

Financing National Adaptation Plan (NAP) Processes: Contributing to the achievement of nationally determined contribution (NDC) adaptation goals

Guidance Note



**NAP
Global
Network**

Disclaimer

This guidance note includes references to relevant decisions under the United Nations Framework Convention on Climate Change (UNFCCC), where appropriate. However, as a technical publication, it does not necessarily use the exact language contained in these decisions. In particular, the concise term “NAP process” is applied throughout the document instead of the phrase “process to formulate and implement NAPs” contained in Decision 1/CP.16 and subsequent decisions. Please note that by following this approach, this publication neither aims to reinterpret any existing decision under the UNFCCC, nor does it intend to pre-empt any potential future decisions on this issue.

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About the NAP Global Network

The NAP Global Network is a group of individuals and institutions who are coming together to enhance bilateral support for the NAP process in developing countries. With participation from both developing countries and bilateral agencies, the Network facilitates peer learning and exchange on the NAP process, improve coordination among bilateral development partners, and support national-level action. Initial financial support for the Network has been provided by Germany and the United States. The NAP Global Network secretariat is hosted by the International Institute for Sustainable Development.

Any opinions stated herein are those of the author(s) and do not necessarily reflect the policies or opinions of the NAP Global Network, funders or Network participants.

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Executive Summary

Many developing countries are demonstrating their commitment to preparing for and adapting to the impacts of climate change by initiating national adaptation plan (NAP) processes. Concurrently, most have also included an adaptation component in their nationally determined contributions (NDCs) to fulfilment of the purpose of the Paris Agreement. These initiatives can be complementary and reinforcing. NDCs enable countries to share their adaptation goals, objectives, priorities and actions with the international community, while NAP processes provide a concrete means for successful achievement of these initiatives.

Financing is needed throughout the entire NAP process to enable its potential to be reached—from its initiation to the implementation, monitoring and evaluation of prioritized adaptation actions. The amount of financing needed by countries will vary depending on their circumstances, but is expected to be significant. This guidance note aims to assist countries with the development of strategies for securing this funding. Specifically, it has the following **objectives**:

- Provide a clear understanding of the NAP process from a financing perspective.
- Present the range of potential sources of finance and identify which sources may be more appropriate for different phases of the NAP process.
- Suggest practical steps that countries might take throughout the NAP process to increase their likelihood of securing finance from different sources.

Practical guidance is also provided in subsections labelled “Key issues for consideration.” These subsections identify issues governments might want to take into consideration when assessing the appropriateness of a financing source given their needs and circumstances and when taking concrete steps toward accessing this source.

The NAP process from a financing perspective

When looking at the NAP process through a financial lens, it is helpful to distinguish between **two broad phases**, which are illustrated in Figure A:

- **Development phase**, which includes actions taken to initiate, coordinate and maintain the NAP process on a continual basis.
- **Implementation phase**, which encompasses the detailed preparation and implementation of individual adaptation actions prioritized through the NAP process.

Reflecting the iterative nature of the NAP process, elements of its development and implementation phases may occur (and therefore require financing) at the same time. However, the scale of financing required by these phases differs significantly. The financing needs associated with the implementation phase are significantly greater than those of the development phase.

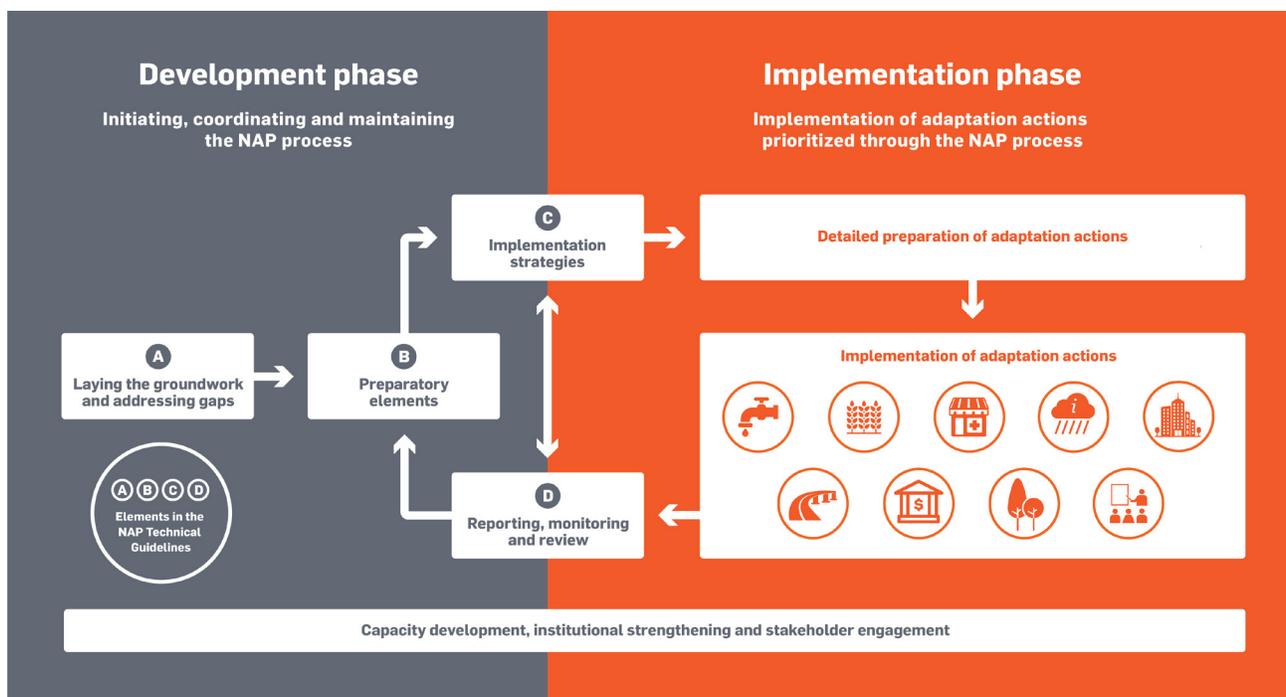


Figure A. The NAP process: Key elements requiring finance.

Potential sources of finance for the NAP process

Developing countries can access a range of finance sources to support their NAP processes and thereby contribute to the achievement of the adaptation component of their NDCs. At a general level, these sources can be classified in terms of whether they are **domestic or international, and public or private**. A key challenge for countries is to determine how to best combine these different sources to meet their financing needs, taking into account national capacities and circumstances.

Identified sources of financing for the NAP process are:

1. **Domestic government revenues.** Financing from domestic public sources is needed throughout the whole NAP process. Initially, domestic sources can support coordination of the NAP process and facilitate adaptation planning. On an ongoing basis, domestic finance can support the implementation of prioritized adaptation actions and maintenance of the process. Systematically integrating the costs associated with this process into domestic budget processes can provide a relatively predictable and consistent source of financing, particularly for its ongoing operation and maintenance in the medium and long terms. Use of finance from domestic budgets also enhances national ownership of the NAP process, provides greater flexibility regarding the allocation of financial resources to different sectors and jurisdictions, and can leverage additional public and private investment. Domestic budgets also provide a key opportunity to systematically allocate adaptation-related finance to sub-national actors.

Domestic governments can use various fiscal instruments to raise additional revenue (e.g., through taxes, bond issuance and debt conversion) or redistribute existing domestic finance (e.g., through subsidies and subsidy reform) to support the NAP process. A further option is to establish domestic climate change funds at the national and/or sub-national levels as a financing vehicle to support the implementation phase of the NAP process. These funds can be used to channel, program, disburse and monitor climate-related finance and to facilitate direct access to international climate finance.

2. Bilateral providers. Financing from bilateral providers can be used to support both the development and implementation phases of the NAP process. Several bilateral donors offer grant-based technical assistance to advance the development phase of the NAP process. This finance is often provided as part of a broader package of support for climate change actions. Technical and financial support for the implementation phase of the NAP process is available from a greater number of bilateral providers. This includes financing from bilateral development banks for the implementation of individual projects.

Financing from bilateral providers is typically provided through one of two delivery channels: donors' targeted climate funds and government-to-government negotiations that determine agreed-upon bilateral commitments. Through the latter, bilateral providers are also able to provide support that goes beyond specific projects. Instruments such as budgetary support or basket funding can be used to finance the implementation of larger programs and sector-wide initiatives.

The flexibility of support from bilateral providers means that this source can be used to finance a wide range of activities, including institutional strengthening and capacity building. The lower risk associated with grants from bilateral providers can also promote investment in innovative projects that may attract additional financing, including private finance. Opportunities for bilateral finance for the NAP process will be determined in part by how important providers are in financing a country's broader development objectives. It will also be influenced by the degree to which adaptation is emphasized within each provider's funding strategies, both generally and in specific countries. Effective use of bilateral financing for the NAP process requires in-country coordination by donors to avoid duplication of efforts.

3. Multilateral providers. A range of multilateral funds established under and outside of the United Nations Framework Convention on Climate Change (UNFCCC) can be accessed to help finance the NAP process. This includes the Green Climate Fund, which is expected to be a significant source of finance for the NAP process. It can support the development phase of a country's NAP process through its Readiness and Preparatory Support Programme, and can finance the preparation and implementation of individual adaptation actions prioritized through the NAP process. The Least Developed Countries Fund and the Special Climate Change Fund have been mandated by the UNFCCC to support NAP processes in the least developed countries and other developing countries respectively. Additionally, the Adaptation Fund's mandate to finance concrete adaptation projects and programs provides an opportunity to finance the implementation phase of the NAP process. Multilateral funds established outside of the UNFCCC can be essential sources for financing the NAP process, particularly for the implementation phase. These funds include the Pilot Program for Climate Resilience and the Adaptation for Smallholder Agriculture Programme. Countries can also consider accessing non-climate-focused funds such as the Global Fund to Fight AIDS, Tuberculosis and Malaria.

In addition, countries can access finance from multilateral development banks to support the implementation of adaptation actions prioritized through the NAP process, particularly in sectors such as water, energy, infrastructure and food production. Multilateral development banks directly finance discrete adaptation projects or development projects that include incremental costs associated with the provision of adaptation co-benefits. They can also act to catalyze additional resources from the public and private sectors. Countries should have a clear understanding of the funding modalities of the different multilateral funds and multilateral development banks to better align their needs related to the NAP process to suitable resources.

4. Private sector actors, both domestic and international. Although experience with mobilizing private finance for adaptation is currently limited, the NAP process can provide governments with an opportunity to direct and influence investments by the private sector to support the implementation of prioritized adaptation actions. To realize this potential, governments need to gain a clear understanding of the private

sector—its diversity, its motivations, the investments it is already making in climate change adaptation and where opportunities exist to engage this sector in the implementation of adaptation actions. In particular there is a need to understand the different roles that private financiers and private enterprises may play in directly and indirectly financing the implementation of adaptation actions. This understanding can better enable governments to tailor communication and engagement strategies. Consideration can also be given to the different means by which the private sector may be engaged in the adaptation process, including through the establishment of public-private partnerships. The public sector can play a key role in mobilizing the private sector to become engaged in the implementation of adaptation actions by creating a supportive general investment environment and by providing relevant information, incentives and economic signals.

Although a wide range of financing sources for the NAP process exist, the diversity of funders and scale of potential financing available for its development and implementation phases differs significantly (as shown in Figure B). A limited number of sources (primarily domestic public finance, bilateral providers and multilateral funds) provide dedicated support for the development phase of the NAP process. In contrast, more diversified financing (domestic and international, public and private) could be available to support the implementation phase of the NAP process. This trend is consistent with the expectation that **greater financing will be required to support the implementation phase of the NAP process**. It should be noted, though, that at present finance directly labelled as NAP support is primarily oriented toward its development phase.

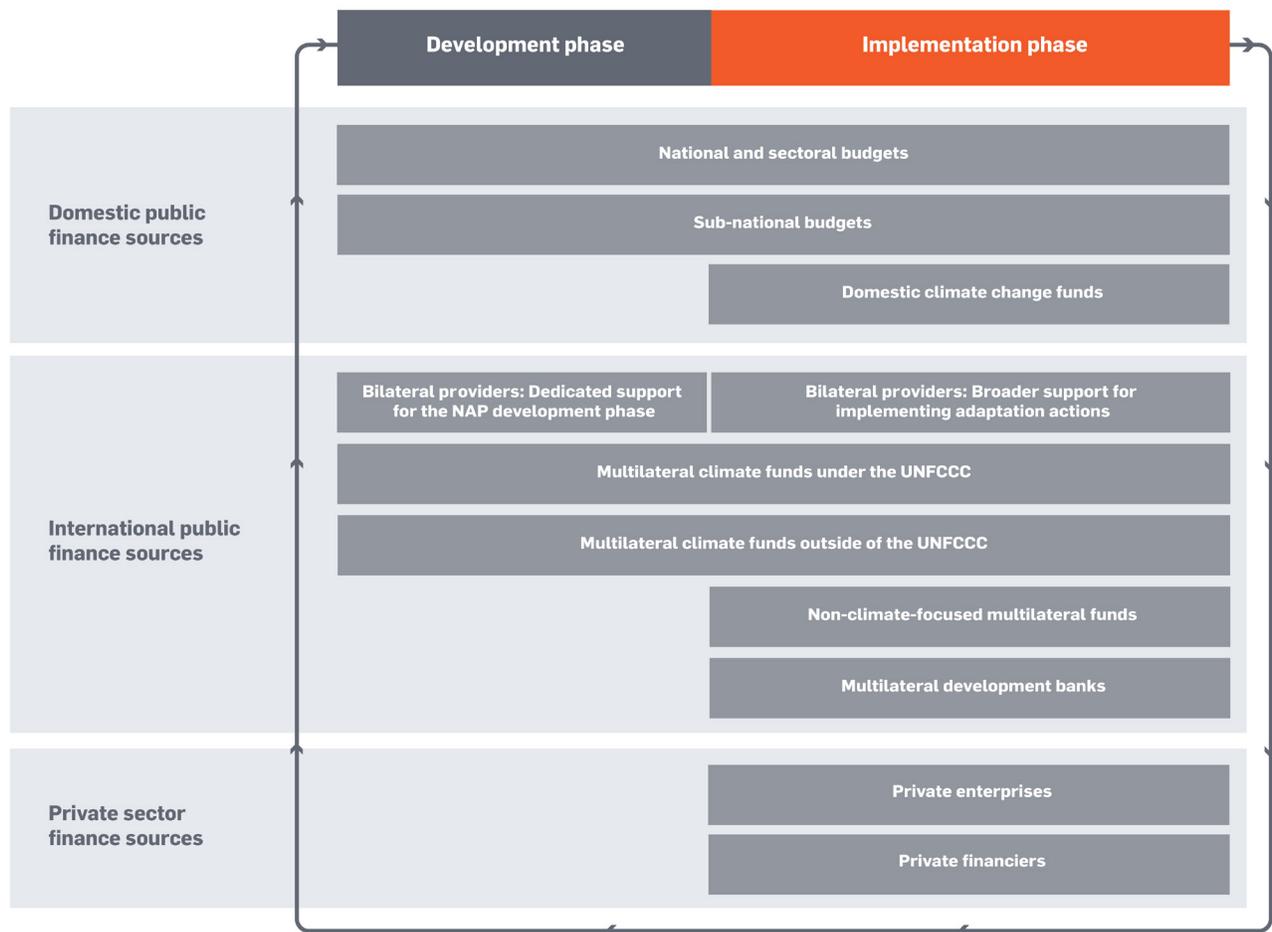


Figure B. Potential sources of finance for the NAP process.

The need for a financing strategy

Given the array of financing available to support the NAP process, it is critical that countries align financing needs to the most appropriate sources to meet these needs. The development of a dedicated financing strategy for the NAP process can assist with this process. These strategies can play a critical role in systematically supporting a coordinated national approach to identifying financing needs throughout the NAP process. They can also help prioritize potential financing sources and provide a comprehensive, step-by-step process for realizing a country's financing goals. These outcomes can be achieved through the development of a **financing strategy** composed of the following **main building blocks** (see Figure C):

- **Identifying the financing gap** given the estimated total costs of the entire NAP process in comparison to the availability of existing sources of finance to meet these costs.
- **Determining financing options** for prioritized adaptation actions by identifying potential sources of financing and suitable financial instruments, taking into consideration national circumstances, relationships and capacities.
- **Identifying operational next steps** to improve the chances of accessing the identified funding sources, such as building capacity, fostering relationships with key actors or preparing specific proposals.

Through this process, a NAP financing strategy can play a key role in translating the ideas and plans emerging from the development phase of the NAP process into concrete actions taken to implement identified adaptation priorities.

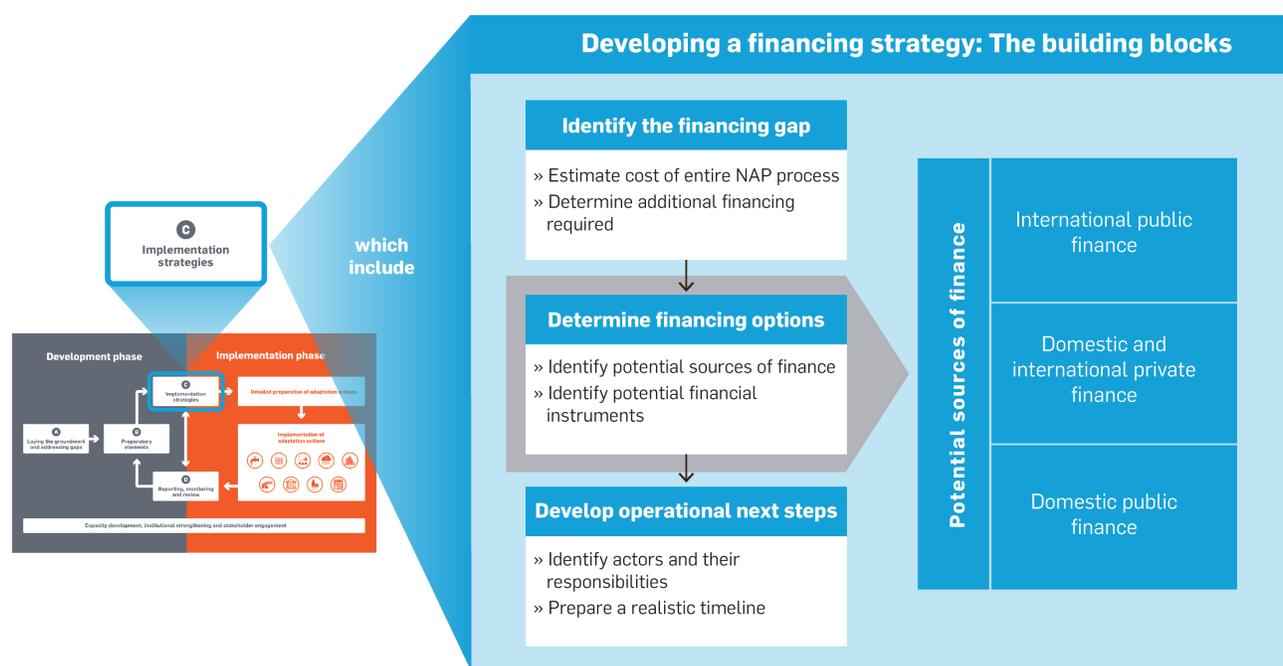


Figure C. Main building blocks of a NAP financing strategy and its link to the NAP process.

Guidance for consideration

Along with preparing a NAP financing strategy, developing countries can take steps throughout the NAP process to increase the likelihood of securing financing in the future. Key guidance for developing countries to consider includes:

- **Financing needs of the NAP process should be considered from the start.** NAP teams should determine the resources required for the development and implementation phases of the NAP process and how they might be accessed early in the process. The development phase should then be designed to improve a country's potential to secure financing from these sources in the future.
- **Engage key stakeholders early in the NAP process.** Ministries responsible for finance and development planning, as well as climate-sensitive sectors, should be engaged early and throughout the NAP process. Efforts should also be made to engage bilateral providers, multilateral providers and representatives of the private sector. Investment of time and resources into these efforts will likely prove beneficial in the long term.
- **Senior-level engagement is critical.** Early and continuous political commitment to the NAP process by high-level officials from key institutions is particularly needed to promote the funding decisions that will enable its successful initiation, continuation and impact.
- **Domestic public finance is crucial for sustainably financing the NAP process.** The iterative nature of the NAP process means that financing from this source is critical to covering the continuing costs associated with coordination and maintenance of the NAP process over time. Domestic public finance is also likely to be required for investments in public goods that advance efforts to reduce climate risk, such as institutional strengthening, capacity building, and improvement of sectors such as education and health.
- **Financing should go beyond the scope of individual projects.** Given the diversity of adaptation financing needs, NAP teams should also consider financing instruments that go beyond support for individual projects and instead target programs and initiatives more broadly.
- **Realizing the potential of private sector financing requires careful design.** Engaging the private sector in the NAP process requires a clear understanding of the sector's diversity, the motivations of its actors and how their interests intersect with countries' adaptation priorities. This understanding can be used to identify appropriate strategies for improving a country's investment environment for private sector involvement in adaptation actions.
- **Countries should pursue finance sources appropriate to national circumstances and capacities.** The likelihood of securing finance from different sources to support NAP processes will be influenced by factors such as countries' general investment environments, technical capacities, public financial management systems and existing relationships with financial providers. Countries should take these factors into consideration when developing NAP financing strategies tailored to their needs.

Considering the recommendations contained in this guidance can enhance the probability of securing the sufficient and dependable financing needed to initiate, coordinate and maintain the NAP process over time. It can also increase the likelihood of securing the considerable financing needed to implement prioritized adaptation actions. This financing can transform strategies and plans into concrete adaptation actions that will enable governments to reduce the risk climate change poses for its citizens, infrastructure and economies and achieve the adaptation goals articulated in their NDCs.

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List of Acronyms

AF	Adaptation Fund
AfDB	African Development Bank
CIF	Climate Investment Funds
GCCA+	Global Climate Change Alliance
GCF	Green Climate Fund
GEF	Global Environment Facility
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
LDC	least developed country
LDCF	Least Developed Countries Fund
LEG	Least Developed Countries Expert Group
MDB	multilateral development bank
MSMEs	micro, small and medium-sized enterprises
MTEF	medium-term expenditure framework
NAP	national adaptation plan
NAP-GSP	National Adaptation Plan Global Support Programme
NCSD	National Council for Sustainable Development
NDA	National Designated Authority
NDC	nationally determined contribution
NGO	non-governmental organization
ODA	official development assistance
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
OECD-DAC	Organisation for Economic Co-operation and Development's Development Assistance Committee
PPCR	Pilot Program for Climate Resilience
PPP	public-private partnership
SCCF	Special Climate Change Fund
UN DESA	United Nations Department for Economic and Social Affairs
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme; now UN Environment
UNEP-FI	United Nations Environment Programme Finance Initiative
UNFCCC	United Nations Framework Convention on Climate Change

1 Introduction

Many countries are increasingly taking steps to understand, prepare for and adapt to the current and future impacts of climate change. This upsurge in commitment to adaptation at the highest political levels is also reflected in the historic Paris Agreement. Under the agreement, countries have committed to improving their “ability to adapt to the adverse impacts of climate change,” engaging in adaptation planning processes and implementing adaptation actions (United Nations Framework Convention on Climate Change [UNFCCC], 2015). Most developing countries have also included an adaptation component in their **nationally determined contributions (NDCs)**. In NDCs, countries outline to the international community the steps they plan to take, in light of national circumstances, to help fulfil the purpose of the Paris Agreement.

