



# Building blocks for Nationally Appropriate Mitigation Actions



African Development Bank

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# Table of Contents

<b>Acronyms</b>	<b>5</b>
<b>UNFCCC United Nations Framework Convention on Climate Change</b>	<b>5</b>
<b>Preface</b>	<b>6</b>
<b>Introduction</b>	<b>8</b>
1.1 The international context	8
1.1.1 NAMA types	9
1.1.2 International support for NAMAs	10
1.1.3 The UNFCCC NAMA Registry	11
1.1.4 NAMAs and other climate policy instruments	12
1.2. Why develop NAMAs?	12
<b>Block 1. From a country's priorities to specific NAMA ideas</b>	<b>15</b>
2.1 Identifying policy priorities and gaps	16
2.2 Stakeholder mapping	17
2.3 Prioritising NAMAs	18
<b>Block 2. From a NAMA idea to a proposal</b>	<b>20</b>
Section 1 –General information	21
Section 2 – Activities	<b>Erreur ! Signet non défini.</b>
Barrier Analysis	22
Section 3 – Impacts	25
Section 4 – Costs and support needs	28
Calculating incremental costs	29
Section 5 – MRV framework	31
<b>Block 3. Putting a NAMA into action</b>	<b>35</b>
3.1 Sharing responsibilities and setting up an action framework	35
3.2 Making a submission to the UNFCCC NAMA Registry	37
3.3 Potential sources of financial or technical support	37
<b>Appendix 1. Additional resources</b>	<b>43</b>
<b>Appendix 2. Indicative outline of a NAMA proposal</b>	<b>45</b>
<b>Appendix 3. Bibliography</b>	<b>46</b>

## Boxes

Box 1. Sources of information to collect in order to identify policy priorities	16
Box 2. Means to engage and mobilize stakeholders	18
Box 3. How can the emission impacts be assessed?	27
Box 4. Potential role of businesses and private sector in NAMAs	36

## Figures

Figure 1. Policy architecture for NAMAs	11
Figure 2. From identification of NAMAs to concrete action	15
Figure 4. Incremental costs v. total costs	29
Figure 5. Example of an action framework for a solar panel NAMA in rural areas	36

## Tables

Table 1. Suggested criteria for NAMA selection	19
Table 2. Common Barriers to GHG mitigation (inspired from UNFCCC, 2006)	<b>Erreur ! Signet non défini.</b>
Table 3. Cost categories for NAMAs	28
Table 4. Non-exhaustive list of potential entities willing to provide support for mitigation initiatives in different countries and regions	38

# Acronyms

AfDB	African Development Bank
BAU	Business as usual
CDM	Clean Development Mechanism
CFL	Compact fluorescent lamp
CGE	Computable General Equilibrium
COP	Conference of the Parties
FAO	Food and Agriculture Organization
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse gas
LCDS	Low Carbon Development Strategy
LEDS	Low Emissions Development Strategy
MRV	Monitoring Reporting and Verification
MW	Megawatts
NAMA	Nationally Appropriate Mitigation Action
NAP	National Adaptation Plan
NAPA	National Adaptation Programme of Action
RMC	Regional Member Country
tCO <sub>2</sub> e	Tonne of CO <sub>2</sub> equivalent
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change

# Preface

*"Building blocks for Nationally Appropriate Mitigation Actions"* is part of the African Development Bank (AfDB) Programme for the Development of Nationally Appropriate Mitigation Actions (NAMAs).

The objective of the AfDB Programme is to provide assistance to Regional Member Countries (RMCs) to promote the understanding and application of NAMAs. The programme also supports the development of a harmonized approach to NAMAs taking into account the specific African context and needs. This in turn will enable RMCs to engage more effectively in the climate negotiations and actively shape this important new climate instrument by providing practical experience on how the NAMA concept may be put into practice in African countries.

This document aims to assist African countries to understand the concepts around NAMA development and to promote the use of NAMAs as a tool to support mitigation and sustainable development strategies. It is primarily targeted at policy makers and other stakeholders with an interest in NAMAs in African countries. However, the information is also relevant for other regions.

The development of NAMAs offers a unique opportunity to support development objectives while contributing to the global efforts to combat climate change. NAMAs can help governments to mobilize support to move away from unsustainable carbon pathways. NAMAs can also be submitted to potential bilateral and multilateral donors or to the NAMA Registry of the United Nations Framework Convention on Climate Change (UNFCCC) in order to seek international financial, technology and/or capacity building support as well as recognition from the international community.

