# Ministries of Finance and Nationally Determined Contributions — Stepping Up for Climate Action



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# Ministries of Finance and Nationally Determined Contributions – Stepping Up for Climate Action

REPORT on Helsinki Principle 6



#### **Foreword**

The Coalition of Finance Ministers for Climate Action is a group of fifty-two finance ministers engaged in efforts to address climate change through economic and financial policies according to the Helsinki Principles. Peer learning and knowledge exchange plays a strong part in the Coalition's success.

As part of the core mandate of Ministries of Finance (MOFs), which is the design and implementation of sound macro-economic policies and public finances, the economic and social impacts of climate change are becoming increasingly relevant for the wellbeing of our societies. This report is a first step in the Coalition's work to support its Member Countries to design their Nationally Determined Contributions (NDCs) by strengthening the Finance Ministries' involvement in the preparatory process. This work is closely related to the Helsinki Principle 1 on aligning policies and practices with the Paris Agreement commitments and Principle 2 on sharing experience and expertise in order to provide mutual encouragement and promote a collective understanding of policies and practices for climate action.

Countries are expected to update or communicate their NDC targets by the end of 2020 (as per the UNFCCC Decision 1/CP.21 paragraph 23 and paragraph 24). In this context, the economic policy tools of climate change are also being developed. In line with this, the involvement of Finance Ministries in the NDC process is still evolving in most countries. This report approaches the topic through experiences from Member Countries, drawing from practical challenges and ways to overcome them.

The report will provide a useful overview to the Coalition members and Institutional Partners working on NDC updates. It will also provide the basis for future work priorities of the Coalition in all areas of the Helsinki Principles as well as promote horizontal efforts nationally and globally.

#### Strategic relevance and mandate

The Helsinki Principles set out the strategic objectives for the Coalition. They state that Finance Ministers are in a unique position to help accelerate a just transition to a low-carbon and climate-resilient economy through their economic policy tools. Finance Ministers have a common purpose and can benefit from sharing experiences and facilitating the adoption of best practices and policies for low-carbon and climate-resilient growth.

The Principles also acknowledge that such policies and actions will support global collective action on climate change under the Paris Agreement.

The Helsinki Principle 6 sets out the strategic basis of the Coalition's objectives for engaging actively in the domestic preparation and implementation of NDCs submitted under the Paris Agreement. Helsinki Principle 2 states that the Coalition's members share experience and expertise with each other in order to provide mutual encouragement and promote the collective understanding of policies and practices for climate action.

The Santiago Action Plan agreed upon by Finance Ministers on 9 December 2019 sets out specific actions on preparation and implementation of the NDCs under Helsinki Principle 6. It underlines that the efforts under Principle 6 build on the work programs of all other Helsinki Principles and aim to help members improve their ability to evaluate the macro-fiscal impacts of NDCs and long-term climate strategies and provide effective guidance to the NDC development process. Key actions include:

- Identifying a list of economic-fiscal guidelines and requirements that Finance Ministries could issue to sector ministries and agencies for the NDC development process in the future, as well as increasing the



- awareness of tools, resources, and support available to assess the macro-fiscal impacts of NDC and Long-Term Strategy implementation.
- Providing opportunities for peer exchange informed by related institutions on good practices and instruments that members can use to support other ministries in the NDC implementation and validation process.
- Facilitating access to networks for information, resource sharing, and visibility of success stories.

#### Execution

This report draws together the experience of a selection of the Coalition's member countries updating and implementing the NDCs as part of their climate strategies. It has been prepared based on the Coalition's Action Plan and benefited from feedback of the Coalition members and the Institutional Partners in the Sherpa meetings. The preparation of the work has been led by Jamaica and Uganda and supported by Institutional Partners the NDC Partnership Support Unit and the World Bank. The report is a joint effort of the Working Group 6 of the Coalition of Finance Ministers in close cooperation with the four country members Chile, Colombia, Ireland, and Philippines.

With these efforts and contributions, progress towards the objectives of the Helsinki Principles and Santiago Action Plan is taking place through this report.

The report describes the involvement of Finance Ministries in the NDC work and draws general lessons on the review of approaches, experiences, challenges, policy instruments utilized, as well as the management of the practical process of preparing the NDCs.

This report is a working document. Opinions or points of view expressed in this report are those of the authors and do not necessarily reflect the views of the Coalition or its members. The main findings of the report will be presented to Finance Ministers. The report serves as a contribution to further policy considerations and planning in the Coalition's work.

The primary audience for this report is policy makers at the Ministries of Finance and Economy that are typically responsible for cross-sector economic coordination, public finance, and fiscal policy, all of which are needed in formulating and implementing NDCs and longer-term strategies. In the on-going work of the Coalition, this report is intended as a background paper on ministerial level discussions. The report should benefit other ministries and institutions involved in the NDC work, and especially those in lead roles at the national and international levels.

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Co-Chairs of Sherpas, Coalition of Finance Ministers for Climate Action



# **Acknowledgments**

This paper is a joint effort of the Working Group 6 of the Coalition of Finance Ministers for Climate Action in close consultation with four country members (Chile, Colombia, Ireland, and Philippines). The Working Group 6 is led by Jamaica and Uganda and supported by the NDC Partnership Support Unit and the World Bank.

The Coalition is very grateful to the experts involved and especially to the NDC Partnership Support Unit for acting as the lead Institutional Partner supporting members during the work together with the World Bank, acting as the Secretariat of the Coalition.

A special thanks goes to all contributors from member countries and institutions, as follows:

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In preparation of the report, the Coalition organized, as part of the Sherpa Meeting in Abidjan (on 24 February 2020), a full day on NDC approaches with the NDC Partnership Support Unit in co-operation with the Finance Ministry of Côte d'Ivoire. This event benefited from the inputs from Finance Minister Koulibaly and Larissa Couadio from Côte d'Ivoire and Romeo Bertolini, from the NDC Partnership Support Unit, as well as representatives from Uganda, Jamaica and Niger who shared their experience on integrating NDCs into Ministry of Finance work.



# **Executive Summary**

Ministries of Finance have a central role in improving the next generation of Nationally Determined Contributions (NDCs) and supporting their implementation. International evidence shows that a focus on climate change can identify and mitigate systemic risks and bring opportunities with positive economy-wide impacts, such as job creation and poverty reduction.

Country experiences demonstrate that NDCs developed in close collaboration with Ministries of Finance (MOFs) are fiscally sound and consider the macro-economic factors and wider financial and private sector implications. NDCs can be situated within the central economic and fiscal policies and mainstreamed into the Public Financial Management (PFM) systems. Mainstreaming NDCs into national PFM systems can ensure that economic and fiscal externalities of the climate agenda are factored into growth and development strategies. The mainstreaming process allows Ministries of Finance to deploy their tools, e.g. annual budgeting, macroeconomic forecasts, Monitoring and Evaluation systems, and PFM laws and regulations to drive climate actions in a coordinated way.

The usefulness of these tools is best optimized by having climate, sectoral, and macroeconomic experts working together to consider the impacts of climate change in their economy. Specifics of PFM systems vary across countries leading to different approaches. This paper uses the experience of six countries and offers insights on the role of an MOF in two tasks: 1. the review and development of NDCs – a five-year task to reflect on past performance and develop a new five year set of commitments on climate action; and 2. mainstreaming of NDCs – incorporating NDC climate actions into annual PFM systems, focusing on the budget cycle. The key messages for MOFs engaging in NDCs are summarised as follows:

- 1. Strong MOF leadership and coordination strengthens the realisation of climate benefits: The process of optimizing benefits of climate action planning and overcoming challenges associated with fiscal and financial domestic constraints requires strong leadership, coordination, and a clear connection with national policy priorities. Climate action is usually integrated into line ministries' mandates. However, promoting the involvement of an MOF is crucial to ensuring that the proposed policies and sector interventions can be implemented. Jamaica and Uganda provide some evidence of the benefits of this approach.
- 2. An MOF can help create an effective and achievable NDC by providing reliable costing and macroeconomic assessments of climate interventions: Macroeconomic analysis can improve decision making for optimizing economic benefits and mitigating risks from climate change. Costing gives a more precise idea of the financial resources required to implement the different programs and interventions, the feasibility within macro-fiscal constraints, and a strong basis for budget allocation negotiations. These tools improve the chances of NDCs being designed as realistic and achievable commitments, and can attract greater levels of support, i.e. there is an opportunity to link this type of macro-planning and disaster risk financing to safeguarding investments in the NDC process. The experiences of Chile, Jamaica, and Uganda demonstrate different ways of realizing this.
- 3. MOF input at the review and development stages are essential for effective mainstreaming of NDCs: To support the development of a realistic NDC and enable its effective implementation, Ministries of Finance need to consider how PFM laws and regulations will affect mainstreaming. The review of the first generation NDCs can give evidence for what challenges existed and how they can be overcome. This can include



analysis of procurement policy, investment plans, and fiscal policy and how these enabled or prevented the attainment of NDC goals. Once this information is gained, solutions to remedy them can be forthcoming as **Uganda's** experience shows.

- 4. An MOF is essential for institutionalising NDCs into national PFM systems: It is crucial that climate change is institutionalised into national PFM systems via mainstreaming. Monitoring financial flows or tagging expenditures are common tools and link climate throughout the budget cycle as the **Philippines**, **Ireland** and **Colombia** experiences show. The MOF task is wider and more complex, including ensuring all line ministries and other budgetary entities are training in new climate-sensitive protocols, that new tax policies are having the impacts they expected, and that private sector incentives are working.
- 5. An MOF can pursue a variety of entry points and phased approaches to suit their economic situation when mainstreaming their NDC: An MOF does not need to hold all knowledge and skills immediately to begin this work; rather it can be an iterative process which evolves over time. All countries presented in this paper have been 'learning by doing', assisted by inter-agency collaboration, peer learning, and international support. They have begun in certain entry points and built from there to incorporate climate action into wider economic and PFM systems.

