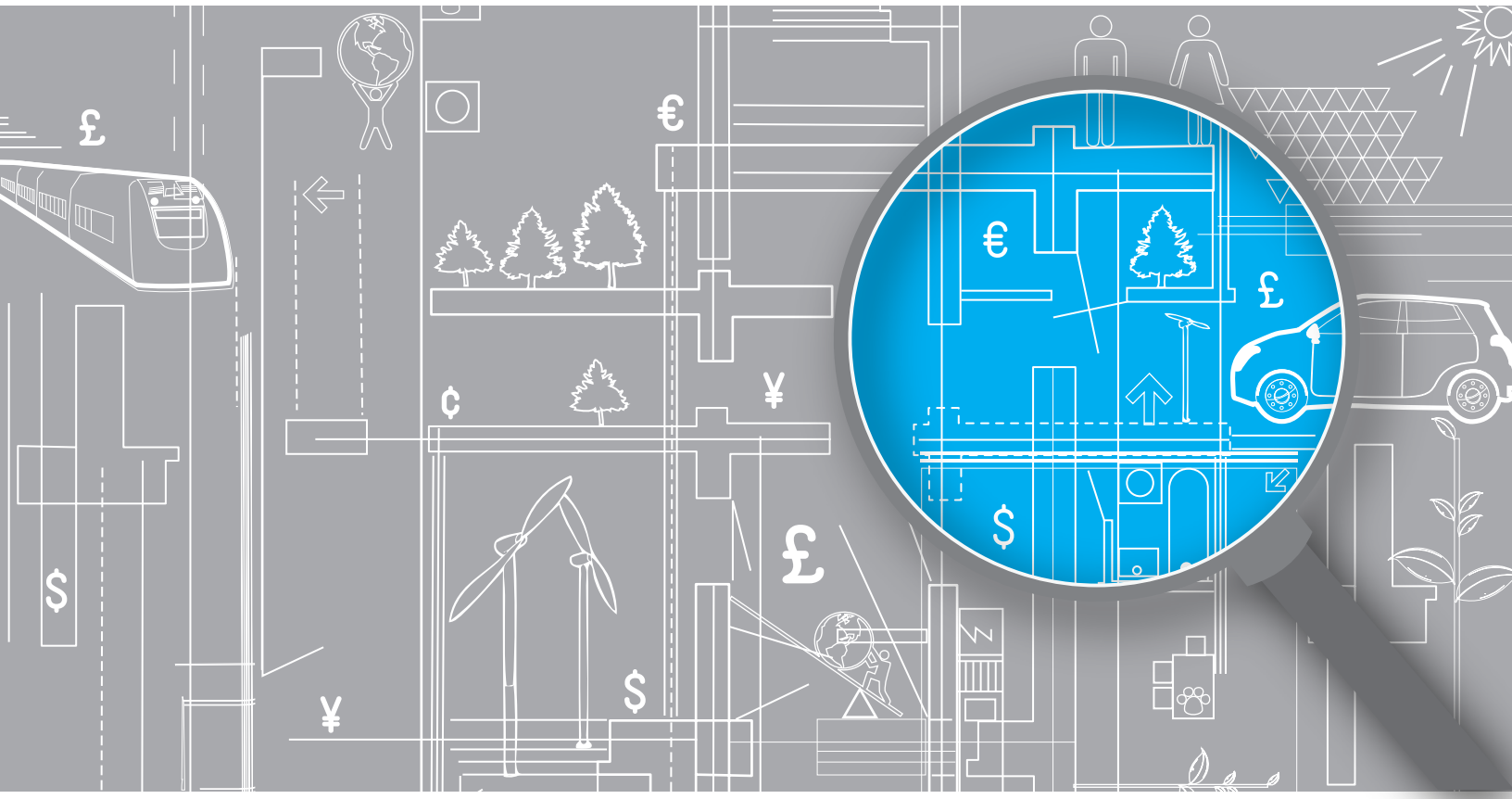

National monitoring approaches for climate change public finance

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National monitoring approaches for climate change public finance

ABSTRACT

This paper describes the opportunities and costs associated with the development of monitoring approaches for national climate change public finance. It describes a leading example of climate change budget tracking, summarises five tools that can support climate change financial monitoring, and identifies key enabling conditions for its effective application. The opportunity to apply these tools in non-Annex I countries is briefly described, along with a closer look at Costa Rica as a country with strong potential for effective tracking. The paper concludes by emphasising that the prioritisation, sequencing and frequency of monitoring efforts will influence the overall effectiveness of monitoring climate change public finance.

Content

1. Introduction

The 2015 Paris Agreement of the UNFCCC acknowledges that responding to climate change and its impacts will involve new expenditure in all countries, including public spending in developing countries. With the expectation of additional public spending comes an interest to monitor and track such finance so as to ensure the transparency and accountability of public spending systems and decision making. It also provides an important opportunity to increase awareness of climate change among sector planners and budget officers.

Addressing climate change requires investments delivered by government programmes across a range of ministries and departments. Departmental spending by the leading ministry responsible for national climate change policies – often the Ministry of Environment – is an insufficient measure of all relevant climate change public spending, as adaptation and mitigation measures involve many sectors, such as water, energy, infrastructure and agriculture.