## **How to Use this Document**

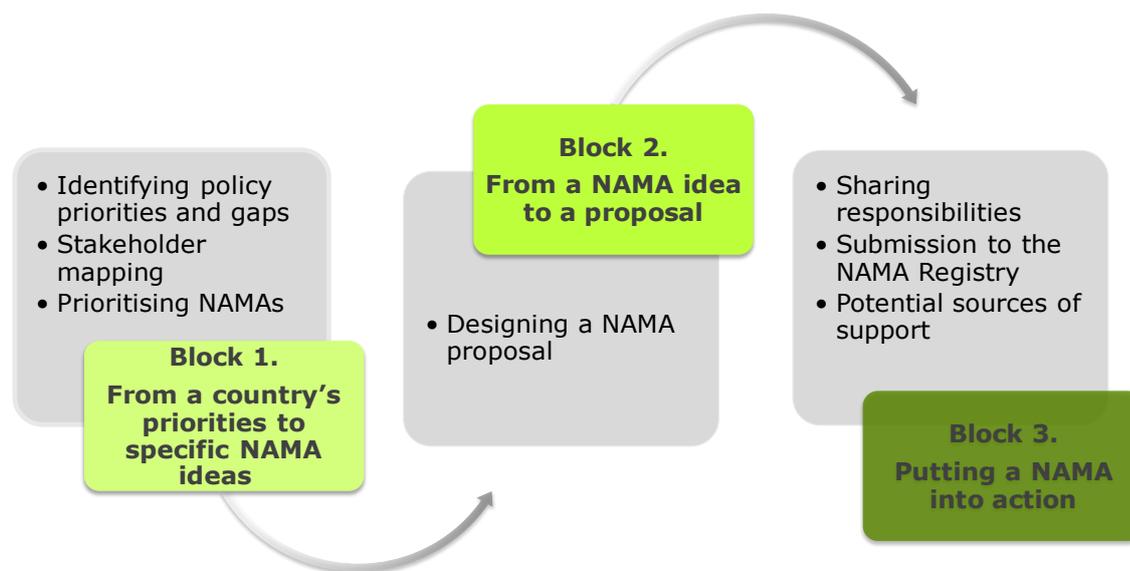
At the time of writing, there are no agreed NAMA definitions or guidelines on how to develop NAMAs at the international level. Therefore, this document intends to sketch the most important issues that need to be considered in NAMA development and to support a country-led process based on each country's needs and circumstances, without prejudging future international decisions on NAMAs. This information is based on current best practice taking into account years of experience in development and climate mitigation policy.

The document seeks to reflect the wide variety of possible NAMAs across different sectors and scopes. The examples throughout the document provide additional context and should be seen as ideas, rather than limiting possible NAMA interventions.

The introduction part of this document defines the NAMA concept and provides background on the international policy context. Subsequent chapters are organized by "blocks". They provide the reader with some key principles and building blocks for the selection of NAMAs (Block 1) and the

development of a proposal for a selected NAMA (Block 2). Block 3 deals with aspects of implementation including how to involve stakeholders and attract support from potential donors.

The Figure below illustrates the purposes served by the three last chapters of the document.



The structure and content of the document is flexible and can be adapted according to specific circumstances of the country. Although each block can be read as standalone input, the sequence of blocks follows a typical NAMA development cycle.

# Introduction

## 1.1 The international context

Nationally Appropriate Mitigation Actions (NAMAs) are one of the cornerstones of the international climate negotiations. The term was first introduced in the Bali Action Plan of 2007<sup>1</sup>, where all Parties to the United Nations Framework Convention on Climate Change (UNFCCC) agreed to negotiate on *"Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity building, in a measurable, reportable and verifiable manner."*<sup>2</sup>

Following the Conference of the Parties (COP) to the UNFCCC in December 2009 in Copenhagen, many developing countries submitted NAMAs to the UNFCCC<sup>3</sup>. One year later, in Cancun, Parties agreed that developing countries would undertake NAMAs *"aimed at achieving a deviation in emissions relative to 'business as usual' emissions in 2020"*<sup>4</sup>. To date, more than 50 countries have voluntarily submitted NAMAs to the UNFCCC. The NAMA submissions have been compiled in official UNFCCC documents<sup>5</sup>.

As of today, there is no agreed international definition of a NAMA. Considering country submissions to the UNFCCC and Decisions of the COP, some common characteristics of NAMAs can be distilled:

- A NAMA is a voluntary intervention by a developing country government
- A NAMA is in line with national and/or local development priorities
- A NAMA has an effect on reducing greenhouse gas (GHG) emissions either directly or indirectly and either in the short, medium or long term
- A NAMA can be supported internationally as well as domestically
- A NAMA should be measurable reportable and verifiable ("MRVable") to ensure transparency of outcomes including emission reductions and other benefits.

Many countries have started to develop NAMA ideas and detailed proposals in order to seek international support and recognition. Only a few of these NAMA proposals have moved into implementation. Therefore considerations on NAMA implementation are still largely theoretical at this stage<sup>6</sup>.

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<sup>1</sup> The Bali Action Plan is the name given to the Decision 1/CP.13, which is the first Decision adopted by the Conference of the Parties to the UNFCCC (COP) in December 2007 at the 13th COP.