Countries are requested to communicate or update their NDCs and submit them to the UNFCCC Secretariat by the end of 2020 (as per the UNFCCC Decision 1/CP.21, paragraph 23 and 24). Demands on MOFs are high given the COVID-19 pandemic and its social, health and economic toll. It is more important than ever to build on what has been achieved through the first generation NDCs and continue to invest in our environment. COVID-19 will have budgetary consequences. The development of macroeconomic assessments, including climate opportunities and risks, and having costed NDCs rooted in macro-fiscal realities can be a doubly effective process. First, it will help Ministries of Finance buffer economic shocks from climate change whilst providing wider recovery options by investing in NDC activities. Second, it will provide a stronger evidence base for negotiating tight fiscal allocations for investing in NDC activities.

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#### 1. Introduction

This document is the joint effort of representatives of the Working Group on Helsinki Principle 6 (WG6) of the Santiago Action Plan of the Coalition of Finance Ministers for Climate Action (the 'Coalition'), launched in April 2019<sup>1</sup>. The Coalition will help countries mobilize and align the finance needed to implement their national climate action plans; establish best practices such as climate budgeting and strategies for, green investment and procurement; and factor climate risks and vulnerabilities into members' economic planning. The focus of Principle 6 is how MOFs can actively engage in the review, development and mainstreaming of Nationally Determined Contributions (NDCs) submitted under the Paris Agreement.

Since its launch, finance ministers from 52 countries have signed on to the Helsinki Principles, a set of six aspirational principles that promote national climate action, by mainstreaming climate change decision-making into economic and financial policies<sup>2</sup>. WG6 is led by the country champions Jamaica and Uganda and supported by the NDC Partnership Support Unit and the World Bank.

The aim of this paper is to share knowledge and experiences on how Ministries of Finance can support the development and mainstreaming of NDCs to achieve the goals of the 2015 Paris Agreement<sup>3</sup>. Five years after the Paris Agreement was adopted, countries are now communicating current targets or preparing to submit the next generation of NDCs by the end of 2020 as per the <u>UNFCCC Decision 1/CP.21</u><sup>4</sup>. An overarching finding from first generation NDCs is that they need to be better situated within the central economic and fiscal debates and that Ministries of Finance have an important role to improve the next generation of NDCs in terms of quality, depth, scope and ambition.

This paper addresses two distinct topics<sup>5</sup>. First how an MOF can engage in the review of the current NDCs and the development of a new NDC, and second, ways in which NDCs can be mainstreamed into the PFM systems. It is structured along the following key questions:

- Why should Ministries of Finance be interested and engaged with NDCs and climate change? Climate change has wide and long-term economic impacts including climate vulnerability, debt and financial management as well as opportunities such as job creation. An MOF can incorporate these into economic analysis to optimize growth and development. Recent macroeconomic evidence, including a study suggesting that in light of the current COVID pandemic, green stimulus packages offer "strong returns on investment for government spending"<sup>6</sup>.
- How can Ministries of Finance engage and what are the key entry points? Integrating NDCs within national PFM systems, with particular emphasis on the budget cycle and establishing strong linkages for

<sup>&</sup>lt;sup>1</sup> See World Bank (2019) and Climate Action Peer Exchange (2019), respectively.

<sup>&</sup>lt;sup>2</sup> CAPE (2019).

<sup>&</sup>lt;sup>3</sup> The overall aim of NDCs is to set the course for a net-zero emissions future, limiting warming to below 2 C degree (and to pursue efforts to limit it to 1.5 C degrees). To date, commitments that countries put forward would leave us with a 3 C degree warming scenario-requiring countries to effectively halve global emissions to reach a 1.5 C degree target.

<sup>&</sup>lt;sup>4</sup> As per the <u>UNFCCC Decision 1/CP.21</u>, countries with a 2030 target are requested to either update or communicate their current target by the end of 2020, and to do so every five years thereafter. Countries with a 2025 target are requested to communicate a new (second/updated) NDC by the end of 2020, and to do so every five years thereafter.

<sup>&</sup>lt;sup>5</sup> This document isn't focused on how to develop a country's NDCs, for information on this please see Designing and Preparing INDCs Levin et all (2015).

<sup>&</sup>lt;sup>6</sup> Hepburn et al (2020).

effective inter-ministerial/inter-agency collaboration, i.e. using and capitalizing on already established processes and systems.

• How different Ministries of Finance are mainstreaming NDCs? Country examples to illustrate how several methods are used to development and mainstream NDCs' climate action within PFM systems. There is no 'one size fits all'. The experiences of Chile, Colombia, Ireland, Jamaica, Philippines, and Uganda describe how different entry points and PFM tools have led to mainstreaming through the budget cycle.

A summary conclusion and next steps is set out with references and links for further reading and information.

One final comment is to acknowledge there are numerous tools, techniques and policy options for an MOF to engage with NDCs, and climate change, within the PFM system. Most are incorporated within the six Helsinki Principles, some concentrate on describing different tools, models, and policy options, whilst here the focus is highlighting some experiences on how countries have mainstreamed NDCs. In this regard, the paper gives an overview of approaches and tools, and set out clear links within the text for further information. Additionally, for technical discussions and detailed approaches, MOFs can refer to the other five Helsinki Principles. For example: 1. Designing long term strategies – Discusses what macroeconomic models can be used; 2. Capacity building – What skills and training Ministries of Finance need to deliver realistic NDCs; 3. Carbon pricing – Details the tax and subsidy policies that could be part of the NDC development; 4. Macroeconomic, fiscal, investment, and procurement policy – Provides technical details on how to incorporate climate into PFM tools such as macro models, public investment, budget tagging and procurement rules; and 5. Creating an enabling environment to attract private investment – Looks at green finance options and regulation.

# 2. Why Ministries of Finance are Needed: Macroeconomic Impact of Climate Change

"Climate policy should not be seen in isolation, but should rather be considered an integral part of the broader policy agenda to promote economic growth" (Bank of England, 2018)

"Recovery packages that seek synergies between climate and economic goals have better prospects for increasing national wealth, enhancing productive human, social, physical, intangible, and natural capital" (Hepburn et al, 2020)

"NDCs ... often provide a window into the government's vision for areas of future economic growth and technology transformation, both of which have clear linkages with job creation. They frequently have to account for complex challenges where progress can deliver multiple wins in terms of reduced poverty, enhanced competitiveness, improved public health and local quality of life, and global public goods" (World Bank, 2020)

Evidence for improving linkages between economic planning and climate change is growing. Climate change has wide and long-term economic impacts on output, jobs, and macroeconomic fundamentals such as inflation debt, and exchange rates<sup>7</sup>. Left unaddressed, climate change can have knock-on effects which affect government

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<sup>&</sup>lt;sup>7</sup> Batten (2018) Climate Change and the Macroeconomy.

revenue and the ability of to fund wider development plans. Additionally, MOFs can choose investments to further green growth. There are substantial opportunities to be gained and risks to be offset, for example: Analysis on mitigation efforts suggest low-carbon sustainable growth "could deliver a direct economic gain of US\$26 trillion through to 2030 compared to business-as-usual"<sup>8</sup>; Research on adaption measures indicates that "investing \$1.8 trillion globally in five areas from 2020 to 2030 could generate \$7.1 trillion in total net benefits"<sup>9</sup>; and, Forecasts suggest that if no urgent action is taken, the number of people in need of humanitarian assistance annually due to the climate crisis could double by 2050<sup>10</sup>. In light of this, there are calls for a greater focus on the linkages between climate change and economic growth and stability<sup>11</sup>.

Ministries of Finance have an important role to play in the development and implementation of ambitious, yet realistic climate action in NDCs. If well planned, in cooperation with an MOF, NDCs and their focus on climate change, could bring resources to challenges, have positive economy-wide impacts, create jobs and reduce poverty. For example, a recent study compared stimulus packages for post-COVID19 recovery phase for economic growth<sup>12</sup>. It found that stimulus packages with an emphasis on climate action and green growth could provide greater returns on investment than those without. Moreover, NDCs are a good resource for identifying investment opportunities for stimulus packages<sup>13</sup>.

Indeed, the Paris Agreement places climate in the context of sustainable development and poverty eradication, i.e. it identifies that climate change is central to long term growth and sound fiscal management. As such, the task of a Ministry of Finance (MOF) - to reduce risks and optimize opportunities for growth and development - puts it at the centre of safeguarding realistic climate actions within NDCs. Particularly when considering their power to influence policy and national development.

# 3. How and Where Ministries of Finance can be involved: Entry points And Budget Cycle Tools

NDC development and mainstreaming encompasses policies and resource-allocation decisions across many sectors, national and sub-national levels of government and involves various stakeholders (public, private, civil society, and international). To work well, mainstreaming must ensure that the planning, budgeting, and reviewing processes for climate plans are aligned with national systems and processes. This results in a system where climate is included as part of the technical and political assessment of policy priorities, budget allocations, and review of efficiency of spending.

Figure 1 shows a universal budget cycle and its wider PFM systems indicating entry points and tools which can assist in mainstreaming climate action across government. This approach can be adapted to any country's PFM system. Whether a country uses annual line item budgeting or performance based Medium Term Expenditure Frameworks (MTEFs), centralized or decentralized budgets: the core budget cycle, represented in Figure 1, is

<sup>&</sup>lt;sup>8</sup> Global Commission on the Economy and Climate (2018).

<sup>&</sup>lt;sup>9</sup> Global Commission on Adaption (2019).

<sup>&</sup>lt;sup>10</sup> International Federation of Red Cross and Red Crescent Societies (2019).

<sup>&</sup>lt;sup>11</sup> Batten (2018).

<sup>&</sup>lt;sup>12</sup> Hepburn et al (2020) COVID-19 Fiscal Recovery Packages.

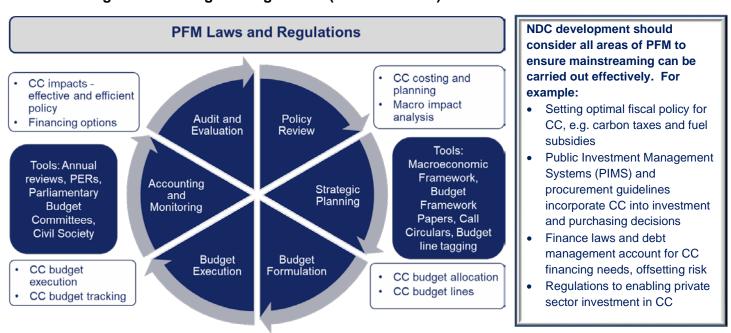
<sup>&</sup>lt;sup>13</sup> Hammer et al (2020) NDCs and COVID-19 Recovery.

still relevant. Review of these institutions can be made to identify the most useful entry points for integrating climate change (a summary is set out in out in the Annex)<sup>14</sup>.

