose multiple challenges, first and foremost being the need for planning and financing of climate action. They will also need to address the fact that rising climate damages may undermine the sovereign ratings of the most vulnerable countries and increase the risk of macroeconomic and fiscal imbalances. In addition, fossil-fuel dependent economies may face deteriorating terms of trade and stranded assets if global mitigation shifts relative prices away from carbon-intensive fuels. At the same time, new fiscal instruments, such as carbon taxes, will require revised taxation structures. As guardians of public spending efficiency and arbiters of competing choices, ministries of finance will need to become adept at

understanding these challenges and the tools and approaches available for addressing them.

**This note focuses specifically on public expenditure management for climate actions.** It does not cover the wide variety of other issues related to managing the fiscal and macroeconomic impact of climate change that are within the purview of finance ministries. The implications of rising climate damages and climate policies and investments on fiscal and macroeconomic stability and on public debt are not considered here. It also does not discuss opportunities to adopt fiscal policy measures to achieve synergies between fiscal and climate policies. Likewise, creating enabling conditions for mobilizing private finance for climate actions is beyond the scope of this note. Instead, it focuses on one specific aspect—public expenditure management for climate actions—where there is emerging good practice and some practical lessons for Ministries of Finance.

**Budgeting for climate action is a complex challenge, but good practice is emerging.** This good practice is firmly rooted in the traditional principles of public expenditure management developed at the World Bank (Annex 1) and elsewhere such as the OECD (Box 3). Most recent experience has been captured in the Climate Change Public Expenditure and Institutional Review Sourcebook. This note aims to demonstrate the need of alignment of sound climate budgeting practices with finance ministries' primary fiscal responsibilities. A climate change public expenditure and institutional review (CCPER) is one way to uncover opportunities to do this better. Many of the recommendations here are drawn from the sourcebook, released in June 2014, which is a compilation of notes and supporting materials that provide practitioners with the tools and information they need to respond to the public expenditure policy and management challenges resulting from climate change. The sourcebook consolidates research and international experience, identifies emerging practice, and provides practical guidance to the staff of central finance agencies, development agencies, environmental agencies, and international organizations. This note is the accompanying piece to the Sourcebook.

**This policy note presents several measures of immediate interest to ministries of finance for better fiscal planning and expenditure management of climate actions.** This note highlights three general areas of financial and expenditures management where improved practice will better prepare finance ministries to deal with the fiscal implications of climate change: (i) including climate change as a long-term objective in the national budget and expenditure framework; (ii) improving financial tracking and performance accountability by spending agencies; and (iii) strengthening government financial management systems to be able to use external climate finance efficiently. While targeted at the climate budget, these actions will also promote financial discipline and more efficient and strategic public spending in general. The discussion

provides finance officials with seven detailed recommendations based on emerging lessons from the experience of World Bank client countries and illustrates the contribution ministries of finance can make to the success of climate change policy.