Efforts to monitor public climate change spending face several significant challenges. The first of these lies in the definitional ambiguity of climate change actions and hence financing, especially for adaptation finance. Second, in many countries a varying proportion of public funds do not pass through the national budget and therefore lie outside its reporting systems. Third, records of recurrent spending are frequently insufficiently detailed to allow the climate change relevant component to be identified. And fourth, actual expenditures (as opposed to the budget estimates) are often not readily available. As a result, the identification of climate change relevant finance within public expenditures has not been institutionalized in most countries.

Despite these challenges, OECD member states have developed tracking methods for their climate change-related official development assistance spending and have been applying and fine-tuning this tracking system for a number of years. International agencies are also exploring the potential to track domestic climate change public expenditure[1].

Three cases with lessons learned

This paper describes the opportunities and costs of such systems, by describing a leading example of climate change budget tracking, together with examples of similar efforts for two other cross-sectoral themes, and then drawing general lessons that may assist the design of a national climate change finance tracking system.

1 Hanh Le and Kevork Baboyan (2015). Climate budget tracking. Country-driven initiative in tracking climate expenditure. The case studies of Bangladesh, Indonesia, Nepal and the Philippines. Draft Working Paper. July 2015. UNDP.

Nepal as a global leader: the first attempt at developing a national climate change budget

In 2011 an ODI-led team carried out a study[2] in Nepal that quantified the budget allocation for climate change actions over a four-year period, identifying the ministries with relevant spending. Derived from the study's recommendations, a national monitoring system was developed, representing the first attempt globally to determine a national climate change budget. That this happened in a highly vulnerable developing country is significant, as it points to the international agenda, which promises additional financing to such countries, as a major driver of such efforts. To-date, no developed country has established a climate change public finance monitoring system.

A key step in developing the Nepal budget tracking tool was reaching consensus on what constituted relevant activities, with eleven activity areas identified[3]. The Nepal tracking tool operates at the activity level within the development budget (the recurrent budget is not assessed). All expenditure is counted as climate change relevant if the activity is deemed to fall within one of the eleven areas (using a menu of climate change relevant activities), subject to the interpretation of sector planners.

A review of the Nepal budget tracking system[4] highlighted two policy questions that a monitoring and tracking system can address:

Policy questions derived from Nepal budget tracking system

%	**Percentage of government spending & Gross Domestic Product allocated to climate change**	Such a tracking tool can give a first estimate of the scale of public funding on climate change. Since there is no defined optimal level of this scale, it enables a discussion on the appropriate level of resource allocation under national circumstances. Comparing current spending versus estimated spending for the implementation of national climate change strategies, may help guide this discussion.
?	**Where is climate change spending taking place across the government administration?**	Identifying which ministries are committing annual budgetary resources to climate change related actions (and its percentage against their overall budget) can help to highlight early leaders on climate change. This may help to examine the coherence between policy and public spending.

One drawback of the Nepal climate change budget tool is that it does not address the incremental cost concept of responding to climate change. For example, whilst sustainable forest management may include climate change related spending, it is not solely a response to climate change. Hence allocating all sustainable forest management activity funding as being climate change relevant would lead to an over-estimate of climate change finance.

2 National Planning Commission (2011). Nepal climate public expenditure and institutional review. CPEIR). Published by Government of Nepal, National Planning Commission with support from UNDP/UNEP in Kathmandu.

3 National Planning Commission (2012). Climate change budget code. Documenting the national process of arriving at multi-sectoral consensus, criteria and method. Published by Government of Nepal, National Planning Commission with support from UNDP/UNEP in Kathmandu.

4 National Planning Commission (2013). Climate change budget code. Application Review. Published by Government of Nepal, National Planning Commission with support from UNDP/UNEP in Kathmandu.

Climate change budgeting can learn from pro-poor budgeting

There is a broader set of experiences of using budget tracking devices for policy outcomes. One of these is pro-poor budgeting. The focus on poverty reduction by many development agencies, linked to a preference to channel funding through the recipient government's budget, led to an interest in the early 2000s to track such spending using 'virtual poverty funds'. A virtual poverty fund is a mechanism to track poverty reducing public spending through the tagging of specific expenditures within the budget and then to monitor their performance. Uganda's Poverty Action Fund (PAF) was an early example,[5] from which a number of important lessons can be learned:

Lessons learned from Uganda's PAF

- **Overall effectiveness of public programmes:** As with the current interest in climate change budgets, pro-poor budgeting focuses on budgetary allocations and expenditures, hence the policy goal impacts are not assessed. Budget tracking should be viewed as a first step in a performance management system, the ultimate effectiveness of which relies on an accompanying assessment of the outcomes and impacts of relevant programmes.
- **Clarity and consensus over the definition of relevant expenditures:** In the case of the Ugandan PAF, over the first 4-year period (1998–2002) the list of eligible programmes changed considerably with the addition of programmes considered to fit the selection criteria. As with climate change actions, the boundaries of pro-poor activities are diffuse and so a broad consensus had to be built over what to include.
- **Identify what drives institutional interest to secure recognition of relevant spending:** In Uganda, pro-poor expenditures were ring-fenced by government and protected from any budget cuts during the financial year. This acted as a strong incentive to demonstrate that expenditure was pro-poor.
- **New monitoring and reporting systems may weaken existing budget monitoring and evaluation systems:** Parallel reporting was developed for the Ugandan PAF, which was considered to divert attention away from government's pre-existing processes for providing fiduciary assurance.