Incorporating NDCs into national systems ensures that real and potential economic and fiscal implications and externalities are factored into growth and development strategies. For example, through macroeconomic assessment of the benefits and costs of climate action / inaction, a government will be able to prioritise budget allocations based on risks and opportunities linked to climate change. Moreover, understanding the macro-fiscal realities will create an achievable list of climate activities of NDCs that can be implemented in a given year. And through PFM tools such as a budget call circular - requesting climate activities to be planned and costed - line ministries will own and implement their climate commitments. This can result in a situation where various agencies will then be responsible – in a coordinated fashion - for driving the process of deepening the climate mitigation and adaptation agenda alongside national priorities.

Underpinning this are the PFM laws and regulations. To support effective implementation of NDCs Ministries of Finance tasks extend to consideration of how PFM laws and regulations will affect mainstreaming. For example, the review and development stage could assess how a new carbon tax or reduction in fuel subsidy is going to impact tax revenues and consumer demand, or provide guidance on new procurement rules which require line ministries to consider climate impact of investment plans. It also provides the opportunity to assess the financial risks associated with natural disasters and the impact this may have on debt levels. There can be reviews of private sector environment – laws, regulations, options for subsidies and crowding in – within this stage. Mainstreaming is not limited to the budget cycle, but all PFM systems linked to this. In this regard the review and development stage are incredibly important for NDCs.

Figure 1: Budget cycle with overarching PFM systems and tools to consider as entry points for mainstreaming climate change through NDCs (denoted as CC)



<sup>&</sup>lt;sup>14</sup> For more detailed information please see: World Bank (2013) Beyond the Annual Budget Global Experience with MTEFs, Levin et al (2015) Climate Change Public Expenditure and Institutional Review, Shabih Ali Mohib (2014) Mainstreaming Climate Change: Entry Points, and Allen et al (2013) International Handbook of PFM.

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# 4. Review and Development of NDCs

A central task for each country is to review the achievements of their first generation of NDCs. What went well, challenges faced, and improvement opportunities are the starting points for designing and implementing the next generation of NDCs and beyond. Although first generation NDC documents were good records on climate change issues and agenda setting, there were opportunities throughout the budget cycle that could be better utilised to ensure a feedback loop to policy impact and the wider economy. Additionally, costing of NDCs could be improved and aligned with available budgets, i.e. first set of NDCs in many cases had no realistic, or, prioritized costing and budgeting. Moreover, of the 36 Coalition members surveyed, only half responded that finance ministries provided macroeconomic and costing inputs to the elaboration of NDCs<sup>15</sup>. Thus, evidence suggest that MOF could take a more prominent role in climate action. This section will concentrate on how an MOF can systematically provide costing and macroeconomic analysis into NDCs review and development, starting with the importance of coordination and leadership.

# 4.1 Coordination and Leadership

"Finance ministries have a key role in ... integrating climate risks and financing into macro-fiscal frameworks; addressing political economy aspects; and coordinating strategies across ministries" (IMF, 2019)

There are multiple sectors and stakeholders to manage in developing an NDC. The process of optimizing benefits of climate action and overcoming challenges associated with fiscal and financial domestic constraints requires strong leadership, political will, coordination, and a clear connection with national policy priorities. The ways in which a country can incorporate climate change vary considerably. Climate action is usually integrated into line ministries' mandates and expertise. However, an MOF is crucial to ensuring that the proposed policies and sector interventions can be implemented. This task can range considerably and include: economics of climate change; checking laws and regulations are aligned to ensure an enabling environment; making necessary resources available; data and coordination; streamlining of processes; limited institutional capacity (limited staff); etc<sup>16</sup>.

Box 1 provides an overview of the experience of **Jamaica** in advancing climate action through high-level political participation in international platforms. Through transformative and high-level political leadership, Jamaica participated in the discussion on the global mobilization of climate finance and its alignment with the objectives of the Paris Agreement, especially in developing countries. Jamaican technical experts were able to capture the political momentum of an international summit and transfer this high-level interest into ambitious national climate goals.

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<sup>&</sup>lt;sup>15</sup> NDC Partnership (2020). Data refers to countries within the Coalition of Finance Ministers for Climate Action, 52 countries surveyed and 36 responded.

<sup>16</sup> World Bank (2014) Climate Change Public Expenditure and Institutional Review.

#### Box 1: Jamaica's high-level political leadership strengthening inter-agency coordination for climate action

**Background:** The United Nations Secretary General convened the Climate Action Summit in 2019 to focus global attention in the face of the worsening climate crisis and to forge new pathways ahead to support the achievement of the Paris Agreement and the 2030 Agenda for Sustainable Development. Jamaica's Prime Minister was requested to colead along with the President of France and the Emir of Qatar, the Climate Finance and Carbon Pricing action track of the Summit. This novel collaboration among a wide range of stakeholders was critical to ensure solutions received the necessary finance and political support and informed by diverse perspectives from developing and developed countries.

Results from Strong Political Leadership: At the country level, this mandate helped to strengthen the inter-agency coordination in response to the initiatives and actions launched at the Summit. In practice this included forums dedicated to sensitizing the MOF on climate finance and climate targets. This led to a more active participation from the MOF in Jamaica's Climate Change Focal Point Network. It has also strengthened the relationship between Ministry of Finance and the Ministry of Economic Growth in response to efforts for a greater alignment of the national budget with climate targets. This patronage of the Prime Minister led to a renewed emphasis and commitment to climate change, for example supporting more ambitious targets for renewable energy.

Source: Interviews with the Office of the Prime Minister in Jamaica. For references see 'further reading' section.

# Box 2: Uganda's NDC review led to improved coordination and achievements in planning and budgeting for climate actions

Coordinated Collaboration: The Ministry of Water and Environment is a lead agency by virtue of its mandate to develop and strengthen Uganda's implementation of the United Nations Framework Convention on Climate Change and its Kyoto Protocol. However, in order to improve coordination and mobilize more resources, the Government of Uganda created a tripartite arrangement as part of NDC Partnership integrated planning approaches. Three focal points that are spearheading the NDC implementation and revision were nominated from Ministry of Finance Planning and Economic Development (MOFPED), National Planning Authority and Ministry of Water and Environment (Climate Change Department). Additionally, an institutional framework for climate action has been established through the national climate change policy (2015). At the top of the institutional framework is the policy committee on environment (a cabinet sub-committee, where minister responsible for finance is represented), the national climate change advisory committee (which is a technical committee on all matters related to policy implementation and climate action). Lastly, MOFPED in its capacity as the national designated authority for the green climate fund has established an interministerial committee on climate finance to advise on matters related to green climate fund.

As a result of the operationalization of such coordination mechanism, the NDC revision is being done in an inter-sectoral and multi-stakeholder manner at national and subnational levels including non-state actors. The government of Uganda has received Climate Action Enhancement Package (CAEP) support through eight partners supporting NDC revision and the formulation of the country's 2030 long-term low greenhouse gas emission development strategy. The tripartite mechanism is tasked to improve coordination across stakeholders and will ensure alignment of policies during the revision process.

(continuation Box 2) Achievements: Not only for NDC revision, this tripartite arrangement is already delivering results for NDC actions to be mainstreamed into the planning and budgeting. The coordinated approach has led to the upcoming National Development Plan (NDP III) including a chapter on climate change which can be leveraged for the tripartite group in annual planning. The tripartite group identified PFM legislation and regulations to gain a better foothold on national systems. The Public Financial Management Act (2015) (PFMA) states that fiscal risks need to be managed in a sensible manner which relates to NDCs and climate change risks. The PFMA also considers budget allocation for natural disasters in an annual contingency fund. This entry point opens space for political and financial discussions for climate change and has resulted in climate change being discussed as a fiscal risk in the annual budget framework paper. A key outcome is that the budgeting system program (used for budgeting and reporting) is being updated to become climate change responsive and a climate change budget tagging manual is being prepared. A Climate Change Bill to improve financing and budgetary arrangements for climate change is also being finalized.

Source: Interviews with MOF Uganda, Climate Change Department, Ministry of Water and Environment, and Ugandan Sherpa to the Coalition of Finance Ministers for Climate Action. For references see 'further reading' section.

# 4.2 Costing and Macroeconomic Modelling of NDCs

An effective NDC needs reliable costing of climate change interventions underpinned by macroeconomic analysis. Both can improve decision making for optimizing economic benefits and mitigating risks from climate change. Costing gives a more precise idea of the financial resources required to implement the different programs and interventions, the feasibility within macro-fiscal constraints, and a strong basis for budget allocation negotiations. Costing is a process that can help identify what NDC activities can be paid for publicly and what may need private partnerships, or international assistance. An NDC underpinned by strong financial data can be particularly beneficial to countries vulnerable to climate risks as there can be an associated perceived financial risk. These tools improve the chances of NDCs being designed as realistic and achievable commitments, and can attract greater levels of support, i.e. there is an opportunity to link this type of macro-planning and disaster risk financing to safeguarding investments in the NDC process. An MOF does not need to hold all knowledge and skills immediately to begin this work, rather it can be an iterative process which evolves over time<sup>17</sup>.

**Box 3** details how the first steps to incorporating aspects of climate change, climate risk and disaster risk financing into macroeconomic planning have been accomplished in **Jamaica**. Through the assessment of policies, financial management and fiscal planning, the Ministry of Finance and the Public Service in Jamaica was able to develop a comprehensive Disaster Risk Financing strategy to best manage contingent liabilities posed by natural disasters. This shows that incorporating climate risk into macroeconomic planning is not a leap into the unknown; it can build on national priorities and skills with the help from international agencies such as World Bank and IMF. This knowledge can then gradually move towards a more in-depth macroeconomic analysis of climate impacts.