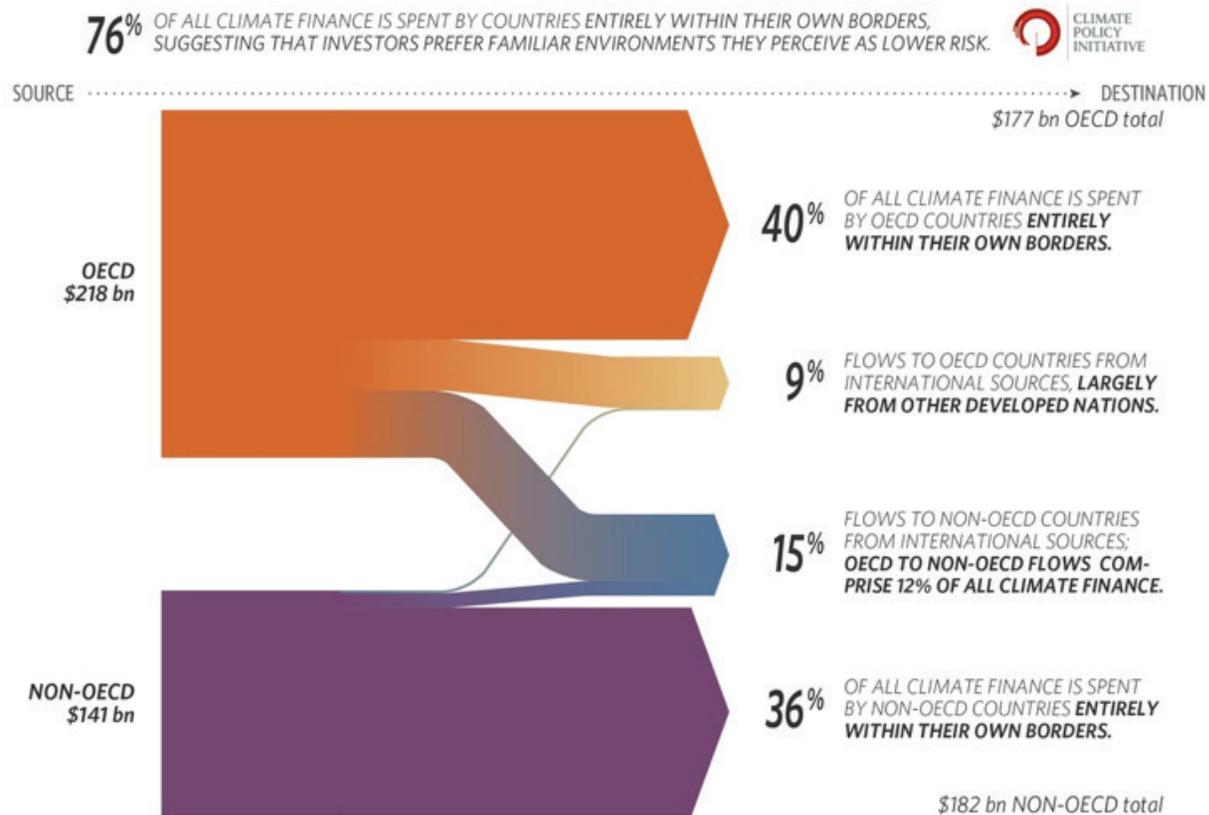
## SNAPSHOT OF TODAY'S CLIMATE FINANCE

**A range of actors, including the public sector, currently finance climate change actions.** There is recognition that developing countries have generally been reliant on public funding and have been less successful in attracting private domestic and foreign investment.

**Although discussions continue on the precise definition of climate finance, a useful working definition is capital flows that specifically target low-carbon and climate-resilient development with direct or indirect greenhouse gas mitigation or adaptation objectives or outcomes.** This definition is accepted by several groups that have done much to advance global understanding of the subject, including the OECD, the World Bank and other multilateral development banks (MDBs), and the research body Climate Policy Initiative (CPI). The World Bank Group is a member of the Joint MDB Tracking Effort on Climate Finance, which has been instrumental in forging common norms and producing the MDB guidelines generally agreed upon by these groups for what spending and financing counts as mitigation and adaptation (*CPI 2013*).

**The Climate Policy Initiative compilation of various climate finance data estimated that climate finance in 2012 amounted to \$359 billion globally. Within this, domestic financing and South-South flows are significant, suggesting that non-OECD countries have been less reliant on OECD countries than is the common perception** (Figure 1). Remarkably, 76 percent (\$273 billion) of all climate finance is spent entirely within country borders in both OECD and non-OECD countries. Slightly more than half of the global total was spent in non-OECD countries (\$183 billion), of which half (\$120–143 billion) came from domestic sources or from other non-OECD countries.

**Despite the increasing importance of private capital as a source of global climate finance, non-OECD countries have not significantly benefited from private sector financing.** Private owners of capital provide 62 percent (\$224 billion) of climate finance globally, but most private climate finance flows occurred within and between OECD countries. The flow of private finance from North to South has been modest, suggesting that developing countries have so far failed to create an enabling policy framework for private climate finance. Investors are seeking a robust market and policy environment as well as general investment stability and

**Figure 1:** Geographic Flow of Climate Finance

Source: Climate Policy Initiative, Global Landscape of Climate Finance (2013).

predictability. South to South private finance has been on the rise, some of it going to climate action, but the scale is still modest.

**Another surprising observation about the climate finance landscape is that public climate finance is not solely associated with public works and government programs; in fact, up to one-third of global public climate finance goes to profit-generating projects.** On a global basis, \$135 billion in climate finance came from public sources, but not an insignificant amount (\$37 billion) was put into private investments that generated a commercial return, including renewable energy and sustainable transport. In many instances, the public sector has not been a majority owner in the private investment structures. The government's direct investment has usually been made in conjunction with a more sizeable amount of private financing, underlining the fact that the role of the public sector in promoting climate investments has been much wider in scope than just regulatory and policy making.

**Although international public climate finance—channeled mainly via multilateral or bilateral institutions—does not provide a large share of the funding for non-OECD countries, it has**

**played and will continue to play an important role in influencing institutional arrangements and national planning within governments.** The majority of climate finance flows from OECD to non-OECD countries (\$39–62 billion) came from governments (\$35–49 billion) through MDBs and bilateral financial institutions. Only \$4–\$11 billion was channeled through UN organizations and bilateral aid agencies, and another \$1.4 billion through non-UN climate funds. Financial planners and policy makers in non-OECD countries need to stay attuned as UNFCCC developments unfold as the UNFCCC is expected to reconcile different views on how the financing burden is to be shared among countries (informed by economic, equity, and ethical considerations). The outcomes of UNFCCC negotiations will have a major influence on the design of future international financing instruments both within and outside the UN system. To secure reliable financing for climate actions, governments in non-OECD countries need to be sufficiently equipped with knowledge of the new operational requirements of multilateral and bilateral institutions that intermediate flows of international public climate finance, while planning for domestically-financed climate actions in parallel (Annex II).

## CLIMATE CHANGE AS A NATIONAL POLICY OBJECTIVE

**Governments will be critical actors in climate planning and action, and ministries of finance have special responsibility.**

Achieving climate action at the national level will require governments to play a leading role through the application of medium- and long-term planning and strategy; through the implementation of policies, laws, and regulations (including taxation); and directly through both capital investment and current spending from public funds. For many countries, substantial financing will be needed, elevating the importance of careful planning. Furthermore, since climate action reaches across sectors and ministries, coordination of the policy framework will be important to ensure consistency in supporting national objectives. As such, all major government ministries need to be involved, and Ministries of Finance, who control the purse strings and typically also provide medium-term financial planning, must be central to climate planning and action. Leadership on climate action may lie primarily with a Prime Minister or President's office or with a planning ministry, but for a coordinated and long-term national response to climate change and the need for climate action, ministries of finance cannot afford to play merely a supporting role in decision making.