At the national level, the growing momentum of adaptation efforts can be seen in the number of developing countries advancing action on climate change adaptation through **national adaptation plan (NAP) processes**. These processes aim to facilitate the integration of climate change adaptation into development planning and budgeting processes at the national, sectoral and sub-national levels, and thereby systematically reduce the vulnerability of a country to the impacts of climate change in the medium and long terms. NAP processes assist countries to, inter alia, lead and coordinate adaptation at the national level, coordinate between sectors, assess their vulnerabilities, identify medium- and long-term adaptation needs, develop and implement adaptation actions that address identified needs, and monitor progress toward national adaptation goals. They can also be a key way to formulate and implement the adaptation component of countries’ NDCs (see Box 1). Specific approaches to initiating and pursuing NAP processes vary from country to country in response to their national circumstances, needs and development priorities (Price-Kelly & Hammill, 2015).

Box 1. Links between NAP processes and NDCs



More than 100 countries have expressed their commitment to addressing climate change risks by including an adaptation component in their NDCs. Roughly one-quarter of these countries made explicit reference to a NAP process in these documents (Deutsche Gesellschaft für Internationale Zusammenarbeit [GIZ], 2017b). If approached in an integrated manner, countries’ NAP and NDC processes can be mutually reinforcing, helping to ensure a coherent approach to national adaptation planning and action. While NDCs are a way for countries to share their adaptation goals, objectives, priorities and efforts with the international community, NAP processes can provide the conditions needed to achieve the adaptation goals outlined in NDCs. Also, NAP processes can inform the content of future NDCs, ensuring that they fully reflect nationally identified adaptation needs and priorities. Thinking about the links between these two processes from their beginning can help build the political and financial support needed for effective national adaptation planning and implementation. Countries can create these links by including key people in both processes, strengthening communication between responsible ministries, coordinating schedules, and considering complementary monitoring and reporting systems (GIZ, 2016, 2017b).

Governments will require financial resources throughout the entire NAP process—from initiation to implementation, monitoring and evaluation of prioritized adaptation actions.¹ The amount of financing required will vary from country to country depending on a range of factors. These factors include the level of current and future climate impacts experienced by a country, the amount of climate risk assessment and adaptation planning the country has already done, and the number and scope of priority actions the country has identified. Regardless of a country's circumstances, it is expected that the NAP process will require substantial funding. Finance will be needed particularly to implement prioritized adaptation actions in different sectors and at different scales.² This funding will not come from a single source. Countries will need to strategically combine funding from a variety of sources to finance their NAP processes and achieve the adaptation goals in their NDCs. These sources of funding may be domestic or international, and public or private.

In recent years, a significant amount of literature on the different sources of financing for adaptation in general has been published. However, very little attention has been paid more specifically to financing NAP processes and how this may contribute to achieving adaptation goals in NDCs. As more countries initiate and advance their NAP processes, they **need specific guidance on how to secure financing for these processes**, particularly for the implementation of prioritized adaptation actions.

This guidance note aims to address this gap by providing an overview of existing sources of finance for a country's NAP process. It also identifies issues to consider in regard to accessing finance from these sources. Specifically, it has the following **main objectives**:

- Provide a clearer understanding of the NAP process from a financing perspective and the relative amount of finance needed for its different phases.
- Present the range of potential sources of finance and identify which sources may be more appropriate for different phases of the NAP process.
- Suggest practical steps that countries might take throughout the NAP process to increase their likelihood of securing finance from different sources.

This guidance note is meant to serve as supplementary material to the [NAP technical guidelines](#) developed by the Least Developed Countries Expert Group (LEG). It is primarily targeted at NAP focal points, other government ministries engaged in adaptation planning processes, and development cooperation practitioners supporting these processes. The content of this guidance note is not prescriptive. Instead, it presents readers with options and issues to consider as they develop their approaches to securing finance for the NAP process. Suggestions are provided for further reading on different aspects of climate finance, drawing on the rich array of available literature.

The guidance note begins with an overview of the NAP process, its financing needs and the categories of funding sources (section 2). These potential sources of financing are then explored in more depth, namely domestic public finance (section 3), international public finance (section 4) and private sector finance (section 5). Each of these sections explores the potential role of these finance sources in supporting elements of the NAP process, noting both opportunities and challenges. Section 6 explains the need to develop robust financing strategies to support NAP processes and gives guidance on how to prepare these strategies.

1 Within this guidance note, "adaptation actions" are defined as projects, programs and other initiatives countries undertake to reduce vulnerability to climate change.

2 An estimate of the amount of financing required for NAP processes is not available. This statement is based on estimates of how much finance developing countries need to support adaptation more generally. Previous global estimates have suggested ranges from US\$70 billion to US\$100 billion per year by 2050. Estimates based on sectoral and national analysis, though, have forecasted costs of US\$140 billion to US\$300 billion by 2030, and US\$280 billion to US\$500 billion by 2050. Estimates of adaptation costs vary significantly depending on factors such as the assumptions made in their calculations, foreseen climatic changes and methods used (UNEP, 2016).

Throughout the entire publication, subsections labelled “Key issues for consideration” draw the reader’s attention to issues they might want to think about when assessing the appropriateness of a financing source given their needs and circumstances. These subsections also discuss practical steps that countries can take during the NAP process to secure financing from different sources in the future.

The guidance note ends with a summary of key points NAP teams³ could keep in mind as they determine how to secure the financing required throughout their NAP processes (section 7).

3 In this document, “NAP team” refers to the collective of people leading and coordinating the NAP process in a given country.

2 A Financing Perspective on the NAP Process

This section gives a general overview of the NAP process and takes a closer look at it from a financing perspective. It also introduces the range of sources of finance available to developing countries that they may use to support their NAP processes.

2.1 Overview of the NAP process

The NAP process was established under the UNFCCC in 2010 (see Box 2). The process is meant to enable developing countries, particularly least developed countries (LDCs), to **identify their medium- and long-term adaptation needs and to develop and implement strategies and programs to address those needs**. As expressed in UNFCCC decisions, it is a continuous, progressive and country-driven process that seeks to align with national priorities and sustainable development objectives. It consists of four elements: (A) laying the groundwork and addressing gaps; (B) preparatory elements; (C) implementation strategies; and (D) reporting, monitoring and review (UNFCCC, 2012). These elements are further broken down into detailed steps and activities in the [NAP technical guidelines](#), developed by the LEG in 2012. This gives countries a flexible, non-prescriptive way to approach the NAP process (LEG, 2012).⁴

Box 2. Background on the NAP process



The NAP process was established under the Cancun Adaptation Framework (Decision 1 CP.16), which was part of the Cancun Agreements negotiated during the 16th Conference of the Parties to the UNFCCC in 2010. The decision focused on enabling effective adaptation planning in LDCs, while inviting other developing countries to use the same modalities to support the formulation of NAPs (UNFCCC, 2011). The following year, Parties further elaborated the details of the NAP process and agreed that it has two objectives: “to reduce vulnerability to the impacts of climate change, by building adaptive capacity and resilience” and “to facilitate the integration of climate change adaptation, in a coherent manner, into relevant new and existing policies, programmes and activities, in particular development planning processes” (UNFCCC, 2012, p.80). A commitment to developing or enhancing adaptation planning and implementation, including through the formulation and implementation of NAPs, was further articulated in Article 7 of the 2015 Paris Agreement (UNFCCC, 2016a). More information on the evolution of NAP processes under the UNFCCC can be found at [NAP Central](#).

⁴ The steps and activities outlined in the technical guidelines prepared by the LEG are consistent with the guiding principles for adaptation in the following UNFCCC decisions: Decision 1/CP.16, paragraph 12 (UNFCCC, 2011), Decision 5/CP.17, paragraphs 2 to 4 (UNFCCC, 2012) and Article 7, paragraph 5 of the Paris Agreement (UNFCCC, 2016a).

The NAP process should be undertaken using a gender-sensitive, participatory and transparent approach that takes into consideration vulnerable groups, communities and ecosystems (UNFCCC, 2012). The process may be led by a national focal point, which is typically situated in a single ministry or agency (often environment). However, the process involves a wide range of actors, including other government ministries, departments and sub-national authorities, as well as civil society and private sector actors.

2.2 A closer look from a financing perspective

Actors both within and outside of government need financing for activities throughout the entire NAP process—from initiation through planning, implementation, monitoring, evaluation and review. However, both the financing needs and sources available to support activities within this process vary greatly. Therefore, when looking at the NAP process through a financing lens, it is helpful to distinguish between **two broad phases**:

- **Development phase.** This phase comprises activities related to initiating, coordinating and maintaining the NAP process—thus, mainly the steps covered in the NAP technical guidelines. Costs associated with the development phase of the NAP process are primarily related to activities led by governments; however, some costs may also be associated with the activities of other stakeholders participating in the process.
- **Implementation phase.** This phase encompasses the actual preparation and implementation of individual adaptation actions prioritized through the NAP process. For this reason, the associated costs are significantly higher than those related to the development phase. Financing to cover these costs is also needed by a wider array of actors, including different sectors and levels of government, civil society and the private sector. National governments typically play a leadership and coordination role in securing this financing.

The differentiation of these two phases follows the language used in the relevant UNFCCC decisions, which refer to the process to “formulate and implement national adaptation plans” (Decision 1/CP.16). However, the two phases underline that the NAP process is iterative (see also Decision 5/CP.17) and emphasizes that it should lead to the implementation of concrete adaptation actions. The financing requirements and the opportunities associated with the implementation of concrete adaptation actions are both somewhat different from those of the four elements of the NAP process described in the NAP technical guidelines. For this reason, this guidance note treats the implementation phase separately from the development phase.

Figure 1 shows the **key elements that require financing throughout a NAP process**. The figure displays the iterative nature of the two phases. Activities related to developing implementation strategies (C) and monitoring, reporting and review (D) link the development and implementation phases. The figure also reflects the crosscutting aspects of capacity development, institutional strengthening and stakeholder engagement that occur throughout the entire process. In addition, the figure highlights that the detailed preparation and implementation of specific adaptation actions refer to various climate-sensitive sectors. Because of this, the process typically involves active engagement and leadership of a range of government ministries, not just the environment ministry.

The NAP process is informed by lessons learned and new information, particularly with respect to observed and projected changes in climate. This information is integrated into the process over time. Therefore, in practice, the many elements of the development and implementation phases are happening at the same time, with each informing the other.

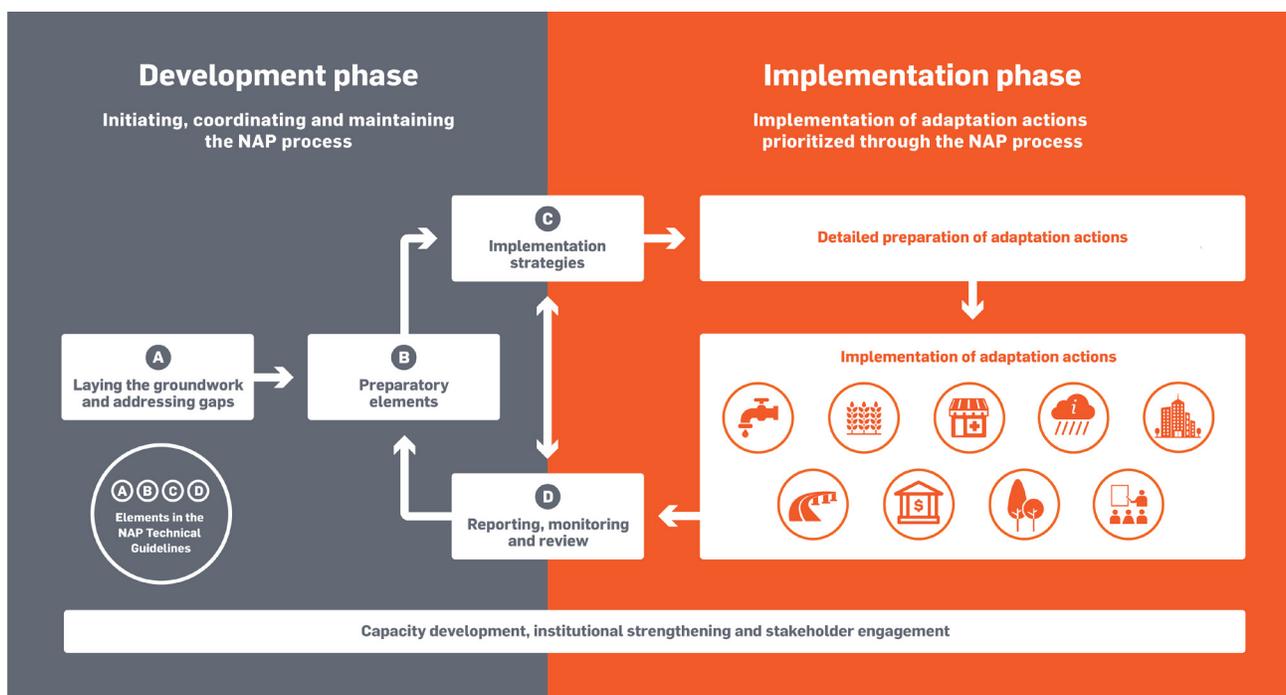


Figure 1. The NAP process: Key elements requiring finance.

Table 1 presents the **main activities in each of the elements** shown in Figure 1. The activities identified are based on the NAP technical guidelines, as well as experiences from supporting developing countries in their NAP processes and other recent related adaptation processes. The table refers, in brackets, to the relevant steps from the NAP technical guidelines.⁵ It further shows the implementation phase as having fewer elements compared to the development phase. However, it is important to note that financing needs in the implementation phase are expected to be much higher than in the development phase. This is due to the range and scale of potential adaptation actions that may be implemented.

The NAP process may identify actions that focus on different dimensions of adaptation. This includes institutional dimensions (e.g., governance structures, laws and policies), social dimensions (e.g., educational, behavioural and informational needs), and structural/physical dimensions (e.g., infrastructure and technologies that address climate risks) (Noble et al., 2014). Within these broad categories, a country’s NAP process may prioritize a wide range of adaptation actions for implementation. Table 1 provides examples to illustrate the range of activities that may require financing.

⁵ Note that some of the steps from the NAP technical guidelines have been expanded, merged and/or simplified for the purpose of clarity.

Table 1. Key activities needing finance in the development and implementation phases of the NAP process.

Element	Key activities	
Development phase		
Laying the groundwork and addressing gaps (A)	<p>Launching the process and establishing institutional arrangements (A1)</p> <p>Stocktaking: Identifying available information and capacities (A2)</p>	Capacity development (A3, C3), institutional strengthening and stakeholder engagement
Preparatory elements (B)	<p>Conducting climate risk and vulnerability analyses (B1, B2)</p> <p>Identifying, reviewing and appraising adaptation options (B2, B3)</p> <p>Compiling and communicating adaptation planning documents (B4)</p> <p>Integrating adaptation into national development and sectoral planning (B5, C1), sub-national planning processes and budgeting</p>	
Implementation strategies (C)	<p>Prioritizing specific adaptation actions (sectoral, sub-national, private sector) with participation of stakeholders</p> <p>Developing strategies for financing and implementation (C2)</p> <p>Strengthening frameworks for implementation (C3, C4)</p>	
Reporting, monitoring and review (D)	<p>Monitoring and evaluating the NAP process (D1)</p> <p>Establishing monitoring and evaluating systems for adaptation (D1)</p> <p>Collecting and analyzing data (D1)</p> <p>Integrating new information and analysis</p> <p>Reviewing the NAP process and updating planning documents (D2, D3)</p> <p>Documenting and disseminating information (D4)</p>	
Implementation phase		
Detailed preparation of adaptation actions	<p>Engaging sub-national actors, civil society, private sector and development partners</p> <p>Designing, in detail, adaptation programs, projects and initiatives to implement priority adaptation actions</p> <p>Comprehensively estimating costs for individual adaptation programs, projects and initiatives</p> <p>Preparing individual funding proposals and business cases</p>	Capacity development (A3, C3), institutional strengthening and stakeholder engagement
Implementation of adaptation actions	<p>Indicative examples:</p> <ul style="list-style-type: none"> • Improving access to information for adaptation <ul style="list-style-type: none"> – Delivering targeted public engagement and outreach campaigns to raise awareness of climate risks and adaptation strategies – Establishing systems to deliver climate information services to sub-national actors, including local organizations and communities – Strengthening agricultural extension service providers to support climate-resilient agricultural practices • Supporting access to and sustainable management of resources for adaptation <ul style="list-style-type: none"> – Creating opportunities to diversify livelihood strategies to include activities that are less climate-sensitive – Developing adaptation-oriented financial services for vulnerable communities – Promoting efficient use of water and other climate-sensitive resources – Establishing regulations for sustainable natural resource management to reduce the vulnerability of communities and ecosystems • Investing in infrastructure and technology <ul style="list-style-type: none"> – Establishing weather stations and early warning systems – Acquiring software for climate analysis and modelling – Reinforcing roads and other major infrastructure to withstand climate extremes and uncertainty – Developing and improving climate-resilient seeds, irrigation systems and other technologies to reduce vulnerability in the agricultural sector – Constructing protective infrastructure (such as flood protection structures) 	

All the activities shown in Table 1 require time and resources and therefore incur a cost. The type of expenses and the amount of funding needed are specific to individual country contexts. The **costs associated with the NAP process** can be grouped into two general categories:

- **Operating costs.** These are the ongoing expenses incurred to support the coordination and facilitation of the NAP process throughout its development and implementation phases. These include human resources, equipment and communication costs. They also include administrative costs for NAP-related activities, such as those for financial oversight and the managing, monitoring and evaluating of programs, projects and initiatives.
- **Investment costs.** These are the costs associated with investments in developing and maintaining infrastructure and technologies for adaptation. These include construction materials and specialized equipment, research and development, and public goods such as education and health care systems.

Most of the costs associated with the development phase of the NAP process are likely to be associated with activities undertaken by governments, including the NAP team, sectoral ministries, sub-national authorities and state agencies. In the implementation phase of the NAP process, as individual adaptation actions can be implemented by a wider array of actors, different levels of government, civil society organizations and private sector actors will require financing. From the beginning of the NAP process, NAP teams should thus consider how financial resources for this phase will be secured, bringing in stakeholders that will later be involved in implementation.

2.3 Financing options for the NAP process

A wide range of sources are available to finance the NAP process and thereby achieve the adaptation goals in a country's NDC. Table 2 gives an overview of these sources and the opportunities they present for financing the NAP process. As reflected in the table, these options may be broadly categorized in two ways:

- Whether the source is **domestic or international**
- Whether the investor is **public or private**

Countries need to think about how to combine these different sources to cover the range of costs of the development and implementation phases of the NAP process. In most cases, this will involve a combination of leveraging existing funds, attracting additional investments and generating new financing streams. It is worth bearing in mind that **finance for adaptation goes beyond what may be specifically labelled as climate finance**. Sectoral actions (e.g., establishing wastewater treatment facilities or improving rural health posts) or cross-sectoral development investments (e.g., establishing social protection systems or strengthening community organization) can facilitate adaptation or even directly lead to reduced climate risks. Similarly, private sector actors may take measures to address business continuity risks that are not necessarily considered adaptation. These various sources of finance are described in further detail in the remainder of this guidance note.

Table 2. Overview of potential sources of finance for the NAP process.

Sources of finance		Description	Opportunities for financing the NAP process	Guidance note section
Domestic public finance	Domestic government revenues	<p>Public sector financial resources, raised and managed by the government</p> <p>Allocated in annual budgets based on short- or medium-term plans for government departments/agencies or transfers to non-state actors</p> <p>Fiscal instruments (taxes, subsidies, bonds, debt conversion) may be used to generate additional revenue or redistribute existing revenues</p> <p>Domestic climate funds may be used as financing vehicle to channel funds</p>	<p>Predictable and consistent source of funding that can support both the development and implementation phases of the NAP process</p> <p>Enhances national ownership of the NAP process</p> <p>Can leverage⁶ other sources of financing for adaptation</p>	3
International public finance	Bilateral providers	<p>Public funds provided from one country to another to support particular sectors, programs or projects, including cross-sectoral actions</p> <p>Includes official development assistance, other official flows and export credits</p> <p>Instruments for providing finance include grants, loans (concessional and non-concessional), guarantees, insurance and equity</p>	<p>Flexible funding source that presents significant opportunities to fund both development and implementation phases of the NAP process</p> <p>Particularly useful for innovation, as well as enabling activities such as capacity development and strengthening of institutions and systems for adaptation</p>	4
	Multilateral providers	<p>Predominantly public funds pooled from multiple governments delivered through institutions with collective governance structures as well as institutions' own resources</p> <p>Mechanisms include multilateral funds (such as climate funds and sectoral funds) and multilateral development banks (MDBs)</p> <p>Financing instruments may include grants, loans (concessional and non-concessional), insurance, guarantees and equity</p>	<p>Climate-focused funds have windows specifically designed to support the development phase of NAP processes</p> <p>Climate and sectoral funds can further finance implementation of adaptation actions</p> <p>MDBs can finance implementation of adaptation actions with higher levels of concessionality than commercial banks</p>	4
Domestic and international private finance	Private sector actors	<p>Non-state organizations and individuals engaged in commercial activities (Pauw, 2015), including both domestic and international actors</p> <p>Includes enterprises (such as companies and private foundations) and financiers (such as commercial banks, insurance companies and investment funds)</p> <p>Instruments for private sector finance include loans, microfinance, credit lines, private bonds, subordinated debt, venture capital, guarantees, insurance, grants and remittances</p>	<p>Financing the implementation phase of the NAP process, i.e., adaptation actions by governments or non-state actors</p> <p>Investment in new business opportunities that support adaptation and reduce climate risk</p> <p>Investments to protect existing business practices from climate impacts</p>	5

6 In this guidance note, "leveraging" means using a comparatively smaller investment to attract larger amounts of finance from public and/or private sources.

3 Domestic Public Finance Options

Every element of the NAP process needs some funding from domestic public sources. When the NAP process begins, national governments must invest human and financial resources to coordinate the process and facilitate adaptation planning across sectors and levels of government. Over time, consistent with the objectives of the NAP process, governments need to take steps to more systematically integrate the costs associated with the development and implementation phases of the NAP process into national budgets. Since many adaptation actions are a public good, domestic public finance is also required to fund the implementation of adaptation priorities identified through the NAP process. Using domestic public finance for these purposes can give governments greater control over how they allocate funds to meet prioritized needs.

This section shows how NAP teams can use domestic budgets to finance the development and implementation phases of the NAP process (see Figure 2). It also presents the potential opportunities and challenges associated with using fiscal instruments to generate new revenue sources and redistribute existing domestic finance. Finally, it looks at the establishment of domestic climate change funds as financial vehicles.