Climate change budgeting can also learn from gender-responsive budgeting

Gender-responsive budgeting also has many parallels with climate change budgeting, as it covers a relatively recent policy concern that remains ill-defined and which has often been influenced by an international, rather than a national agenda. Budlender has completed a comprehensive review of the lessons to be learned for the tracking of climate change funding.[6] She highlights the need to be clear on the objectives of any budget tracking exercise, as such work requires resources and commitment from individuals (mostly sector planners and budget officers) across a wide range of implementing ministries. Gender responsive budgeting has been carried out mostly to support increased budgetary allocations and to affect policy and governance-related change.

5 Tim Williamson and Siudharshan Canagarajah (2003). Is there a place for virtual poverty funds in pro-poor public spending reform? Lessons from Uganda's PAF. Development Policy Review 21 (4): 449-480.

6 Debbie Budlender (2014). Tracking climate change funding: learning from gender-responsive budgeting. IBP Paper. August 2014. International Budget Partnership.

An important lesson from gender responsive budgeting exercises – and one equally relevant to climate change budget tracking – was the need to go beyond public expenditures that specifically targeted activities supporting gender equality to identify spending that was relevant to the policy goal of gender equality. The difference between these two sets of actions is that for the former an explicit gender objective existed in the budget documentation, whereas for the latter actions addressing gender was not explicitly recognised as an objective for the expenditure.

Another relevant observation from Budlender's review is the recognition that this type of analysis is likely to improve in quality over time. Definitional issues can be expected to be demanding at the outset and may require several years of implementation to resolve. Hence the process of this type of work is as important as the results obtained. Overdue emphasis on the absolute numbers arising from expenditure analysis is cautioned against; more attention should be directed at any patterns and trends that the analysis highlights.

Lessons for climate change budget tracking

For those countries considering the introduction of climate change budget tracking, the above experiences highlight a number of important considerations that should be addressed prior to establishing such a system. These include:

Lessons for climate change budget tracking

- A starting point –readily overlooked– is to clearly state the expected objectives of the proposed system. This will help determine, for example, what stage of the budget cycle should be given attention in any public expenditure analysis. If allocation issues are the main interest, then the analysis should focus on the budget estimates at the start of the fiscal year; if programme implementation is the focus, then end of year out turns should also be assessed.
- An important consideration is to differentiate between the various sources of funding, particularly between domestic and international funds. The amount of effort invested in distinguishing between these will be determined by the objectives of the monitoring system.
- The magnitude of climate budgeting is a poor proxy for climate outcomes. Any public expenditure analysis should ultimately lead to the optimal impact with the least public expenditure. Expenditure analysis should therefore be seen as one tool that can lead to a deeper understanding of national climate change strategies. Budget tracking can only address the financial inputs of climate change relevant actions, which cannot measure the impact of such spending. Other types of financial, economic and climate analysis should complement the budget tracking tool to evaluate climate finance effectiveness.
- Expenditures relate to activities, hence defining what constitutes a climate change relevant action is a key foundation for this type of public expenditure analysis. Reaching a broad, evidence-based consensus across relevant ministries, national legislature and civil society on such actions and then developing a protocol whereby the degree of relevancy can be estimated for each programme are among the most important early actions to consider.

- Working at the activity level within a budget classification may be too disaggregated for a policy orientated tracking system. An alternative approach would be to pre-determine the percentage of programme spending that can credibly pass as climate change related. This may have to be estimated by expert opinion until an empirical basis can be reliably determined.

- An important consideration for such analysis is to identify spending on both adaptation and mitigation strategies. These represent two different but complementary climate change strategies that are much influenced by a country's development trajectory.

- At the design stage of any monitoring and tracking system it is important to determine whether only 'positive' spending should be identified. There is increasing policy interest to understand the level of public expenditure that may undermine the response to climate change, for example by public investments in fossil fuel generation or public subsidies for land-use change where increased carbon emissions can be expected. To-date, climate change budget tracking has focused on so-called positive expenditures only.

- There is a need to situate this type of analysis within the broader context of budget management reform, recognising the Ministry of Finance as the lead government institution. This particularly applies to how any monitoring and tracking system is developed and how it is integrated into existing budgetary systems.

The objective of managing public resources is ultimately one of maximizing public welfare while minimizing the public expenditure needed for that aim. Public climate change finance is no different. Although in many cases, fiscal authorities will need to mobilize resources to respond to climate change adequately, their broader responsibility over public budgets should seek to maximize the outcomes of budget allocations, and make sure adequate resources are provisioned, rather than maximize allocations to a particular budget priority. The reality is that this approach to climate finance tracking is somewhat at odds with the political value of demonstrating action by highlighting the size of budget allocations toward a national or international policy objective.

Effective climate change finance thus begins with effective climate change policy, rooted in an understanding of national greenhouse gas emissions, and thus mitigation policy, and climate impact risks, and thus adaptation. With effective national climate change planning, policy makers are in a position to assess budgetary allocations and consider their effectiveness toward those aims.

2. The context and rationale for quantifying public climate change finance

Why measure public climate change finance?

For a government to invest in monitoring climate change public expenditure there need to be clear benefits. While the precise bureaucratic burden will of course vary according to the size of government, number of ministries implicated, existing monitoring and evaluation capacity and other factors, the time and cost of tagging and analysing such expenditures can be significant. Budget monitoring should be designed to increase understanding of the budget´s effectiveness. The budget effectiveness for a particular policy outcome, in this case the public response to climate change, requires an evaluation of both the expenditure relevant to the outcome and the measurement of outcomes. Climate change finance tracking addresses the first of these concerns.