Climate change planning shares some common challenges with other important national policy objectives where multiple interests need to be managed; it also presents, however, some unique complexities. Mitigation and adaptation action will generate a large demand for funding for most countries. It will create both winners and losers (e.g., as energy prices rise or public subsidies to climate-affected regions are increased). As with any policy, climate policy needs to strike a balance between economic efficiency and a balanced distribution of costs. Given a fixed fiscal envelope, a government must prioritize between spending on climate action and on other priorities—and, within climate action, on investing in mitigation or adaptation measures. Some of the particular challenges of climate action are the need for a multi-sector response, reaching all of the economy; uncertainty around future climate damages; uncertainty about national obligations to global emissions mitigation; the delayed nature of many of the returns on investment; and that benefits tend to be public, whether national or global. For example, the adoption of clean energy may sometimes reduce local air pollution, generate jobs during the investment period, and reduce fuel costs in the long run—but require substantial up-front costs. These difficult choices appear all over the landscape of climate change policy and must be negotiated within the confines of scarce financial resources. As a result, climate planning merits mainstreaming into the policy process.

# CLIMATE CHANGE PUBLIC EXPENDITURE AND INSTITUTIONAL REVIEWS: A HELPFUL REFERENCE FOR CLIMATE BUDGETING

**Governments need to make a conscious effort to mainstream climate change into long-term budget planning in order to ensure the availability of domestic public resources and to continue participating in the evolving international climate-change architecture for national policy.** In fact, as governments increasingly seek to reconcile climate change with their growth and poverty reduction agenda, it has become more common to integrate climate change into the process of national policy and budget planning. Many countries, including Mexico, Brazil, India, and China, have already developed Low-Carbon Development Plans that attempt to set the broad direction of government policy. These development plans mark a milestone in that climate change being is regarded as one of the central development agendas instead of as an add-on component to development.

**Development strategies will likely fail to translate into plans without the finance ministry's active involvement in integrating climate actions into long-term budget planning.** Some countries have framed their own low emissions development strategies (e.g., Ethiopia, Rwanda, Vietnam, and Cambodia) by highlighting the low carbon and sustainable development benefits as well as opportunities for technology investments and employment in green industries. In many cases, however, the strategies were not developed with budget realities in mind, and thus they did not systematically provide for the aggregate cost of implementation. Only selective policy measures were assigned short-term costs, and financing was nearly always assumed to be coming from external development assistance funds. Moreover, implementation arrangements were not well developed. By 2011, as many as 47 countries had moved beyond mitigation planning to put forward low-emissions development strategies—many were contingent

on international support for implementation (World Bank 2011). In Rwanda and Ethiopia, where development of their strategies has been led by environmental agencies, the strategy documents explicitly acknowledge the need to integrate the strategy into a higher-level planning instrument led from the center of government (Rwanda 2011 and Ethiopia 2011).

**One way to start moving toward climate budgeting is to conduct a Climate Change Public Expenditures and Institutional Review.** A CCPER adopts a similar analytical framework to a traditional Public Expenditure and Institutional Review: (1) fiscal sustainability; (2) strategic resource allocation; (3) the role of government; (4) the efficiency and effectiveness of spending; (5) the incidence of spending; and (6) the capability of institutions and the alignment of incentives. This framework tests the consistency between intended and actual outcomes (i.e., the economic, social, and environmental impacts of public expenditure policies). It recognizes that there are tradeoffs among policy objectives, (e.g., increased spending on public services, reduced taxation, and aggregate fiscal discipline). It also acknowledges that policy objectives may be achieved using a range of instruments, by providing information, through regulation and taxation, as well as through public expenditure, and that public expenditure may not be the most cost-effective means of achieving these objectives (Pradhan 1996). The World Bank has undertaken over four hundred public expenditure reviews over the last 15 years to inform expenditure policy, with some spanning the entire public sector and others focusing on a few priority sectors.

**In addition to the benefits of traditional Public Expenditure and Institutional Reviews, CCPERs make unique contributions by evaluating the effectiveness of climate-related public**

**spending and the alignment of expenditures with a country's needs and objectives.** The CCPER assessment of the financial implications of climate change policies provides valuable inputs to the process of prioritizing and allocating scarce resources of expenditure programs; this in turn facilitates the integration of climate change policies into budgets and the implementation of plans. CCPERs can help mobilize resources by highlighting policy objectives that require additional financing and by evaluating a country's domestic and external financing framework. Moreover, CCPERs address the absence of an institutional framework for climate change policy making and implementation, and are able to respond to the particular challenges posed by climate change (e.g., decision making under uncertainty or disaster risk management). As an aid in dealing with the uncertainties of climate change impacts, CCPERs assess the extent that the government incorporates flexibility and learning into its response and decision-making processes. In disaster risk management, CCPERs are useful in focusing attention on the role played by finance ministries and can lead to better financial planning to ensure timely funding of post-disaster recovery and reconstruction.

**Determining which on-budget and off-budget expenditures are climate items is a complex yet important step** in CCPERs because it generates statistics that guide the allocation of resources, evaluate the impact of public expenditures, and track climate change expenditures. Differentiated approaches have been applied to the classification of climate-related expenditures, responding to varying strengths and weaknesses in public financial management systems. Developing countries that have completed or are currently undertaking CCPERs include Burkina Faso, Ethiopia, Morocco, Tanzania, and Uganda in Africa, Bangladesh, Cambodia, China, Indonesia, Nepal, Philippines, Samoa, Thailand, and Vietnam in Asia. The methodologies and results of these reviews are diverse, and Box 1 shows one approach in the example of Morocco. With the support of the World Bank, an assessment of climate change public spending was conducted to help the Moroccan government increase climate spending efficiency, tag climate-related expenditures, and mainstream climate spending in the budget process (including the development of a Climate Medium Term Expenditure Framework (MTEF)). The review covered public expenditure from 2005 to 2010.