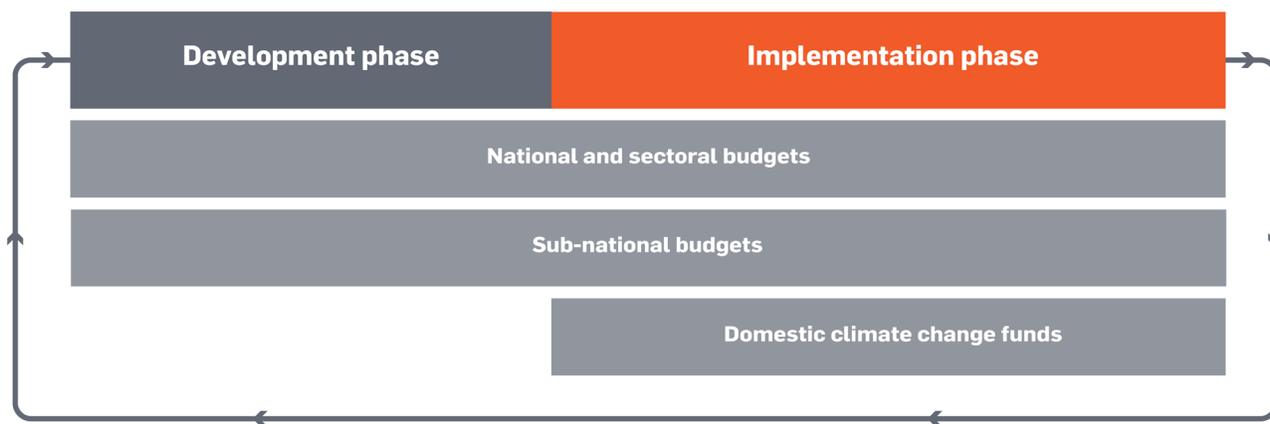


Figure 2. Potential role of domestic public finance in supporting the NAP process.

3.1 Domestic public budgets

Domestic budgets can be a **key source of financial resources for adaptation**. Compared to other sources, they have the potential to provide relatively predictable and consistent financing for NAP processes, particularly for operating and maintaining the process over the medium and long terms. Using domestic resources for the implementation of adaptation actions shows that a country is committed to advancing adaptation efforts. This demonstrated commitment can help leverage more public and private investment. Use of in-country resources may increase the likelihood that adaptation efforts will build on existing systems and institutional arrangements. This means that they will be integrated into government processes that already exist, rather than take place through short-term projects or programs established in parallel to standard government systems. However, while many countries have moved forward in establishing climate change policies and developing plans to operationalize them (including adaptation plans), in most cases these have not yet been integrated into the planning processes that drive budgeting (United Nations Development Programme [UNDP], 2015a). This makes it difficult for countries to benefit from using their domestic budgets to finance the NAP process.

Financing from domestic budgets can be used to support NAP processes in many ways, including the following:

- Covering ongoing operational costs throughout the development and implementation phases of the NAP process. These include costs of human resources, equipment and communication.
- Covering other costs associated with integrating adaptation priorities into planning processes that drive budget allocations. These include costs of personnel time and expert inputs.
- Investing in crosscutting measures that enable sound implementation of adaptation actions, such as climate services and adaptation monitoring and evaluation systems.
- Allocating funding for the implementation of specific adaptation actions by government ministries, sub-national authorities or other actors.

Domestic public budgets are not in the hands of a single entity. Finance and/or planning ministries are generally the main decision-makers for budget allocations (Miller, 2012). However, allocating resources for the NAP process within domestic public budgets will typically also involve the ministry responsible for coordinating the process, often the environment ministry. Financing from the central budget may be designated for use by the environment ministry, other government ministries, sub-national authorities, state agencies or non-state actors. Designated funds may be allocated to recipients' core budgets (e.g., to pay for operating costs, engage additional human resources or strengthen crosscutting support structures). These funds may also be used to implement specific adaptation programs, projects or initiatives arising from the NAP process.

Domestic budgets also present **a key opportunity to systematically allocate adaptation-related resources to actors at sub-national levels**. This is critical because the implementation of adaptation actions will largely occur at sub-national levels, yet these actors may face barriers in accessing international sources of public and private finance. How resources are allocated to sub-national levels will depend on the degree of decentralization that has occurred in a country and the systems already in place for transferring and tracking funds (see Box 3).⁷

⁷ For more information on linking national and sub-national adaptation, please see the NAP Global Network guidance note [Vertical Integration in National Adaptation Plan \(NAP\) Processes](#) (Dazé, Price-Kelly, & Rass, 2016).

Box 3. Tracking adaptation finance



Efforts to enhance the tracking of adaptation finance are growing at the national level, increasing the transparency of climate finance flows. Better tracking of adaptation finance can enable countries to identify gaps, improve coordination and management, and draw conclusions from different financial mechanisms. These outcomes can increase the potential to raise additional finance for climate change adaptation (Tirpak, Brown, & Ballesteros, 2014).

A variety of methods have been deployed to track national climate finance for adaptation (World Bank, 2015). One successful method is the UNDP's [Climate Public Expenditures and Institutional Review](#). This tool makes a one-off systematic qualitative and quantitative analysis of a country's public spending and how it relates to climate change. The tool has been instrumental in helping decision-makers better understand the amount of resources they need to finance their national response to climate change (UNDP, 2015b). Similarly, the [Adaptation Finance Accountability Initiative](#) aims to analyze how countries are using adaptation funding and how it is supporting local communities.

These efforts have revealed challenges and problems. One challenge is determining what constitutes "adaptation finance" given the strong links between adaptation and development (Wilkinson et al., 2014). A lack of awareness of what "adaptation" means and a lack of agreement on comprehensive systems for coding and tracking adaptation investments further complicate efforts (Jones et al., 2012). Another challenge is duplication and lack of coordination between levels of government as well as funders and project implementers. This includes discrepancies between donor and recipient reporting. These challenges make it difficult to get a complete overview of how funds are disbursed at different levels of government (King'uyu, 2016). Investments that build capacity and strengthen reporting mechanisms, and thereby improve national climate finance tracking, can be considered part of countries' efforts to implement their NAP processes. These investments can assist countries in determining whether priorities are being met and better enable them to track value for money and the impact of investments.

The most suitable approach for allocating financing to the NAP process depends on the **planning and budgeting cycle** of each country. Generally speaking, there are two key entry points within this cycle (GIZ, 2014a):

- a) **Medium-term expenditure framework (MTEF)**. This is generally based on a national development or economic strategy. It provides a broad framework of planned expenditures and ceilings for resource allocation in particular areas. The timeline is usually three to five years. Some countries may also have sector-specific medium-term budgets.
- b) **Annual budgeting process**. This is based on annual development or sectoral plans. This process sets out the yearly allocations for operational spending and for specific programs or activities.

As the NAP process itself has a medium- to long-term perspective, it provides a basis for projecting medium-term financing needs. These needs can be integrated into MTEFs. This integration can create the conditions for sustainable financing for the implementation of adaptation actions. However, if the timelines for these different processes do not align, this approach may not be practical in the near term. Further, as some countries do

not have MTEFs, they may not have a strong foundation for allocating resources for medium-term adaptation priorities (GCCA+, n.d.). In these cases, annual budgets may be the most logical entry point, at least initially. These shorter-term instruments may offer more flexibility to allocate resources to activities related to the NAP process, particularly during its development phase.

Key issues for consideration



- Analyzing a country's planning and budgeting procedures early in the NAP process can serve to identify specific entry points in the national budget cycle for integrating adaptation financing needs (see Case Study 1 for an example).
- Involving key actors from institutions responsible for budget allocation, such as the finance and/or the planning ministry, is crucial to capitalize on the entry points identified and to carry out targeted efforts to integrate adaptation.
- Developing and/or improving cost estimates for adaptation priorities enables more robust communication of financing needs to the key institutions responsible for budget allocations.
- Developing practical, country-specific guidance documents for planning officers in sectoral ministries can raise awareness on when and how they can integrate climate change issues and financing needs into the planning and budgeting cycle.
- To ensure effective allocation, distribution and tracking of financing related to the NAP process, NAP teams may need to advocate to colleagues in ministries responsible for planning and/or finance for improvements to a country's existing finance system (e.g., establishing an MTEF or strengthening expenditure-tracking systems).

Case Study 1. Aligning the NAP process to Togo's national budget-planning process



The Government of Togo has taken steps to align its NAP process with its national development and budget planning cycle. Specifically, the government analyzed its planning and budgeting system to identify relevant steps and entry points to align the NAP process with existing procedures. It did this with support from GIZ's Climate Policy Support Programme and a bilateral Study and Expert Fund commissioned by the German Federal Ministry for Economic Cooperation and Development (GIZ, 2014b). As part of this process, the Togolese government set up a Technical Committee for Coordination of the Integration Process of Climate Change in Planning and Budgeting in Togo. The committee was co-chaired by the Ministry of Development Planning, the Ministry of Economy and Finance, and the Ministry of Environment and Forest Resources (Ministère de l'Environnement et des Ressources Forestières, 2016a).

The analysis involved interviews with key stakeholders during the early stages of the development phase, including senior officials from key ministries. Results of the analysis showed that climate change adaptation considerations were to a certain degree already reflected in the national development strategy and many sectoral plans (GIZ, 2014b). Following the analysis, the committee identified the framework letter of the 2017 budget process as an entry point for integrating adaptation into the budgeting process, due to its importance in developing the state budget.

Members of the Medium Term Budgeting Framework Committee attended a training workshop on integration of climate change adaptation into the budget process for 2017 to 2019 (Sama et al., 2016). Follow-up activities will include identifying the individual steps of the budget process, along with entry points and timeframes, and evaluating the respective cost for each climate change adaptation option to be incorporated into budgeting and programming systems.



3.2 Using fiscal instruments

Fiscal instruments such as taxes and subsidies are another way governments can raise additional revenue or redistribute existing domestic finance to support implementation of adaptation actions. New revenue raised using these instruments can be allocated to general government budgets or earmarked to support a specific objective related to the development and/or implementation phases of the NAP process. Fiscal instruments also can be tailored to encourage actions that reduce climate risk and discourage activities that are maladaptive (NAP Global Network, 2016). Moreover, they can be used to generate predictable and dependable revenue streams (Innovative Financing Initiative, 2014). However, while fiscal instruments have already been used to finance climate mitigation efforts, there is still a widespread lack of experience in the use of these instruments to address adaptation needs.

Governments currently use a wide range of fiscal instruments for many purposes. Of these, the following could potentially be used to **generate new revenue** for the NAP process:

- **Taxes, levies and fees.** Governments can introduce taxes, levies and fees on goods or services to raise government revenues or change incentive structures. Examples include gasoline taxes, carbon taxes, and levies in national emissions trading systems at the point of allowance allocation or during allowance trading. Revenue raised through these instruments can be earmarked to support the implementation of adaptation actions.
- **Bonds.** Governments can raise money by issuing bonds for a period of time at a fixed or variable rate of interest for investors to purchase. For example, governments can issue bonds tailored to their diaspora community. These diaspora bonds can finance projects at a lower rate of interest than might be available from other investors. India has successfully issued these bonds, and Nigeria has initiated their use as well (UN Department for Economic and Social Affairs [UN DESA], 2012).
- **Debt conversion.** Governments may negotiate with one or more creditors to have a portion of their debt cancelled to release funds for use in a designated initiative. Existing examples mainly include debt-for-nature swaps and debt-for-development swaps (UN DESA, 2012). Governments have shown interest in debt-for-climate swaps. Analysis suggests that such an instrument may be suited to specific situations, such as countries with high debt levels, improving governance capacities and high vulnerability to climate change (Warland & Michaelowa, 2015).

Fiscal instruments can also be used to **redistribute existing or new government revenue** to achieve desired adaptation outcomes. The following are some prominent examples:

- **Subsidies.** Governments may use a portion of their available budgets to subsidize the cost of a good or service to promote the uptake of technologies or practices that build adaptive capacity. For example, individuals or companies could receive subsidies that encourage them to buy more efficient irrigation technologies or drought-resistant seeds. As well, tax breaks may be provided to companies to encourage them to invest in the development or introduction of adaptation technologies.
- **Subsidy reform.** Governments can reduce existing subsidies, such as fossil fuel subsidies (see Case Study 2). This would enable the reallocation of available funding to activities that decrease climate risk and/or discourage behaviours that increase climate risk.

Case Study 2. Fossil fuel subsidy reform in Indonesia



In 2014, the Indonesian government renewed its attempts at gasoline and diesel subsidy reform. The high cost of fossil fuel subsidies was preventing the country from making important improvements to poor infrastructure and social services (Benes et al., 2016). Moreover, these subsidies were mostly benefitting middle- and upper-income households (Lontoh et al., 2016).

Declining global oil prices in 2014 provided a window of opportunity to pursue fossil fuel subsidy reform at a time when it would have a less dramatic impact on consumer purchasing power (Benes et al., 2016). In November 2014, Indonesia introduced major reforms that eliminated subsidies for gasoline (except for distribution costs outside of the country's central islands) and implemented a "fixed" subsidy of IDR1,000 per litre for diesel (Pradiptyo et al., 2016). To moderate opposition to the price increase and to counter the adverse economic and social impacts on low-income households, the government used an unspent budgetary line to finance a social security program, introducing a new card system to distribute education and health assistance (Beaton et al., 2017).

The reforms saved the government IDR186 trillion (US\$13.8 billion), freeing up significant public funds for alternative investments. These funds were used to increase the budgets of ministries linked to special programs to boost growth and reduce poverty (Pradiptyo et al., 2016). The government also allocated IDR120 trillion (US\$8.9 billion) to programs such as village funds, agriculture, education, social security, and various kinds of public works and infrastructure programs. These investments may be expected to increase the adaptive capacity of vulnerable populations in the medium and long terms.

Although many subsidies remain, Indonesia has seen a significant change in policy. It has shown the potential for fossil fuel subsidy reform to free up resources and reallocate them to key sectoral initiatives, including the implementation of adaptation priorities identified through the NAP process.



These different instruments have the potential to raise or redistribute government revenue to support the development and implementation phases of the NAP process. However, careful consideration should be given to their use prior to implementation. These mechanisms are challenging and time-consuming to introduce. If they are poorly designed, they can have unexpected negative impacts that may result in greater risk of communities and sectors being adversely impacted by climate change. Their use also may adversely affect vulnerable social groups such as the poor and women. Furthermore, countries need to have the right conditions and capacities in place to ensure the successful introduction of these instruments. Diaspora bonds, for example, have been successful in countries with large, well-established and more prosperous diaspora communities with a high level of trust in the national government of their country of origin. The potential for their success in countries without these conditions is uncertain, and some bond issuances have failed (UN DESA, 2012).

Key issues for consideration



- Assessing existing capacity to properly design and implement fiscal instruments can help inform decisions regarding their potential usefulness in financing the NAP process. In some situations, significant capacity building may be required to enable the introduction of identified fiscal instruments.
- Establishing strong relationships with ministries of finance can increase their understanding of the need to adapt to climate change, the NAP process and its associated costs. This will enhance the likelihood of fiscal instruments being introduced specifically to finance adaptation actions.
- Considering the potential political sensitivities associated with introducing new taxes, levies, fees and/or subsidy reforms is important, as these may be unpopular with citizens and the private sector.
- The feasibility of earmarking newly generated revenue for the development and implementation phases of the NAP process may be considered. Earmarking may be viewed negatively by government leaders, as it limits their ability to reallocate funds as circumstances change and may introduce inefficiencies in financing processes.

3.3 Domestic climate change funds

Many developing countries have established national and/or sub-national climate change funds dedicated to financing their adaptation (and mitigation) priorities. Generally, national climate change funds have been established to **create a financial vehicle** through which climate-related finance (domestic and/or international) can be channelled, programmed, disbursed and monitored. An accountable and effective domestic climate change fund, supported by regular domestic financial resources, can do the following:

- Act as a financing vehicle for priority adaptation projects and programs at the national, sub-national and sectoral levels identified during the NAP process.
- Increase national financial management capacities and accountability by developing effective financial controls, monitoring and reporting mechanisms, and capacity for project preparation, project appraisal and review of climate programs.
- Position national governments to diversify their resource-mobilization strategies and enhance credibility with international donors (Climate and Development Knowledge Network, 2015).

Climate change funds can be designed in different ways and should be tailored to national circumstances and needs. The components of a fund can differ with respect to their objectives, funding sources, governing bodies and implementing organizations. **Resource mobilization** for the fund can be in the form of finance from domestic or international, and public or private sources (Flynn, 2011). Domestic contributions to these funds may be financed, if desired, through the use of selected fiscal instruments. International contributions may be provided as part of bilateral assistance. National climate change funds can also become accredited to receive financing directly from different multilateral funds (e.g., the Green Climate Fund), thereby facilitating greater access to international climate finance. Deciding where the financing will come from is one of the most important choices that will shape the fund and must be grounded in the objectives of the fund.

Most **existing national climate funds** are financed by a combination of domestic and international sources. Examples include the [Indonesia Climate Change Trust Fund](#),⁸ the [Amazon Fund](#)⁹ and the [Mali Climate Fund](#).¹⁰ The [Philippines's People's Survival Fund](#), though, is an example of a fund financed on an annual basis solely through domestic sources. It consists of PHP1 billion (approximately US\$20 million) per year allocated to adaptation programs and projects at the local level across different sectors such as agriculture, environment, health and infrastructure (Fernandez, 2016).

Further, evidence from Kenya is showing how **sub-national climate funds** can enable local governments to prioritize investments that reduce climate risk and achieve adaptation priorities. Four Kenyan counties have established county-level climate change funds. These funds are structured so that they blend financial resources from international climate finance, multilateral development banks (MDBs), the private sector, the Government of Kenya and their own budgets. Legislation commits counties to contributing a minimum percentage of their development budget to finance local adaptation efforts. The county climate change funds are used for community-prioritized investments and promote mainstreaming of climate change adaptation into local planning and budget systems (Hesse & Pattison, 2013). This example shows how domestic climate change funds can advance local adaptation and further vertical integration in the development and implementation phases of the NAP process.

However, establishing domestic climate change funds comes with **challenges and risks**. First, there is a risk that national climate funds may ignore existing institutions or government systems with significant established capacity to channel resources. Often, new funds are new organizations without an established expenditure track record of efficient disbursement (African Development Bank [AfDB], 2012). Second, past examples have shown that full programming requirements and capacities for climate funds need to be considered during their establishment to ensure long-term successful operation. This applies to planning, project selection and approval, financial management, monitoring and evaluation, and internal control frameworks. Sustained funding is needed for staff and personnel—a major factor that has often been lacking, preventing long-term success and sustainability of funds (GIZ, 2012). Third, creating a separate body for financing climate change adaptation measures may prevent the integration of climate change within ministries through budgetary processes (AfDB, 2012).

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- 8 The national government of Indonesia established the Indonesia Climate Change Trust Fund to meet its climate change target set in 2009, but only became a national trust fund in 2015. The fund is considered a key institution in Indonesia's climate change architecture, supporting the implementation of national and local mitigation and adaptation actions. The fund has received financing and commitment support from various development partners, including the United States Agency for International Development, the United Kingdom Climate Change Unit and the Royal Danish Embassy. It also receives funding support from the Government of Indonesia's State Revenues and Expenditure Budget as its commitment to combating climate change (Government of Indonesia, 2015).
 - 9 The Amazon Fund was established to raise funds for efforts to prevent, monitor and combat deforestation, as well as to promote preservation and sustainable use of the Brazilian Amazon. International donors pay into the fund on the basis of verifiable reductions achieved in deforestation. Brazil is committed to using the funds for its further efforts in combating deforestation in the Brazilian Amazon region. The Amazon Fund is managed by the Brazilian Development Bank, which is also responsible for raising funds, facilitating contracts and monitoring projects and efforts (Government of Brazil, n.d.).
 - 10 The Mali Climate Fund combines funding sources from the Least Developed Countries Fund, the Adaptation Fund and the German government to support strategic priorities defined in its National Strategy for Climate Change. The fund lays out five mutually reinforcing objectives, is aligned with the national budgeting cycle, and makes funds available to national entities, UN bodies and civil society organizations (UNDP, n.d.).

Key issues for consideration



- Before deciding to establish a domestic climate change fund, it may be prudent to assess the potential to support the NAP process by using established institutions or systems for channeling financial resources and existing means of accessing and managing climate finance (e.g., regular government budgets).
- Countries should consider the political feasibility of establishing a climate change fund. This includes factors such as required support from parliament or the need to pass a new law or act.
- Establishing and effectively operating climate change funds requires sufficient capacity, including institutional and human resource capacity, and resources over the long term. Therefore, prior to establishing a fund, countries must keep in mind the need for a long-term and strong resource-mobilization strategy and a good understanding of the resources required (e.g., endowment funds, human resources) to operate a fund.
- Aligning the design and objectives of the climate change fund with national climate change strategies and identified NAP priorities can better enable countries to take full advantage of domestic climate change funds in supporting the implementation of adaptation actions. This includes defining the functions of the fund and how money can be channeled to the local level, where implementation of adaptation actions will occur.
- Countries should consider whether establishing sub-national funds (or sub-national funding windows within national funds) would strengthen the implementation of local-level adaptation actions and the vertical integration of NAP processes.

Suggested further reading about domestic public finance:



Frankfurt School UNEP Collaborating Centre for Climate & Sustainable Energy Finance (n.d.): [National Climate Finance Institutions Support Programme](#)

GCCA+ (n.d.): [Mainstreaming climate change in the budgetary process](#)

GIZ (2014a): [NAP Align: Recommendations for aligning national adaptation plan processes with development and budget planning](#)

Hurley & Voiturez (2016): [Financing the SDGs in the Least Developed Countries \(LDCs\): Diversifying the financing toolbox and managing vulnerability](#)

UNDP (2011): [Blending Climate Finance through National Climate Funds. A Guidebook for the Design and Establishment of National Funds to Achieve Climate Change Priorities](#)

UNDP (2012): [National Climate Funds: Learning from the experience of Asia-Pacific countries](#)

UNDP (2015b): [Climate Public Expenditure and Institutional Review \(CPEIR\): A Methodological Guidebook](#)

4 International Public Finance Options

As countries will need substantial funding to finance the NAP process, particularly its implementation phase, many will need to augment their own domestic resources with finance from international sources. International public finance is provided mainly by developed countries. This finance comes either directly in the form of bilateral assistance or indirectly through multilateral channels. It may be combined with private finance, such as through lending from MDBs.

The current **scale of international public finance for climate change adaptation is significant**. An estimated US\$22.5 billion was provided in 2014 to enable developing countries to adapt to climate change (United Nations Environment Programme [UNEP], 2016). Greater funding is expected in the coming years. Developed countries have restated their commitment to jointly mobilize US\$100 billion per year by 2020 (UNFCCC, 2016c). Financing for adaptation is projected to at least double by 2020 compared to levels in 2014 (Organisation for Economic Co-operation and Development [OECD], 2016b). The rest of this section explores the potential role of international sources of public finance, such as bilateral providers, multilateral funds and MDBs, in supporting the NAP process (as illustrated in Figure 3).