<sup>2</sup> Decision 1/CP.13, paragraph 1 b ii, document FCCC/CP/2007/6/Add.1

<sup>3</sup> A submission to the UNFCCC is an official document written by a governmental institution on behalf of a country and communicated to the UNFCCC for publication. NAMA submissions are compiled in two UNFCCC documents: [unfccc.int/resource/docs/2011/awglca14/eng/inf01.pdf](http://unfccc.int/resource/docs/2011/awglca14/eng/inf01.pdf) (UNFCCC, 2011) and [unfccc.int/resource/docs/2012/awglca15/eng/misc02.pdf](http://unfccc.int/resource/docs/2012/awglca15/eng/misc02.pdf).

<sup>4</sup> Decision 1/CP.16, paragraph 48.

<sup>5</sup> UNFCCC, 2011.

<sup>6</sup> For an overview of current NAMA activities in different countries visit [www.nama-database.org](http://www.nama-database.org).

### 3.1 NAMA types

At the international policy level two main types of NAMAs are distinguished:

- Unilateral NAMAs (also referred to as "*domestically supported NAMAs*") are mitigation actions undertaken by developing countries with their own resources.
- Supported NAMAs (also referred to as "*internationally supported NAMAs*") are mitigation actions undertaken by developing countries, supported and enabled by international technology, financing and capacity building.

In addition to these high level distinctions, different NAMA types (based on the type of intervention) are emerging. From the NAMAs that have been submitted by countries to the UNFCCC, the following four types can be distinguished:

**Targets** – A target refers to a quantified objective to reduce GHG emissions (i.e. if expressed in GHG terms) or to undertaking actions with an impact on GHG emissions (i.e. if expressed in non GHG terms).

*For example, South Africa submitted a GHG reduction target of 34% from business as usual (BAU) emissions growth trajectory by 2020 and of 42 % by 2025 as a NAMA<sup>7</sup>.*

*For example, Cameroon intends to increase forest cover from 11% in 2005 to 25% in 2050<sup>8</sup>.*

Targets may be defined at the national level, at the sub national level or in specific sectors of the economy. Targets state a goal that specific measures and actions will achieve.

**Strategies** - A strategy aims to achieve a long term mitigation objective. It sets a framework under which mitigation measures and actions will be undertaken.

*For example, Côte d'Ivoire submitted the elaboration of an action plan for renewable energies as a NAMA<sup>9</sup>.*

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<sup>7</sup> UNFCCC, 2011.

<sup>8</sup> *Ibid.*

<sup>9</sup> *Ibid.*

**Policies or Programmes** - Policies or programmes are concrete measures implemented by a government in order to promote or discourage technology options, impact economic activity or change consumer behaviour.

*For example, Botswana made a submission to the UNFCCC containing various policies in the transportation sector and the energy efficiency sector, including the use of standards for buildings and for appliances<sup>10</sup>.*

**Projects** - Projects are activities undertaken by private or public organizations. They encompass defined activities which require investments.

*For example, Togo is considering developing projects to replace existing lamps with high efficiency lamps<sup>11</sup>.*

NAMAs can have a nationwide approach - such as an energy tax or a comprehensive mitigation action plan - or be restricted to a specific region or city (e.g. city urban transportation plan). NAMAs could also target one specific sector or sub sector.

### **3.1 International support for NAMAs**

Currently, the institutional structure for delivering support to NAMAs is still under development. The funding for NAMAs may come from various sources, including:

- Funds under the UNFCCC including the Global Environment Facility (GEF) and the Green Climate Fund (GCF);
- Other funds such as multilateral funds and bilateral financing;
- Private funds, including private sector investments and potentially the carbon market (if Parties to the UNFCCC decide that NAMAs are eligible to generate carbon credits).

In 2009, developed countries pledged to provide US\$ 30 billion fast-start financial assistance by 2012, and to mobilize US\$ 100 billion annually by 2020 from both public and private sources. This support is to be provided to developing countries for both adaptation and mitigation actions, including NAMAs. The GCF, which is not yet operational, is expected to channel long term financial support (i.e. support pledged until 2020), which will be mobilized from various sources, including multilateral and bilateral sources, and the private sector.

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<sup>10</sup> *Ibid.*

<sup>11</sup> *Ibid.*

### 3.1 The UNFCCC NAMA Registry

As agreed in Cancun, a registry for NAMAs is currently being set up by the UNFCCC. The Registry is expected to become operational by early 2013. Its purpose is to provide a platform for countries to present NAMAs that seek international support as well as to submit NAMAs implemented through domestic resources ("unilateral NAMAs") that would be registered and "recognised". Thus, countries can submit NAMAs for support or NAMAs for recognition. The Registry will also include sources of support and ease the match-making of support with NAMAs. This will provide greater transparency and help countries find support for their NAMAs.