Three general benefits accrue from the measurement of public climate change finance:

Benefits from measurement of public climate change finance

1	**FIRST, identifying relevant expenditures is important for climate change policy formulation and the associated resource allocation across sectors:**	This is particularly needed at the present time, in the context where many countries have completed a first iteration of their national climate change policy. With initial policy goals identified it is necessary to understand the resource requirements for the implementation of public programmes that will lead to these policy goals being met. This will assist further policy development and international climate policy negotiations.
2	**SECOND, accountability of public spending will be strengthened:**	By raising public awareness and transparency towards the public. With climate change being a relatively new policy concern for legislators, having financial information on actions offers scope for improved oversight of public programmes. In the case of countries that receive international financial support for climate change actions, such information will increase confidence that additional financial resources will be well spent within the context of a coherent domestic financing plan.
3	**THIRD, there are administrative gains to be had through the review of budgetary performance:**	Administrative systems can be strengthened so as to ensure more effective public programme delivery. Existing monitoring and finance tracking systems may be augmented with climate change specific criteria and indicators. Reporting systems can be made more rigorous leading to greater efficiency.

Recognising these benefits, there are also costs to consider. An initial challenge for the design of a climate change budget is that climate change is not recognised as a category of public expenditure under the UN classification system of the functions of Government, which would allow an automatic compilation of relevant spending to be made. Hence, a manual examination of budget spending, potentially leading to a tailored budget tracking tool, is required if climate change relevant expenditures are to be identified and summarised. This task is a challenging one and in part explains why this is a poorly developed area of public expenditure analysis.

Institutional interests need to be considered

From the outset, interest in budget tracking of climate change relevant actions will vary across the government administration, as ministries will have differing incentives to participate in such action. Some alignment of institutional interest is therefore needed for an effective national approach to be established. Table 1 suggests reasons why key ministries may support the tracking of public climate change finance, and also possible concerns that might reduce their interest to support such efforts. These issues need to be addressed at the system design phase.

Table 1: Possible institutional incentives for supporting climate change budget tracking

Ministry	Major incentives	Major concerns
Ministry of Climate Change	To raise the profile of climate change policy To attract international public finance for climate change	Lack of capacity to commit to financial analysis due to competing priorities Limited demand for such analysis
Ministry of Finance	To bring all public spending (including off-budget expenditure) within the national budgetary system To attract additional public finance To allocate the budget effectively across competing ministry agendas	› Additional task for what may be perceived as a low priority theme › Scepticism over potential quantum of funding involved
Ministry of Planning	To strengthen national development planning To identify the financial inputs to advance a cross-sectoral policy theme	Climate change not perceived as being central to national development (too little knowledge about co-benefits of climate change actions) Focus on financial inputs rather than outcomes of spending
Line Ministries	To secure additional funding for climate change actions	Increased reporting responsibilities Scepticism over funding priority given to climate change

Ministry buy-in will be incentivised by leadership from a head of state. This can create momentum for the development of a framework and help sustain attention. Likewise, inter-ministerial coordinating bodies can facilitate the uptake of climate change finance tracking. However, high level buy-in, while a crucial enabler, does not substitute for uptake by government administrators. The performance of climate change tracking eventually requires capacity, incentives and the interest of those in ministerial middle-management who will generate and analyse budget data.

Complimentary actions necessary for success

As mentioned above, measuring climate change public finance can be a valuable policy evaluation tool. However, its effectiveness depends on two complimentary conditions.

First, it requires the evaluation of climate outcomes and impacts such as emissions by sector, or climate impact risks. Climate finance tracking can pose a risk to results based policy approaches where ministries seek to substitute outcome and impact based policy evaluation with expenditure-based tools. Expenditure tracking requires complimentary evaluations of policy effectiveness, but is critical to value-for-money analysis when the two are combined.

Second, policy, planning and budgeting processes must be designed to take on board the evaluation of budget expenditures, and related outcomes and impacts, and formulate subsequent policies taking such information into account. Such processes can take a number of forms, beyond the scope of this paper. In fact, mainstreaming climate change public expenditure analysis can be a tool for capacity building in such regard. Under any circumstance, tracking tools are only as useful as institutional design and the political economic context allows for some degree of policy learning and adaptive governance.

International reporting obligations for climate change finance

In addition to domestic considerations, all countries are subject to international reporting obligations. For climate change actions such obligations are determined by the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC recognises three country groupings: Annex I, Annex II and non-Annex I Parties[7]:

7 http://unfccc.int/parties_and_observers/items/2704.php

UNFCCC country groupings

Annex I Parties	› Industrialized countries that were memders of OECD in 1992 › Plus countries with economies in transition (EIT Parties) including the Russian Federation, the Baltic states and several Central and Estaern European States
Annex II Parties	› The OECD members from Annex I, without EIT Parties › Required to provide financial resources to developing countries for mitigation and adaptation activities
Non-Annex I Parties	› Mostly developing countries › Certain groups are recognized by the Convention to be especially vulnerable to the effects of climate change (including those with low-lying coastal areas and/or prone to desertification and drought)

These country groupings have differing reporting obligations under the Convention, with Annex II countries required to provide details of measures taken to give effect to their commitments under Article 4 of the Convention[8], which include financial support to developing countries. At present there is no official guidance on how such financial flows should be reported, although the decisions supporting the adoption of the 2015 Paris Agreement include a commitment to begin a process to identify the information that developed country Parties shall provide on projected levels of public financial resources going to developing country Parties[9].