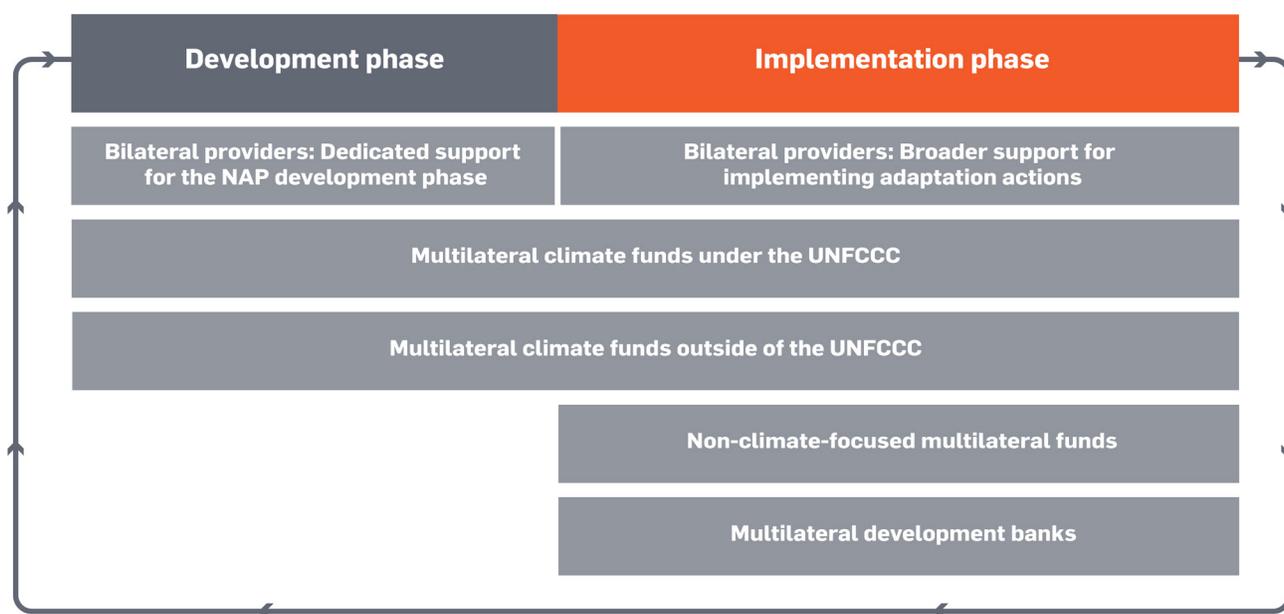


Figure 3. Potential role of international public finance in supporting the NAP process.

4.1 Bilateral providers¹¹

Bilateral climate finance has risen steadily in recent years. In 2013–2014, bilateral finance, including official development assistance (ODA) and other official flows, represented over 55 per cent of total climate finance from public sources. This included funds for both mitigation and adaptation (OECD & Climate Policy Initiative, 2015). According to ODA statistics from the OECD's Development Assistance Committee (OECD-DAC), in 2014–2015, over US\$8 billion was allocated to projects and programs addressing adaptation specifically. A further US\$6 billion was spent on initiatives addressing both adaptation and mitigation (OECD-DAC, 2016a). Thus, bilateral providers clearly represent an important source of financing for adaptation.

The amount of funding from this source is expected to increase. Bilateral mechanisms are emphasized as one of the key sources of finance for developing countries in implementing the Paris Agreement (UNFCCC, 2016a), compelling providers to build on and increase existing commitments. Several countries have indeed indicated their intention to increase bilateral finance for adaptation as part of achieving the 2010 commitment to increase climate finance for developing countries to US\$100 billion per year by 2020 (UNFCCC, 2016c). Moreover, rapidly developing countries such as China are increasingly providing bilateral assistance to less developed countries (Adaptation Committee, 2015). Financing from bilateral providers for climate change is provided through grants, concessional loans and non-concessional loans, amongst other instruments (OECD, 2016b).¹²

Bilateral support to NAP processes is being provided by ministries or agencies responsible for international development cooperation, and implemented through institutions such as technical assistance agencies or bilateral development banks.¹³ A number of bilateral providers are providing grant-based **technical assistance to advance the development phase** of the NAP process, often as part of a broader package of support for climate change policy and planning, institutional strengthening, and capacity building. For example, through Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Germany is providing comprehensive technical support at all stages of the NAP process in a number of countries (as illustrated in Case Study 3). Other countries providing support for the development phase include Australia, the European Union, the Netherlands, the United Kingdom and the United States (Adaptation Committee, 2015).

Whereas the number of bilateral providers specifically supporting the development phase of NAP processes remains limited, there are significant opportunities for developing countries to receive **support for the implementation of specific adaptation actions** from a wider range of providers. This includes the provision of both technical and financial assistance for adaptation. Particularly related to financial assistance, bilateral development banks like Agence Française de Développement from France or KfW Development Bank from Germany are important actors in terms of funding the implementation of individual projects and programs. Support for the implementation of prioritized adaptation actions can also be provided through instruments

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- 11 Within this guidance note, we have chosen to use the more comprehensive term "bilateral providers" instead of "bilateral donors." The term "providers" better reflects the diversity of sources and terms of provision of international public finance. In terms of sources, the number of countries providing international development assistance has increased beyond the more traditional group of donors involved in the OECD-DAC. This includes, for example, support provided by China, Mexico and South Korea to developing countries. As well, the channels through which international public finance is delivered have expanded, such as the use of export credits. This latter trend is evidenced by the emerging Total Official Support for Sustainable Development system being developed by the OECD. The system will track financial flows above and beyond ODA that are being invested as part of efforts to achieve the Sustainable Development Goals.
 - 12 The OECD-DAC reports that nearly 60 per cent of adaptation-related development financing to developing countries in 2013–2014 was in the form of grants (OECD-DAC, 2016b). As well, analysis of the reported adaptation-focused Fast Start Financing contributions of 36 countries and the European Commission between 2010 and 2012 shows that almost 70 per cent of the finance provided to governments, NGOs and companies in recipient countries was provided through grants and related instruments. The rest was provided through loans, guarantees and insurance (World Resources Institute, ODI, Institute for Global Environmental Strategies & Climate Advisers, 2013).
 - 13 Developed countries differ in terms of how they deliver their development cooperation. For information regarding how individual members of the OECD-DAC have organized the delivery of their development cooperation, see OECD (n.d.-a).

Case Study 3. Grenada's program on Integrated Climate Change Adaptation Strategies



In response to the anticipated impacts of climate change, the Caribbean state of Grenada has developed a number of climate change policies and strategies. These include a climate change policy and action plans, as well as sectoral strategies. However, even after these plans were created, substantial gaps remained that limited a coordinated and integrated approach to adaptation.

To address the issue, Grenada worked with its bilateral partner, the Government of Germany, to initiate the Integrated Climate Change Adaptation Strategies program. The main objective of the program is to increase the resilience of Grenada's vulnerable communities and ecosystems to climate change through a holistic approach that brings together different sectors and jurisdictions. The program is financed by the International Climate Initiative of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety. Grenada's Ministry of Education, Human Resources and the Environment, GIZ and UNDP are jointly implementing the program.

Under the Integrated Climate Change Adaptation Strategies program, Grenada initiated the NAP process to help the government understand how to integrate adaptation activities into national development planning and link local and sectoral activities with national policies. During the development phase of the NAP process, GIZ provided strategic assistance to the government. This assistance aimed to strengthen institutional capacities, identify national adaptation priorities and meet fiduciary principles (climate finance readiness) that would enable the country to directly access the Green Climate Fund (GIZ, 2015a).

such as specific budgetary support and basket financing¹⁴ to climate-sensitive sectors, and sector-wide approaches to integrating adaptation considerations into comprehensive sector development programming (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, 2008; OECD, 2006). These instruments go beyond financing of individual projects and have the potential to further incentivize a country's commitment to systematically integrating adaptation into planning and budgeting.

There are **two main delivery channels** for bilateral finance to support the development and implementation phases of the NAP process:

- **Bilateral commitments based on government-to-government negotiations.** These commitments build on country priorities and strategies (Global Partnership for Effective Development Cooperation, 2014). Within the framework of these commitments, implementation of adaptation actions may be financed in two ways. First, where climate change is identified as a priority for bilateral assistance, targeted adaptation projects may be funded as part of the overall portfolio (e.g., projects that aim to improve access to and use of climate information). Second, climate change considerations may also be integrated into specific programs in climate-sensitive sectors such as agriculture and water resource management (e.g., considering climate models for water availability in the design of irrigation systems). In addition, instruments such as targeted budget support, basket financing or sector-wide approaches that go beyond financing of individual projects may also be agreed upon through government-to-government negotiations.

14 "Basket financing" refers to donor- or government-led mechanisms that pool and manage funds from multiple contributors to finance shared priorities or channel funds into a specific sector (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, 2008).

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- **Targeted climate funds.** These funds provide financing for projects that are specifically designed to address climate change (both mitigation and adaptation). Examples include Germany's [International Climate Initiative](#), the [Nordic Development Fund](#), the United Kingdom's [International Climate Fund](#) and the European Union's [Global Climate Change Alliance](#) (GCCA+) program. The adaptation windows of these funds represent a key opportunity to access funding for the implementation of adaptation actions prioritized through the NAP process, particularly strategic priorities that cut across sectors. They typically operate through calls for proposals with specific focus areas. For example, the United Kingdom's climate fund identifies resilience building and risk management as one of its three focus areas (Government of the United Kingdom, 2015).

The development portfolio of most bilateral providers includes a combination of stand-alone climate change adaptation programming and the integration of adaptation considerations into programs supporting climate-sensitive sectors. As these providers tend to work closely with country governments to define development assistance priorities, the NAP process provides a strategic opportunity to communicate a country's adaptation needs in a coherent way and to integrate adaptation priorities into frameworks for development assistance, alongside other development priorities. In this way, bilateral finance may provide simpler and quicker access modalities than some multilateral mechanisms.

As well, the broad range of support modalities from bilateral providers means that **these funds can be used to finance the whole range of costs** associated with the NAP process. These costs include direct support to governments for operational costs as the process is being initiated; institutional strengthening, stakeholder engagement and capacity development for different actors involved in the process; infrastructure, equipment and improved systems for generation and communication of climate information; and strengthening of monitoring and evaluation systems. Bilateral providers place a strong emphasis on capacity development and technical assistance for adaptation, creating opportunities to finance the building of in-country capacity that may not be offered by other sources such as the private sector or domestic finance. Furthermore, when provided in the form of grants, this funding represents a low-risk source of finance for investing in innovative approaches to adaptation that could also leverage other sources, including private finance.

The extent to which bilateral finance may be a potentially important source of finance for the NAP process will vary from country to country, depending in part on existing relationships with providers. In LDCs, where ODA plays a significant role in financing development activities in general, there may be greater potential to gain bilateral support for the NAP process. Opportunities for bilateral funding for the NAP process will also be determined by the degree of emphasis on adaptation within each provider's funding strategies, both generally and in the country in question. For bilateral assistance to be an effective source of finance for the NAP process, donor coordination is critical to avoid duplication of efforts, in line with internationally agreed principles and mechanisms for aid effectiveness.

Key issues for consideration



- Gaining a clear understanding of the existing priorities and delivery channels of bilateral providers can help develop a targeted approach to accessing bilateral support for the NAP process. Ministries leading the process of bilateral negotiations represent an important source of information in this respect.
- Actively engaging in dialogue with bilateral providers and ministries involved in negotiations with them can further increase the chances that priorities identified in the NAP process will be reflected in future bilateral cooperation agreements.
- The effectiveness and sustainability of adaptation-related investments can be increased by considering how bilateral support (whether climate related or not) can complement other sources of financing for the NAP process. For example, bilateral resources can be used for capacity development alongside private sector investments in infrastructure or technology.
- Encouraging bilateral providers to coordinate efforts to support the NAP process can help maximize synergies and avoid duplication of efforts. For example, providers can build on existing donor coordination mechanisms or hold joint NAP-specific capacity-building events.

4.2 Multilateral funds

The international community has established several multilateral funds, both under and outside the UNFCCC, that can finance aspects of the NAP process. These include funds mandated by the UNFCCC to specifically support the development phase of the NAP process as well as funds mandated to finance climate change adaptation more broadly. Other climate- and non-climate-focused multilateral funds can also provide significant financing for the implementation of adaptation actions.

Funds established under the UNFCCC that may be accessed to support the NAP process are the Green Climate Fund (GCF), the Least Developed Countries Fund (LDCF), the Special Climate Change Fund (SCCF) and the Adaptation Fund (AF).¹⁵ The LDCF and SCCF are operated by the Global Environment Facility (GEF).

The **GCF** has been mandated by the UNFCCC to support the NAP process. It is expected to be a significant source of finance for both the development and implementation phases of the NAP process.¹⁶ The GCF's Readiness and Preparatory Support Programme can support the development phase, as it provides funding for:

- **Formulating NAPs and/or other national adaptation planning processes.** Countries can access up to US\$3 million in funding to support the initiation of NAP processes, augment ongoing planning processes, or support multi-country, programmatic approaches to formulating NAPs. These funds are to complement or build on other NAP-related initiatives and support (GCF, 2016c). They may be used to enhance activities undertaken during the development phase of the NAP process, such as conducting climate risk assessments and developing implementation strategies.

15 Unlike the GCF, LDCF and SCCF, the AF was established under the Kyoto Protocol and therefore is not an operating entity of the financial mechanism of the UNFCCC.

16 Under Decision 3/CP.17, the GCF was mandated to "support developing countries in pursuing project-based and programmatic approaches in accordance with climate change strategies and plans, such as ... national adaptation plans" (UNFCCC, 2013). It was further requested to expedite support for the formulation of NAPs within the Paris Agreement (Decision 1/CP.21, paragraph 46) (UNFCCC, 2016a).

- **Building capacity to effectively engage with the GCF.** Countries can access up to US\$1 million per year to strengthen institutional capacities to effectively access, program and deploy GCF financing (GCF, n.d.-a).¹⁷ These funds may be used to strengthen the capacity of countries to engage with the GCF and effectively use climate finance. This can improve their ability to access financing needed to implement adaptation actions prioritized through the NAP process. At least 50 per cent of the funding allocated for these types of readiness activities is to be received by particularly vulnerable countries (GCF, n.d.-a).

The GCF also provides significant opportunity to finance adaptation actions identified and prioritized through the NAP process. Although it only became operational in 2015, the GCF is already the largest multilateral climate fund (Schalatek, Nakhoda, & Watson, 2015) and largest source of multilateral adaptation financing (Caravani & Patel, 2016).¹⁸ Half of the GCF's overall funding targets adaptation. Half of this adaptation-related funding supports particularly vulnerable countries, including LDCs, African countries and Small Island Developing States. Further, the GCF's adaptation-related funding is directed to projects and programs that advance adaptation efforts in a manner consistent with national strategies and plans, including those emerging from NAP processes.¹⁹ Funding is provided through grants, subordinated debt, concessional loans, equity investments and guarantees (GCF, 2016b).

In addition, the GCF has established a project preparation facility through which countries can receive grants of up to US\$1.5 million per preparation request. This facility supports accredited entities in preparing projects and programs, from project identification to late-stage activities such as project structuring (GCF, n.d.-b). As such, funding from this source can be used to convert adaptation-focused project ideas (e.g., those identified in an implementation strategy of the NAP process) into detailed project proposals that can be submitted to the GCF Board.

Interaction with the GCF is mediated by a country's [National Designated Authority](#) (NDA) or focal point. The NDA or focal point is responsible for leading development of country work programs for GCF consideration and ensuring that all proposals are consistent with national development plans and climate priorities. Financing from the GCF is deployed through accredited entities, which may be public organizations, private entities, or NGOs working at the international, regional, national or sub-national levels (GCF, 2016b). Developing countries can directly access the GCF by establishing national accredited entities that meet the standards set by the GCF.

The [LDCF](#)²⁰ and [SCCF](#)²¹ have been specifically mandated to support activities to enable the NAP process in LDC and non-LDC countries respectively. Finance from these sources may be used to finance activities that are consistent both with the UNFCCC's objectives and guiding principles for the NAP process and with the GEF's general operational guidelines for the LDCF and SCCF (GEF, 2013). Funding is provided for medium-sized projects (up to US\$2 million), full-sized projects (more than US\$2 million) and programmatic approaches as defined by the GEF. Financing provided through the LDCF may also be used to support the implementation of adaptation actions prioritized through the NAP process that align with those identified in LDCs' National

17 These funds can be used to strengthen NDAs or focal points, establish strategic frameworks for financing, accredit implementing entities, develop programs and projects, and share information and experiences (GCF, n.d.-c).

18 Developed and developing countries have pledged US\$10.3 billion to support the GCF's first four years (2015 to 2018) of operation (GCF, n.d.-d). As of February 2017, the GCF had approved US\$1.48 billion in funding, of which 29 per cent was for adaptation-related projects and 37 per cent for crosscutting projects (GCF, 2017).

19 Adaptation funding provided through the GCF is intended to increase the resilience of people's livelihoods and communities; infrastructure and the built environment; health, food and water security; and ecosystems and ecosystem services (UNFCCC NAP Central, n.d.).

20 Under Decision 12/CP.18, the GEF, as the operating entity of the LDCF, was mandated "to enable activities for the preparation of the national adaptation plan process by the least developed country Parties" (UNFCCC, 2013, p.4). It also was mandated to provide funding from the LDCF in support of the first steps of the NAP process "to meet the agreed full cost, as appropriate, of activities to enable the preparation of the national adaptation plan process" (LEG, 2012, p.31).

21 Under Decision 12/CP.18, the UNFCCC requested the GEF to "consider how to enable activities for the preparation of the national adaptation plan process for interested developing country Parties that are not least developed country Parties" through the SCCF (UNFCCC, 2013, p.4).

Adaptation Programmes of Action. Similarly, financing for NAP processes can be integrated into investment projects financed through the SCCF that are consistent with the mandate of this fund (GEF, 2013).

At the global level, the LDCF and SCCF finance the [NAP-Global Support Programme](#) (NAP-GSP), jointly led by the UNDP and UN Environment. The NAP-GSP provides technical assistance to LDCs and non-LDCs to build their capacity to initiate and conduct NAP processes and integrate climate change adaptation into medium- and long-term planning. Along with providing one-on-one support, the program hosts regional meetings to share knowledge, increase understanding of the NAP process and provide training on specific topics. The NAP-GSP does not directly fund developing countries' efforts in the development and implementation phases of their NAP processes. However, its assistance can enhance their technical and institutional capacity to undertake these efforts (NAP-GSP, n.d.).

At the national level, LDCF funding for projects that support the development phase of the NAP process in Chad, Senegal and Rwanda have recently been approved. Additional projects are in the pipeline. The project in Chad, for example, will strengthen the capacity of ministries at the national and sub-national level to integrate medium- and long-term climate considerations into planning and budgeting processes. It also aims to increase access to the socioeconomic and climate information needed to inform planning and policy making in climate-sensitive sectors (UNFCCC, 2016b).

Support from the LDCF and the SCCF for NAP processes is limited by the fact that these funds are oversubscribed. Several technically accepted projects remain in their pipelines because of a lack of funding. The LDCF has placed a cap of US\$40 million on the amount of funding individual countries may receive over the fund's lifetime to address this concern. This funding cap also ensures that LDCs have equal access to the fund.

The [AF](#), established under the Kyoto Protocol, is also a source of financing for the implementation of adaptation actions prioritized through the NAP process. The AF is mandated to finance concrete adaptation projects and programs in particularly vulnerable developing countries that are Parties to the Kyoto Protocol. Projects currently funded by the AF typically include components that build capacity to implement adaptation actions at the national and sub-national levels (Adaptation Committee, 2015). NAP teams may coordinate with these initiatives to gain additional support for elements of the development phase of the NAP process. Like the LDCF and SCCF, though, the AF's financing is constrained. The fund has set a cap of US\$10 million per eligible country (AF, 2016).²² Countries can directly access finance from the AF through national accredited entities. Before the GCF began a similar program, the AF established a climate finance readiness program to support countries seeking accreditation. The program also aims to strengthen the capacity of accredited implementing entities to receive and manage climate financing (AF, n.d.).

Multilateral funds established outside of the UNFCCC specifically to support climate change adaptation provide a further means by which the NAP process may be financed. Prominent among these is the [Pilot Program for Climate Resilience](#) (PPCR), one of the funding windows of the Climate Investment Funds (CIF). It is assisting 21 countries to advance a programmatic approach to achieving long-term climate resilience.²³ The PPCR is implemented through two phases. First, it supports the development of an investment plan based on stakeholder consultations. Then, it finances implementation of planned actions and innovative pilots that reduce climate-related risks (e.g., investments in climate-resilient infrastructure or strengthening the technical capacity of farmers; CIF, 2016). Outcomes of these activities could be used to foster the development

22 As of March 2017, pledges to the AF totaled US\$569 million (ODI & Heinrich-Böll-Stiftung, 2017). The AF board has also placed a cap on 50 per cent of funding on fully developed proposals for projects and programs implemented by accredited multilateral implementing entities (AF, 2016).

23 Due to the program's focus on deep engagement in a small number of countries, the number of countries involved in the PPCR is unlikely to expand soon.

and implementation phases of a NAP process. Countries engaged in the PPCR should ensure that their NAP processes align with plans and activities completed through the PPCR.

A few other multilateral adaptation-focused funds may be used to support the development and implementation phases of the NAP process. Among these is the International Fund for Agricultural Development's [Adaptation for Smallholder Agriculture Programme](#). This program works in more than 30 countries to support smallholder farmers by building their resilience to climate change while also increasing agricultural output and diversifying livelihoods. Another is the [Africa Climate Change Fund](#) under the AfDB, funded and initiated by the German government. It supports climate finance readiness for both the development and implementation phases of NAP processes, and specifically for the development of project proposals. The [Local Climate Adaptive Living Facility](#), established in 2011 by the UN Capital Development Fund, supports local governments in LDCs to integrate climate change adaptation into their budgetary and planning processes. It provides support in the form of performance-based grants and technical assistance (Adaptation Committee, 2015).

NAP teams may also consider financing projects and programs that address both mitigation and adaptation priorities through **multilateral climate funds that are more strongly oriented toward supporting climate mitigation**. Financing from these funds is more suited to initiatives in sectors in which there is greater potential to achieve mitigation and adaptation synergies. This includes sectors such as agriculture, forestry and urban development. There is greater potential in these sectors to achieve mitigation and adaptation synergies. For example, efforts to build climate resilience in a country's forestry sector may be appropriately financed through the CIF's [Forest Investment Program](#).²⁴ As well, the GCF particularly encourages projects and programs that deliver multiple benefits.

Some **non-climate-focused multilateral funds** may also be potential sources of financing for the implementation phase of the NAP process. This includes the [Global Environment Facility](#)'s focal areas of biodiversity, international waters and land degradation. These may be appropriate windows for financing the implementation of prioritized adaptation actions related to these themes. As well, support from the [Global Fund to Fight AIDS, Tuberculosis and Malaria](#) could finance priority needs in the health sector.²⁵ Additional financing for adaptation in the agriculture sector could potentially be gained through the [Global Agriculture and Food Security Program](#) or the broader work of the International Fund for Agricultural Development.²⁶

The array of available multilateral funds presents many opportunities to finance the development and, in particular, implementation phases of the NAP process. Different ministries within a country may have prior experience with these sources and could provide NAP teams with insight on sources' suitability for financing different elements of the NAP process. Finance ministries, for example, may be able to provide insight on how different funds work and access to established relationships with fund managers. Countries should also be aware that the NAP process itself can facilitate access to different multilateral funds, particularly those best suited to financing its implementation phase. It can do so by providing the strategic framework many multilateral funds need to inform and guide their financing decisions.

24 This US\$775 million program provides grants and low-interest loans through partner MDBs to enable direct investment in activities that reduce the drivers of deforestation and deforestation and promote sustainable forest management. Currently, 23 countries are engaged in the program (CIF, n.d.-a).

25 The Global Fund is a public-private health partnership and international financing institution. It aims to boost countries' and partners' capacity to provide essential commodities and strengthen service delivery to prevent and treat HIV and AIDS, tuberculosis and malaria. Since 2002, the Global Fund has approved US\$21.7 billion in funding for more than 600 programs in 150 countries (Devex, n.d.).

26 The program was established in 2010. It is a multilateral financing mechanism that supports national and regional strategic plans to boost agricultural productivity and food and nutrition security in poor countries. The Global Agriculture and Food Security Program includes both a public and private sector financing window. Resources received from its donors amounted to approximately US\$1.52 billion (Global Agriculture and Food Security Program, 2016).