It should be noted that individual NAMAs may contain both unilateral and supported elements. For example, a country may undertake infrastructure investments unilaterally but may also seek capacity building support to operate the infrastructure.

Figure 1 below provides a schematic overview of the emerging political landscape of NAMAs and NAMA finance.

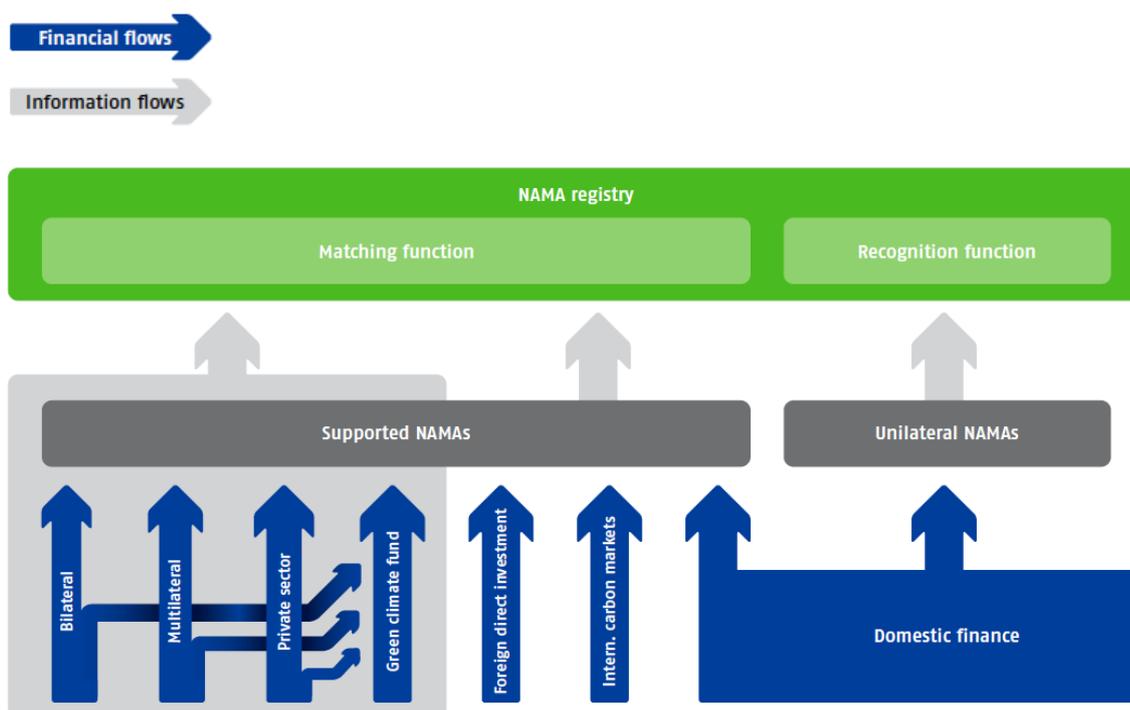


Figure 1. Policy architecture for NAMAs

Source: Ecofys, 2012.

### 3.1 NAMAs and other climate policy instruments

To further clarify the concept of NAMAs, it is also helpful to illustrate some key differences with other mitigation and adaptation tools and instruments, such as the Clean Development Mechanism (CDM), Low Carbon Development Strategies (LCDS) (also referred to as Low Emissions Development Strategies, LEDS), National Adaptation Programmes of Action (NAPA) and National Adaptation Plans (NAP).

**CDM and NAMAs:** A key difference between NAMAs and the CDM is that NAMAs encompass a wider range of activities with broader time horizons which provide more opportunities for large-scale reductions than the project/activity-based approach under the CDM. Governments/agencies elaborating NAMAs are direct recipients of support and do not (yet) have to follow UN-prescribed development processes as is the case under CDM. Finally, the option to issue carbon credits from NAMAs has not been decided under international climate negotiations.

**LCDS and NAMAs:** In addition to NAMAs, the COP also encourages developing countries to prepare and implement LCDS. A LCDS is an economy-wide strategy aiming at long-term mitigation. As a consequence, it concerns most, if not all, segments of the economy. In comparison to an LCDS, a NAMA is often sector specific as it is a targeted action. Many synergies between NAMAs and LCDS can be exploited. A LCDS provides a policy framework for actions, such as NAMAs, and a NAMA can support specific LCDS objectives in given sectors through actions on the ground.

**NAPAs and NAMAs:** A key difference between NAMAs and NAPAs or NAPs is that NAPAs and NAPs address adaptation issues while the primary focus of a NAMA is mitigation. NAPAs and NAPs are prepared by developing countries to present adaptation actions and strategies in order to decrease and manage risks posed by negative impacts of climate change. Nevertheless NAMAs may have adaptation benefits.