**In order to improve the effectiveness of climate budgeting, CCPERs survey the processes of budget and expenditure planning and identify the entry points for climate change policy.** Ministries of finance have a wide array of tools for climate budgeting, the effectiveness of which depends in part on the structural features of the budget process. The budget process combines a top-down, whole-of-government policy framework with a bottom-up process of expenditure planning (Box 2). During the budget process, central finance and planning agencies pursue government-wide policy objectives, within agreed expenditure

### Box 1: Climate Change Public Expenditure and Institutional Review in Morocco

Morocco is highly vulnerable to climate change, particularly in three key areas—water resources, agriculture, and physical infrastructure. Budgetary spending on climate measures is significant—and it needs to be efficient given limited budget resources and competing national priorities. The CCPER assessment covered five sectors based on their mitigation potential and climate vulnerability: agriculture, energy, water and forestry, solid waste, and sanitation.

The CCPER revealed considerable public investments by the government in the selected sectors, and a more detailed analysis showed a preponderance of infrastructure programs. Much of the funding was in favor of adaptation activities, notably related to water resource management. Spending on adaptation accounted on average for 64 percent of climate expenditures (and nine percent of national investment expenditures) over the 2005–2010 reviewed period, much of which went to the water and agriculture sectors. Most of the investment programs and projects in these sectors addressed water efficiency and were closely linked to traditional development projects (e.g., dams, hydro-agricultural development).

About a third of climate-relevant expenditures were funded through special accounts managed by respective sectoral ministries. The recently established Fund to Address Natural Disaster (Fonds de Lutte contre les Catastrophes Naturelles) is an important tool for the government in addressing prevention and mitigation aspects, but its management, impact, and sustainability raise questions and point to the need for reform.

The CCPER also revealed that mainstreaming of climate change issues into strategic decision making and budget processes remains limited. This is due in part to the lack of a clear and sound climate strategy, as well as to weak climate governance arrangements. As a result, (1) the integration of climate issues in the sectoral strategies and budget planning varied among sectors; (2) processes and systems to support climate activities have not yet been developed; (3) the chart of accounts did not allow for identification of specific climate-relevant expenditures; (4) central and local government agencies have not been motivated to develop specific climate activities; and (5) existing performance indicators do not yet include climate change.

Budget planning tools, including the Climate Medium-term Expenditure Framework (METF), constitute a key entry point for mainstreaming climate change in strategic planning. As part of the CCPER, a draft framework for a climate MTEF was prepared, incorporating key climate programs and projects and climate performance indicators.

Source: World Bank (2012). Morocco Climate Change Public Expenditure and Institutional Review.

### Box 2: A Stylized Budget Process



Central finance and planning agencies initiate the budget process six to nine months before the start of the fiscal year by preparing a pre-budget policy document that lays out the macroeconomic framework and proposes the broad allocation of resources in line with government plans and policies (1). This policy statement is generally approved by the government (2). A budget circular is issued with instructions and policy guidance and lays out the resource allocations that spending agencies should use for budget formulation (3). Spending agencies prepare budget proposals that allocate resources among departments, programs, and projects in line with sector policy and submit them to the central agencies (4). Central agencies assess whether each spending agency proposal is within expenditure limits and aligned with overall policy objectives. Usually, negotiations follow (5). Central agencies consolidate agency budgets into a state budget (6) that is approved by the government (7) and then submitted for legislative appropriation (8). In most parliamentary systems, the legislature has limited authority to alter the budget proposal. Once approved, funds are released to spending agencies according to the availability of funds in the central treasury account and rationed as necessary (9). Spending agencies execute the budget and implement plans, providing periodic reports on progress (10). Allocations are adjusted through a mid-year budget review or on an *ad hoc* basis as needs arise. Financial statements are usually prepared within three to six months following the end of the fiscal year (11) and are subject to independent audit within six to 12 months of year-end (12).

Source: World Bank 2014.

constraints, while spending agencies seek to maximize the resources available for agency-specific policy and institutional objectives. Besides the CCPER Sourcebook, different resources are being developed to support the expenditure planning process. For example, the OECD Council has checklists of good practice for establishing, reviewing, or reforming public environmental expenditure programs (Box 3). CCPERs can be used to highlight

the difficulties that policy makers encounter in shifting resources in support of climate-related policy objectives and in assessing the impact of climate-related expenditure decisions, which are mostly made outside of the budget and expenditure planning process. In response to these challenges, the following section presents seven lessons for central finance and planning agencies, based on country experiences to date.

### **Box 3: OECD Recommendations on Good Practices on Public Environmental Expenditure Management**

The OECD Council adopted the Good Practices for Public Environmental Expenditure Management in 2006. These recommendations were derived from the reviews of many years of diverse practical experiences with different public environmental expenditure programs both in OECD member and non-member countries.

The objective of the OECD recommendations is to encourage member countries to ensure that public environmental expenditure programs are environmentally effective, economically efficient, and managed in accordance with sound principles of public expenditure management. The recommendations define specific steps that public authorities need to take when establishing and managing public environmental expenditure programs. They further stipulate that countries should make use of the checklists of specific recommendations organized under the three main headings of (1) environmental effectiveness, (2) budgetary good practice; and (3) management efficiency.