Box 3: Jamaica's entry point for mainstreaming climate change into macroeconomic and debt sustainability

<sup>&</sup>lt;sup>17</sup> For further information see: Levin et al (2015) Designing and Preparing INDCs, World Bank (2014) Climate Change Public Expenditure and Institutional Review, and UKCIP (2018), Cost of Climate Impacts Costing Tool.

Macroeconomic Entry Point: The Ministry of Finance and the Public Service in Jamaica has placed a special emphasis in maintaining macroeconomic and debt sustainability. In order to achieve macro-fiscal goals, minimize impacts on the GDP, and correct for economic impacts from natural disasters and other risks (such as COVID-19 pandemic) Jamaica is introducing a shift in the disaster management paradigm to include ex-post and ex-ante responses. Jamaica has developed a comprehensive national Disaster Risk Financing Strategy to improve the capacity of the government to access immediate financial resources in the event of a national disaster. This strategy creates more flexibility, allows for a proportional response based on the magnitude of the loss, and importantly, to better align with fiscal responsibility and sustainability objectives. There is an opportunity to link this type of macro-planning and disaster risk financing to safeguarding investments in the NDC process.

**PFM Tools and Analysis Required:** This strategy follows a multi-layered approach in acquiring a menu of financial instruments to manage the financing of disaster and climate risk. The identification of such financial instruments followed an assessment of budgetary framework for disaster response and the supporting legislation and policies. The MOF was supported by the IMF, World Bank, and Bilateral Partners to incorporate disaster risk management and response into their macroeconomic framework.

Source: Interviews with Jamaica Sherpa to the Coalition of Finance Ministers for Climate Action, and Institutional Partners. For references see 'further reading' section.

Box 4 describes Uganda's analysis in considering the effect of climate change on the economy. This was carried out through Natural Capital Accounting and a macroeconomic report which have fed into the new medium-term National Development Plan. This provides quantitative estimations of the risks to the economy from degradation of natural resources. This macroeconomic information and placement in high-level policy documents can provide evidence and motivation for climate action and further downstream integration.

#### Box 4: Uganda's economic analysis for mainstreaming climate actions into planning

**Macro-Fiscal Assessments:** Annual Budget Papers speak about the fiscal risks of climate change in a qualitative manner. The MOF and the National Planning Authority worked with the World Bank to produce a Natural Capital Accounting Issues paper and country adjusted macroeconomic report. These fed in quantitative estimates for the National Development Plan (NDP) and will now incorporate the contribution of natural assets and ecosystem services to the economy. These tools also consider the impact of the economy on the natural asset base providing a solid basis for the new NDP to incorporate risks to natural resources.

Source: Interviews with MOF Uganda, and Uganda Sherpa to the Coalition of Finance Ministers for Climate Action. For references see 'further reading' section.

A country that has been making these steps since 2010 is **Chile**. The government has continued to build and improve on what it has learnt in costing and economic analysis of climate action. As Box 5 shows, this has culminated in a highly technical NDC mitigation proposal which uses marginal abatement costs and macroeconomic variables to underpin the emissions targets<sup>18</sup>. This will be used to develop a more realistic and achievable set of NDC targets for the next five years. Moving forward, the government remains determined to further develop this towards a nationally integrated annual process, i.e. a more dynamic process whereby climate policy can be continuously updated when macroeconomic data is available.

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<sup>&</sup>lt;sup>18</sup> Ministry of Science, Technology, Knowledge and Innovation (2019).

#### Box 5: Chile's evolution of macroeconomic skills for climate impact and NDC targets

**Role of Ministry of Finance in the NDC process:** The involvement of Chilean MOF in the NDC responds to a strong institutional framework that allows the MOF to participate in different components. For the NDC elaboration, Chilean MOF participated in the determination of the pillar of mitigation and financing.

Macroeconomic underpinning of NDC targets: A multi-agency group worked on scenario analysis of mitigation options to determine the optimal NDC climate targets. The MOF evaluated the set of mitigation measures that are financially profitable. The objective of this macroeconomic assessment is to help understand whether these measures support economic growth, boost development, or somehow threaten the economy, worsening the pain they were supposed to relieve. Additionally, the Ministry of Energy calculated marginal abatement costs to refine mitigation options, while Ministry of Finance provided the GDP forecast for modelling different scenarios. With this approach, the government developed a good understanding of the costs and benefits associated with climate action, and so identified what could and could not be achieved within current economic realities. The exercise makes the new NDC more practical. It is expected that these findings will have further knock on effects such as using the data to develop an expenditure framework that will be incorporated into the budget cycle.

**Multi-dimensional capacity building program:** Chile took advantage of and is benefitting from peer learning, specialized technical assistance, Coalition networks, and Multilateral Development Banks' support. Each capacity need is considered independently and builds on what exists. Despite success in developing a complex analysis for NDC emissions they plan to continue investing in capacity, plans include developing technical skills to assess the cost of inaction, financial flows, adaption and to incorporate macroeconomic analysis on a more permanent basis.

Source: Interviews with Chilean Sherpa to the Coalition of Finance Ministers for Climate Action. For references see 'further reading' section.

# 4.3 Opportunity to Refine NDCs

Once macroeconomic analysis and costing of (first draft) NDCs are carried out, policies can be revised to optimise needs within fiscal constraints. The results can be used as a selection criterion to prioritise projects given limited domestic resources. For example: It can be used to advocate for more resources if the wider social and economic benefits are outlined, gaining more from the investment. Fiscal space analysis is particularly useful when countries consider which climate actions they will fund themselves (unconditional NDCs) and those which rely on external funding (conditional NDCs)<sup>19</sup>.

"Rigorous costing of programs helps focus attention on what can realistically be delivered, forcing sector-level decision makers to consider trade offs, priorities, and the appropriate sequencing of intervention(s) ... Realistic costing of climate change-related programs and projects is more likely to result from planning processes that bring together sector agency planning units, operational departments, and finance agencies' staffs" (World Bank 2014)

# 5. Integration of NDCs

After reviewing past NDCs and developing a macro-based costing of updated climate priorities, the task becomes one of integrating climate action within regular national processes. With so much to accomplish across all sectors and actors it is essential that climate change is institutionalised into national PFM systems. From medium-term

<sup>&</sup>lt;sup>19</sup> Unconditional NDCs are NDC targets that the country will undertake through their own domestic resources. Conditional NDCs are those NDC targets that will rely on external support for implementation. See ECBI (2018) for further information.

planning and annual budget formulation, to budget execution, reporting and oversight. Reflecting NDCs, climate change sectoral plans and related policy proposals within national systems will provide the MOF with the ability to allocate, monitor, and evaluate spending and performance of climate action and its impacts on the economy.

Essential elements highlighted in the previous section must continue for successful mainstreaming, namely: leadership and coordination. The following examples demonstrate iterative evolution rather than one-off leaps into mainstreaming climate change, i.e. countries build on existing capacities and resources and improve over time. Each example contains linkages to other areas of the budget cycle and requires underpinning PFM systems, however, we have chosen some specific elements to highlight what can be possible in parts of the budget cycle.

# 5.1 Strategic Planning and Budget Formulation

Both the development and integration of NDCs must align with, or be derived from, national and sectoral plans, as well as international agreements like SDGs. This begins with reviewing what has happened over the past five years and linking this to planning. In this sense, the development of the NDC should be part of the budget cycle and is best to being integrating at the review and development stage. For the annual budget cycle, tools such as the budget call circular can help link climate planning and budget formulation. This is especially true if the MOF request line ministries to indicate climate-related programmes, and/or provide guidelines for 'tagging' these climate programmes within a proposed budget.

This is something that the **Philippines** have been working on since 2013. Climate Change Expenditure Tagging (CCET) was first introduced in the 2014 national budget and now covers decentralised sub-national/local government units, see Box 6. The process began simply with guidelines being introduced into the annual budget call circular. It grew to create a unified budget code across government (CCET typology codes). The CCET process has opened dialogue between ministries on climate change policy, budget, and financing. It will also prove useful in the development of the new NDC as it provides information on policies and budgets. There are further developments planned. For example, the Government is currently assessing the appropriate approach for expanding the typologies to capture nuances in categories and developing auditing systems. This example clearly shows that climate change and NDCs can be brought into the PFM systems with relative ease using familiar tools and developed over time.

#### Box 6: Philippines' development of decentralized climate planning and budgeting

Evolution of Climate Change Expenditure Tagging (CCET): In 2013, the Climate Change Commission (CCC) and the Department of Budget and Management (DBM), with the assistance of the World Bank, started studying the national budget and identified the need to mainstream climate change in the budgeting and investment programming. This led to the creation of the 2013 Climate Public Expenditure and Institutional Review (CPEIR). Through this and the ongoing public finance management (PFM), a climate budgeting framework was developed and implemented to sustain the country's climate reform initiatives.

In the same year, the DBM and CCC issued the Joint Memorandum Circular (JMC) 2013-01: Guidelines in Tagging/Tracking Government Expenditures for Climate Change in the Budget Process. This supports national government agencies to identify, plan, track, and report their climate change expenditures and allows the oversight agencies to plan, prioritize, and monitor the national climate change response allocation and performance. Starting 2014, the Government has mobilized the national process to tag climate change expenditures using a common policy-based typology and guidelines.

In an effort to mainstream and expand the tagging system, JMCs 2015-01, amending JMC 2013-01, were issued by the DBM, CCC and the Department of Interior and Local Government (DILG), requesting both the national and local agencies to tag climate change expenditure in the National Expenditure Program and the General Appropriations Act. Moreover, the issuance of the said JMCs also enhanced the process and institutionalized the functions of the help desk, which is currently lodged under the CCC. These respective amendments reinforced the government's transformative climate reforms, especially on mainstreaming climate change in its national budgeting process. The CCET, which included all climate change-related public expenditures, was published for the first time in the FY2017 Budget of Expenditures and Sources of Financing (BESF) and submitted to Congress.

In sum, the CCET process links climate plans with budget allocation. It produces data that can be used to prioritize funding for the second generation NDC. Moreover, the team can identify which projects lack funding and can source new financing to suit unfunded areas.