#### 1.2. Why develop NAMAs?

There are a number of potential benefits associated with NAMAs:

- **NAMAs can help governments to mobilize support for moving away from unsustainable carbon pathways** and move towards low-carbon development while contributing to achieving national development priorities. If a LCDS captures specific strategies to lower the carbon intensity of an economy, NAMAs could therefore contribute to the objectives of the LCDS of a country and/or be undertaken in parallel to support specific priorities.

*For example, by installing 2000 Megawatts (MW) of concentrated solar power (CPS) by 2020, Morocco intends to reduce the share of fossil fuel imports and gain revenues from renewable energy exports to neighbouring countries<sup>12</sup>.*

- **Although NAMAs may often target high emission sectors, development priorities play an important role when selecting and prioritising NAMAs.** The concept of NAMA, as expressed in the “nationally appropriate”, recognises the importance of sustainable development benefits, such as other environmental, social and economic benefits. Experience shows that the starting point for identifying NAMAs for many countries are indeed national development objectives, e.g. developing transport infrastructure to meet increased demand for mobility.

*For example, Ethiopia is developing a NAMA to scale up the usage of energy efficient fuel wood and alternative fuel stoves. This is expected to increase rural household income by 10% and create an industry worth USD 15 million in gross value added<sup>13</sup>.*

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<sup>12</sup> De Vit C. *et al.*, 2011.

<sup>13</sup> Ethiopia, 2011.

- **By designing attractive policies for investments, NAMAs have the potential to improve business conditions for local and foreign private investments.** NAMAs support concrete initiatives by lowering barriers through a comprehensive package of policies. These initiatives can encourage private sector investments<sup>14</sup> (e.g. a feed-in tariff policy that guarantees an affordable electricity price, etc.).

*For example, Tunisia considers private investments in renewable energy as key to the success of its Solar Plan and is examining policy options to leverage those investments<sup>15</sup>.*

- As NAMAs may also encompass long-term, comprehensive policies and strategies, **they provide more opportunities for larger-scale reductions** than the project based approach under, for example, the CDM. In this sense NAMAs may provide an opportunity to achieve long term transformational change supporting sustainable economic growth.

*For example, South Africa carried out an internationally reviewed study on its national mitigation potential by sectors. This has led to setting a GHG reduction target of 34% from business as usual (BAU) emissions growth trajectory by 2020 and of 42 % by 2025<sup>16</sup>.*

- **NAMAs can contribute to adaptation objectives.** For many developing countries adaptation concerns take priority over mitigation. Although NAMAs are mitigation focussed, they can have adaptation benefits or may include an adaptation angle. In this sense NAMAs could be conceived in a holistic way to encompass mitigation, adaptation as well as wider sustainable development considerations.

*For example, a NAMA to improve crop production will lower negative impacts of climate change on crops while reducing GHG emissions.*

- Finally, as the international policy framework is still emerging, there is an **opportunity to shape the international NAMA framework by providing on-the-ground experience on how the NAMA concept may be put into practice.** NAMAs experiences from African countries are key to shaping this framework and moulding it into something that will be beneficial for Africa as well.

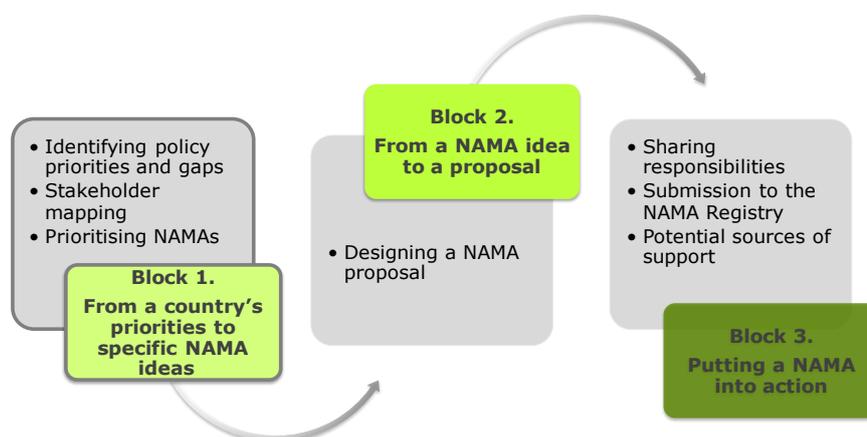
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<sup>14</sup> Ward M., 2010.

<sup>15</sup> Wuppertal Institute, 2011.

<sup>16</sup> UNFCCC, 2011.

## Block 1. From a country's priorities to specific NAMA ideas



**Figure 2. From identification of NAMAs to concrete action**

Block 1 takes the reader through key concepts and activities relevant to the identification of NAMAs. The guidance provided here intends to support a country-led NAMA development process based on current experiences in developing NAMAs. The NAMA development process requires the active involvement of the government with participation from stakeholders including possible champions for this initiative. This implies coordination efforts from the government, which may choose to establish a NAMA office to liaise and support NAMA related efforts.