Two reporting schemes under the UNFCCC Convention refer to the financial needs of non-Annex I countries: the four-yearly National Communications (NCs) and the Biennial Update Reports (BURs). The relevant element of both reports is the section on 'constraints and gaps, and related financial, technical and capacity needs'. Over 100 non-Annex I countries have submitted their Second NC, whilst the BURs are at a much earlier stage of development, having been first called for in 2014. As of December 2015, 22 countries have submitted their initial BUR[10]. In its 2002 NC Guidelines the UNFCCC Secretariat advised that 'Non-Annex I Parties should also provide information on financial resources and technical support provided by themselves and by the GEF, Annex II Parties or bilateral and multilateral institutions, for activities relating to climate change.' No further guidance has been provided to-date and no official international verification or review process exists for these reports (although a process termed "international consultation and analysis (ICA)" has been established for BURs).

8 http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf
9 FCCC/CP/2015/L.9. Paragraph 56.
10 http://unfccc.int/national_reports/non-annex_i_natcom/reporting_on_climate_change/items/8722.php

The development of international reporting on climate finance flows can therefore be seen to be at the earliest of stages. The first Biennial Assessment and Overview of Climate Finance Flows Report[11] prepared by the UNFCCC Standing Committee on Finance in 2014 noted the considerable challenges in preparing a global overview from diverse sources that currently use differing definitional classifications, particularly to cover adaptation finance.

It is worth emphasising that the objective of this international reporting is to demonstrate compliance with the financing commitments made by all Parties under the UNFCCC Convention. These focus on the transfer of financial resources from Annex II countries to non-Annex I countries: 'Reporting on the climate finance provided by developed countries to developing countries (national communications and biennial reports) is intended to promote transparency as to how, where and for what purpose climate finance flows'[12]. This represents a different objective compared to that of national governments where monitoring efforts aim to improve the effectiveness of public spending.

The challenges of tracking international sources of climate change finance

Public funds in support of climate change actions in developing countries (non-Annex I countries) can come from a number of sources. The most significant categories to distinguish in terms of public expenditures are domestically sourced funds and international public finance. The latter category can be further categorized as coming from dedicated climate funds (e.g. the Green Climate Fund, the Adaptation Fund and the Climate Investment Funds) or through bilateral and multilateral agencies, most often in the form of official development assistance.

The ability to capture international funds (either ex-ante in budget appropriation or ex-post in reporting) varies according to the nature of the funding received and the channel of funding adopted. There are three national channels through which international grants are disbursed[13]:

National channels for international grants disbursement

1. The first channel follows the normal government financial channels and these funds are fully captured in the budget allowing for them to be monitored using the national budget system.
2. The second channel is where funds are disbursed by donors to sector ministries rather than the central finance agencies of government, but these are also captured in the budget since the sector ministries report to the Ministry of Finance and hence can also be identified.
3. Donor grants disbursed through the third channel, where funds are transferred directly by donors to projects and programmes operating outside government structures, are very difficult to capture. This type of 'off-budget' expenditure is common in developing countries, meaning that a significant source of funding is not readily visible nor reported upon.

11 https://unfccc.int/files/cooperation_and_support/financial_mechanism/standing_committee/application/pdf/2014_biennial_assessment_and_overview_of_climate_finance_flows_report_web.pdf

12 FCCC/TP/2015/2. Paragraph 10 (c).

13 Eshetu, Zwedu, Belay Simane, Gebeyehu Tebeje, Workneh Negatu, Aklilu Amsalu, Abeje Berhanu, Neil Bird, Bryn Welham and Nella Canales Trujillo. (2014). Climate finance in Ethiopia. ODI, London and Climate Science Centre, Addis Ababa.

Public spending flowing through government systems that are captured in the national budget (the first and second of the channels above) are within a unitary system that uses standardised coding in many countries. However, expenditure passing through the third channel is not captured with the same level of consistency. This raises the danger of double counting of expenditures and makes the monitoring of such flows quite problematic. This has led to this channel of funding not being adequately captured in many climate change public expenditure analyses to-date, which represents an analytical gap as projects funded in this way may not necessarily respond to the spending priorities established through the national budget system.

Transparent and accountable public spending on climate change in non-Annex I countries

The demand for transparency over climate change public spending in non-Annex I countries is at an early stage. At the global level, most interest focuses on Annex II countries and their commitment to provide developing countries with adequate and predictable financial resources. The onus on reporting of these funds lies with the Annex II countries. However, without an international standard in place each country has to make its own decision as to whether an expenditure item is climate change related or not. As a consequence, differences in interpretation can and do arise.

In terms of increasing transparency of bilateral climate finance as it flows into the national systems of recipient countries, there is an opportunity to increase both transparency and accountability of such funds through a national monitoring and verification system. Such a system would allow funds from international sources received by non-Annex I countries to be checked for consistency of reporting at the international and national level[14].

The record so far of international climate funds on disbursements to recipient countries is mixed. Processes are slow and accurate data is difficult to access[15]. Despite this, some of these new funds have made significant commitments to improving the transparency of finance flows, as reflected in their governance structures and the inclusion of civil society as observers within fund board decision making processes.