**Budget Cycle Tools Used:** Key to the success was the utilization of multiple common budget cycle tools. The initial request was done via the annual budget call circular. This explains the common framework for CCET to national government agencies, including policy definitions aligned with the national climate change action plan, CCET methodology, roles and accountabilities. LGUs were also sent guidelines and typology to be consistent with the national CCET (via JMC). In subsequent years, completing the CCET became a legal requirement and a helpdesk was set up within the CCC for any agency with CCET queries (national and local). Quality Assurance and Review Forms were included as a requirement in the budget call circulars to ensure accuracy of the respective agency's tagging process. Technical Budget Hearings opened policy dialogue between CCC, DBM, and national agencies, and prioritized climate spending in budget submissions. The CCC organize capacity building 'orientations' each year for government agencies to provide guidance to the CCET process.

Source: Interviews with Department of Finance, National Economic and Development Authority, Department of Budget and Management, and the Climate Change Commission. For references see 'further reading' section.

# 5.2 Budget Execution and Accounting and Monitoring

There are various entry points to tracking climate expenditure. In an ideal world it would be continuous throughout the budget cycle. However, countries develop their own methodology to suit their own needs and existing PFM systems. The way in which the **Philippines** example above has developed is slightly different from that experiences in Ireland, although both do the same job of tracking expenditures. The example from **Ireland** focuses more on the accounting and monitoring of executed expenditures as seen in Box 7. To promote the

achievement of improved climate outcomes through the budgetary system, the Government has not invented something new but built upon the implementation of gender and equality budgeting, which is already at an advanced stage in Ireland. As a next step, the Ministry has now began assessing the effectiveness of expenditure against stated goals. Given the breadth of green budgeting, its implementation will be an iterative process which will take place over several budgetary cycles.

#### Box 7: Ireland's expenditure tracking for monitoring climate finance

Evolution of Climate Change Expenditure Tracking (CCET): The CCET process began in fiscal year 2018/19, arising from a commitment in Ireland's National Mitigation Plan published in 2017. This committed to developing proposals for the monitoring and reporting of climate related expenditure through the Exchequer, and the issuance of Ireland's first sovereign Green Bond in 2018, which requires proceeds to be used to fund green projects. As a first step in implementing green budgeting domestically, all Exchequer climate-related expenditure has been tagged by the Ministry of Public Expenditure and Reform. The Ministry defined climate-related expenditure as: "Any expenditure which promotes, in whole or in part and whether directly or indirectly, Ireland's transition to a low carbon, climate-resilient and environmentally sustainable economy." As a result, climate-related expenditure is now amalgamated into a table included in the State's regular budgetary documentation, specifically as part of the Revised Estimates Volume for Public Services (REV) for public expenditure.

As a next step, the Ministry is progressing to assess the effectiveness of this expenditure against the stated goals. Assessment commenced in 2020 through the assigning of ex-ante performance metrics to all programmes in receipt of additional funding via the carbon tax increase (announced in Budget 2020). A paper has been published discussing how the Government intends to use the additional revenues raised by the increase in the carbon tax including outlining the ex-ante performance metrics. It is intended that future iterations of the Revised Estimates for Public Services will include an ex-post assessment of the performance of these programmes against the selected metrics and that performance against these metrics will influence future uses of carbon tax revenues. Given the breadth of green budgeting, its implementation will be an iterative process which will take place over several budgetary cycles. It is also hoped to widen this impact analysis of climate related expenditure beyond measures funded by the carbon tax to include wider Government climate related expenditure in future iterations of the Revised Estimates Volume. This will increase transparency on the progress being made towards the achievement of Ireland's climate goals within NDCs. Additionally, the Climate Action Plan envisages the creation of legally binding carbon budgets for sectors of the economy. Linking these carbon budgets with the fiscal resources available to Government Departments will also be a key goal in the next phase of the green budgeting process.

(continuation Box 7) Building from what you know: The methodology builds on existing gender budgeting already in operation and used a modified version of the International Capital Markets Association's definition. The definition excludes significant items of Government expenditure where the climate-related aspects of expenditure cannot be separated out from wider expenditure. For example, investment in research and development, where climate action is one of several investment priorities. It also excludes investment that might have a positive environmental impact but where it would be difficult to ascribe improved climate outcomes. For example, Exchequer capital investment in water infrastructure. The Government of Ireland also worked with the OECD led Paris Collaborative on Green Budgeting.

It is the intention of the Department to continue to evolve the approach to green budgeting in line with emerging best practice and our collaboration with the OECD and other institutions. The CCET will incorporate revenues from carbon tax ring-fenced for climate action. It will be improved to include impact analysis on climate related spending. There are also plans to capture expenditure on fossil fuel subsidies and other fiscal measures which have a negative impact on greenhouse gas emissions.

Source: Interviews with Irish Sherpa to the Coalition of Finance Ministers for Climate Action. For references see 'further reading' section.

### 5.3 Audit and Evaluation and Policy Review

The final element of the annual budget cycle is the monitoring and evaluation section which should speak to a policy review and so then feed into the strategic planning process of the subsequent year. There have been references to creating better indicators for measuring climate performance and improving feedback loops from M&E to policy review from all six of countries interviewed. It is expected that mainstreaming NDCs into national systems will raise the level of M&E for climate activities. This in turn provides better evidence for effectiveness of climate spending.

One country that has developed a country-wide specialised M&E system for climate change is Colombia. As described in Box 8 an M&E system has been set up to monitor climate finance. The M&E system was created in conjunction with climate policy and climate financing strategy, identifying early on that transparency would be key to realising plans and resource mobilisation. M&E data on climate finance provides an important feedback loop to national, regional and sectoral policy review and planning processes. This is currently being developed further whereby financing and emissions information can be linked to show effectiveness of climate spending.

#### Box 8: Colombia's monitoring of climate finance providing evidence for policy review

Measure, Report and Verify (MRV) System: The creation of the Climate Finance MRV System was a commitment within the first generation NDCs. It was conceptualized in conjunction with the National Strategy for Climate Finance and the National Climate Change Policy, making M&E a crucial element of planning and financing. The system was developed by utilizing existing information systems and applying a taxonomy for tracking finance (this defines what is considered an action on climate change in Colombia, i.e. a classification of shares and investment). The aim was to compile and consolidate climate finance information, identify gaps and funding opportunities, and to present the trends and evolution of climate finance. MRV is used to provide information for decision making as it can compare planned public investments against reality (by sectors and territories). This can assess the progress towards national goals and commitments in the country's NDC. This provides an important feedback loop to national, regional and sectoral policy review and planning processes.

(continuation Box 8) The MRV System is the result of a coordinated participatory process: The process consisted of building from available sectoral information and proposing viable mitigation measures with added value for the country. Moreover, through Decree, the MRV ensures that reporting of information on climate finance is not only the responsibility of environmental entities but also of all sectoral and territorial entities that influence climate results. It has been built to improve transparency and comparability, improving the confidence of donors and recipients to mobilize resources for climate change. At the same time, it has fostered trust in the reporting between national and territorial entities.

Expanding to measure more financing sources and productivity of spending: The government are currently reviewing and improving the taxonomy, the tracking methodology, and the use and appropriation model of the system. It is being developed to include more climate financing from sources such as private green bonds, and fiscal measures such as the proposed new carbon tax. Moreover, it will be integrated with the MRV system for emissions to better understand the relationship between emissions and finance and show productivity / effectiveness in spending. It is expected that this linkage will be able to be used to help develop the new NDC in 2020.

Source: Interviews with Colombian Sherpa to the Coalition of Finance Ministers for Climate Action. For references see 'further reading' section.

# 6. Conclusions and Next Steps

Ministries of Finance have a central role to improve the next generation of NDCs and support their implementation. In-country capacities have improved since 2015, and international evidence and experiences are increasingly available. An overarching finding from first generation NDCs is that they need to be better situated within the central economic and fiscal debates. Mainstreaming into PFM systems, from planning to evaluation, is essential. NDCs require underpinning costs and macroeconomic impact analysis to provide evidence for budget allocation negotiations. The integration into the budget cycle will require M&E and provide further evidence for the effectiveness of investing in climate action. With the expected fiscal tightening coming after the COVID-19 pandemic, the negotiations for budget allocation will be intensified. Finding proof of value for money of climate investment and ways to 'green' the recovery package will secure climate funding and create a more sustainable longer-term growth.

International evidence and the country experiences have highlighted the need for MOF engagement in effective development and mainstreaming of NDCs. They suggest key entry points as follows:

- 1. Strong MOF leadership and coordination strengthens the realisation of climate benefits: The process of optimizing benefits of climate action planning and overcoming challenges associated with fiscal and financial domestic constraints requires strong leadership, coordination, and a clear connection with national policy priorities. Climate action is usually integrated into line ministries mandates. However, promoting the involvement of an MOF is crucial to ensuring that the proposed policies and sector interventions can be implemented.
- 2. An MOF can help create an effective and achievable NDC by providing reliable costing and macroeconomic assessments of climate interventions: Macroeconomic analysis can improve decision making for optimizing economic benefits and mitigating risks from climate change. Costing gives a more precise idea of the financial resources required to implement the different programs and interventions, the feasibility within macro-fiscal constraints, and a strong basis for budget allocation negotiations. These tools improve the chances of NDCs being designed as realistic and achievable commitments, and can attract greater levels of support, i.e. there is an opportunity to link this type of macro-planning and disaster risk financing to safeguarding investments in the NDC process.
- 3. **MOF input at the review and development stages are essential for effective mainstreaming of NDCs:**To support the development of a realistic NDC, and enable its effective implementation, Ministries of Finance need to consider how PFM laws and regulations will affect mainstreaming. The review of the first generation NDCs can give evidence for what challenges existed and how they can be overcome. This can include analysis of procurement policy, investment plans, and fiscal policy and how these enabled or prevented the attainment of NDC goals. Once this information is gained solutions to remedy them can be forthcoming.
- 4. An MOF is essential for institutionalising NDCs into national PFM systems: It is crucial that climate change is institutionalised into national PFM systems via mainstreaming. Monitoring financial flows, or tagging expenditures, are common tools and link climate throughout the budget cycle. However, the MOF task is wider and more complex including ensuring all line ministries and other budgetary entities are training in new climate-sensitive protocols, that new tax policies are having the impacts they expected, and private sector incentives are working.