Key issues for consideration



- Transaction costs associated with accessing multilateral funding in comparison to the financing needs for individual projects should be considered. Getting a project from the idea stage to implementation often takes two years or longer.
- Engaging NDAs and focal points for different funds (e.g., GCF, GEF, AF and CIF) throughout the NAP process can ensure better coordination of funding requests. Representatives of ongoing complementary initiatives, such as the PPCR, should also be actively engaged in the NAP process to ensure that consultations, planning, prioritization and implementation associated with these processes build on one another.
- Discussions with national and international organizations and institutions accredited to receive funding from different multilateral funds (e.g., UN agencies, MDBs, technical assistance agencies, bilateral development banks) can support strategic decisions regarding from which source to seek financing for prioritized projects and programs. As well, accredited entities can sometimes contribute additional resources to support project development.
- Becoming familiar with the modalities of different multilateral funds and what they have financed in the past can enable better alignment of prioritized financing needs with specific multilateral funding opportunities. For example, awareness of caps on financing from certain funds (e.g., the LDCF, SCCF and AF) and the remaining space under these caps can provide a realistic picture of their potential to finance the NAP process.

4.3 Multilateral development banks

MDBs are another source of financing for the implementation of prioritized adaptation actions. MDBs can directly finance discrete adaptation projects or development projects that include incremental costs associated with adaptation co-benefits (Adaptation Committee, 2015). This is in addition to their role as implementing agencies, accredited entities and implementing entities to the GEF, GCF and AF, respectively. Finance from MDBs is generally provided as loans, rather than grants. The loans are offered on terms more favourable than what is available from commercial banks. Concessional loans are provided to lesser developed countries and non-concessional finance is provided to more developed countries (UNFCCC Standing Committee on Finance, 2016).²⁷

MDBs provided, from their own resources, an estimated US\$3.951 billion in adaptation financing to developing countries in 2013, and US\$4.521 billion in 2014 (UNFCCC Standing Committee on Finance, 2016).²⁸ This level of finance is expected to rise in the future, reflecting the commitment made by six MDBs in the lead-up to the Paris Agreement to substantially increase their climate finance (AfDB et al., 2016). MDBs are also taking steps to improve their ability to transparently track their financial contributions to climate change adaptation. This commitment is reflected in the Common Principles for Climate Adaptation Finance Tracking agreed upon in June 2015 (AfDB et al., 2016).

²⁷ MDBs raise capital through contributions from developed- and developing-country shareholders as well as by borrowing money from global capital markets. In turn, they lend funds to developing countries on more favourable terms than other lenders. Payments of interest and principle by loan recipients are used to service their debts (UNFCCC Standing Committee on Finance, 2016).

²⁸ This represents less than 20 per cent of the total amount of climate finance delivered by MDBs to developing countries in these years (UNFCCC Standing Committee on Finance, 2016).

Along with the well-established **global and regional development banks**,²⁹ new MDBs have emerged in recent years, such as the Asian Infrastructure Investment Bank³⁰ and the New Development Bank.³¹ These new MDBs may provide future opportunities for financing the NAP process. Countries can also consider engaging with national and regional development banks about priorities emerging from their NAP processes. These banks can be members of the International Development Finance Club, such as the Central American Bank for Economic Integration, the Development Bank of Latin America, the Small Industries Development Bank of India and the West African Development Bank.

The largest share of **finance provided by MDBs for climate change adaptation** has been directed toward water and wastewater systems; the energy, transport and other built environment and infrastructure sector; and crop and food production (AfDB et al., 2016). As such, MDBs can finance the implementation phase of the NAP process, particularly projects and programs in these sectors. Along with their capacity to directly provide significant finance to support implementation of adaptation actions prioritized through the NAP process, MDBs can catalyze additional resources from the public and private sectors. To a certain extent, they also provide policy advice and technical assistance. This assistance can strengthen the capacity of developing countries to generate and manage additional financial flows from domestic and international sources (Inter-Agency Task Force on Financing for Development, 2016).

Accessing finance from MDBs to support the implementation phase of the NAP process may require overcoming some barriers. For instance, the criteria MDBs use for project selection and investment may not necessarily be tailored to supporting climate change adaptation, particularly in LDCs (Tippman et al., 2013). Moreover, MDBs tend to favour single large-scale projects over a number of smaller scale projects—which may be better placed to advance adaptation at the local or community level. This is because transaction costs in relation to overall project funding decrease as projects increase in scale (Nakhoda et al., 2014; Rai & Norton, 2016). Despite these limitations, MDBs remain a substantial source of potential financing for prioritized adaptation projects and programs in key sectors.

Key issues for consideration



- Engaging and consulting with sectoral ministries, particularly the ministry responsible for liaising with MDBs, during the development phase of the NAP process increases the likelihood that NAP priorities will be incorporated into future proposals to different MDBs.
- Countries may choose to approach MDBs, before other sources, to finance adaptation actions in sectors that they have traditionally financed, such as the agriculture, built environment, energy, infrastructure and transport sectors. In particular, MDBs may be well suited to finance large-scale infrastructure projects.

29 MDBs include the World Bank as well as regional and specialized banks such as the AfDB, Asian Development Bank, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank and the Islamic Development Bank.

30 The Asian Infrastructure Investment Bank opened in January 2015 with the aim of addressing infrastructure needs in Asia. It finances projects in areas such as water and sanitation, urban development, agriculture development, energy and transportation. In 2016, the fund made investments worth US\$1.7 billion (Asian Infrastructure Investment Bank, n.d.).

31 Launched in 2014 by Brazil, China, India, Russia and South Africa, the purpose of the New Development Bank is to mobilize additional finance to support infrastructure and sustainable development projects in its founding member states, other emerging economies and developing countries. Its initial authorized capital is US\$100 billion (New Development Bank, n.d.).

Suggested further reading about international public finance:



Adaptation Committee (2015): [Navigating the landscape of support for the process to formulate and implement national adaptation plans](#)

GCF (2015): [Engaging with the Green Climate Fund: A resource guide for national designated entities and focal points of recipient countries](#)

LEG (2015): [Information paper on how the process to formulate and implement national adaptation plans can be supported in least developed countries](#)

NAP-GSP (n.d.): [NAP Global Support Programme](#) jointly implemented by UNDP and UNEP.

OECD (n.d.): [Climate Fund Inventory database](#)

5 Engaging the Private Sector

Globally, governments and civil society organizations have mostly focused on the role of the public sector in financing climate change adaptation (Oxford Consulting Partners, 2015). However, **public sector finance alone will not be enough to fund NAP processes**, given the amount of funding needed, particularly for the implementation of adaptation actions prioritized through the NAP process. As such, there is growing interest in understanding how the private sector may help finance climate change action. Uncertainty remains, though, regarding ways to mobilize private finance for climate change adaptation in general, and thus also for NAP processes. Experience in this regard is still limited. There are currently only a few examples of analysis and research on private investments, particularly by domestic actors, in climate change adaptation (e.g., United Nations Environment Programme Finance Initiative [UNEP-FI] & GIZ, 2016).

The NAP process provides an opportunity for governments to direct and influence investments by the private sector in the implementation of adaptation actions. Initiating, coordinating and maintaining the NAP process (its development phase) is largely a public good. Therefore, private finance is almost exclusively relevant for the implementation of adaptation actions prioritized in the NAP process (as Figure 4 shows).



Figure 4. Potential role of private finance in supporting the NAP process.

5.1 Understanding the private sector

When considering the potential role of the private sector in supporting NAP processes, it is important to clearly understand the motivations and decision-making processes of the sector's actors. Financial decisions within the sector are typically informed by a business case that assesses the expected risks versus the potential benefits of a particular investment. A combination of factors makes it difficult to articulate the business case for climate change adaptation. These factors include uncertainties regarding future climate change impacts; the very context-specific nature of required adaptation actions, which makes it difficult to quantify the benefits arising from adaptation actions; and the lack of cost-benefit analyses of climate change adaptation actions (Atteridge & Dzebo, 2015). These specific features of climate change adaptation make it more challenging to develop a business case for related investments than, for example, for investments in climate mitigation. Governments will need to consider the specific challenges associated with making the business case for climate change adaptation as they seek to engage the private sector in NAP processes.

Nonetheless, the private sector is **already making substantial investments in climate change adaptation**. Three main reasons drive these investments:

- **Managing risks for business continuity and reputation.** Data show that climate change is already having negative direct and indirect impacts on all types of businesses, with consequences for local economies and for investors (e.g., UNEP-FI & GIZ, 2016).³² Private sector actors therefore have an incentive to manage climate risks once they are aware of them. Doing so can also help create and secure a positive reputation in the eyes of customers and shareholders.
- **Capitalizing on new markets and business opportunities arising from the need to adapt to climate change.** As suppliers of goods and services, businesses can develop and distribute solutions that help people, communities, businesses and governments adjust to the current and future effects of climate change. They can create the new and innovative products and solutions needed by all sectors to adapt to climate change.³³
- **Complying with policies, regulations and investors' interests.** Large companies in developed countries, but also increasingly in emerging economies, need to comply with voluntary and mandatory environmental and social safeguard guidelines (GIZ, 2015b).

However, the private sector's contribution to financing climate change adaptation has largely been "invisible" until recently, particularly in developing countries. A combination of factors explains this gap in knowledge: differences in terminology and definition,³⁴ confidentiality requirements, and activities supporting climate change adaptation being hidden in normal business operations. The predominance of the informal sector in most developing countries imposes an additional challenge.

32 Direct impacts can include degradation of the company's infrastructure, reduced quality and quantity of raw materials, and delays in product and service delivery. Indirect impacts can include reduced income, increased costs of insurance, reduced productivity due to reduced availability of labour, and changing demand for goods and services.

33 The IFC (2016) estimated that US\$22.6 trillion in mitigation and climate change adaptation investment opportunities exists in the emerging markets from 2016 to 2030.

34 Private sector actors who support climate change adaptation rarely label it as such. They tend to use terms such as "risk management," "disaster recovery," "business continuity," "new business opportunities" or aspects of "sustainability," "reliability," "diversification" or "resilient supply chains" (Koh, Mazzacurati, & Swann, 2016).

Box 4. Key considerations to systematize engagement of private sector actors



- **Type and nature of the adaptation investment.** This should be considered in terms of the investment's objective, scale, lifetime, volume of the capital required and associated risks. For example, once the public sector has piloted a specific innovation, private finance can support its scaling up through large-scale replication and delivery. The sources of private finance will also vary at each stage of an innovation (from research and development to commercialization). To illustrate, early-stage venture capital and private equity firms typically finance technology development (e.g., more water-efficient irrigation systems). When a proof of concept exists, private equity markets can finance the manufacturing and commercialization of the technology, although this is not automatically the case in all developing countries (Schmidt-Traub & Sachs, 2015).
- **Type of private sector actors to be engaged.** Different types of private sector actors have different risk profiles influencing their access to private finance for climate change adaptation. These risk profiles also affect their willingness and/or capacity to invest their own funds in developing new markets or tools (UNEP-FI & GIZ, 2016). For example, small and medium-sized enterprises often have access to microloans from banks or other lending institutions at very high interest rates or high guarantee requests. Microenterprises often do not have access to loans from banks. They receive finance from microfinance institutions, or often from informal sources such as family and friends or loan sharks.
- **Private sector perceptions of climate risks.** If private sector actors do not perceive climate change as a risk or as an opportunity to their business activities, they will not invest in climate change adaptation. When businesses are affected by climate variability and change directly, they are more likely to be interested in taking action.

Governments need to assess where opportunities lie for engaging the private sector in adaptation actions. Governments especially need to consider elements such as the type and nature of the adaptation investment, the type of the private sector to be engaged, and the sector's perception of climate risks (see Box 4) (UNEP-FI & GIZ, 2016; Schmidt-Traub, & Sachs, 2015).

When evaluating opportunities for engagement, governments need to recognize and understand the **diversity of the private sector**. This diversity influences the range of private finance available. Diversity exists in terms of size, from micro, small and medium-sized enterprises (MSMEs) to large multinational corporations. Private actors also have diverse motivations. They may be geared entirely to financial (or "for-profit") goals or entirely to social goals (e.g., private charities and remittances from migrant workers). Different types of private actors may be active in different sectors and scales (e.g., domestic versus international enterprises). The high diversity among private sector actors means climate change impacts them differently, as they have different levels of exposure and vulnerability to climate change. Similarly, they can contribute differently to the implementation of adaptation actions.

To manage this diversity, it may be particularly useful for governments to distinguish between **two main sources of private finance** when exploring how to mobilize private finance for the implementation of adaptation actions:

- **Private enterprises (i.e., commercial companies).** These enterprises may support adaptation efforts by climate-proofing their operations and developing climate-resilient products and services in line with the adaptation priorities of the government.
- **Private financiers.** These include private commercial banks, microfinance institutions, private insurance companies, institutional investors, equity and venture capital investors, private foundations, and charities. These organizations can provide direct financing to private and public sector actors for the implementation of adaptation actions.

Governments can also use public funds to catalyze private financial flows toward the implementation of adaptation priorities. Public-private partnerships (PPPs) are an example of this type of collaboration. These financing options are explored in the following sections.

Key issues for consideration



- Clearly understanding how specific private sector actors are already contributing to the implementation of adaptation actions helps start a constructive dialogue about their engagement.
- Using the language of private sector actors when engaging with them is important. Avoiding complex terminologies used by climate change practitioners and academics can help to better communicate messages about the need for and opportunities associated with climate change adaptation.
- Different engagement strategies are needed to reach different actors, as the private sector is a very diverse group. A clear understanding of the complex range of private sector actors active in a country and their motivations to engage in adaptation can help inform the design of these strategies.
- The opportunities and challenges associated with different sources of private sector finance must be weighed carefully when assessing which may be most appropriate to support the implementation of specific adaptation actions prioritized through the NAP process.

5.2 Engaging private enterprises and private financiers

Private enterprises can undertake activities that support climate change adaptation and therefore potentially finance the implementation of adaptation actions indirectly. These activities can include the following:

- a) **Integrating climate risks into business operations** (including, but not limited to, its physical infrastructure, procurements, business plans and supply chains). This concerns all types of businesses. Multinationals are increasingly interested in integrating climate risks into the management of their supply chains. In addition, more and more examples exist where MSMEs assess their risks and develop adaptation strategies. They often have support from bilateral and multilateral providers or “business multipliers,” such as business associations that have the potential to influence multiple private sector actors. An illustrative example is a coffee-processing company in Rwanda planting shady trees across its coffee plantations, applying organic pesticides and considering new pest-resistant coffee plant varieties to minimize the risk of water scarcity due to climate change on its activities (UNEP-FI & GIZ, 2016).
- b) **Developing and distributing non-financial products and services** that support climate change adaptation. These investments occur at varying scales in response to shifts in market conditions driven by climate change. Examples of climate-resilient products include climate-resilient seeds, water-efficient irrigation systems, equipment for early-warning systems and telemedicine technologies to respond to the predicted increase in infectious diseases due to climate change (UNEP-FI & GIZ, 2016). Examples of climate-resilient services include a consulting company offering climate and weather modelling or sector-specific data analysis, and a seed company offering agricultural extension services to farmers (including on climate-smart agriculture) to ensure the quality and quantity of seed production. Private enterprises can also support governments in the implementation of climate change adaptation initiatives such as constructing climate-resilient roads and flood-protection barriers and the scaling up of other climate-resilient solutions.

In developing countries, **private enterprises are mostly MSMEs**. Most of these are in the informal economy. These enterprises are often vulnerable to climate change, especially when they are involved in climate-sensitive sectors such as water and agriculture. MSMEs in developing countries are frequently unaware of either the risks or opportunities associated with climate change. They also have limited capacities (financial and human resources) to assess and address climate risks compared to larger companies. In most developing countries, chambers of commerce, business associations, consultancy firms and state institutions also are not able to advise MSMEs on adaptation measures. Private enterprises, especially MSMEs, often depend on private financiers for the funding they need to invest in adaptation actions. As such, private financiers are another key source of private finance that governments can use to advance the implementation phase of the NAP process.

Private financiers can provide financing to governments and other private sector actors to support the implementation of adaptation actions prioritized in the NAP process. Examples include a private commercial bank providing debt financing to a government to improve its network of hydrometeorological stations, or a private microfinance institution providing loans to farmer cooperatives to buy climate-resilient seeds and irrigation kits.

Private financiers can use a variety of mechanisms to finance the implementation of adaptation actions: debt instruments (e.g., loans, microfinance), equity instruments (e.g., mezzanine finance, equity participation), de-risking instruments (e.g., guarantees, insurance and risk-financing facilities) and grants (e.g., corporate

social responsibility contributions, private philanthropic grants). As shown in Box 5, many new approaches to financing climate change adaptation are also beginning to be applied in different contexts. So far, domestic and international private investments in adaptation finance have mostly focused on insurance schemes (UNEP, 2016). A relatively small portion can also come from corporate social responsibility and philanthropic activities from private corporations and foundations (Bhinda et al., 2014). An example of this type of activity is an international company financing a climate change adaptation project in a developing country as part of its corporate social responsibility commitments.

Box 5. Examples of innovative private financing mechanisms for the implementation of adaptation actions



- **Green bonds** raise revenue to finance projects that meet certain environmental standards. The market for green bonds has grown significantly in recent years. They have been used to support climate-related investments in areas such as renewable energy and sustainable forestry management (IFI, 2014; International Bank for Reconstruction and Development, 2015). While large middle-income countries have benefited the most from their use, green bonds have also benefited some LDCs, such as Timor-Leste, Rwanda, Uganda and Zambia (Hurley & Voituriez, 2016).
- **Blue bonds** (or water bonds) are similar to green bonds but focus on investment in socially and environmentally beneficial projects that promote marine conservation, such as sustainable fisheries development (Holmes et al., 2014; Hurley & Voituriez, 2016).
- **Impact investing funds** facilitate investment in initiatives that provide social and environment impacts as well as a return on investment. They provide capital to sectors such as sustainable agriculture, microfinance, housing, health care and renewable energy (Global Impact Investing Network, n.d.).
- **Guarantees for development** allow a provider to backstop financing for initiatives that advance social and economic development. In developing countries, the provider typically is the public sector (national or multilateral). These guarantees have been used to reduce the risk associated with large infrastructure projects, enable local banks to enter new markets, and backstop low-cost credit to small and medium-sized enterprises. African countries have benefited the most from this financial instrument (Hurley & Voituriez, 2016).
- **Risk financing facilities** transfer the financial risk associated with national disasters from individual governments to a shared financial entity. The Extreme Climate Facility, for example, will use a combination of private and public funds to support the issuance of climate change catastrophe bonds to participating African countries. Payments from the facility will finance proactive adaptation actions prioritized in national investment plans (African Risk Capacity, n.d.).

The **choice of the appropriate financing instrument**, or combination of instruments, mostly depends on the volume of the capital required, the cost of capital associated with each financial instrument (e.g., equity instruments have a much higher return expectation than loans [or bonds] because they assume more risk) and the transaction costs associated with the investment (UNEP-FI & GIZ, 2016). As Figure 5 shows, the most appropriate type of private financier and financial instrument for financing the implementation of an adaptation action depends on the scale of the private capital required and the type of business requiring the capital.

Importantly, MSMEs with limited resources to assess climate risks on their operations may need special types of financial mechanisms that incentivize them to consider climate risks. Some domestic private financiers in developing countries are already experimenting with new financing models to support this process, as Case Study 4 shows.

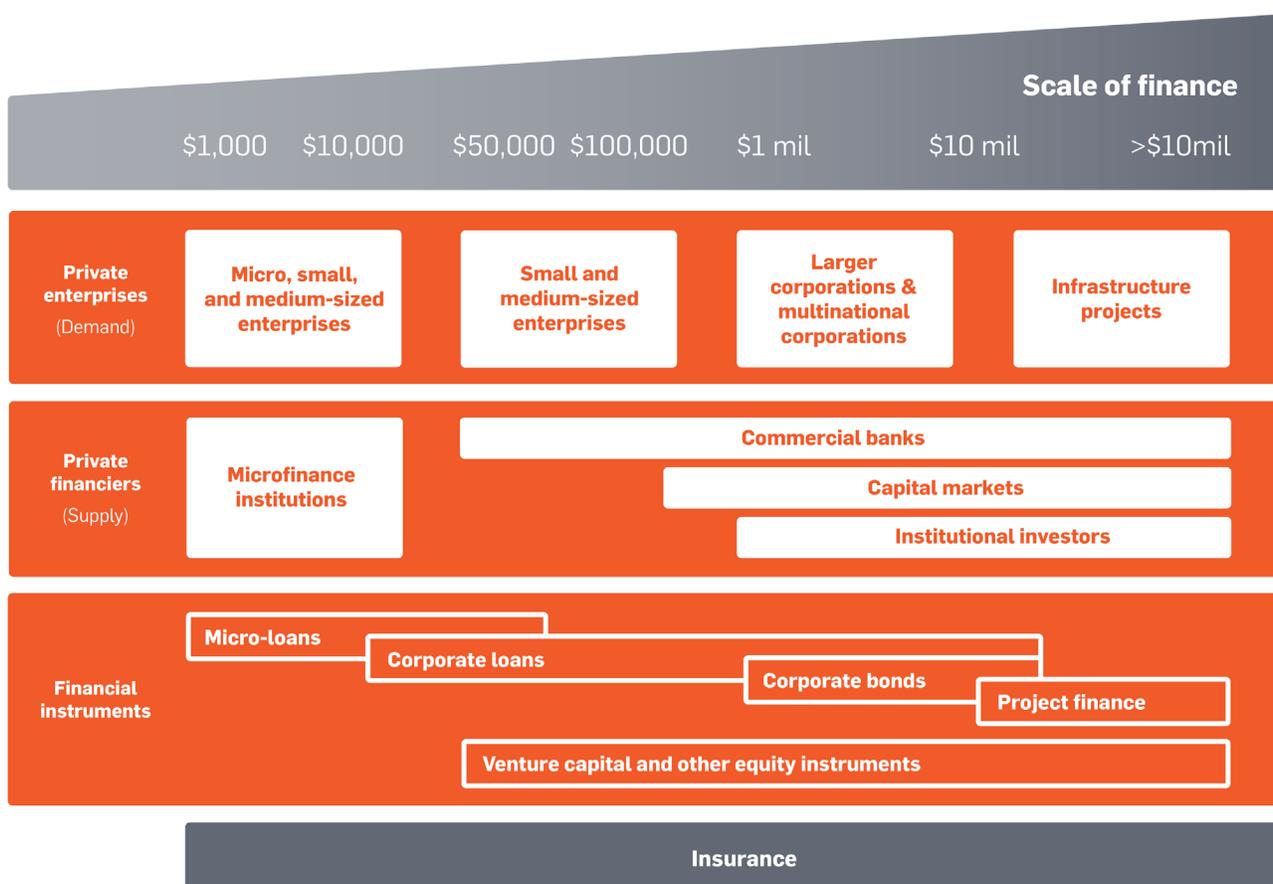
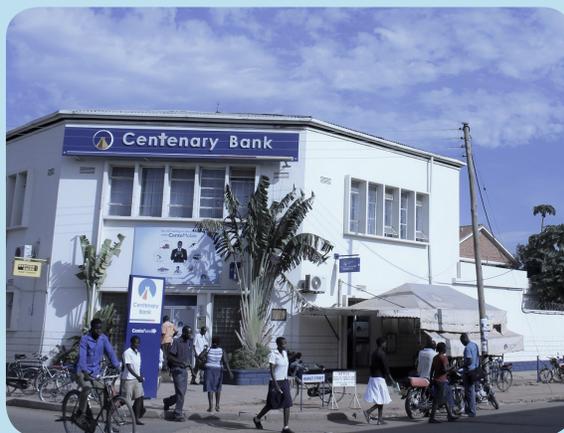


Figure 5. Overview: Private sector actors, financial instruments and associated scales of finance (adapted from Frankfurt School diagram in UNEP-FI & GIZ, 2016).