Positive and negative public spending for climate change

As noted earlier, climate change public expenditure reviews to-date have focused on actions that are perceived as constituting a positive response to climate change. However, in all countries there are also public investments that are not consistent with a climate compatible economic pathway. These include public support for the development of projects that generate greenhouse gas emissions directly, such as fossil fuel power generation projects and the removal of natural carbon sinks through land-use change. It can also include expenditures that enable consumption patterns which will increase emissions, such as the expansion of fossil fuel supply.

14 Yanda and Bird (2015). Disbursements of international climate finance to Tanzania, 2010 – 2013. ODI Working Paper 420. ODI, London.
15 Nakhooda and Norman (2014). Climate finance: is it making a difference? A review of the effectiveness of multilateral climate funds. ODI Report. ODI, London.

No attempt has yet been made to quantify the level of such expenditures in non-Annex I countries, in part because of political economy considerations that lay behind such decision making. The demand for such analysis has yet to emerge, although urban pollution in China and forest fires in Indonesia are starting to feature as public policy concerns in these countries, which may generate demand for public expenditure analysis. Quantifying such expenditures face the same technical challenges as for positive expenditures, namely identifying the relevant programmes and projects funded within (and outside) the national budget system.

3. Approaches for the quantification of public climate change finance

The tracking of both the inputs in the form of funding and the outputs in the forms of mitigation or adaptation results is critical to the successful implementation of national climate change strategies. Mitigation results can be monitored, reported and verified in an emission accounting system. Adaptation results are more problematic to monitor, although much effort is now being made to lower this barrier. The tracking of financial inputs represents another challenge.

The first step in tracking financial inputs is to secure a clear definition of public climate finance. Progress is now being made with an international definition through the work of the Standing Committee on Finance of the UNFCCC. In the 2014 Biennial Assessment report, an activity-based definition of climate finance was proposed that covers both mitigation and adaptation actions: 'climate finance aims at reducing emissions, and enhancing sinks of greenhouse gases and aims at reducing vulnerability of, and maintaining and increasing the resilience of, human and ecological systems to negative climate change impacts'[16]. This international definition can be used to help clarify the term 'climate finance' at the national level.

The tools available for quantifying public climate change finance

A number of tools are available that estimate the amount of public finance on climate change actions. They vary in their scope, analytical approach, and the purpose for which they were developed. Five tools can be highlighted that cover a breadth of applications and focus on different sources of funding. These tools require very different levels of analysis as well as providing differing types of information. They are not mutually exclusive approaches, in fact there is much to be gained in seeking synergies between these tools to ensure coherence between different data sets. For national government administrators they represent a continuum from more passive to more active financial monitoring.

16 UNFCCC (2014). UNFCCC Standing Committee on Finance. 2014 Biennial assessment and overview of climate finance flows report. Paragraph 4, page 5.

Climate aid reporting	The OECD Development Assistance Committee maintains an on-line database of donor reporting on official development assistance (ODA) flows at the activity level. This database is searchable and summarises all funding tagged as climate change related by country17. Government administrators can access this database to identify, measure and verify international public climate change finance that passes through ODA channels. For aid receiving countries this may represent a significant portion of the available funding. However, records do not appear in the OECD database for at least one year, so this tool cannot support current monitoring efforts. Climate aid commitments and disbursements may also be available from the country offices of development agencies and if development partner groups exist individual agency funding may be collated to provide an in-country summary of relevant ODA.
Multilateral Development Bank reporting	Since 2011, a group of multilateral development banks (MDBs) have tracked and reported on their financial commitments to climate change actions in developing countries. These annual reports18 are available on-line and provide an overview of the international climate finance that is channelled through these MDBs. However, to assist national planners the data would need to be further disaggregated from the current regional summaries to country-level spending. The group has worked on common principles for climate finance tracking for both mitigation and adaptation, identifying eligible activities for the former category of climate change finance19. These principles will prove useful to national planners.
UNFCCC reporting	All UNFCCC Parties have reporting obligations and may use these to support their domestic monitoring. Concerning financing, the UNFCCC guidance for national reporting is limited, as it focuses on Annex I parties' reports. However, as this guidance develops, support to non-Annex I countries to comply with the reporting requirements can be expected. So, although a nascent tool, non-Annex I countries can influence and help mould the reporting framework to their benefit.
Climate finance studies	National studies on climate change public expenditure represent a newly-emerging tool. The first study was completed in Nepal in 2011 and its methodology has been extended to other countries. UNDP has developed a global support programme named climate public expenditure and institutional reviews (CPEIRs).[20] The Overseas Development Institute has completed similar studies in the African region.[21] The focus of these studies has been on all-government spending recorded in national budgets over 4-year periods, identifying expenditures that are explicitly, or implicitly, relevant to climate change. This in-depth research and analysis can raise awareness of such spending and identify which government agencies are allocating budget to climate change actions.[22]
National budget tracking	A logical extension of the previous tool is to institutionalise the tagging of relevant expenditures in the national budget system. Rather than the completion of a one-off study carried out by research groups, national budget tracking implies the uptake by the government administration of climate change tracking as part of the regular budget monitoring system. Whilst this provides a comprehensive approach to monitoring and reporting (at least for 'on-budget' public expenditure) it is also the most resource intensive tool, requiring significant commitments in terms of systems development and implementation. The way the national budget is classified will have a bearing on the ease by which climate change relevant spending can be identified. For example, in many countries the budget is made up of line items under administrative spending units. This requires careful scrutiny of all intended actions to identify those that are climate change relevant.