The document was adopted by the OECD Council, which is the highest OECD governing body, after a careful review by all OECD committees, including Committees for Fiscal Affairs and Environmental Policy.

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Source: OECD. Available at <http://acts.oecd.org/Instruments/ShowInstrumentView.aspx?InstrumentID=175&Lang=en&Book=False>.

## SEVEN LESSONS FOR MINISTRIES OF FINANCE

**Ministries of finance have a key role in promoting economic development while ensuring fiscal prudence in public spending in order to set the conditions for macroeconomic stability.**

Climate change, with its economic implications (both from needed investments and the economic cost of climate damage), is among the long-term issues that finance ministries have to consider in fiscal planning. By focusing on three general areas of financial and expenditures management, finance ministries will be better prepared to deal with the fiscal implications of climate change and more effectively set a path for sustainable economic development. These three areas are:

- Including climate change among the long term needs of the national budget and expenditure framework.
- Improving financial tracking and accountability for performance among the spending agencies in order to inform allocation decisions of scarce public funds.
- Raising the capability of government financial management systems to efficiently use external climate finance.

**These principles should help strengthen financial discipline and promote more efficient and strategic public spending.** In this regard, they may deserve consideration even in the absence of major climate action and investment plans. The Climate Change Public Expenditures and Institutional Review Sourcebook (World Bank, 2014) presents recommendations on how to put these principles into practice based on country experiences to date, and some highlights for finance ministries are presented here.

### AREA I: SETTING A MID-TERM BUDGET FRAMEWORK FOR CLIMATE ACTION

**Lesson I. Incorporate climate change into longer-term budget frameworks to allow for planning and adjustment of spending across programs.**

Annual budgets offer limited scope for adjusting resource allocations in line with emerging policy priorities, and medium-term expenditure frameworks (MTEF) have become widespread since the mid-1990s. Today, 132 countries have introduced some form of medium-term expenditure planning. Seventy-one countries (and 18 out of 33 low-income countries) have a top-down medium-term fiscal framework in place that lays out allocations to spending agencies over a 3–5 year period (World Bank 2014). Medium-term expenditure plans allow for adjustments in resource allocations within the overall period. Climate change can be introduced into this framework, giving certainty and predictability to agencies for their climate expenditure planning while allowing for alignments with other priorities along the way (World Bank 2012b). The shift away from annual budgeting also has the advantage of often accelerating implementation speed and fostering a greater sense of ownership by agencies towards climate programs.

**Lesson 2. Send an early and clear signal of the importance of climate action through the budget process, preferably before actual budget development.**

Signaling the importance of climate action can be done through administrative guidelines issued at the start of the budget process. The UK Treasury's Pre-Budget Report of 2009, for example, highlighted revenue and expenditure measures in support of environmental and climate-change-related policies (HM Treasury 2009). In South Africa, policy commitments such as the proposed carbon tax and establishment of a fund for green economy initiatives, are announced in the medium-term budget statement (South Africa 2011). The budget circular supports implementation of these policies by providing guidance on the presentation of climate-change-related expenditures in the agency budget proposals. The Philippines Budget Circular, meanwhile, requires agencies to categorize programs according to the government's five priority areas of spending, one of which corresponds to environment and climate change mitigation and adaptation (Philippines 2012).

## AREA II. TRANSPARENCY AND ACCOUNTABILITY TO INFORM RESOURCE ALLOCATION DECISIONS

**Lesson 3. Use interagency committees to help mainstream new policy initiatives such as climate change into the plans of line agencies and to allocate resources in balance with other priorities.**

The challenge for sectoral agencies is to link climate change policies and expenditure planning to their operational work. Agencies are usually required to highlight and justify expenditures arising from new policy initiatives in their budget submissions; base expenditures (those related to current policy), however, may not be subject to review unless there are pressures to curtail costs. Ministries of finance are typically not expected to advocate reallocations across policy goals or to promote overall increases, but they are in a position to determine if spending agencies are proposing budgets that meet whole-of-government policy objectives (e.g., climate change)—and do so in an efficient and effective manner.

Experience from poverty reduction planning has shown that intra- and inter-ministerial committees consisting of sectoral agencies and finance ministries can improve the definition of plans and realism of implementation timelines. The same holds true for climate action, where finance ministries can encourage synergies between climate and other agency programs during the resource

allocation review. Review processes that link program-level performance with agency-level negotiations on resource allocation are effective points of intervention (Alonso et al. 2005). The review function can be formalized by issuing specific guidelines on how climate change issues should be addressed in agency budget proposals, such as requiring a description of climate change policy objectives and an explanation of how these are reflected in the budget proposal.

**Lesson 4. Require more comprehensive reporting at the sub-national level and among state-owned enterprises.**

State-owned enterprises (SOEs) and various autonomous agencies are important economic actors in many countries, for which information on climate action and finance is usually not available. Important climate action entities such as natural resource management agencies and national climate change funds fall into this category. Ministries of finance should encourage these entities to develop and document climate actions and financing plans and require the reporting of climate-related investments and expenditures.<sup>1</sup> Many countries have power sectors that are dominated by state-owned generation and distribution plants; these SOEs are in key positions in climate change mitigation. Water infrastructure is also usually state owned and managed, and is critical for effective adaptation. SOEs often report on the environmental impacts of their operations and related financial transactions on a voluntary basis or when instructed by their boards. Where climate actions undertaken by SOEs are financed from earmarked taxes and other sources of revenue (e.g., levies on domestic and international carbon market transactions), finance ministries should mandate reporting of expenditures against climate actions. Where climate actions by SOEs are funded through external climate finance, sometimes arranged without coordination with the Ministry of Finance, finance ministries should similarly mandate reporting.