A NAMA office could for example coordinate NAMA related activities that are developed in different sectors. It could also set up a list of criteria for NAMA selection and provides technical support for tasks relating to the measurement, reporting and verification (MRV) of NAMAs. Finally, a NAMA office could also be a focal point institution to make submissions to the UNFCCC NAMA Registry and to coordinate NAMA related support from international institutions and donor countries.

The initial NAMA identification and selection process may include a number of activities which are described in more detail below. Depending on each country's national circumstances, some of those activities may be more or less relevant than others and undertaken in a different order.

This initial process should result in the following:

- A short-list of possible NAMA(s) based on a country's policy priorities;
- Identification and mobilisation of key stakeholders associated with the selected NAMA(s); and
- A prioritisation of NAMAs.

## 1.1 Identifying policy priorities and gaps

At the beginning, it is important for the NAMA owner, i.e. the entity responsible for the development of the NAMA, to identify the political and economic context in which the NAMA will be developed. It is important to have a good overview of the current policy framework as well as wider development policy objectives. A review will help to identify policy priorities and potential gaps where specific action is needed and where a NAMA could play a role to fill this gap.

Sources of information include official documentation, such as national climate change plans, national energy strategies, national development plans, etc. Box 1 below provides a comprehensive, yet non-exhaustive, list of sources of information, which may be useful to identify policy priorities as well as current and planned mitigation actions.

Box 1. Sources of information to collect in order to identify policy priorities

### **Government's strategies and legislation relating to climate change mitigation**

Official texts, such as a Low Carbon Development Strategies or Plans, Green Economy Strategy, Climate Change Strategy, an Environmental Protection Act, an Energy Plan or environmental regulations provide a good basis to identify mitigation actions implied by the objectives stated in those texts, and which could then become a basis for NAMAs.

### **Country's development priorities**

Gathering information on national and regional development priorities on the basis of which climate change is addressed (e.g. poverty reduction strategy papers<sup>17</sup>, development plans, etc.) is also useful. Such information will help to assess the appropriateness of a NAMA according to national development priorities, which could become criteria for NAMA selection.

### **National Communications and Biennial Update Reports**

All developing countries have been required to submit National Communication to the UNFCCC every four years since 2012. Since the 16<sup>th</sup> COP meeting in Cancun (2010) and the 17<sup>th</sup> COP meeting in Durban (2012) they also have to submit Biennial Update Reports every two years (except Least Developed Countries - LDCs - and Small Island Developing States - SIDS - who may submit biennial update reports at their discretion). In those official documents, countries are invited to provide information on "programmes containing measures to mitigate climate change" (i.e. through National Communications<sup>18</sup>) and "on actions to mitigate climate change" (i.e. through Biennial Update Reports).

### **Technology Needs Assessments and Technology Action Plans**

Technology Needs Assessments and Technology Action Plans prepared by developing countries can also be relevant to identify mitigation actions for which a specific technology is needed<sup>19</sup>.

<sup>17</sup> To consult a list of Poverty Reduction Strategy Papers prepared by various countries, see: <http://www.imf.org/external/np/prsp/prsp.aspx>.

<sup>18</sup> To consult the list of submitted National Communications, see: [http://unfccc.int/national\\_reports/non-annex\\_i\\_natcom/items/2979.php](http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php)

<sup>19</sup> To consult the list of submitted Technology Needs Assessment, see: <http://unfccc.int/ttclear/jsp/CountryReports.jsp>.

### **Submissions and presentations made to the UNFCCC on NAMAs**

Key information on current and planned NAMAs can be found in submissions and presentations made to the UNFCCC<sup>20</sup>.

### **Existing mitigation initiatives**

It is also recommended to collect information on existing projects with mitigation benefits that are taking place or being developed, e.g. CDM projects<sup>21</sup>, development projects with a mitigation component. Those projects may require additional support to overcome barriers, which a NAMA could provide (e.g. technical capacity building to operate a solar farm, etc.). This could also avoid selecting a NAMA that is partly or totally being implemented in the context of a specific project.

Once the analysis of existing information is complete, a long list of potential NAMAs could be prepared. Information collected on relevant policies, programmes or projects will most likely also be useful at a later stage when documenting the strategy in the NAMA proposal (Block 2).

## **1.2 Stakeholder mapping**

Once the initial list of potential NAMAs is complete, it is useful to identify key stakeholders and possible champions of the NAMAs. Stakeholders involved in programmes, actions and/or measures with mitigation benefits are often identified during the policy review phase, e.g. Ministry of Transport and Municipality in the case of an Urban Transit Plan.