17 http://www.oecd.org/development/stats/rioconventions.htm

18 http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/10/07/090224b08312d0f4/4_0/Rendered/PDF/20140joint0rep0nks00climate0finance.pdf

19 http://www.worldbank.org/content/dam/Worldbank/document/Climate/common-principles-for-climate-mitigation-finance-tracking.pdf

20 http://climatefinance-developmenteffectiveness.org/

21 http://www.odi.org/projects/2537-climate-finance-climate-change-fast-start-finance

22 As exemplified by Viet Nam's initial Biennial Update Report that cites the results of the 2014 CPEIR study

Where national budget reform efforts are leading to programme-based budgeting approaches, identification of relevant activity could be eased considerably.

Characteristics and feasibility of measures

Table 2 lists potential advantages and disadvantages that national planning and budgetary officials may consider when reviewing the tools available. The first two tools focus on the international sources of climate finance; the latter two tools have focused to-date on domestic public funding.

Country example – Costa Rica

Costa Rica represents a potentially fertile context for effective climate change budget tracking. Through the UNFCCC process, it has prepared an intended nationally determined contribution (INDC) that lays out an international commitment to Costa Rica's response to climate change[23]. Costa Rica's INDC has a particularly robust mitigation strategy: it has short, medium and long-term absolute emissions objectives, with no conditionality on the availability of international funds[24]. To achieve this required analysis of current and projected emissions and emissions reductions options across all sectors. It also lays out an adaptation strategy, identifying sectoral priorities vulnerable to climate change and a framework for response.

Costa Rica's policy objectives in response to climate change, and a clear, measurable framework for measuring outcomes (e.g. emissions, vulnerability, etc.) establishes the requisite enabling conditions against which budget tracking can provide a useful tool. Tracking budget allocations (i.e. inputs) against INDC policy objectives and outcomes can provide the government with critical data as to where expenditure gaps exist, where policy interventions are most cost effective, and where more fiscally prudent alternatives may exist to achieve climate policy objectives.

These considerations become all the more critical as Costa Rica's response to climate change moves away from project-by-project interventions, which entail only the buy-in of the Ministry for Energy and Environment and occasionally other ministries and agencies, to economy wide considerations, this will require action from each of the line ministries, the Ministry of Finance, and the Ministry of National Planning and Political Economy. For example, a response to climate change may require small but material budget allocations to implement land planning policies or transport related regulation, and at the same time require very large capital investment to address transportation sector emissions. Monitoring these needs and allocations across ministries would ensure that Costa Rica's climate response is comprehensive, and focused on the most material opportunities for change. Budgetary analysis can show where allocations reflect (or fail to reflect) the sectoral transformation required for Costa Rica's policy objectives by clearly identifying those actions being supported through budget allocations, which can then be linked back to policy setting.

23 http://www4.unfccc.int/submissions/INDC/Published%20Documents/Costa%20Rica/1/INDC%20Costa%20Rica%20Version%202%200%20final%20ENG.pdf

24 The INDC targets carbon neutrality by 2021, including offsets, with an absolute emissions target of 9.3 million tonnes of CO_2 equivalent by 2030 (a reduction of 25% compared to 2012 levels), and specific levels of (very low) per capita CO_2 emissions by 2050 and 2100. Costa Rica's current objectives remain in line with its 2021 "carbon neutrality" target of its National Climate Change Strategy (although does not reaffirm that objective), and adds medium and long-term near-zero absolute per capita emissions objectives.

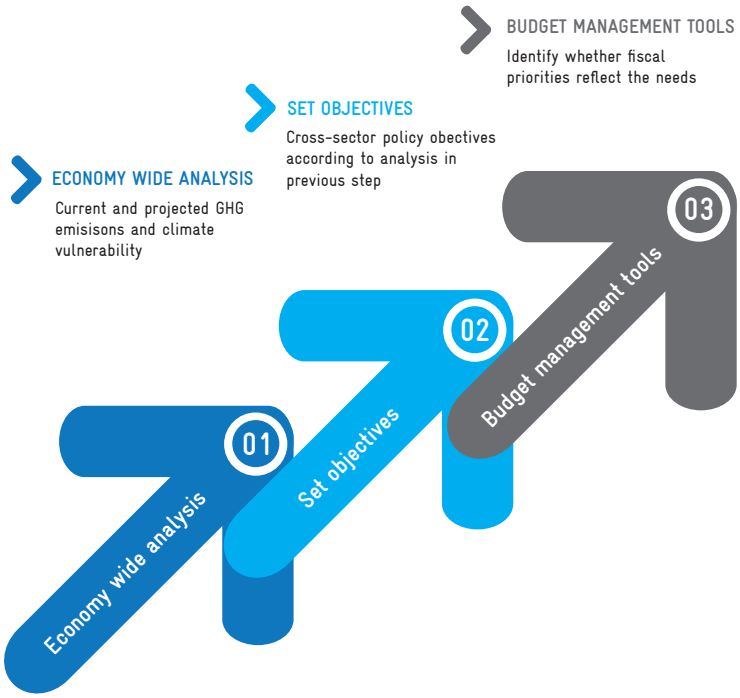
Costa Rica could provide a model for other national contexts, with a focus on climate finance tracking as a tool that compares a government's economy-wide fiscal allocations (including international sources) against its national policy objectives, as opposed to one that primarily assesses the flow of public international funding commitments. Costa Rica demonstrates the necessary pre-conditions of a robust climate change policy framework for such an approach to make sense.