Sub-national jurisdictions also tend to identify their climate-related expenditures only on a voluntary basis or at the request of statistical agencies. Better quality and coverage of reporting at all levels of government will provide a better picture of how much is being spent. Both ministries of finance and planning agencies should consider making financial transfers to sub-national entities conditional on the submission of financial reports, and coordinate this with agencies responsible for territorial administration. CCPERS

<sup>1</sup> In July 2012, South Africa's Department of Public Enterprises announced that SOEs would develop a climate change response plan, with emissions reductions targets, that would not compromise their financial viability. As part of this commitment, the department became a signatory to the UN Global Compact, a corporate social responsibility initiative that includes environmental goals.

can help to uncover where inter-linkages can be easily made and to identify the right institutional arrangements for implementing mitigation and adaptation projects (i.e., whether and when to assign either a central or a local agency to be responsible for enforcing performance).

### **Lesson 5. Identify and monitor all off-budget expenditures.**

Climate policy can be advanced through quasi-fiscal operations,<sup>2</sup> tax expenditures, and guarantees.<sup>3</sup> The fiscal impact of these tools will only be felt later, when quasi-fiscal operations have to be paid for by government, when taxes are due to be paid, and when guarantees are called. While the delayed fiscal effect can be politically appealing, it can increase fiscal risk as off-budget expenditures are not transparent. This approach also raises governance concerns since, in the absence of systematic reporting, it is not possible to test the policy rationale of implicit subsidies and verify their targeting. Ministries of finance should make these hidden costs more explicit by requiring all entities responsible for guarantee payments and other liabilities to report them and periodically assess their risk exposure. Ministries of finance should also analyze the risk of accumulated contingent liabilities to the fiscal system and public debt and include appropriate contingencies in the budget.

Tax concessions are revenue losses, and come in the form of tax deductions, tax credits, concessional rates, or rules such as those governing the accelerated depreciation of assets. The concessions are typically used as incentives to change household behavior or to encourage businesses to invest in low-carbon technologies. The fiscal impact of these tax concession program can be substantial. In the U.S., for example, the revenue losses associated with the 11 climate-change-related tax expenditures and energy grants amounted to \$7.23 billion in 2010, almost as much as the reported funding of \$8.8 billion for climate change programs and activities (GAO 2011). If possible, finance ministries should administer tax concession programs as transfers that are reported as expenditures and require regular forecasting of all tax credits and concessions from responsible line agencies.

While identifying off-budget expenditures and quantifying subsidies can be technically challenging, conducting a CCPER can help. With these expenditures more clearly highlighted, ministries of finance can apply performance metrics to determine if policy objectives are adequately and efficiently met (as tax concession programs can sometimes be missing these elements). In addition, the findings from the review may prompt the establishment of new program management structures to review the eligibility of individual applications for tax concessions according to the agreed performance criteria. Other types of off-budget instruments, such as national climate change funds (Box 4), should also have performance stipulations and review requirements.

## **AREA III. EFFECTIVELY RECEIVE AND DISTRIBUTE EXTERNAL FINANCE**

### **Lesson 6. Identify all externally funded initiatives and establish uniform reporting practices to give a complete picture of climate-related expenditures. Ministries of finance and planning agencies must track and report on these expenditures and reflect them in national budget documentation.**

As much as possible, all external funds should be received and disbursed through the central financial systems. Different types of development assistance financing may use either government or parallel systems of reporting, depending on the donor's procedural requirements (and the extent that donors assess the presence of fiduciary risks in a particular project context). Finance ministries should aim to have consistent application of reporting requirements across all programs and actions so that externally funded climate expenditures are accurately captured. Public entities managing external funds in parallel systems should be required to include them in their budget and financial reports to the central authority. Ministries of finance may encounter different standards of reporting; requirements for loans and other borrowing, for example, are usually rigorous as many loans require central finance approval and, in some cases, ratification of financing agreements by the legislature. Budget support, or development policy financing, meanwhile, is disbursed through the treasury and therefore conforms to government systems. (Committing budget support funds to programs should be done in a timely manner to allow for the funds to be properly identified in budget documentations and for spending to be tracked during the next spending cycle). Reporting tends to be less rigorous for grant financing, where authority for approval may be delegated to the development cooperation agency or the designated climate change authority.

<sup>2</sup> Quasi-fiscal operations occur where state-owned banks and enterprises, and sometimes private sector companies at the direction of the government, use prices that are not "market rate" in their sales and purchasing in order to achieve a government policy objective.

<sup>3</sup> Contingent liabilities are another risk, and they may arise where the government provides a guarantee to the private sector to reduce the risk inherent in certain mitigation and adaptation activities. Guarantees are an implicit subsidy, since they transfer risk from the investor to the public sector and so reduce the cost of capital. Guarantees are commonly used to encourage investment in high-risk start-up industries (e.g., renewable energy). Because there are limits to the availability of international climate financing from public sources, recipient governments may begin to acquire more contingent liabilities as they are compelled to look to the private sector, particularly for mitigation projects.