Case Study 4. Financial products that incentivize climate change adaptation: The case of the Centenary Bank in Uganda



The Centenary Bank is a private commercial bank in Uganda, with the goal of serving the rural poor and contributing to the country's economic development. Since 2014, the bank has been exploring how to adjust existing financial products to incentivize climate risk management by farmers (Dazé & Dekens, 2016). In 2017, a new scheme will provide a preferential interest rate on loans for farmers who buy climate-resilient seeds and/or irrigation kits. The Centenary Bank will partner on this scheme with a domestic seed company and a private company with expertise in irrigation technologies. In parallel, the Government of Uganda has developed a draft NAP document for its agricultural sector (Uganda Ministry of Agriculture, Animal Industry and Fisheries, 2016). The new scheme to be piloted by the Centenary Bank is already in line with the priority adaptation options identified by the government, including promoting climate-resilient crops and strengthening irrigated farming. The draft NAP document therefore provides a basis to support and scale up the initial efforts of the Centenary Bank.



Key issues for consideration



- Gaining an understanding of how businesses already integrate climate risks in their operations, how private investment in climate-resilient products and services occurs, what drives these investments, and how they are financed can enable NAP teams to capitalize on early movers and enhance their alignment with the adaptation priorities of governments.
- Particular attention may be given to MSMEs because they are especially vulnerable to climate change. Also, MSMEs may significantly contribute to the implementation of adaptation actions if provided with better information and access to affordable finance.
- Strategies for engaging the private sector in the implementation phase of the NAP process should target both private financiers and private enterprises, as they are two interdependent funding options for the implementation of adaptation actions.
- The NAP process can contribute to improving links between private enterprises and private financiers. The process can create opportunities for improved dialogue among actors and increased understanding of climate change adaptation (e.g., through targeted training courses).

5.3 The role of the public sector in attracting private finance in the NAP process

As indicated in the previous section, the public sector has a key role to play in mobilizing the potential of private enterprises and private financiers to support the implementation of adaptation actions. Data show that three-quarters of global climate finance and more than 90 per cent of private resources are invested in their countries of origin (Buchner et al., 2015). This suggests that, depending on where private finance is available for investment and its willingness to take risk, the main opportunity for private sector adaptation financing may be in the domestic private sector. Governments therefore need to create a supportive environment to attract private finance, particularly for domestic private investment, to support implementation of adaptation actions. This needs to be done at two levels: the country's general business environment and the business environment specific to climate change adaptation.

First, many conditions for private sector investments in climate change adaptation depend on the attractiveness of the **general investment environment** of the respective country. A country's business conditions and investment climate involve factors such as the stability of the policy environment, the nature and quality of business regulations and procedures, and the quality of infrastructure. A supportive business environment also needs to respond to the specific needs of different private sector actors. Some needs will be similar, while others will differ depending on the type of private sector actors involved. Incentives for investing in new products and markets, access to affordable finance, and strong and stable structure of "business multipliers" (e.g., business associations, training institutions, and financial institutions acting as key multipliers for promoting investments in climate change adaptation) are especially needed for domestic businesses.

Second, some conditions for attracting domestic private investments are more **specific to climate change adaptation** and therefore need to be considered as part of the NAP process. These especially include, but may not be limited to, the following:³⁵

- **Developing and raising awareness of the business case for financing climate change adaptation.** This action is particularly needed to change perceptions that climate change adaptation is risky and not revenue generating. It can also help the private sector better understand and manage the complex trade-offs between different adaptation actions (e.g., between short-term and long-term gains). Business cases and proven examples can raise awareness of the costs of climate change impacts and the benefits of adaptation. These examples can also improve knowledge of climate change adaptation options and their cost-effectiveness. In order to build the business case and convince investors, ways to measure returns on climate change adaptation investments are needed. These could include cost-benefit analysis, cost-effectiveness analysis and possibly new metrics to evaluate returns other than financial ones. Different business cases backed up with rigorous analysis may be needed to mobilize different private sector groups.
- **Providing non-financial incentives.** Incentives may include climate data and information available in formats that the different types of private sector actors will find useful; decision-support tools to help private sector decision-makers understand and incorporate climate risks in business activities (e.g., climate risk assessment tools, cost-benefit analysis, portfolio-risk analysis for financial institutions); capacity building for businesses to conduct climate risk planning and management (including climate change vulnerability and risk assessments); capacity building for "business multipliers" to catalyse best practices, tools and relevant information; introduction of conducive policies and regulations supportive of climate change adaptation across all sectors (e.g., zoning regulations that take into account changing climate risks);

35 These points are drawn from GIZ, n.d.; Koh et al., 2016; Prowitt et al., 2011; Smith, Hayman, Anderson, & Laird, 2016; Shaw, n.d.; UNEP, 2016; and UNEP-FI & GIZ, 2016.

removal of policies that potentially create maladaptation (e.g., low water prices can lead to over-extraction and make investments in drip irrigation unattractive); and appropriate coordination among public agencies.

- **Providing the right economic signals to incentivize private investments in the implementation of adaptation actions.** This can be done through, for example, tax breaks and fast-track permitting for companies that implement priority adaptation actions; risk guarantees for securing the demand for new climate-resilient products and services through government procurement contracts; favourable conditions set by export credit agencies to make investments in climate change adaptation more attractive; financial support for climate risk assessments; and start-up financing/seed financing for new products and services.
- **Using national and international public funds to support the implementation of adaptation actions by the private sector.** For example, sectoral ministries can engage the private sector in capacity building and awareness raising about new climate-resilient products and services for replication and scaling up. A few facilities or funding windows with a mandate for private sector engagement have been established within multilateral climate funds over the past few years, such as the PPCR Private Sector Set Aside and the GCF Private Sector Facility. Private sector engagement in the GEF is at an exploratory stage, but a strategy has been developed to strengthen it with a focus on PPPs and working with MDBs (UNFCCC Standing Committee on Finance, 2014). The amount of support from bilateral and multilateral development finance institutions to the private sector has also increased over the past few years. This trend is expected to continue in the future (Pereira, 2012).
- **Exploring mechanisms such as through levies, fees and royalties for increasing national public revenue from the private sector** (see more information in section 3). For example, governments could put systems in place to use non-renewable energy taxes from the private sector to finance the implementation of the identified adaptation priorities. This often requires developing countries to strengthen their tax systems. Some initiatives, such as the UNDP/OECD's [Tax Inspectors Without Borders](#), are working toward this objective.

Key issues for consideration



- Identifying and estimating the impacts of climate change on different private sector actors, along with their existing efforts to adapt, may promote private sector awareness of the need to invest in adaptation.
- Involving the private sector in stakeholder consultations and priority setting around the NAP process may be instrumental in identifying areas for collaboration and understanding the conditions for attracting domestic private investments in climate change adaptation.
- Participation of private sector associations in the NAP process, including its development phase, may be encouraged by enhancing their awareness of adaptation needs (e.g., through training programs) and strengthening their capacity engage their members (e.g., through tailored brochures or case studies).
- Integrating private sector perspectives on adaptation priorities (e.g., their costs, technical feasibility, barriers to implementation and financing) into stakeholder engagement activities and the development of financing strategies may enhance implementation of these measures as well as private sector ownership of the overall NAP process.

5.4 Public-private partnerships

Public-private partnerships (PPPs) are one way the public sector may engage the private sector in the implementation phase of the NAP process. In PPPs, the public and private sectors allocate and share risks amongst themselves. This allows for more practical and doable financing and delivery of large-scale projects.³⁶ PPPs are particularly appropriate for investments in areas such as building and operation new infrastructure, climate-proofing existing infrastructure, and managing natural resources. Interest in PPPs has grown in recent years in part because of their potential to provide better value for money than conventionally delivered projects.

PPPs take a wide range of forms that vary in the extent of involvement and risk taken by the private sector partner(s) (Alloisio et al., 2014). Approaches can include the following:

- **Greenfield projects.** The private sector is invited to provide new installations needed to meet growing demand. Examples include cellular networks, airports and manufacturing plants built from scratch.
- **Concessions.** These include long-term contracts under which the private sector assumes full responsibility for operating and managing an infrastructure asset, including investment and renewal. However, ownership remains with the public sector. Examples include urban passenger transport systems, water and waste water services, and waste and recycling collection contracts
- **Management and lease contracts.** These are shorter in duration (five to seven years) with less risk and responsibility being transferred to the private sector. Private operators assume responsibility for the management and operations and are remunerated according to pre-agreed performance targets. Investment remains the responsibility of the public sector (World Bank Group, 2016). Examples include drinking-water treatment plant operation, and water and sanitation operation contracts.

Based on the above, PPPs offer possible financing opportunities for the implementation phase of the NAP process (see Case Study 5). They appear particularly **suited for the following types of projects** (Green Growth Best Practice, 2014; Smith et al., 2016):

- **Enabling resilient (green) infrastructure and systems.** Upgrading and financing new, climate-resilient infrastructure for key vulnerable sectors where large “public good” infrastructure is needed but cannot be provided cost-effectively by governments alone. Examples include irrigation equipment to deal with drought, waste water treatment plants and ports.
- **Managing natural resources.** Collaboration and shared ownership of natural resources and protected areas, such as for ecotourism. This can support compliance and identify links between adaptation and resource management.
- **Information and technologies.** Improving climate information and services through technologies that support business decisions and capacity, such as weather stations or drought-resistant seeds.
- **Innovation, research and development.** Provision of the long-term commitment needed by the private sector to invest in innovations that can facilitate adaptation.

36 PPPs commonly incorporate three key elements: (1) a contractual agreement defining the respective roles and responsibilities of public and private actors, (2) risk-sharing among public and private actors, and (3) a financial reward for private parties clearly defined in contractual and risk-sharing arrangements (Gardiner et al., 2015).

Case Study 5. Advancing irrigation through a PPP in Megech-Seraba, Ethiopia



In 2004, the Ethiopian government began to explore the potential to expand its irrigated lands through a project in the Megech-Seraba region in northern Ethiopia. The purpose of this project was to increase the agricultural production of approximately 6,000 smallholder subsistence farmers by providing reliable water availability and flood protection. This entailed the construction of two pumping stations and open channels as well as pumping irrigation water from Lake Tana. Taking into consideration the potential economic, social and environmental effects of this large-scale project, the Ethiopian government decided to move ahead, considering the use of a PPP with the support of the World Bank to help implement the project.

In 2012, the Ethiopian government signed a contract with the French operator BRL Ingénierie to provide services for construction supervision, operations and maintenance, and capacity building of water users associations for the Megech-Seraba project. According to the Ministry of Water Resources of Ethiopia, the government provided the capital investment for the construction of the project and covered all associated costs of the operations and maintenance services with a concessionary loan from the World Bank. The government aimed to offset the operation and maintenance cost of the system by collecting user fees from farmers (BRL Ingénierie, Metaferia Consulting Engineers, & Ethiopian Ministry of Water and Energy, 2010). The contract duration of the PPP is eight years, after which operating and maintenance service responsibilities are to be turned over to a new local public entity, trained by the PPP contractor (Public-Private Infrastructure Advisory Facility, 2012).

The government provided the capital investment for system construction, and the water service is billed to the end-user. BRL Ingénierie's risk exposure should be limited to operation and maintenance costs. Through the PPP, the Ethiopian government intended to ensure efficient construction supervision, high-quality operating and maintenance services of the irrigation system, and adequate training and education to small landholders and the new public operating entity (Public-Private Infrastructure Advisory Facility, 2012).



However, PPPs can be relatively complex in design and usually involve high contracting and (up-front) financing cost. They require policy and market conditions that create an enabling environment that balances the need of governments to effectively deliver public goods and the private sector's commercial interests. Private sector participation can only be expected when market conditions are favourable and adequate returns on investment within an acceptable timeframe can be assured. **Several key factors are needed to make PPPs effective** from a public and private perspective. These include a stable regulatory and enabling environment; tailored technical assistance, capacity-building and awareness-raising; and early involvement of civil society or community groups (Gardiner et al., 2015). National governments have an important role in creating this enabling environment by establishing frameworks suitable for PPPs.

As these components suggest, for PPPs to be successful, both the public and private sector must have specific capacity to enter into an agreement and administer it successfully. Such capacity is absent in many jurisdictions in developing countries, both at the national and sub-national levels, and it takes both time and experience to establish it (Colverson & Perera, 2011). Consequently, the potential benefits of PPPs must be carefully assessed against their associated costs and the ability of a country to manage them (Schmidt-Traub & Sachs, 2015).

When the required enabling environment exists, adaptation measures identified through NAP processes can be supported through appropriately structured PPPs. While PPPs can vary in terms of size and complexity, they are commonly associated with large-scale projects in order to attract private sector interest and financing. PPPs have been used in smaller projects but are often bundled to create a larger initiative that encourages private sector involvement. The potential for scaling up and using PPPs for the implementation phase of the NAP process may therefore be limited to a small number of (mostly) large-scale projects.

Key issues for consideration



- Gaining a clear understanding of PPPs, including their strengths and weaknesses, can better enable an accurate assessment of their suitability for the implementation of specific adaptation measures identified in the NAP process. This understanding should recognize that PPPs tend to be relatively complex in design, usually involve high contracting and (up-front) financing costs, and often involve long-term contracts (up to 30 years or longer).
- In various countries, governments have established a central unit responsible for liaising with private investors potentially interested in PPPs. Collaborating with this unit and making use of its contacts and experiences may significantly enhance the chances to develop successful PPPs related to adaptation.
- Policy and market conditions that create an enabling environment for PPPs must be in place. Private sector participation can only be expected when market conditions are favourable and adequate returns on investment within an acceptable timeframe can be assured.
- Ensuring that both the public and private sectors have specific capacity to enter into a PPP agreement and administer it will increase the potential success of an adaptation-related PPP.

Suggested further reading about private sector finance:



Gardiner, G., Bardout, M., Grossi, F., & Dixon-Declève, S. (2015): [Public-Private Partnerships for Climate Finance](#)

GCF Private Sector Facility. (2016a): [Establishing a programmatic framework for engaging with micro-, small- and medium-sized enterprises](#)

GIZ (n.d.-a): [Climate Expert](#), which helps small and medium-sized enterprises adapt to climate change.

International Bank for Reconstruction and Development (2015): [What are Green Bonds?](#)

[The Global Innovation Lab for Climate Finance \(n.d.\)](#), which screens proposals from around the world to identify instruments that have potential to drive investment in developing countries at scale.

UNDP (2015c): Low Emission Capacity Building Project: [Tracking Private Climate Finance Flows at the National Level: Proposed country-level methodology](#)

UNEP-FI & GIZ (2016): [Demystifying Adaptation for the Private Sector](#)

World Bank Group (n.d.-a): [PPP Knowledge Lab](#), which promotes smarter public-private partnerships.

World Bank Group (n.d.-b): [Public-Private-Partnership in Infrastructure Resource Center \(PPPIRC\)](#)

6 Connecting the Dots to Finance the NAP Process

As the previous sections of this guidance note illustrate, a wide range of sources—public and private, domestic and international—are currently available to finance the NAP process. The diversity and scale of financing options differ, however, between the development and implementation phases of the NAP process. Figure 6 shows the following:

- **A limited number of sources are available to provide dedicated support for the development phase of the NAP process.** These sources consist primarily of domestic public finance, bilateral providers and multilateral funds, including the funds established under the UNFCCC that have a clear mandate to support the development phase of the NAP process. These sources often offer programs specifically tailored to meeting needs related to this phase of the NAP process. At present, available finance specifically connected to the NAP process is primarily oriented toward activities associated with its development phase.
- **More diversified finance is available to support the implementation phase of the NAP process.** Financing for this phase may be accessed from a greater array of domestic and international public sources, as well as from the private sector. The potential scale of financing available from these sources is also larger. This is consistent with the significantly greater amount of financing that will be required for the implementation of adaptation actions prioritized through the NAP process. Many of these sources are mandated to finance adaptation actions in general, as opposed to the NAP process in particular. Some require significant capacities to access and/or mobilize.

A key challenge for NAP teams is to strategically determine how to align financing needed for the NAP process in its development and implementation phases with available sources of financing. Their approaches must match their countries' capacities and finance readiness. A dedicated **financing strategy** for the NAP process can help NAP teams meet this challenge. Such a strategy can set out a coordinated national approach to identifying and securing the finance required at different stages of the NAP process in a way that reflects a country's individual adaptation objectives (GIZ, 2017a). According to countries' needs and circumstances, these strategies may also serve as core features of future NDC adaptation components. Thus, they may also be branded as NDC financing strategies and combined with similar efforts to finance mitigation priorities, if appropriate.

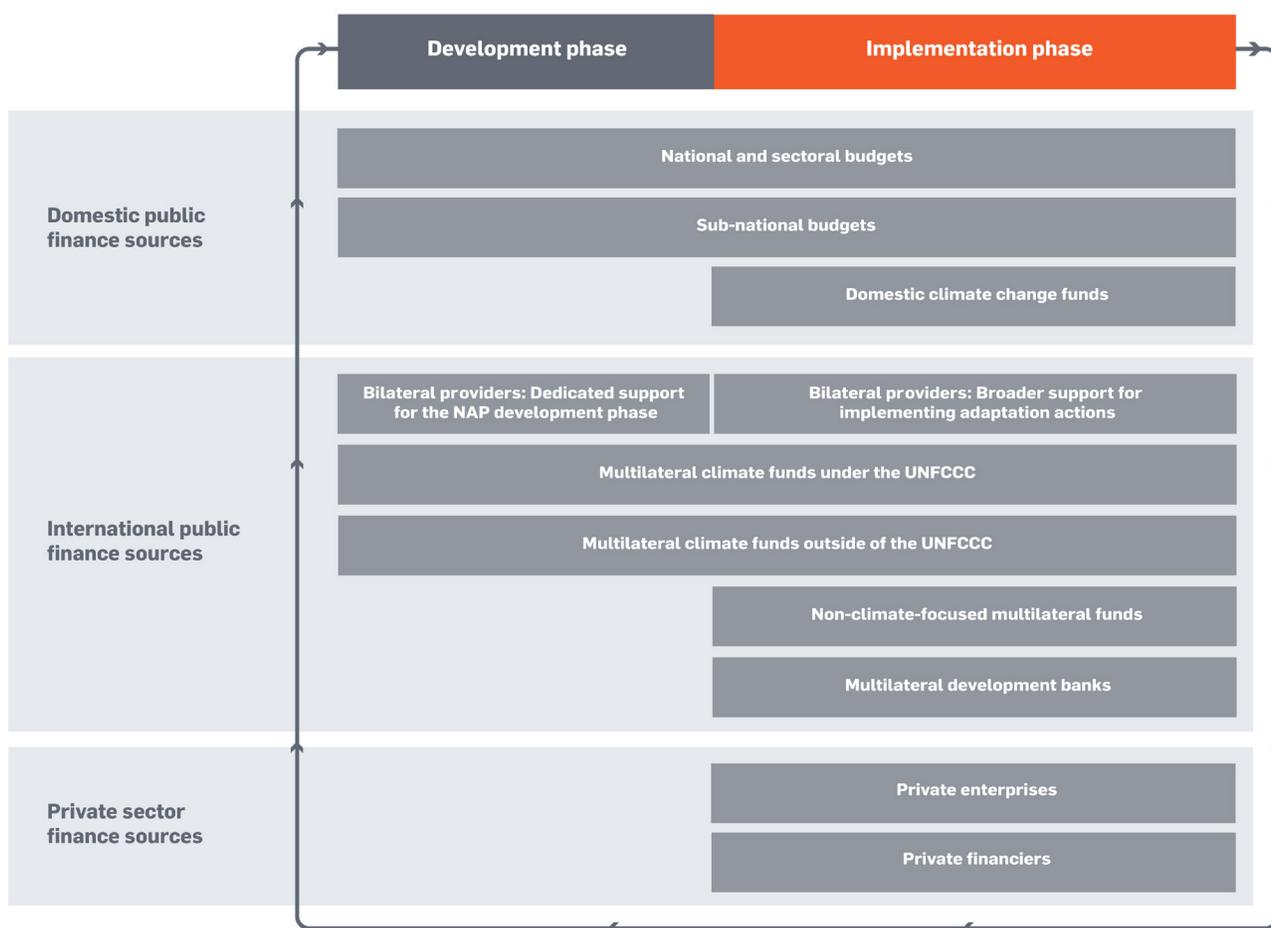


Figure 6. Potential sources of finance for the NAP process.

A tailored financing strategy should be developed early in the NAP process. The strategy should be fully integrated with NAP activities, and reviewed and updated in an iterative manner. It may be designed to support the integration of financing needs related to the NAP process into planning and budgeting processes at the national, sectoral and sub-national levels. While the scope of a financing strategy for the NAP process will vary from country to country, it may consist of the following main **building blocks** (see Figure 7):

1. **Identifying the finance gap.** As part of efforts to prepare implementation strategies during the development phase of the NAP process, countries are encouraged to determine the amount of additional finance required to cover future operating and investment costs. These estimates should cover the costs of coordinating and maintaining the process (development phase) and implementing prioritized adaptation actions (implementation phase). After estimating the cost of the entire NAP process, countries can evaluate whether these costs can be covered by current domestic public finance (national and/or sub-national budgets) as well as non-budgetary sources such as existing support from bilateral and multilateral providers. This assessment may be aided by efforts to track domestic climate finance for adaptation, such as through the Climate Public Expenditures and Institutional Review or the Adaptation Finance Accountability Initiatives (see Box 3). The information retrieved can be used to develop scenarios that map current expenditures against anticipated future needs. This will identify the financing gap for a country's NAP process (GIZ, 2017a).

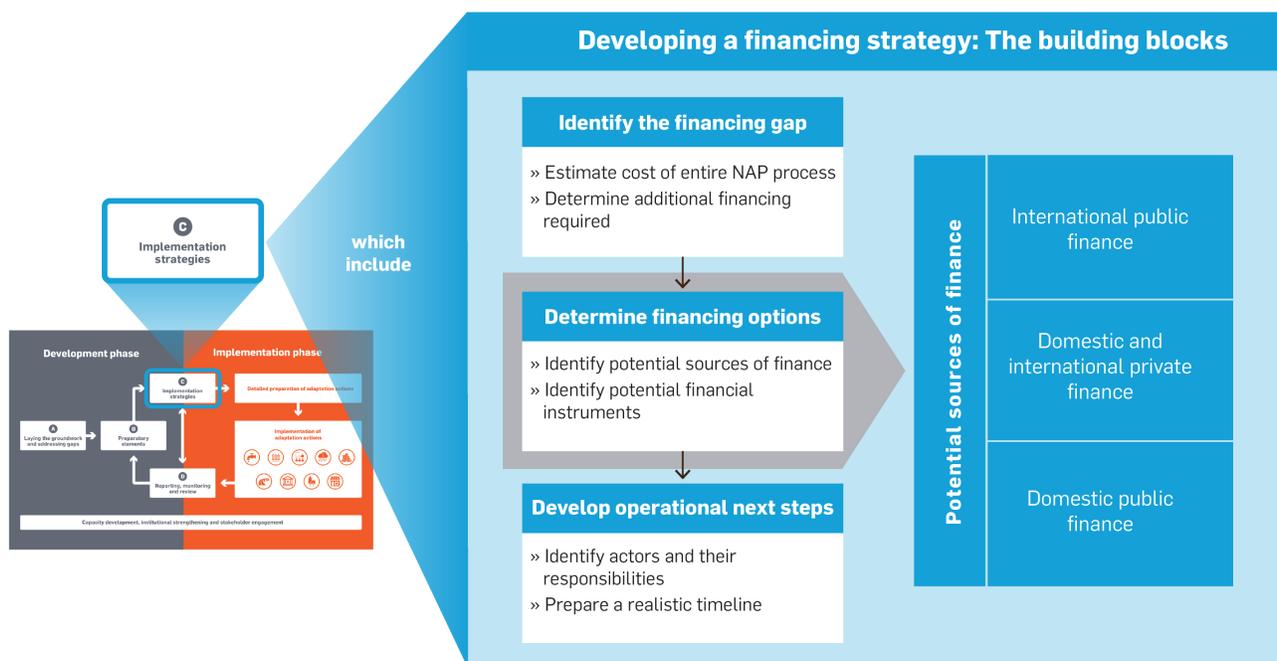


Figure 7. Main building blocks of a NAP financing strategy and its link to the NAP process.