Table 2: Tools for quantifying climate finance flows

Tool	Possible advantages to consider	Possible disadvantages to consider
Climate Aid reporting (for international sources)	The OECD DAC Creditor Reporting System database is well established and has markers for both climate change mitigation and adaptation spending. Database is available on-line and enquiries can be directed to the OECD Secretariat.	Limited to international funding classified as official development assistance. Time delay – data are not available on database for several years. Data are more complete for committed funds than for disbursed funds. Depends on donor self-reporting, which is of variable quality.
Multilateral Development Bank reporting (for international sources)	In recent years a range of MDBs have worked on a common methodology for reporting both mitigation and adaptation finance. Includes both loan and grant finance.	Only covers one source of funding: international funding that is channelled through MDBs. Public reporting is at the regional level. Nationally disaggregated data would depend on such information being made available by individual MDBs.
UNFCCC reporting (standards not yet defined)	An obligation under the UNFCCC and therefore non-Annex I countries may receive support in completing the tools (National Communications and Biennial Update Reports).	A common methodology has yet to be defined. International attention is focused on Annex I reporting before considering guidance for non-Annex I countries.
Climate finance studies (focuses on domestic resources)	Detailed estimates of public finance channelled through the national budget in support of relevant public programmes across all ministries. Multi-year studies that allow for emerging trends to be identified, particularly in identifying where relevant spending occurs across government.	A common methodology is only now emerging, with some significant differences between country studies. Depends on dedicated research teams working with government. Provides a 'snap shot' of relevant spending rather than a monitoring tool.
National budget tracking (focuses on domestic resources)	Detailed estimates of public finance channelled through the national budget in support of relevant public programmes across all ministries. Built into the national budget monitoring and reporting systems. Involvement of relevant sector planners and budget officers.	Requires capacity and interest from sector planners and budget officers across government to establish and maintain system. Limited to funding that passes through the national budget system.

However, in many developing country contexts international assistance—in the form of ODA, climate finance or other financial flows—will have a much greater significance. A major value of climate change budget tracking will then be to better integrate these capital sources into fiscal planning. Even in these cases, however, governments will want to start with a clear policy framework, and strong outcome monitoring against which to compare budget allocations. Other countries wishing a robust national public climate finance tracking framework can learn from the Costa Rican experience by beginning first with strong economy-wide analysis of current and projected GHG emissions and climate vulnerability, second with cross-sector policy objectives designed to meet that analysis, and finally, with budget management tools that identify whether fiscal priorities reflect the needs arising from those targeted objectives and outcomes.

Main steps for a robust national public climate finance tracking framework



RECOMMENDATIONS

Countries are now responding to climate change, as evidenced by the preparation of INDCs prior to the 2015 Paris UNFCCC COP meeting. Public funding is being committed and monitoring systems established as national policies, strategies and plans are put into effect. There is a wealth of activity taking place and hence a strategic concern is to identify and secure early priority actions. As described in this paper, outcome and impact monitoring of public programmes need to be established quickly to guide an effective response.

In terms of financial monitoring systems these remain at the earliest stage of development. Under such circumstances, some prioritisation should be considered, driven by the needs of national policy makers. The challenge is that data on climate change finance is generally lacking from all sources of funding. However, there is a difference between internationally and nationally sourced public finance. The former lies outside the control of national policy makers, making monitoring of international sourced finance a major challenge in many non-Annex I countries. An early strategic concern in non-Annex I countries should therefore be to collate the data on donor financial support and to integrate this information with the government monitoring system, thus increasing the coherence of public finance information systems. This is best achieved by ensuring all donor funding is recorded within the national budget.
The sequencing of monitoring efforts also requires consideration. The driving questions should be, when is such information required and what will it be used for? This returns to the issue highlighted earlier in this paper of having clarity over what a national financial monitoring is aiming to achieve, and how the results of such monitoring will be used (acknowledging that monitoring is a means to an end, not an end in itself). In this context, the analysis contained within national climate change strategies can provide guidance. Effectiveness may be optimised where financial monitoring is first focused on those sectors where the emissions reduction potential is highest or where adaptation efforts will support the greatest number of those most vulnerable. In both cases, the quantum of finance may be large (where major public investment programmes are required) or small (where regulatory implementation is what is needed to drive reform).

Linked to the sequencing of monitoring efforts is the question of how often should such monitoring be carried out? Financial monitoring can follow the annual budget cycle, and be part of the reporting system on a yearly basis (as is the case with the national budget tracking tool). However, this frequency may not be necessary to inform policy development. Adopting a longer monitoring cycle may fulfil such needs, perhaps linked to the national multi-year planning system, often reported within the framework of a medium-term expenditure framework (MTEF). This emphasises the need to embed such monitoring within existing national systems, and to identify the potential for its uptake within broader public finance management reform programmes. Under such circumstances, using the national climate finance study tool may provide the appropriate analytical support.

These considerations all have a bearing on the costs of financial monitoring and the resource implications to ensure that financial information is available to guide strategic decision making for climate change action.

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