### Box 4: Examples of National Climate Change Funds

Country	Name	Est'd	Finances	Governance	Budget Transfers	Earmarked Revenues	External Financing	Private Financing
<b>Statutory Funds</b>								
Brazil	Amazon Fund	2008	Combat deforestation	Development Bank		✓ Oil Revenues		✓
China	Clean Development Mechanism Fund	2007	National CC strategy	Ministerial board		✓ Tax on CERs		✓
Germany	Special Energy and Climate Fund	2010	15% CC in developing countries	Government		✓ ETS Auctions		
India	Clean Energy Fund	Future	Low carbon and renewable energy	Under discussion		✓ Taxes on Coal		
Philippines	Peoples' Survival Fund	2011	Local adaptation activities	Government, private, and CSO board	✓			
Rwanda	National Fund for the Environment	2012	Mitigation and adaptation	Government	✓		✓	
Thailand	Energy Efficiency Revolving Fund	2003	Energy efficiency projects	Government		✓ Petroleum Taxes		✓ Commercial Lending

National climate funds allow governments to enter long-term commitments by ring-fencing resources so that they remain outside the government's budget process. They can be financed by specific revenues earmarked to the fund, one-time government transfers, or deposits from external donor sources. In climate actions that rely on private co-financing, income generating funds, especially funds structured to maintain assets, provide more certainty that governments intend to meet its financial obligations. Climate funds designed to mobilize and blend financing, especially from external sources, can form a critical part of the government's response to climate resilience and adaptation needs. Being outside the budget process implies less control in the overall efficiency of public resource allocation, as there will be limits in the government's ability to re-channel resources in extra-budgetary mechanisms. To maintain good governance, national climate funds should be established with clear provisions on performance expectations, and for a review or expiration of mandate.

Source: World Bank (2014). Climate Change Public Expenditure and Institutional Review Sourcebook.

### Lesson 7. Respond strategically and effectively to the requirements of external donor funds.

Where available, external resources can be an important complement to limited domestic funds. Ideally, these resources should be disbursed centrally so that allocation across various climate actions undergoes the same strategic considerations as is done for domestic funding. Similarly, where national reporting systems can be used to track spending against the achievement of policy objectives, this approach is preferable to donor-specific reporting systems. National tracking will also reinforce the ministry of finance's oversight rather than introducing a separate line of accountability.

Recent developments in international climate funds give support to having ministries of finance take a more prominent role in managing external resources. The Adaptation Fund launched

its "Direct Access" accreditation process in 2010, which assesses proposed national implementing entities for their financial management, project appraisal, and management capacity, and for their transparency, internal audit, and anti-corruption measures. The Green Climate Fund, meanwhile, is finalizing its own Direct Access criteria. Governments should designate a relevant branch in the ministries of finance (or a specialized entity such as the national development bank) as the point of Direct Access to facilitate integration of climate finance (from UNFCCC mechanisms and other international climate funds) into national planning and budgeting systems. Ministries of finance should retain overall responsibility for Direct Access, while delegating other required functions (e.g., project selection, technical appraisal, and so forth) to specialist environmental agencies.

It is important to understand donor requirements as they evolve. In taking steps to comply with changing requirements, however, it is important to avoid creating major misalignment with

existing administrative systems—instead, steps should be taken to enhance them. Ongoing discussions at the UNFCCC concerning monitoring, reporting, and verification (MRV) of climate finance provides an illustration. New requirements for the monitoring, reporting, and verification of finance provided to mitigation and adaptation actions (NAMAs and NAPAs/NAPs) are being considered to strengthen accountability for resource mobilization by developed countries and to increase the accountability of developing countries using the funds.

While the MRV requirements are still unclear, there is some indication that developing countries with the capacity for granular level financial reporting (i.e., according to specific emissions

reduction projects or programs and assigned to individual donor source) can better demonstrate their readiness for donor funds. However, this capacity is currently beyond the capabilities of many developing countries, where systems for source-level emissions monitoring are often under the environment agency. Information on financial inputs is usually available by agency or territorial jurisdictions, and rarely at the level of individual sources. Measured steps can be taken to close the gap between current capabilities and what is needed in future, without drastic reform to existing administrative arrangements. Recipient governments can begin by exploring options for creating inter-linkages between national systems for emissions source monitoring and financial reporting.





# ANNEX I: ANALYTICAL FRAMEWORK FOR PUBLIC EXPENDITURES REVIEW

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**Fiscal sustainability** tests whether the aggregate level of public spending and deficits is consistent with a sustainable medium-term macroeconomic framework yielding a sustainable deficit and level of public debt. This assessment requires a broad definition of public spending, since fiscal imbalances may arise within the central government, autonomous agencies, and/or other levels of government. It also requires an understanding of macroeconomics and other risks and their potential fiscal impacts.

**The strategic allocation of resources** tests whether the allocation of resources within and across sectors (and other categories of expenditures) maximizes social welfare. Given the government's role in translating society's preferences into public policy, this assessment should also determine whether current and planned expenditures are aligned with the government's stated policy objectives.

**The role of government** assesses whether the public sector complements rather than substitutes for the private sector in generating desired social outcomes. Government intervention may be justified in cases of market failures, which may occur for a number of reasons: public good externalities, natural monopolies, and asymmetrical information. The appropriate public sector response—distinguishing public provisions, financing, or regulations—and

the level of public spending will depend on the type and degree of market failure that the public sector is seeking to correct.