2. **Determining financing options.** When identifying financing options for the NAP process, each country should consider its existing circumstances, relationships and capacities along with the adaptation needs prioritized through its NAP process. Countries can identify not only potential sources of finance (public or private, domestic or international) but also the financial instruments they will use (e.g., grants or loans). The strategy must also consider the political economy associated with different sources of finance (e.g., interests of different stakeholders, financing trends of bilateral providers). Countries should also consider diversifying the range of sources and instruments used. This will minimize the risk associated with depending on a small number of sources and will better tailor financing options to meet specific needs (GIZ, 2017a).³⁷ NAP teams are encouraged to reflect on some of the key observations and issues this guidance note has outlined prior to determining the potential to finance their NAP process through domestic public sources, international public sources and/or private sector sources.
3. **Identifying operational next steps.** To move from intention to action, a financing strategy for the NAP process can include a realistic and specific set of next steps that aim to improve the chances of accessing the identified funding sources. These steps may include undertaking policy reforms, strengthening institutions and coordination mechanisms, completing additional analysis, distributing targeted information to key stakeholder groups, preparing specific proposals, and establishing systems to monitor and track adaptation finance. The strategy might also need to include capacity building efforts to strengthen a country's readiness to plan for, access, deliver, and monitor and report on finance associated with the NAP process.

As an operational document, each step of the financing strategy should specify which actors are expected to play a key role, such as ministries responsible for oversight of the NAP process (typically the environment ministry), planning, finance and climate-sensitive sectors. The strategy can also outline the role of private sector

³⁷ It should be recognized, though, that diversifying finance sources can increase transaction costs, as each source will have its own specific expectations regarding demonstrating due diligence and meeting other requirements.

actors, such as business associations and key private enterprises, in each step. The document should further delineate the specific responsibilities and tasks of these actors, including means for ensuring coordination and cooperation between them. Finally, it should also include a realistic timeline with achievable milestones over the near, medium and long terms (GIZ, 2017a).

Preparing a strategy composed of these three building blocks can enable developing countries to align their financing needs for the NAP process with suitable available sources. It will also strengthen their capacity to access and effectively use funding. The ongoing efforts of countries preparing their financing strategies show the benefits of these strategies. Case study 6 shows an example of these benefits. Insights gained through these experiences can further inform efforts by NAP teams engaged in developing dedicated financing strategies for their NAP processes.

Case Study 6. Developing a financing strategy for the NAP process in Cambodia



The Royal Government of Cambodia has put measures in place in response to climate change challenges. To reduce the country's vulnerability in the medium to long term and integrate climate change adaptation into policy and budget planning, the government has taken steps to enter the implementation phase of its NAP process.

GIZ's Climate Finance Readiness Programme, commissioned by the German Federal Ministry for Economic Cooperation and Development in cooperation with and financed by the United States Agency for International Development, is supporting the National Council for Sustainable Development (NCSO) of the Royal Government of Cambodia in this endeavour.

One important pillar of this cooperation is supporting the NCSO to develop a more comprehensive financing strategy and implementation plan for the NAP process. The plan includes the following steps:

- Assessing financial demand and supply (from national, international, public and private sources) for the implementation of adaptation action.
- Setting adaptation priorities and agreeing on an implementation plan.
- Strengthening the capacities of the NCSO to mobilize the necessary financial resources and access international climate funds (including GCF access and the National Implementing Entity selection process).
- Strengthening the capacities of the NCSO in project appraisal and project management.

Another important pillar of Cambodia's NAP process is the integration of climate change adaptation aspects into sectoral planning processes to provide the basis for future budget allocations. Two line ministries (Ministry of Health and Ministry of Environment) are being supported in 2017 in these mainstreaming efforts.

7 Conclusion

The success of NAP processes will depend in part on the capacity of developing countries to secure the substantial financing required throughout its development and, in particular, implementation phases. Accessing these funds requires clearly understanding each country's financing needs and identifying suitable sources of finance to meet these needs. It also requires structuring NAP processes to enhance the probability of securing financing from these sources to meet near-, medium- and long-term finance requirements. As NAP teams design and carry out their NAP processes, key points that they may consider from this guidance note include the following:

- **Financing needs of the NAP process should be considered from the start.** From its initiation, NAP teams should give thought to what resources might be needed for the development and implementation phases of the NAP process and how they might be accessed. The development phase of the NAP process should then be designed to improve a country's potential of securing finance for the NAP process in the future, particularly its implementation phase.
- **Key stakeholders must be engaged early in the NAP process.** Related to the point above, ministries responsible for finance and development planning must be engaged early and continuously throughout the NAP process. Sector ministries similarly need to develop ownership of the NAP process to integrate identified priorities into their planning and budgeting cycles. Efforts should also be made to engage bilateral providers, NDAs or focal points for specific multilateral funds, and private sector associations. These different engagement processes require the investment of considerable time and resources early in the NAP process. However, these efforts will likely prove beneficial in the long term by ensuring that adaptation is indeed integrated into national and sectoral policy documents, finance strategies align with national and sectoral development priorities, and adaptation actions consistent with these policies and strategies are implemented.
- **Senior-level engagement is critical.** The NAP process needs early and continuous political commitment by high-level officials from key institutions to enable its successful initiation, continuation and impact. While this statement is true for the overall NAP process, it becomes particularly important in the context of funding decisions (both regarding national budget allocations and access to international funding).
- **Domestic public finance is crucial for sustainably financing the NAP process.** Given the iterative nature of the NAP process, domestic public finance is critical to covering the operating and investment costs related to coordinating and maintaining the process in the medium to long term. As well, during the implementation phase of the NAP process, investments in public goods like institutional strengthening and capacity building—and sectors such as education and health—are more likely to be funded through public sources, either domestic or international. These funds may be delivered through national, sectoral or sub-national development planning and budgeting processes. This situation reiterates the importance of the objective of the NAP process to integrate adaptation needs into development planning processes at the national, sectoral and sub-national levels.

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- **Financing can go beyond the scope of individual projects.** Reducing climate risks and addressing adaptation priorities will require the implementation of a variety of programs and initiatives along with individual adaptation projects. NAP teams should therefore also consider financing instruments that go beyond the scope of individual projects. These can originate both from international public sources (e.g., through budgetary support for actions in line with the adaptation priorities of a given climate-sensitive sector) and the private sector (e.g., through insurance schemes or risk-financing facilities).
 - **Realizing the potential of private sector financing requires careful design.** NAP teams must clearly understand the diversity of private sector actors, their motivations and how their interests may intersect with identified adaptation priorities. Governments should also consider their existing investment environments for private sector engagement in adaptation actions and how these environments might be enhanced. For example, governments can provide climate information, raise awareness of decision-support tools, and provide economic signals to incentivize private investments.
 - **Countries should pursue finance sources appropriate to national circumstances and capacities.** Countries differ in terms of their capacity to access financing from public and/or private and domestic and/or international sources due to their individual national circumstances. Countries that are less able to support their NAP process through domestic public finance may rely more on grants or concessional financing from international public sources. They may put greater emphasis on building their relationships with bilateral providers to secure new adaptation finance and/or build adaptation considerations into existing development assistance portfolios. Funding from international sources of private finance, on the other hand, may be more suited to countries with a stable regulatory regime, macroeconomic stability, investment-grade sovereign credit rating, well-functioning markets, strong technical capacities, and efficient and transparent public financial management systems. For example, the considerable capacities needed to effectively structure and manage PPPs limits the number of countries with the right set of circumstances to enable their success.
 - **Creating a dedicated NAP financing strategy helps systemize planning and action.** These strategies can assist in strategically determining how to align financing needs throughout the NAP process with potential sources of finance. NAP teams should collaborate on the development of their finance strategy with key actors within national and sub-national governments as well as within civil society (e.g., private sector associations and NGOs). Like the NAP process itself, these strategies should align with national priorities and development objectives. The strategies should also reflect national circumstances with respect to available capacities and finance readiness. Based on clear analysis of financing needs, strategies should outline potential financing options and include a realistic and specific set of next steps. These strategies may promote innovative approaches to securing the financing needed for adaptation and should focus on ensuring the sustainability of the investments made.

Integrating these observations and other insights from this guidance note into the design and execution of NAP processes can help NAP teams take a structured and effective approach to accessing financing. By understanding the financing requirements of the different phases of the NAP process and how they might be met through a combination of sources (domestic and international, public and private), countries will be better positioned to achieve their adaptation objectives not just in the immediate future but also over the longer term. This can lead to the successful implementation of prioritized adaptation actions that will reduce countries' climate risk and help achieve adaptation goals articulated in NDCs.

Glossary of Terms

Accredited entity: An international, regional, national or sub-national organization that is public, private or non-governmental in nature and has met the standards required by the GCF to directly receive finance from it to develop and implement approved projects or programs.

Basket financing: Donor- or government-led mechanism that pools and manages funds from multiple contributors to finance shared priorities or channel funds to a specific sector (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, 2008).

Bilateral provider: A national government that provides international public finance to a developing country. The government may or may not be a member of the OECD-DAC. Finance may be provided through channels above and beyond ODA.

Capital market: A market in which securities (e.g., shares and bonds) are issued and traded by governments and companies to raise medium- to long-term finance (Financial Times, n.d.)

Concessionary loan: A loan extended to recipients on terms that are substantially more generous than loans offered through the market. The loan may be offered at interest rates below those available on the market and/or have long grace periods (International Monetary Fund, 2003).

Corporate bond: A bond is a tradable security issued by a company to raise money. The company is obliged to repay the bond purchaser based on agreed-upon terms (e.g., original value of the bond and interest paid at regular intervals). Issued bonds may be traded on secondary markets (Financial Times, n.d.).

Debt finance: Occurs when a company borrows money from individuals or institutional investors (e.g., national and international banks) with corporate finance capacities in return for a commitment to repay the capital sum (the debt) along with a predetermined rate of interest on the debt at a future date (UNEP, 2014).

Equity instrument: A share or share option issued by the company to finance its business (Financial Times, n.d.). This includes the issuance of a permanent share (or “stock”) in the ownership of a corporation, project or asset in order to raise capital for future investments. Share purchasers (equity investors) own part of the company or asset and secure a financial return based on the success of the company or asset. As such there is no guaranteed return on the investment (Whitley, Canales Trujillo, & Norman, 2016).

Export credit: Government financial assistance provided to promote the foreign purchase of goods from national exporters by, for example, providing guarantees on bank loans to companies selling goods internationally or financial support to foreign buyers (Financial Times, n.d.; OECD, n.d.-b).

Fee: A payment to a central or local government in return for the delivery of a particular service provided in the public interest. Fees are typically introduced by governments to regulate different types of activities (Muley, n.d.; OECD, 2016a).

Grant: Non-repayable resources typically provided by a government or organization to a person, organization or government for a particular purpose (e.g., technical assistance or capacity building) without expectation that the money will be repaid. Grants can be offered to complement other instruments, such as loans (Financial Times, n.d.; Whitley, Canales Trujillo, & Norman, 2016).

Guarantee: Financial instrument by which a provider promises to be responsible for (i.e., repay up to a specified amount) a loan issued to someone else in the case the original borrower fails to make their payments (e.g., defaults on their loan or fails to redeem a bond) (Hurley & Voituriez, 2016). Guarantees can also be issued to cover other risks, such as those due to political uncertainty.

Implementing agency: Multilateral institution or international NGO approved by the GEF Board to assist national governments and NGOs with the development and implementation of projects and programs that receive funding from the GEF.

Implementing entity: Multilateral, regional or national institution that has met the standards required by the AF Board to directly receive finance from this fund and implement approved projects or programs.

Leveraging: The use of a comparatively smaller investment to generate a larger allocation of public and/or private financing from another source or sources.

Levy: The collection or setting of a tax (Financial Times, n.d.).

Medium-term expenditure framework: A budgetary planning tool that links the strategic objectives outlined in government policies and plans to action and predicted resource needs and expenditures over a three- to five-year time frame (GCCA+, n.d.).

Public good: A good or service provided by a government that generates significant benefits to society.

Public-private partnership (PPP): A long-term contract between a government and a private sector entity (or entities) that commits both parties to the shared provision of a public asset or service under specific agreed-upon terms that allocate and share risks between both parties. These arrangements allow for more practical and doable financing and delivery of large-scale projects (Gardiner et al., 2015; World Bank Group, Asian Development Bank, & Inter-American Development Bank, 2014).

Subordinated debt: Debt that is ranked lower than other forms of debt when claims are made on assets. Holders of subordinated debt are unable to satisfy claims against a borrower that had defaulted until the claims by holders of higher-ranking debt have been met (Financial Times, n.d.).

Tax: A compulsory unrequited payment by citizens and businesses to the government to finance the expenses of government (OECD, 2016a).

Venture capital: A form of private equity finance focused on investment in the early stages of a company or project, typically by wealthy individuals or venture capital specialists, in the expectation that it will yield high returns—compensating for the high risk associated with early-stage investments (UNEP, 2014).

References

- Adaptation Committee. (2015). *Navigating the landscape of support for the process to formulate and implement national adaptation plans: 2015 overview for developing countries*. Retrieved from https://unfccc.int/files/adaptation/application/pdf/nap_lowres.pdf
- Adaptation Fund. (n.d.). *Readiness programme for climate finance*. Retrieved from <https://www.adaptation-fund.org/readiness/>
- Adaptation Fund. (2016). *Resource mobilization strategy* (AFB/B.28/8). Retrieved from https://www.adaptation-fund.org/wp-content/uploads/2016/10/AFB.B.28.8_Resource_mobilization_strategy.pdf
- African Development Bank (AfDB). (2012). *Getting Africa ready for the Green Climate Fund*. Retrieved from <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Getting%20Africa%20ready%20for%20the%20Green%20Climate%20Fund.pdf>
- African Development Bank (AfDB), Asian Development Bank, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank Group, & World Bank Group. (2016). *2015 joint report on multilateral development banks' climate finance*. Retrieved from http://www.eib.europa.eu/attachments/documents/joint_mdb_report_on_climate_finance_2015.pdf
- African Risk Capacity. (n.d.). *Extreme Climate Facility (XCF)*. Retrieved from <http://www.africanriskcapacity.org/2016/10/31/extreme-climate-facility-xcf>
- Alloisio, I. (2014). *Public-private partnerships: A focus on energy infrastructures and green investment* (International Center for Climate Governance Reflection No. 22). Retrieved from http://www.iccgov.org/wp-content/uploads/2015/05/22_Reflection_April-2014.pdf
- Asian Infrastructure Investment Bank. (n.d.). *Home page*. Retrieved from <https://www.aiib.org/en/index.html>
- Atteridge, A., & Dzebo, A. (2015). *When does private finance count as climate finance? Accounting for private contributions towards international pledges* (Discussion Brief). Retrieved from <https://www.sei-international.org/mediamanager/documents/Publications/Climate/SEI-DB-2015-Private-climate-finance-accountability.pdf>
- Beaton, C., Lontoh, L., & Wai-Poi, M. (2017). Indonesia. In D.G. Victor & G. Inchauste (Eds.), *The politics of fossil fuel subsidies* (pp. 133–207). Washington, DC: World Bank.
- Benes, K., Cheon, A., Urpelainen, J., & Yang, J. (2016). *Low oil prices: An opportunity for fuel subsidy reform*. Retrieved from <http://www.theigc.org/blog/low-oil-prices-an-opportunity-for-fuel-subsidy-reform/>
- Bhinda, N., Attridge, S., & Sumaria, S. (2014). *Innovative finance for development: A Commonwealth toolkit*. London, UK: Commonwealth Secretariat.

-
- Briner, G., & Moarif, S. (2016). *Unpacking provisions related to transparency of mitigation and support in the Paris Agreement* (Climate Change Expert Group Paper No. 2016[2]). Retrieved from <http://www.oecd.org/environment/cc/Unpacking-transparency-provisions-Paris-Agreement-CCXG-May2016.pdf>
- BRL Ingénierie, Metaferia Consulting Engineers, & Ethiopian Ministry of Water and Energy. (2010). *Environmental and social impact assessment of about 20,000 ha irrigation and drainage schemes at Megech Pump (Seraba), Ribb and Anger Dam*. Retrieved from <http://documents.worldbank.org/curated/en/579061468021599027/pdf/603860V10BR0P01OFFICIAL0USE0ONLY191.pdf>
- Buchner, B.K., Trabacchi, C., Mazza, F., Abramskiehn, D., & Wang D. (2015). *Global landscape of climate finance 2015*. Retrieved from <https://climatepolicyinitiative.org/wp-content/uploads/2015/11/Global-Landscape-of-Climate-Finance-2015.pdf>
- Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung. (2008). *Konzept zur Budgetfinanzierung im Rahmen der Programmorientierten Gemeinschaftsfinanzierung (PGF)*. BMZ Konzepte 146. Retrieved from <https://www.bmz.de/de/mediathek/publikationen/archiv/themen/entwicklungsfinanzierung/Konzepte146.pdf>
- Caravani, A., & Patel, S. (2016). *Climate Funds Update highlights: November 2016* [Blog post]. Retrieved from <http://blog.climatefundsupdate.org/2016/11/10/climate-funds-update-highlights-november-2016/>
- Caravani, A., Watson, C., & Schalatek, L. (2016). *Climate finance thematic briefing: Adaptation finance*. Retrieved from <https://www.odi.org/sites/odi.org.uk/files/resource-documents/11024.pdf>
- Climate and Development Knowledge Network. (2015). *Opinion: Climate finance options for national climate funds*. Retrieved from https://cdkn.org/2015/12/opinion-climate-finance-options-for-national-climate-funds/?loclang=en_gb
- Climate Investment Funds (CIF). (n.d.). *Funds and programs: Forest investment program*. Retrieved from <https://www.climateinvestmentfunds.org/fund/forest-investment-program>
- Climate Investment Funds (CIF). (2016). *Pilot Program for Climate Resilience*. Retrieved from https://www-cif.climateinvestmentfunds.org/sites/default/files/ppcr_fact_sheet_november_2016.pdf
- Colverson, S., & Perera, O. (2011). *Sustainable development: Is there a role for public-private partnerships?* Retrieved from http://www.iisd.org/pdf/2011/sust_markets_PB_PPP.pdf
- Dazé, A., & Dekens, J. (2016). *Financial services for climate-resilient value chains: The case of the Centenary Bank in Uganda*. Retrieved from <https://www.iisd.org/sites/default/files/publications/climate-resilient-value-chains-case-centenary-bank-uganda.pdf>
- Dazé, A., Price-Kelly, H., & Rass, N. (2016). *Vertical integration in national adaptation plan (NAP) processes: A guidance note for linking national and subnational adaptation processes*. Retrieved from <http://napglobalnetwork.org/wp-content/uploads/2016/11/Vertical-Integration-in-NAP-Processes-Guidance-Note.pdf>
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (n.d.). *Climate expert*. Retrieved from <http://www.climate-expert.org/en/home/>
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (2012). *It's not just the money: Institutional strengthening of national climate funds. Lessons learned from GIZ's work on the ground*. Retrieved from <https://www.giz.de/fachexpertise/downloads/giz2012-en-climate-funds-institutional-strengthening.pdf>

-
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (2014a). *NAP align: Recommendations for aligning national adaptation plan processes with development and budget planning* (Supplementary material to the NAP technical guidelines). Retrieved from <http://www4.unfccc.int/nap/Documents/Supplements/GIZ%20NAPAlign%2025.11.14.pdf>
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (2014b). *Overview of GIZ's support to the national adaptation plan (NAP) process*. Retrieved from http://www.adaptationcommunity.net/?wpfb_dl=200
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (2015a). *Integrated Climate Change Adaptation Strategies (ICCAS) Grenada. Grenadian–German pilot programme*. Retrieved from <https://www.giz.de/en/downloads/giz2015-en-integrated-climate-change-adaption-strategies-grenada.pdf>
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (2015b). *The role of the private sector to scale up private finance in India (Final report)*. Retrieved from <https://www.giz.de/en/downloads/giz2015-en-nama-india-private-financial-institutions-climate-finance-final-report.pdf>
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (2016). *(I)NDC adaptation components and NAP* (Climate change policy brief). Retrieved from http://www.adaptationcommunity.net/?wpfb_dl=356
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (2017a). *Financing strategies: A missing link to translate NDCs into action*. Retrieved from <https://www.giz.de/expertise/downloads/giz2017-en-climate-finance-strategies-ndcs.pdf>
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (2017b). *Linking national adaptation plan processes and nationally determined contributions* (Climate change policy brief). Retrieved from http://ac.akryl.co/wp-content/uploads/2017/05/GIZ_2017_Climate-Change-Policy-Brief-Linking-National-Adaptation-Plan-Processes-and-Nationally-Determined-Contributions-1.pdf
- Devex. (n.d.). *The Global Fund: Overview*. Retrieved from <https://www.devex.com/organizations/the-global-fund-30677>
- Fernandez, A.L. (2016, March). *People's Survival Fund: Overview and status*. Presentation made at the Targeted Topics Forum: "Financing NAPs: Options for Implementation," Kingston, Jamaica. Retrieved from http://www.slideshare.net/NAP_Global_Network/peoples-survival-fund-overview-and-status
- Financial Times. (n.d.). *ft.com/lexicon*. Retrieved from <http://lexicon.ft.com/>
- Flynn, C. (2011, November). *National climate funds: Designing and establishing a national fund to achieve climate change priorities*. Presentation made at the Seventeenth Session of the Conference of the Parties, Durban, South Africa. Retrieved from https://unfccc.int/files/press/media_outreach/application/pdf/111130_mw_undp_cf.pdf
- Frankfurt School UNEP Collaboration Centre for Climate & Sustainable Energy Finance (FS-UNEP Centre). (n.d.). *National climate finance institutions support programme*. Retrieved from <http://fs-unep-centre.org/projects/national-climate-finance-institutions-support-programme>
- Gardiner, A., Bardout, M., Grossi, F., & Dixson-Declève, S. (2015). *Public-private partnerships for climate finance*. Retrieved from <https://norden.diva-portal.org/smash/get/diva2:915864/FULLTEXT01.pdf>
- Global Agriculture and Food Security Program. (2016). *About GAFSP*. Retrieved from <http://www.gafspfund.org/content/about-gafsp>
- Global Climate Change Alliance (GGCA+). (n.d.). *Module 8: Mainstreaming climate change in the budgetary process*. Training workshops on mainstreaming climate change in national development planning and budgeting. Retrieved from http://www.gcca.eu/sites/default/files/GCCA/MOD8_Handout_EN.pdf