5. An MOF can pursue a variety of entry points and phased approaches to suit their economic situation when mainstreaming their NDC: An MOF does not need to hold all knowledge and skills immediately to begin this work, rather it can be an iterative process which evolves over time. Countries can engage in 'learning by doing', assisted by inter-agency collaboration, peer learning, and international support. They have begun in certain entry points and built from there to incorporate climate action into wider economic and PFM systems.

#### **Next Steps**

Various global activities currently support countries in reviewing second generation NDCs, for example, the NDC Partnership's Climate Action Enhancement Package and UNDP Climate Promise. These initiatives provide a coordination vehicle to strengthen MOF engagement and capacity to support transformative climate action. Connecting the dots between Coalition members and these initiatives could yield additional support avenues and deepen the understanding of how important Ministries of Finance are for climate action and what can be achieved for the wider economy through integration of NDCs.

This also applies to the immediate COVID-19 response: stimulus packages are central to recovery and NDCs are central to implementing the Paris Agreement. Considering NDCs in the heart of the recovery packages will make this investment a catalyst for climate action and green growth. A recent survey carried out by NDC Partnership found that 84% of respondents from Ministries of Finance or Planning indicated they will be considering climate action when developing economic stimulus packages or making other spending decisions in the wake of COVID-19. In order to respond to this immediate need, the NDC Partnership on country request and through its members, will deploy economic advisory support. This will assess the impact of new macro-economic situation on climate agenda, support cost analysis of new NDCs, consider the economic impact of COVID-19 and recovery mechanism, design fiscal instruments that can stimulate green growth, including guarantees, regranting, tax credit and expansion, green bonds, refinancing facilities, and others. Having advisors embedded in ministries, ideally sourced locally, will ensure solutions are locally driven and nationally implemented.

The Santiago Action Plan for 2020 sets out the ongoing agenda for the Coalition. It creates opportunities to further define the next steps and connect dots between various activities to unpack what climate action means for MOFs and where the main entry points for their engagement are.

#### May - July

- PEFA webinar on the climate change responsive PFM toolkit.
- Workshop Principle 5: Key Strategic Issues on Disclosure of information on climate related risk, and Taxonomy.
- o Workshop Principle 4: Green budgeting.
- Workshop Principle 3: Carbon pricing political economy.

#### August

- Webinar Principle 6: Role of Ministries of Finance in NDC review, development and implementation.
- o LAC MOF Regional Policy Dialogue on Principles 1,2,4,5, and 6: The role of MOFs in climate action.

#### Autumn

- Workshop Principle 4: Macro economic forecasting
- Ministerial Meeting (WB/IMF Annual Meetings).
- o Sherpa Meeting (before Ministers meeting).
- November COP26, Ministerial Meeting (TBC) Glasgow UK (Postponed to 2021)



# ANNEX A: THE BUDGET CYCLE ENTRY POINTS AND TOOLS FOR NDC MAINSTREAMING

Table 1 provides an overview of PFM tools and how they can be used to mainstream NDCs. The country experiences described here, and these additional tools illustrate how varied approaches to mainstreaming can be. Central to successes have been committed leadership for climate action and strong coordinating mechanisms. Further reading can be found in the references section below.

**Table 1: The Budget Cycle Entry Points and Tools for NDC Mainstreaming** 

Key Entry Points	Tools	How
Policy Review Review existing climate policies, update them and design new ones where necessary	Mapping NDC - SDG - National Development Plan Linkage Reassessment of costing Public Expenditure Review (PEER / CPEIR) Annual reports to parliament Impact evaluations Situation analyses	Review existing climate change policies, updating these and developing new where necessary, vis-à-vis stated policy goals. To learn lessons from NDC implementation from previous fiscal year.  Regular and specialised analysis can be produced to assist decision making.  Reviews should include issue such as regulations, laws, PFM Acts, and not solely national climate change policy documents to tackle any underpinning inconsistent laws and regulations.
Strategic Planning  Develop costed climate plans that link policy and budget	Strategic Plan - identifying key policy priorities from NDCs for next fiscal year / medium term (outcomes and objectives)  Costed plan  Identification of funding gaps  Formulation of policy and results matrix – approach and initiatives  Macroeconomic Framework Paper (Medium Term Fiscal Framework and Medium-Term Expenditure Framework)  Public Investment Management Systems (PIMS)	Climate change strategy to be built on evidence from analytical tools such as costing and macroeconomic analysis.  Need to identify all stakeholders.  Potential macroeconomic impacts of climate change can be incorporate into the macro-fiscal framework which underpins budget ceilings and budget call circulars to all sectors. This provides a good starting point for budget negotiations and evidence-based arguments can be linked to the macroeconomic framework paper.  PIMS can be a key tool for planning infrastructure investments, where NDC priorities can be incorporated in
Budget Formulation	Budget Call Circular Budget Negotiations Budget Framework Paper	the investment decision process.  Integration of NDCs in all budget formulation documents, negotiations, and so the Budget Law.

Key Entry Points	Tools	How
Climate included in annual budget law, MTEF and budget guidelines	Fiscal Risk Statements  Parliamentary Budget Committees  Civil Society / NGOs input  Tracking of climate related expenditure (CCET / CBT)	Potential macroeconomic impacts of climate change can be incorporated into the macro-fiscal framework which underpins budget ceilings and budget call circulars to all sectors.  When discussing budget allocations, a parliament budget committee can be set up for climate change; the budget framework paper can include climate change for all sectors to consider, budget call circulars can include information and instructions on how to tag and track climate expenditures followed by provision of training to sectors
Budget Execution  Resources are used to implement the climate policies via the budget	Budget reporting – Tracking of climate related expenditure (CCET / CBT)	Regular budget reporting may provide some information on climate change expenditures and their alignment with plans and budget allocation. Can identify problems in funding flows through PFM systems.  Specialist tracking / tagging may be necessary due to the numerous activities and stakeholders.  Budget reports can track 'tagged' budget lines on climate change
Accounting and Monitoring Measuring, accounting and monitoring financial and non-financial performance of climate actions	Budget analysis – Tracking of climate related expenditure (CCET / CBT)  Public Expenditure Tracking Surveys (PETS)  Key Performance Indicators (KPIs)	Tagging expenditure can also align with achievement of policy targets. Key performance targets prepared in the planning stages can strengthen the budget cycle. Effective monitoring and follow-up of performance against targets is essential.  Whether a country has a modern financial management information system or a basic budgeting information system, both can support useful monitoring. MOF can help gather information to assess how the climate change interventions are performing, and this can benefit from tweaking policy if its ineffective or scaling up when it is seen as efficient spending.
Audit and Evaluation	National Audit (Auditor General)	Evaluating compliance: proper use of climate funds and measurement of
Financial and legal compliance and impact of climate expenditure	Public Accounts Committee	results. Important for those using climate funds and incurring debt / creating new financial mechanisms.

#### **ANNEX B: METHODOLOGY**

This paper is the joint effort of representatives of the Working Group on Helsinki Principle 6 (WG6) of the Santiago Action Plan of the Coalition of Finance Ministers for Climate Action, launched in April 2019<sup>20</sup>. The Coalition will help countries mobilize and align the finance needed to implement their national climate action plans; establish best practices such as climate budgeting and strategies for, green investment and procurement; and factor climate risks and vulnerabilities into members' economic planning.

The focus of Principle 6 is how MOF can actively engage in the review, development and mainstreaming of Nationally Determined Contributions (NDCs) submitted under the Paris Agreement. WG6 is led by the country champions Jamaica and Uganda and supported by the NDC Partnership Support Unit and World Bank.

WG6 began with a survey of Coalition members. This was to gauge the level of interaction of Ministries of Finance in NDC review, development and implementation. 36 out of 52 countries responded, giving a 69% response rate. The findings are as follows:

- 49% agreed that the MOF take a leading role in the formulation and update of NDC.
- 81% agreed that the MOF work with line ministries and financial institutions to ensure that climate policies are coordinated and coherent.
- 50% agreed that the MOF provide technical inputs relevant to NDC formulation (e.g. macroeconomic forecasting, least-cost pathways for emissions reduction, and costing guidelines).
- 72% agreed that the MOF support the integration of NDC requirements into climate-informed appraisal and analysis of policies and programs.
- 39% agreed that the MOF coordinate technical assistance and financing provided by international institutions for NDC preparation and the integration of NDCs in policies, programs and procedures.

From this, it is clear that Ministries of Finance are involved in NDC development, but that this can be improved. Primarily there is a lack of underpinning macroeconomic fundamentals to NDCs. This and the improved costing of NDC activities could lead to new NDCs having greater fiscal and budgetary credibility.

Given this, the focus on this paper is to show examples of countries working towards mainstreaming NDCs. Country examples highlight the achievements in incorporating macro-fiscal elements, using M&E systems to track and review policy, and common tools used to mainstream such as budget tagging (to mention a few from a long list of potential entry points for MOF). A shortlist of countries was identified by the WG6. and six were chosen. Telephone interviews took place to gain greater context and documentation: Jamaica and Uganda which are the country champions, Chile, Colombia, Ireland, and the Philippines.

It must be noted that country experiences are not confined to these examples chosen, and each country has achieved much more in terms of mainstreaming NDCs. However, the paper focuses on different experiences to show readers they can start at different entry points and move forward with engaging / mainstreaming as it suits different country realities.

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<sup>&</sup>lt;sup>20</sup> See World Bank (2019) and Climate Action Peer Exchange (2019), respectively.

Finally, it is important to acknowledge that there are numerous tools, techniques and policy options for a MOF to engage with NDCs, and climate change, within the PFM system. Most are incorporated within the six Helsinki Principles, some concentrate on describing different tools, models, and policy options, whilst here the focus is on how countries have mainstreamed NDCs. In this regard there is little in-depth analysis of different tools, but we do set out clear links within the text for further information.