Getting the inputs of stakeholders on the NAMA selection and mobilizing their efforts is key to achieving success. Many tools and methods already exist on how to involve and mobilize stakeholders (see Box 2 below). Stakeholders may include, for example, representatives from:

- Ministries and governmental agencies;
- Regional/local institutions;
- Research and training organisations;
- Service institutions, including private and public entities;
- Recipients of services impacted by the NAMA (e.g. energy users in case of a hydroelectricity NAMA), including local communities; and
- Non-governmental organisations.

Existing forums such as National Environmental Committees could provide a good basis to initiate a process to involve and consult stakeholders. These forums often include a wide range of stakeholders.

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<sup>20</sup> To consult the list of NAMA submissions, see: UNFCCC, 2011. For a list of presentations on NAMAs made at UNFCCC workshops, see: <http://unfccc.int/bodies/awg-lca/items/5988.php> and [http://unfccc.int/meetings/bonn\\_may\\_2012/workshop/6660.php](http://unfccc.int/meetings/bonn_may_2012/workshop/6660.php)

<sup>21</sup> To consult the list of CDM projects: <http://cdm.unfccc.int/Projects/projsearch.html>.

## Box 2. Means to engage and mobilize stakeholders

Mobilizing stakeholders at an early stage has proven very useful to increase chances of implementation of an action (i.e. enhanced ownership) and to take into account impacts of the action on a wide range of stakeholders. As a consequence, it tends to avoid potential conflicts and non satisfaction about the action's outcomes and increases recognition.

Stakeholders who will have influence over specific NAMAs or that will be affected by these NAMAs are the most appropriate stakeholders to engage in the NAMA development process (O'Hara, 2010). At a later stage, relationship mapping may be useful to understand interactions between the different stakeholders.

One way to engage stakeholders is through a participatory approach, which provides a democratic process to the participants to initiate an open dialogue and make decisions on NAMAs (e.g. selection, prioritisation, etc.). This approach will also help to gather information that will be used for the NAMA proposal.

The following sources of information provide relevant guidance for stakeholder's processes (not all directly linked to climate mitigation):

- United Nations Development Programme (UNDP) Technology Needs Assessment for Climate Change Handbook (2010). <http://content.undp.org/go/newsroom/publications/environment-energy/www-ee-library/sustainable-energy/technology-needs-assessment-for-climate-change-handbook.en>

- Food and Agriculture Organisation (FAO) Stakeholder Analysis:  
<http://www.fao.org/Participation/tools/stakeholderanalysis.html>

- Peter O'Hara for FAO: Enhancing stakeholder participation in national forest, programmes: A Training Manual (2010). [http://participatorynrm.com/yahoo\\_site\\_admin/assets/docs/Pnfp\\_training\\_manual\\_OK1.13543317.pdf](http://participatorynrm.com/yahoo_site_admin/assets/docs/Pnfp_training_manual_OK1.13543317.pdf)

- Low Emission Development Strategies (LEDS) Gateway:  
[http://en.openei.org/wiki/Identify\\_roles\\_and\\_responsibilities\\_for\\_LEDS\\_process](http://en.openei.org/wiki/Identify_roles_and_responsibilities_for_LEDS_process)

### 1.3 Prioritising NAMAs

Once stakeholder mapping is complete, it is time to prioritize the potential NAMAs being considered to determine which NAMAs are appropriate to pursue. Specific criteria can be used to select and prioritize NAMAs. It is important to seek the views of stakeholders on the criteria that will be used and consult them in the process. Development priorities identified earlier can provide a good basis to define those criteria and to demonstrate that the suggested NAMAs fit in the country's policy framework and are aligned with national policies and development priorities.

It is recommended to investigate whether similar prioritisation efforts have already happened. For example, sustainable development criteria defined in the context of CDM projects or in the context of official development assistance can be a good basis for NAMA selection.

A stakeholder process may have already taken place in some countries in the context of the preparation of National Communications. It is still important to have a NAMA specific stakeholder process, which can also help to confirm the validity of previously identified mitigation actions within National Communications.

Table 1 below provides a list of sample criteria for NAMA selection.