-
- Global Environment Facility (GEF). (2013). *Operationalizing support to the preparation of the national adaptation plan process in response to guidance from the UNFCCC COP* (GEF/LDCF.SCCF.14/06). Retrieved from <https://www.thegef.org/council-meeting-documents/operationalizing-support-preparation-national-adaptation-plan-process>
- Global Impact Investing Network. (n.d.). *What you need to know about impact investing*. Retrieved from <https://thegiin.org/impact-investing/need-to-know/>
- The Global Innovation Lab for Climate Finance. (n.d.). *The ideas*. Retrieved from http://climatefinancelab.org/ideas/?_sfm_type=Adaptation
- Global Partnership for Effective Development Cooperation. (2014). *First high-level meeting of the Global Partnership for Effective Development Cooperation: Building towards an inclusive post-2015 development agenda* (Mexico High Level Meeting Communiqué, 16 April 2014). Retrieved from http://effectivecooperation.org/wp-content/uploads/2014/07/ENG_Final-ConsensusMexicoHLMCommunique.pdf
- Government of Brazil. (n.d.). *Amazon Fund, purpose and management*. Retrieved from http://www.amazonfund.gov.br/FundoAmazonia/fam/site_en/Esquerdo/Fundo/
- Government of Indonesia. (2015). *Indonesia Climate Change Trust Fund*. Retrieved from <http://icctf.or.id/welcome-to-icctf/>
- Government of the United Kingdom. (2015). *Policy paper: International Climate Fund*. Retrieved from <https://www.gov.uk/government/publications/international-climate-fund>
- Green Climate Fund (GCF). (n.d.-a). *Empowering countries*. Retrieved from <https://www.greenclimate.fund/how-we-work/empowering-countries>
- Green Climate Fund (GCF). (n.d.-b). *Project preparation facility guidelines*. Retrieved from https://www.greenclimate.fund/documents/20182/466886/Project_Preparation_Facility_Guidelines.pdf/f8b62701-a9ca-4b1e-9e23-e67f1b88abd4
- Green Climate Fund (GCF). (n.d.-c). *Readiness program overview*. Retrieved from https://www.greenclimate.fund/documents/20182/319135/Readiness_Program_Overview.pdf/331e4062-0da0-40b6-bb76-2d2c22aaa53e
- Green Climate Fund (GCF). (n.d.-d). *Resource mobilization*. Retrieved from <http://www.greenclimate.fund/partners/contributors/resources-mobilized>
- Green Climate Fund (GCF). (2015). *Engaging with the Green Climate Fund: A resource guide for national designated entities and focal points of recipient countries*. Retrieved from https://www.greenclimate.fund/documents/20182/194568/GCF_ELEMENTS_01.pdf/542c1610-81b4-40df-be62-025cef3d26d8
- Green Climate Fund (GCF). (2016a). *Establishing a programmatic framework for engaging with micro-, small- and medium-sized enterprises*. Retrieved from https://www.greenclimate.fund/documents/20182/226888/GCF_B.13_15_-_Establishing_a_programmatic_framework_for_engaging_with_micro-_small-_and_medium-sized_enterprises.pdf/558ec8ba-f0f8-455a-a8ce-8544de51f719
- Green Climate Fund (GCF). (2016b). *Insight: An introduction to GCF*. Retrieved from https://www.greenclimate.fund/documents/20182/194568/GCF_INSIGHT_2016/dc2b945f-d96a-4f6d-9eeb-3960beee919a
- Green Climate Fund (GCF). (2016c). *Report of the thirteenth meeting of the board, 28–30 June 2016* (GCF/B.13/33). Retrieved from https://www.greenclimate.fund/documents/20182/226888/GCF_B.13_33_-_Report_of_the_thirteenth_meeting_of_the_Board_28-30_June_2016.pdf/268c1ea7-5243-410d-8ed8-e5257083c555

-
- Green Climate Fund (GCF). (2017). *Portfolio dashboard*. Retrieved from <http://www.greenclimate.fund/projects/portfolio>
- Green Growth Best Practice. (2014). *Green growth in practice: Lessons from country experiences*. Retrieved from <http://www.greengrowthknowledge.org/resource/green-growth-practice-lessons-country-experiences>
- Hesse, C. & Pattison, J. (2013). *Ensuring devolution supports adaptation and climate resilient growth in Kenya*. Retrieved from <http://pubs.iied.org/pdfs/17161IIED.pdf>
- Holmes, L., Strauss, C.K., de Vos, K., & Bonzon, K. (2014). *Towards investment in sustainable fisheries: A framework for financing the transition*. Retrieved from <http://www.pcfisu.org/wp-content/uploads/2014/07/Towards-Investment-in-Sustainable-Fisheries.pdf>
- Hurley, G., & Voituriez, T. (2016). *Financing the SDGs in the least developed countries (LDCs): Diversifying the financing toolbox and managing vulnerability*. Retrieved from <http://www.undp.org/content/undp/en/home/librarypage/poverty-reduction/afd-undp-financing-sustainable-development-and-managing-vulnerab.html>
- Innovative Financing Initiative. (2014). *Innovative financing for development: Scalable business models that produce economic, social and environmental outcomes*. Retrieved from http://www.citifoundation.com/citifoundation/pdf/innovative_financing_for_development.pdf
- Inter-Agency Task Force on Financing for Development. (2016). *Multilateral development banks*. Issue Brief Series. Retrieved from http://www.un.org/esa/ffd/wp-content/uploads/2016/01/Multilateral-Development-Banks_WBG_IATF-Issue-Brief.pdf
- International Bank for Reconstruction and Development. (2015). *What are green bonds?* Retrieved from http://treasury.worldbank.org/cmd/pdf/What_are_Green_Bonds.pdf
- International Monetary Fund. (2003). Appendix III: Glossary of external debt terms. In *External debt statistics: Guide for compilers and users*. Retrieved from <http://www.tffs.org/pdf/edsg/ft2014.pdf>
- Jones, L., Mitchell, T., Villaneuva, P.S., & Standley, S. (2012). *Coding and tracking adaptation finance: Lessons and opportunities for monitoring adaptation finance across international and national scales*. Retrieved from <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7821.pdf>
- King'uyu, S. (2016). *Making the business case for NAPs: How Kenya is tracking adaptation finance*. Retrieved from <http://www.napglobalnetwork.org/2016/08/making-business-case-naps-kenya-tracking-adaptation-finance/>
- Koh, J., Mazzacurati, E., & Swann, S. (2016). *Bridging the adaptation gap: Approaches to measurement of physical climate risk and examples of investment in climate adaptation and resilience* (Discussion paper). Retrieved from <http://427mt.com/wp-content/uploads/2016/11/GARI-2016-Bridging-the-Adaptation-Gap.pdf>
- Least Developed Countries Expert Group (LEG). (2012). *National adaptation plans: Technical guidelines for the national adaptation plan process*. Retrieved from https://unfccc.int/files/adaptation/cancun_adaptation_framework/application/pdf/naptechguidelines_eng_high_res.pdf
- Least Developed Countries Expert Group (LEG). (2015). *Information paper on how the process to formulate and implement national adaptation plans can be supported in least developed countries*. Retrieved from http://www4.unfccc.int/nap/Documents/UNFCCC%20LDC_Support_9%20124.pdf
- Lontoh, L. & Toft, L. (2016, September 8). *Indonesia should lead fuel subsidy reform*. Jakarta Post. Retrieved from <http://www.thejakartapost.com/news/2016/09/08/indonesia-should-lead-fuel-subsidy-reform.html>

-
- Miller, M. (2012). *Climate public expenditure and institutional reviews in the Asia-Pacific region: What have we learnt?* Retrieved from http://www.asia-pacific.undp.org/content/rbap/en/home/library/democratic_governance/CPEIR-lessons-learnt.html
- Ministère de l'environnement et des ressources forestières. (2016a). *Atelier national de validation du plan national d'adaptation aux changements climatiques (PNACC) et de présentation des résultats du premier inventaire forestier national (IFN) dans le cadre de la REDD+*. Retrieved from <http://tg.chm-cbd.net/events/atelier-national-de-validation-du-plan-national-d-adaptation-aux-changements>
- Muley, R. (n.d.). *Difference between tax and fees*. Retrieved from <http://www.economicdiscussion.net/government/taxation/difference-between-tax-and-fees/17448>
- Nakhoda, S., Norman, M., Barnard, S., Watson, C., Greenhill, R., Caravani, A., ... Whitley, S. (2014). *Climate finance: Is it making a difference? A review of the effectiveness of multilateral climate funds*. Retrieved from <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9359.pdf>
- NAP Global Network. (2016). *Financing national adaptation plans (NAPs): Options for implementation* (Targeted Topics Forum Report II). Retrieved from <http://www.napglobalnetwork.org/resource/financing-national-adaptation-plans-naps-options-for-implementation/>
- National Adaptation Plan Global Support Programme (NAP-GSP). (n.d.). *About the NAP-GSP*. Retrieved from <http://globalsupportprogramme.org/about-nap-gsp-0>
- New Development Bank. (n.d.). *NDB fact sheet*. Retrieved from <http://www.ndb.int/wp-content/uploads/2017/05/factheet-1.jpg>
- Noble, I.R., Huq., S., Anokhin, Y.A., Carmin, J., Goudou, D., Lansigan, F.P., ... Villamizar, A. (2014). Adaptation needs and options. In C.B. Field, V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, ...L.L. White (Eds.), *Climate change 2014: Impacts, adaptation and vulnerability. Part A: Global and sectoral aspects. Contribution of working group II to the fifth assessment report of the IPCC* (pp. 833–868). Cambridge, UK: Cambridge University Press.
- Organisation for Economic Co-operation and Development (OECD). (n.d.-a). *DAC members*. Retrieved from <http://www.oecd.org/dac/dacmembers.htm>
- Organisation for Economic Co-operation and Development (OECD). (n.d.-b). *Glossary of statistical terms*. Retrieved from <https://stats.oecd.org/glossary/index.htm>
- Organisation for Economic Co-operation and Development (OECD). (2006). *Harmonising donor practices for effective aid delivery. Volume 2. Budget support, sector wide approaches and capacity development in public financial management*. DAC Guidelines and Reference Series. Retrieved from <https://www.oecd.org/dac/effectiveness/34583142.pdf>
- Organisation for Economic Co-operation and Development (OECD). (2016a). *Glossary of tax terms*. Retrieved from <http://www.oecd.org/ctp/glossaryoftaxterms.htm>
- Organisation for Economic Co-operation and Development (OECD). (2016b). *2020 projections of climate finance towards the USD 100 billion goal*. Retrieved from <http://www.oecd.org/environment/cc/oecd-climate-finance-projection.htm>
- Organisation for Economic Co-operation and Development (OECD) & Climate Policy Initiative. (2015). *Climate finance in 2013–14 and the USD 100 billion goal*. Retrieved from <http://www.oecd.org/environment/cc/OECD-CPI-Climate-Finance-Report.htm>

-
- Organisation for Economic Co-operation and Development - Development Assistance Committee (OECD-DAC). (2016a). *Climate-related development finance in 2015*. Retrieved from [https://www.oecd.org/dac/environment-development/Climate-related%20development%20finance%20in%202015%20-%20FINAL%20\(2\).pdf](https://www.oecd.org/dac/environment-development/Climate-related%20development%20finance%20in%202015%20-%20FINAL%20(2).pdf)
- Organisation for Economic Co-operation and Development - Development Assistance Committee (OECD-DAC). (2016b). *Summary data for key charts and tables summarising finance provided by DAC member (Updated March 2016)*. Retrieved from <http://www.oecd.org/dac/environment-development/Climate-Finance-Summary-Data-and-Tables.xlsx>
- Overseas Development Institute (ODI) & Heinrich-Böll-Stiftung. (2017). *Climate Funds Update: Fund size and spending*. Retrieved from <http://www.climatefundsupdates.org/global-trends/size-spending>
- Oxford Consulting Partners. (2015). *Tracking private climate finance flows at the national level. Proposed country-level methodology (Draft v.2)*. Retrieved from http://lowemissiondevelopment.org/lecbp/docs/resources/UNDP_LECB_Methodology.pdf
- Pauw, W.P. (2015). *Not a panacea: Private-sector engagement in adaptation and adaptation finance in developing countries*. *Climate Policy*, 15(5), 583–603.
- Pereira, J. (2012). *Cashing in on climate change? Assessing whether private funds can be leveraged to help the poorest countries respond to climate challenges*. Retrieved from <http://www.eurodad.org/files/pdf/1345788-cashing-in-on-climate-change-assessing-whether-private-funds-can-be-leveraged-to-help-the-poorest-countries-respond-to-climate-challenges.pdf>
- Pradipto, R., Susanto, A., Wirotomo, A., Adisasmita, A., & Beaton, C. (2016). *Financing development with fossil fuel subsidies: The reallocation of Indonesia's gasoline and diesel subsidies in 2015*. Retrieved from <http://www.iisd.org/sites/default/files/publications/financing-development-with-fossil-fuel-subsidies-indonesia.pdf>
- Price-Kelly, H., & Hammill, A. (2015). *sNAPshot: Initiating sector integration of adaptation considerations (Overview brief)*. Retrieved from <http://napglobalnetwork.org/wp-content/uploads/2015/11/sNAPshot-initiating-sector-integration-adaptation-overview-brief.pdf>
- Prowitt, S., Putt del Pino, S., Metzger, E., & Kerdeman, M. (2011). *Making climate companies' business*. Retrieved from <http://www.wri.org/blog/2011/02/making-climate-companies-business>
- Public-Private Infrastructure Advisory Facility. (2012). *PPIAF support to private sector participation in the irrigation sector in Ethiopia*. Retrieved from <https://library.pppknowledgelab.org/PPIAF/documents/2566/download>
- Rai, N., & Norton, A. (2016). *Expediting direct access to the GCF for least developed countries*. Retrieved from <http://www.iied.org/expediting-direct-access-gcf-for-least-developed-countries>
- Sama, B., Meatchi, T., & Issifou, A. (2016, March). *NAP process in Togo experience integrating adaptation into planning and budgeting*. Presentation made at the Second Targeted Topics Forum: "Financing NAPs: Options for Implementation," Kingston, Jamaica. Retrieved from http://www.slideshare.net/NAP_Global_Network/nap-process-in-togo-experience-intergrating-adaptation-into-planning-and-budgeting
- Schalatek, L., Nakhooda, S., & Watson, C. (2015). *The Green Climate Fund*. *Climate Finance Fundamentals* 11. *Climate Funds Update*. Retrieved from <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/10066.pdf>

-
- Schmidt-Traub, G., & Sachs, J.D. (2015). *The roles of public and private development finance* (Issue brief). Retrieved from <http://unsdsn.org/wp-content/uploads/2015/05/150529-The-Roles-of-Public-and-Private-Development-Finance.pdf>
- Shaw, S. (n.d.). *Private gain, public interest. Can private finance help communities adapt to climate change?* Retrieved from http://tilz.tearfund.org/~media/files/tilz/research/private_gain_public_interest_-_tearfund.pdf
- Smith, J., Hayman, A., Anderson, G., & Laird, M. (2016, March). *Engaging the private sector for national adaptation plan (NAP) implementation: The role of the public sector*. Presentation made at the Second Targeted Topics Forum: "Financing NAPs: Options for Implementation," Kingston, Jamaica. Retrieved from http://pdf.usaid.gov/pdf_docs/PA00M56Q.pdf
- Tippmann, R., Agoumi, A., Perroy, L., Doria, M., Henders, S., & Goldmann, R. (2013). *Assessing barriers and solutions to financing adaptation projects in Africa*. Retrieved from <https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/51972/1/IDL-51972.pdf>
- Tirpak, D., Brown, L.H., & Ballesteros, A. (2014). *Monitoring climate finance in developing countries: Challenges and next steps: Reporting on a series of three workshops*. Retrieved from <http://www.wri.org/publication/monitoring-climate-finance-developing-countries-challenges-and-next-steps>
- Uganda. Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). (2016). *National adaptation plan (NAP) for the agricultural sector*. Draft. Republic of Uganda, Kampala.
- United Nations Department for Economic and Social Affairs (UN DESA). (2012). *World economic and social survey 2012: In search of new development finance*. Retrieved from http://www.un.org/en/development/desa/policy/wess/wess_current/2012wess.pdf
- United Nations Development Programme (UNDP). (n.d.). *Mali Climate Fund*. Retrieved from <http://mptf.undp.org/document/download/12430>
- United Nations Development Programme (UNDP). (2011). *Blending climate finance through national climate funds. A guidebook for the design and establishment of national funds to achieve climate change priorities*. Retrieved from http://www.undp.org/content/dam/undp/library/Environment%20and%20Energy/Climate%20Change/Capacity%20Development/Blending_Climate_Finance_Through_National_Climate_Funds.pdf
- United Nations Development Programme (UNDP). (2012). *National climate funds: Learning from the experience of Asia-Pacific countries*. Retrieved from <http://www.asia-pacific.undp.org/content/rbap/en/home/library/climate-and-disaster-resilience/APRC-EE-2012-NCF-DiscussionPaper-Asia-Pacific.html>
- United Nations Development Programme (UNDP). (2015a). *Budgeting for climate change: How governments have used national budgets to articulate a response to climate change. Lessons learned from over twenty Climate Public Expenditure and Institutional Reviews*. Retrieved from https://www.climatefinance-developmenteffectiveness.org/sites/default/files/documents/27_08_15/1%20Budgeting%20for%20Climate%20Change_August%202015.pdf
- United Nations Development Programme (UNDP). (2015b). *Methodological guidebook: Climate Public Expenditure and Institutional Review (CPEIR)*. Retrieved from http://www.asia-pacific.undp.org/content/rbap/en/home/library/democratic_governance/cpeir-methodological-guidebook.html
- United Nations Environment Programme (UNEP). (2011). *Bilateral finance institutions and climate change: A mapping of public financial flows for mitigation and adaptation to developing countries in 2010*. Retrieved from <http://wedocs.unep.org/handle/20.500.11822/7976>

-
- United Nations Environment Programme (UNEP). (2014). *Demystifying private climate finance*. Retrieved from <http://www.unepfi.org/fileadmin/documents/DemystifyingPrivateClimateFinance.pdf>
- United Nations Environment Programme (UNEP). (2016). *The adaptation finance gap report 2016*. Nairobi, Kenya: United Nations Environment Programme. Retrieved from <http://www.unep.org/adaptationgapreport/2016>
- United Nations Environment Programme Finance Initiative (UNEP-FI) & Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (2016). *Demystifying adaptation finance for the private sector*. Retrieved from <http://www.unepfi.org/news/themes/climate-change/demystifying-adaptation-finance-for-private-sector/>
- United Nations Framework Convention on Climate Change (UNFCCC). (2011). Decisions adopted by the Conference of the Parties. In *Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010. Part two: Action taken by the Conference of the Parties at its sixteenth session*. Retrieved from <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>
- United Nations Framework Convention on Climate Change (UNFCCC). (2012). Decisions adopted by the Conference of the Parties. In *Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011. Part two: Action taken by the Conference of the Parties at its seventeenth session*. Retrieved from <https://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf>
- United Nations Framework Convention on Climate Change (UNFCCC). (2013). Decisions adopted by the Conference of the Parties. In *Report of the Conference of the Parties on its eighteenth session, held in Doha from 26 November to 8 December 2012. Part two: Action taken by the Conference of the Parties at its eighteenth session*. Retrieved from <http://unfccc.int/resource/docs/2012/cop18/eng/08a02.pdf>
- United Nations Framework Convention on Climate Change (UNFCCC). (2016a). *Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015*. Retrieved from <http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf>
- United Nations Framework Convention on Climate Change (UNFCCC). (2016b). *Report of the Global Environment Facility to the Conference of the Parties*. Retrieved from <http://unfccc.int/resource/docs/2016/cop22/eng/06.pdf>
- United Nations Framework Convention on Climate Change (UNFCCC). (2016c). *Roadmap to US\$100 billion*. Retrieved from [http://www4.unfccc.int/Submissions/Lists/OSPSubmissionUpload/261_295_131233554162587561-Roadmap%20to%20the%20US\\$100bn%20\(UNFCCC\).pdf](http://www4.unfccc.int/Submissions/Lists/OSPSubmissionUpload/261_295_131233554162587561-Roadmap%20to%20the%20US$100bn%20(UNFCCC).pdf)
- United Nations Framework Convention on Climate Change (UNFCCC) National Adaptation Plan (NAP) Central. (n.d.). *Assessing financial support for the NAP process*. Retrieved from <http://www4.unfccc.int/nap/Pages/GCF.aspx>
- United Nations Framework Convention on Climate Change (UNFCCC) Standing Committee on Finance. (2014). *Fifth review of the financial mechanism* (Technical paper SCF/TP/2014/1). Retrieved from http://unfccc.int/files/cooperation_and_support/financial_mechanism/standing_committee/application/pdf/technical_paper_fifth_review_of_the_financial_mechanism_18112014_final.pdf
- United Nations Framework Convention on Climate Change (UNFCCC) Standing Committee on Finance. (2016). *2016 biennial assessment and overview of climate finance flows report*. Retrieved from http://unfccc.int/files/cooperation_and_support/financial_mechanism/standing_committee/application/pdf/2016_ba_technical_report.pdf
- Warland, L., & Michaelowa, A. (2015). *Can debt for climate swaps be a promising climate finance instrument? Lessons from the past and recommendations for the future*. Retrieved from http://www.perspectives.cc/fileadmin/Reports/2015_Perspectives_Debt_for_climate_swaps.pdf

-
- Whitley, S., Canales Trujillo, N., & Norman, M. (2016). *Mobilising private finance for climate compatible development: A diagnostic tool for mapping incentives and investment*. Retrieved from <https://www.odi.org/sites/odi.org.uk/files/resource-documents/10480.pdf>
- Wilkinson, E., Caravani, A., Canales Trujillo, N., Nakhooda, S., Terpstra, P., & Peterson Carvalho, A. (2014). *Going in the right direction? Tracking adaptation finance at the subnational level*. Retrieved from <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9360.pdf>
- World Bank. (2015). *Developing common principles for tracking climate finance* [Blog post]. Retrieved from <http://www.worldbank.org/en/news/feature/2015/04/03/common-principles-for-tracking-climate-finance>
- World Bank Group. (n.d.-a). *PPP knowledge lab*. Retrieved from <https://pppknowledgelab.org/>
- World Bank Group. (n.d.-b). *Public-Private Partnership in Infrastructure Resource Centre*. Retrieved from <https://ppp.worldbank.org/public-private-partnership/>
- World Bank Group. (2016). *PPP arrangements/types of public-private partnership agreements*. Retrieved from <https://ppp.worldbank.org/public-private-partnership/agreements>
- World Bank Group, Asian Development Bank, & Inter-American Development Bank. (2014). *Public-private partnerships reference guide version 2.0*. Retrieved from <http://documents.worldbank.org/curated/en/600511468336720455/pdf/903840PPP0Refe0Box385311B000PUBLIC0.pdf>
- World Resources Institute, Overseas Development Institute, Institute for Global Environmental Strategies, & Climate Advisers. (2013). *Fast-start finance project and programme data set v2.0*. Retrieved from <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8692.xlsx>



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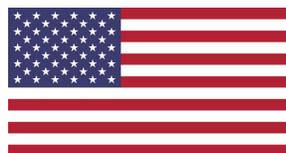
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