Additionally, for technical discussions and detailed approaches, the reader can refer to the other five Helsinki Principles. For example: 1. Designing long term strategies – Discusses what macroeconomic models can be used; 2. Capacity building – What skills and training Ministries of Finance need to deliver realistic NDCs; 3. Carbon pricing – Details the tax and subsidy policies that could be part of the NDC development; 4. Macroeconomic, fiscal, investment, and procurement policy – Provides technical details on how to incorporate climate into PFM tools such as macro models, public investment, budget tagging and procurement rules; and 5. Creating an enabling environment to attract private investment – Looks at green finance options and regulation.

#### **FURTHER READING / REFERENCES**

#### General

Allen et al Eds (2013) *The International Handbook of Public Financial Management*, Palgrave and MacMillan, London. Available at: https://link.springer.com/book/10.1057/9781137315304#toc

Batten (2018) *Climate Change and the Macro-Economy: A Critical Review*, Staff Working Paper No. 706, Bank of England, London. Available at: <a href="https://www.bankofengland.co.uk/-/media/boe/files/working-paper/2018/climate-change-and-the-macro-economy-a-critical-review.pdf?la=en&hash=D1A56DF33C50074F5D3383587A272BFD611CBA04">https://www.bankofengland.co.uk/-/media/boe/files/working-paper/2018/climate-change-and-the-macro-economy-a-critical-review.pdf?la=en&hash=D1A56DF33C50074F5D3383587A272BFD611CBA04</a>

CAPE (2019) Overview of the Santiago Action Plan: The Coalition of Finance Ministers for Climate Action, Briefing Note prepared by the Sherpas of the Coalition, Washington DC. Available at: https://www.cape4financeministry.org/sites/cape/files/inline-files/Overview%20-%20Santiago%20Action%20Plan.pdf

Climate Action Peer Exchange (2019) *The Coalition of Finance Ministers for Climate Action*, CAPE, World Bank Group, Washington DC. Available at: https://www.cape4financeministry.org/coalition\_of\_finance\_ministers.

ECBI (2018) Pocket Guide to NDCs: Under the UNFCCC, ECBI, Oxford. Available at: https://pubs.iied.org/pdfs/G04320.pdf

Global Commission on Adaption (2019) *Adapt Now: A Global Call for Leadership on Climate Resilience*, Prepared by Global Centre on Adaption, Rotterdam, and the World Resources Institute, Washington DC. Available at: <a href="https://gca.org/global-commission-on-adaptation/report">https://gca.org/global-commission-on-adaptation/report</a>

Global Commission on the Economy and Climate (2018) *Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times*, New Climate Economy, World Resource Institute, Washington DC. Available at: <a href="https://newclimateeconomy.report/2018/wp-content/uploads/sites/6/2019/04/NCE\_2018Report\_Full\_FINAL.pdf">https://newclimateeconomy.report/2018/wp-content/uploads/sites/6/2019/04/NCE\_2018Report\_Full\_FINAL.pdf</a>

Hammer et al (2020) *How countries' climate ambitions can support a sustainable recovery from COVID-19 (Coronavirus),* World Bank Blogs, Washington DC. Available at: <a href="https://blogs.worldbank.org/climatechange/how-countries-climate-ambitions-can-support-sustainable-recovery-covid-19-coronavirus">https://blogs.worldbank.org/climatechange/how-countries-climate-ambitions-can-support-sustainable-recovery-covid-19-coronavirus</a>

Hepburn et al (2020) *Will COVID-19 Fiscal Recovery Packages Accelerate or Retard Progress on Climate Change?* Oxford Review of Economic Policy 36(S1), Working Paper No. 20-02, Oxford. Available at: <a href="https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf">https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf</a>

International Federation of Red Cross and Red Crescent Societies (2019) *The Cost of Doing Nothing: The Humanitarian Price of Climate Change and How it can be Avoided*, International Federation of Red Cross and Red Crescent Societies, Geneva. Available at: <a href="https://media.ifrc.org/ifrc/wp-content/uploads/sites/5/2019/09/2019-IFRC-CODN-EN.pdf">https://media.ifrc.org/ifrc/wp-content/uploads/sites/5/2019/09/2019-IFRC-CODN-EN.pdf</a>

IMF (2019) Fiscal Policies for Paris Climate Strategies – From Principle to Practice, IMF Policy Paper, Washington DC. Available at: <a href="https://www.imf.org/en/Publications/Policy-Papers/Issues/2019/05/01/Fiscal-Policies-for-Paris-Climate-Strategies-from-Principle-to-Practice-46826">https://www.imf.org/en/Publications/Policy-Papers/Issues/2019/05/01/Fiscal-Policies-for-Paris-Climate-Strategies-from-Principle-to-Practice-46826</a>

Levin et al (2015) Designing and Preparing Intended Nationally Determined Contributions (INDCs), World Resources Institute, Washington DC. Available at: <a href="https://www.wri.org/publication/designing-and-preparing-indcs">https://www.wri.org/publication/designing-and-preparing-indcs</a>.

NDC Partnership (2020) *The NDC Partnership's Economic Advisory Support*, NDC Partnership, Washington DC. Available at: https://ndcpartnership.org/economic-advisory-support

NDC Partnership (2020) *Helsinki Principle 6 Survey Results and Heat Map*, Internal report, NDC Partnership under the Coalition of Finance Ministers, Washington DC.

Shabih Ali Mohib (2014) Mainstreaming Climate Change into Planning and Budgeting: Entry Pints in the Budget Cycle, Presentation given November 2014, Climate Change Public Expenditure and Institutional Review Sourcebook, World Bank Group, Washington DC. Available at: https://www.climatefinance-

<u>developmenteffectiveness.org/sites/default/files/documents/15\_11\_14/Session\_4CCPER\_Budget\_Process\_Bangkok\_2014\_</u>
Oct-31.pdf

World Bank (2014) Climate Change Public Expenditure and Institutional Review Sourcebook, World Bank, Washington DC. Available at:

https://www.greengrowthknowledge.org/sites/default/files/downloads/resource/World Bank CCPEIR Sourcebook 0.pdf

World Bank (2019) *The Coalition of Finance Ministers for Climate Action: An Overview*, World Bank Spring Meetings 2019. Available at: <a href="http://pubdocs.worldbank.org/en/646831555088732759/FM-Coalition-Brochure-final-v3.pdf">http://pubdocs.worldbank.org/en/646831555088732759/FM-Coalition-Brochure-final-v3.pdf</a>

World Bank (2013) *Beyond the Annual Budget: Global Experience with Medium Term Expenditure Frameworks*, World Bank, Washington DC. Available at: <a href="http://documents.worldbank.org/curated/en/354601468330959258/pdf/Beyond-the-annual-budget-global-experience-with-medium-term-expenditure-frameworks.pdf">http://documents.worldbank.org/curated/en/354601468330959258/pdf/Beyond-the-annual-budget-global-experience-with-medium-term-expenditure-frameworks.pdf</a>

UKCIP (2018) Cost of Climate Impacts, UKCIP, Oxford. Available at: <a href="https://www.ukcip.org.uk/wizard/future-climate-vulnerability/costings/">https://www.ukcip.org.uk/wizard/future-climate-vulnerability/costings/</a>

UNCFFF (2016) Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015, UNFCCC, Bonn. Available at: <a href="https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf">https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf</a>

# **Country Specific**

#### Chile

#### Integrating climate change and climate action into macroeconomic analysis for development of NDCs:

Ministry of Science, Technology, Knowledge and Innovation (2019) *Chilean NDC Mitigation Proposal: Methodological Approach and Supporting Ambition*, Mitigation and Energy Working Group Report, COP25 Scientific Committee, Government of Chile, Santiago. Available at: <a href="http://www.minciencia.gob.cl/comitecientifico/documentos/mesa-mitigacion-y-energia/14.Mitigation-NDC-White-Paper.pdf">http://www.minciencia.gob.cl/comitecientifico/documentos/mesa-mitigacion-y-energia/14.Mitigation-NDC-White-Paper.pdf</a>

#### Colombia

#### Overview of the MRV System:

General website: https://mrv.dnp.gov.co/Version%20Ingles/Paginas/inicio.aspx

Comité de Gestión Financiera-Departamento Nacional de Planeación. (2016) *Guía metodológica para clasificar y medir el financiamiento asociado con acciones de mitigación y adaptación al cambio climático en Colombia*, Departamento Nacional de Planeación, Government of Colombia, Bogota. Available at:

https://mrv.dnp.gov.co/Publicaciones/Documents/GU%C3%8DA%20METODOL%C3%93GICA%20PARA%20CLASIFICAR%20Y%20MEDIR%20EL%20FINANCIAMIENTO%20ASOCIADO%20CON%20ACCIONES%20DE%20MITIGACI%C3%93N%20Y%20ADAPTACI%C3%93N.pdf

Department of Planning (2017) What is the Climate Finance MRV system and why was it created?, Republic of Colombia, Bogota. Available at: <a href="https://mrv.dnp.gov.co/Version%20Ingles/About%20the%20platform/Paginas/What-is-the-Climate-Finance-MRV-system-and-why-was-it-created.aspx">https://mrv.dnp.gov.co/Version%20Ingles/About%20the%20platform/Paginas/What-is-the-Climate-Finance-MRV-system-and-why-was-it-created.aspx</a>

Dirección de Ambiente y Desarrollo Sostenible (2017) *Documento Nacional del Sistema de Monitoreo Reporte y Verificación MRV para Colombia*, Government of Colombia, Bogota. Available at:

https://www.minambiente.gov.co/images/AsuntosMarinosCosterosyRecursosAcuatico/Documento\_MRV\_Nacional\_Consolidado\_\_Julio\_2017\_V\_FINAL\_2\_0.pdf

Department of Planning (2020) Sistema MRV de Financiamiento Climático en Colombia, Presentation given in April 2020 by the Environment and Sustainable Development Directorate (Dirección de Ambiente y Desarrollo Sostenible), Government of Colombia, Bogota.