**Efficiency and effectiveness** tests the relationship between government expenditures and intended outputs in terms of goods and services (efficiency), as well as the impact of expenditures in terms of changes in social welfare (effectiveness). This entails an assessment of the inputs, means, and arrangements for the delivery of public goods and services and an assessment of whether these provide value for money.

**Incidence** assesses how the costs and benefits arising from public policies are distributed across society. This analysis may consider the distribution of costs and benefits between categories defined in terms of income, gender, ethnicity, region, and/or other policy-relevant characteristics.

**The institutional assessment** examines whether and how the institutional framework and incentive structure deliver aggregate fiscal discipline, strategic allocation of resources, efficiency and equity in the composition of spending, and technical efficiency in the use of budgeted resources.

Source: Pradhan (1996). *Evaluating Public Spending. A Framework for Public Expenditures Reviews*. World Bank Discussion Papers 323.

## ANNEX II: UNFCCC PLANNING INSTRUMENTS

**National Communications and National Inventories.** The UNFCCC requires States Parties to report on progress in implementation of the convention through National Communications. Per UNFCCC guidance, the National Communication should provide a description of national circumstances, including development challenges and policies; a national greenhouse gas inventory;<sup>4</sup> a description of steps taken or envisioned to implement the convention; measures to facilitate adequate adaptation to climate change; measures to mitigate climate change; measures to raise awareness; and steps to integrate climate change into decision making, capacity building and an assessment of constraints and gaps, and related financial, technical, and capacity needs. Non-Annex I countries<sup>5</sup> are also required to submit National Communications (except for the least developed countries, who may report at their discretion). From December 2014, non-Annex I countries should also submit an update, particularly on the progress of mitigation plans, in their first biennial update report (again, least developed countries and small island developing states which may do this at their discretion).

**National Adaptation Programs of Action (NAPAs).** These programs were intended to follow up National Communications as adaptation projects identified by developing countries for financing on an urgent basis. These are action-oriented projects that targeted the most vulnerable populations. Technical assistance to prepare NAPAs was available from the Least Developed Countries Fund (LDCF), managed by the Global Environment Facility (GEF). As of July 2014, 50 developing countries have submitted NAPAs, covering agriculture and food security, terrestrial ecosystems, water resources, and marine and coastal management. COP 16 introduced national adaptation plans (NAP) as a means for developing countries to identify and address their medium- and long-term

adaptation needs; in the case of LDCs, these built on NAPAs. The GEF, through the LDCF and the Special Climate Change Fund (SCCF), supports the preparation of the national adaptation plan process in LDCs and non-LDC developing countries, respectively.

**Nationally Appropriate Mitigation Actions (NAMA)** were established after 2009 to encourage developing countries to implement mitigation activities that will help them reduce the rate of growth of emissions below their “business as usual” scenarios. Many NAMAs are entered into a UNFCCC registry to attract financial support. Many will only be implemented if there are adequate incentives from external sources in the form of technology, finance, and capacity-building support. Other projects are listed for recognition, and countries are proceeding without financial support. The content of NAMAs vary: most present broad statements of policy priorities; some present lists of specific interventions; and a few present specific projects aimed at reducing emissions (though generally these are less developed than the projects presented in NAPAs).

**Low Carbon and Low Emissions Development Strategies (LCDS and LEDS) have been proposed as a framework for**

<sup>4</sup> The UNFCCC requires that “each non-Annex I Party shall, as appropriate and to the extent possible, provide in its national inventory, on a gas-by-gas basis and in units of mass, estimates of anthropogenic emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O) by sources and removals by sinks.” Parties are encouraged to use standard tables which disaggregate the data by sector (UNFCCC document FCCC/CP/2002/7/Add.2).

<sup>5</sup> Under the UNFCCC, Annex I parties are industrialized countries that were members of the Organization for Economic Cooperation and Development in 1992, plus countries with economies in transition (the EIT Parties), including the Russian Federation, the Baltic States, and several Central and Eastern European states. Most developing countries are classified as Non Annex I parties.

**mitigation actions.** This approaches mirror, in some respects, the shift from NAPAs to NAPs, and from immediate action to a longer-term strategy. LEDS were originally proposed in the context of the UNFCCC in 2008 as a means of focusing attention on national efforts in support of low-carbon development. While the 2010 16<sup>th</sup> Cancun COP encouraged developing countries to develop low-carbon development strategies, it did not provide specific guidance. The intention was that LCDS should be fully integrated into the national development strategy, presenting a sustainable pathway to achieve established development goals. This approach entails the identification of national and sector-specific actions for the reduction of GHGs, drawing on an assessment of GHG trends and opportunities for low-carbon development alternatives. In this context, NAMAs become policy- and project-level actions identified to implement the LCDS. OECD has proposed a framework for LEDS which builds on an assessment of major sources of emissions, the identification of emissions reduction potential, and a climate vulnerability assessment. The framework draws on country experience in developing national climate change strategies.

**Nationally Determined Contributions** may set the basis for climate change planning after 2020. This concept was introduced at the 2013 Conference of the Parties (COP) in Warsaw, where all countries were invited to “initiate or intensify domestic preparations for their intended nationally determined contributions” and to communicate the “contribution” well in advance of the Paris COP—possibly by the first quarter of 2015. Although the standards and parameters for national contributions have yet to be agreed upon, the COP decision calls for increased clarity, transparency, and understanding of these contributions. Countries have begun seeking technical advice on major planning components that are likely to support this. The World Bank’s Partnership for Market Readiness has developed a program of analytic support to help a first set of countries develop their intended nationally determined contributions.

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