#### **Cost of NDCs:**

Álvarez-Espinosa et al (2017) Evaluación económica de los compromisos de Colombia en el marco de COP21, Revista Desarrollo y Sociedad, no. 79 (2017): 15-54, Bogota. Available at: https://revistas.uniandes.edu.co/doi/full/10.13043/dys.79.1

#### **Ireland**

#### **Climate Change Expenditure Tracking Process:**

Department of Public Expenditure and Reform (2018) *An Introduction to the Implementation of Green Budgeting in Ireland*, Staff Paper 2018, Climate Change Unit, Irish Government Economic and Evaluation Service, Dublin. Available at: <a href="https://igees.gov.ie/wp-content/uploads/2019/01/The-Implementation-of-Green-Budgeting-in-Ireland.pdf">https://igees.gov.ie/wp-content/uploads/2019/01/The-Implementation-of-Green-Budgeting-in-Ireland.pdf</a>

Department of Public Expenditure and Reform (2019) *Valuing Greenhouse Gas Emissions in the Public Spending Code*, Staff Paper 2018, Climate Change Unit, Irish Government Economic and Evaluation Service, Dublin. Available at: https://assets.gov.ie/19749/77936e6f1cb144d68c1553c3f9ddb197.pdf

Department of Public Expenditure and Reform (2020) *The Use of Carbon Tax Funds in 2020*, Staff Paper 2020, Climate Change Unit, Irish Government Economic and Evaluation Service, Dublin. Available at: <a href="https://igees.gov.ie/wp-content/uploads/2020/01/The-Use-of-Carbon-Tax-Funds-2020.pdf">https://igees.gov.ie/wp-content/uploads/2020/01/The-Use-of-Carbon-Tax-Funds-2020.pdf</a>

#### **Sovereign Green Bond Framework:**

National Treasury Management Agency (2018) *Irish Sovereign Green Bond Framework*, Government of Ireland, Dublin. Available at: https://www.ntma.ie/uploads/general/Irish-Sovereign-Green-Bond-Framework.pdf

#### **Carbon Tax:**

De Bruin et al (2019) *The Economic and Distributional Impacts of an Increased Carbon Tax with Different Revenue Recycling Schemes*, Research Series Number 95, Economic and Social Research Institute, Dublin. Available at: https://www.esri.ie/publications/the-economic-and-distributional-impacts-of-an-increased-carbon-tax-with-different

#### **Jamaica**

#### Disaster risk financing in the budget, debt strategy and PFM:

Ministry of Finance and the Public Service (2020a) *Moving in the Right Direction: Opening of the 2020/21 Budget Debate*, Government of Jamaica, Kingston. Available at: <a href="https://mof.gov.jm/downloads/speeches/opening/hmfps-budget-presentation-2020-2020-170320.pdf">https://mof.gov.jm/downloads/speeches/opening/hmfps-budget-presentation-2020-2020-170320.pdf</a>

Ministry of Finance and the Public Service (2020b) *Medium-Term Debt Strategy FY2020/21-FY2023/24*, Government of Jamaica, Kingston. Available at: <a href="https://mof.gov.jm/mof-media/media-centre/press/2547-public-financial-management-of-jamaica-s-disaster-risk-policy.html">https://mof.gov.jm/mof-media/media-centre/press/2547-public-financial-management-of-jamaica-s-disaster-risk-policy.html</a>

Ministry of Finance and the Public Service (2020c) *Public Financial Management of Jamaica's Disaster Risk Policy*, Government of Jamaica, Kingston. Available at: <a href="https://mof.gov.jm/documents/documents-publications/documents-centre/file/2336-medium-term-debt-management-strategy-2020-21-2023-24.html">https://mof.gov.jm/documents/documents-publications/documents-centre/file/2336-medium-term-debt-management-strategy-2020-21-2023-24.html</a>

World Bank (2018) *Advancing Disaster Risk Financing in Jamaica*, World Bank, Washington DC. Available at: <a href="https://elibrary.worldbank.org/doi/pdf/10.1596/29735">https://elibrary.worldbank.org/doi/pdf/10.1596/29735</a>

NDC Partnership (2019) *Bringing Global Outcomes of the Climate Action Summit to the Country Level: Jamaica*, NDC Partnership, Washington DC. Available at: <a href="https://ndcpartnership.org/news/bringing-global-outcomes-climate-action-summit-country-level-jamaica">https://ndcpartnership.org/news/bringing-global-outcomes-climate-action-summit-country-level-jamaica</a>

#### **Philippines**

#### Budget tools for CBT (Call Circular with Climate Expenditure Form and Budget):

Department of Budget and Management (2019) *National Budget Memorandum: National Budget Call Circular for FY 2021*, Republic of the Philippines, Manila. Available at: <a href="https://www.dbm.gov.ph/wp-content/uploads/lssuances/2019/National-Budget-Memorandum/NATIONAL-BUDGET-MEMORANDUM-NO.-133-DATED-NOVEMBER-29,-2019.pdf">https://www.dbm.gov.ph/wp-content/uploads/lssuances/2019/National-Budget-Memorandum/NATIONAL-BUDGET-MEMORANDUM-NO.-133-DATED-NOVEMBER-29,-2019.pdf</a>

Department of Budget and Management (2019) *Budget of Expenditures and Sources of Financing FY 2020,* Republic of the Philippines, Manila. Available at: <a href="https://www.dbm.gov.ph/index.php/budget-documents/2020/budget-of-expenditures-and-sources-of-financing-fy-2020">https://www.dbm.gov.ph/index.php/budget-documents/2020/budget-of-expenditures-and-sources-of-financing-fy-2020</a>

#### **Overview of Climate Budget Tagging:**

UNDP (2019) Climate Change Knowing What You Spend: A Guidance Note for Governments to Track Climate Finance in their Budgets, Climate Change Financing Framework Technical Note Series, UNDP, New York. Available at: <a href="https://www.undp.org/content/dam/undp/library/planet/climate-change/RBAP-DG-2019-Climate-Budget-Tagging-Guidance-Note.pdf">https://www.undp.org/content/dam/undp/library/planet/climate-change/RBAP-DG-2019-Climate-Budget-Tagging-Guidance-Note.pdf</a>

World Bank (2015) *Mobilizing the Budget for Climate Change in the Philippines*, World Bank, Washington DC. Available at: https://www.worldbank.org/en/country/philippines/publication/mobilizing-budget-for-climate-change-in-philippines

#### **Joint Memorandum Circulars:**

Department of Budget and Management and Climate Change Commission (2013) *Joint Memorandum Circular: Guidelines in Tagging/Tracking Government Expenditures for Climate Change in the Budget Process*, Republic of the Philippines, Manila. Available at:

https://www.dbm.gov.ph/wp-content/uploads/Issuances/2013/Joint%20Memorandum%20Circular/JMC2013-01\_DBM-CCCdec27.pdf

Department of Budget and Management, Climate Change Commission, and Department of Interior and Local Government (2014) *Joint Memorandum Circular: Revised Guidelines for Tagging/Tracking Climate Change Expenditures in the Local Budget (Amending JMC 2014-01, Dated August 7, 2014),* Republic of the Philippines, Manila. Available at: <a href="https://www.dilg.gov.ph/issuances/jc/Revised-Guidelines-for-TaggingTracking-Climate-Change-Expenditures-in-the-Local-BudgetAmending-JMC-2014-01Dated-August-7-2014/50">https://www.dilg.gov.ph/issuances/jc/Revised-Guidelines-for-TaggingTracking-Climate-Change-Expenditures-in-the-Local-BudgetAmending-JMC-2014-01Dated-August-7-2014/50</a>

Department of Budget and Management and Climate Change Commission (2015) *Joint Memorandum Circular: Revised Guidelines for Climate Change Expenditure Tagging (CCET) amending JMC No. 2013-01*, Republic of the Philippines, Manila. Available at:

https://www.dbm.gov.ph/wp-content/uploads/Issuances/2015/Joint%20Memorandum%20Circular/NEW\_JMC\_DBM-CCC-DILG%20NO.%202015%20-%2001%20DATED%20JULY%2023,%202015.pdf

#### **Domestic Climate MRV Database:**

National Integrated Climate Change Database Information and Exchange System (NICCDIES) (2020) *Philippines National Integrated Climate Change Database and Information Exchange System*, Republic of the Philippines, Manila. Available at: https://niccdies.ph/climate-finance/ccet

#### **Uganda**

#### **PFM Act:**

Republic of Uganda (2015) *Public Finance Management Act 2015*, Government of Uganda, Kampala. Available at: <a href="https://www.ugandainvest.go.ug/wp-content/uploads/2016/02/Uganda\_Public\_Finance\_Management\_Act\_2015\_3.pdf">https://www.ugandainvest.go.ug/wp-content/uploads/2016/02/Uganda\_Public\_Finance\_Management\_Act\_2015\_3.pdf</a>

#### Incorporating climate change into macro-fiscal assessments and national planning:

Ministry of Finance, Planning and Economic Development (2018) *Fiscal Risk Statement*, Government of Uganda, Kampala. Available at:

https://budget.go.ug/sites/default/files/National%20Budget%20docs/Fiscal%20Risk%20Statement%20FY%202019-20%20-%20PDF%281%29 0.pdf

Ministry of Finance, Planning and Economic Development (2019) *Uganda Adjusted Macroeconomic Indicators and Measures of Comprehensive Wealth: Technical Report*, in conjunction with the World Bank Wealth Accounting and the Valuation of Ecosystem Services, Government of Uganda, Kampala. Available at: <a href="https://www.wavespartnership.org/en/knowledge-center/uganda-adjusted-macroeconomic-indicators-and-measures-comprehensive-wealth">https://www.wavespartnership.org/en/knowledge-center/uganda-adjusted-macroeconomic-indicators-and-measures-comprehensive-wealth</a>

National Planning Authority (2019) *Issue Paper on Natural Capital Accounting and the National Development Plan III 2021-2025*, Government of Uganda (in conjunction with the World Bank), Kampala.

World Bank WAVES (2019) *Natural Capital and NDP III 2021-2025*, World Bank Wealth Accounting and the Valuation of Ecosystem Services, World Bank, Washington DC. Available at:

 $\frac{\text{https://www.wavespartnership.org/sites/waves/files/kc/NCA\%20NDP\%20III\%20\%20Final\%20Brief\%20November\%202019}{\text{.pdf}}$