**Table 1. Suggested criteria for NAMA selection**

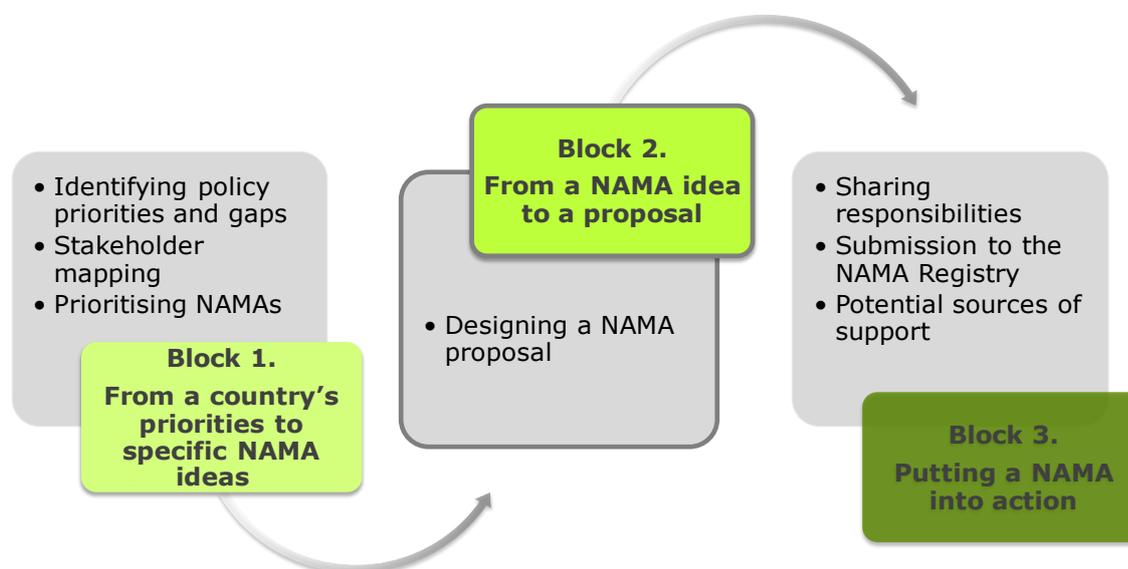
GHG related criteria <sup>22</sup>	Non- GHG related criteria
- Direct emission reductions expected from the NAMA (e.g. in tonnes of CO2e reduced)	- Sustainable development benefits in line with development priorities: employment, local development, environmental benefits, etc.
- Indirect emission reductions expected from the NAMA – long term transformational potential	- Cost
- Increased mitigative capacity <sup>23</sup>	- Political support and interest and support from various stakeholders, including funders

The different NAMA options should be considered according to identified key criteria that may also be weighted according to the NAMA type and country's circumstances. This case-by-case exercise will then result in a list of prioritized NAMAs.

<sup>22</sup> Section 3 of Chapter 3 provides basic guidance to assess GHG benefits.

<sup>23</sup> Mitigative capacity relates to a country's ability to reduce GHG emissions. For example, an improved institutional framework contributes to mitigative capacity as it allows coordination and information sharing. This can result in informed and enforceable policy making on climate change mitigation.

## Block 2. From a NAMA idea to a proposal



Block 2 provides guidance on completing a NAMA proposal for an individual NAMA, i.e. a strategy, programme or policy, or a specific project. The proposal is a key output that supports requests for financial and technical support as well as the action plan to be developed at a later stage. As a NAMA proposal is only a starting point and not the end result, additional work is needed to plan and discuss with funders how to bring the NAMA proposal to a more concrete level of action.

This chapter provides a framework outline for drafting a NAMA proposal. It covers most of the key information a potential funder may seek and can be used to request support for implementation or for further preparation. The information contained is in line with the requirements of the UNFCCC NAMA Registry to which a submission can be made to present the NAMA and increase chances to obtain support. This framework also outlines complementary information, which is useful for implementation planning and for presenting potential NAMAs to donors. The structure and content should be adapted according to specific circumstances of the country.

The framework presented in this chapter covers the following five elements:

1. General information
2. Activities
3. Impacts
4. Costs and support needs
5. MRV framework

Each element is outlined in a structured way in the following sections, which also include a description of common approaches and references to existing tools. An indicative outline for NAMA proposal is also presented in Appendix 2. The guidance does not intend to recommend specific methodologies, e.g. for GHG calculation, but rather explains key principles and refers to existing methodologies and additional resources (also provided in Appendix 1) which may be helpful in the process.

## Section 1 –General information

This section outlines the NAMA approach, giving an overview of the objective, the sectors covered, the scope and the main proponents of the NAMA.

Section	Title	Guidance to complete
1.1	<b>Overarching objective</b>	<p>The overarching objective is a brief statement which declares the aims of the NAMA. It should extend across all activities that will be undertaken and tie them together. All activities should contribute towards reaching this objective.</p> <p><i>Example: Reach a target of 2 Megawatts of solar panels in rural areas.</i></p>
1.2	<b>Sector</b>	<p>List the sector or sub-sectors being targeted. NAMAs could be classified using the following sectors:</p> <ul style="list-style-type: none"> <li>• Agriculture</li> <li>• Buildings</li> <li>• Energy supply</li> <li>• Forestry</li> <li>• Industry</li> <li>• Transport</li> <li>• Waste</li> </ul>
1.3	<b>Scope</b>	<p>The scope defines the boundaries of the NAMA. It sets the area that is directly under control of the project, policy or programme being undertaken. Defining a clear scope is necessary for good planning, for implementation and for measuring impacts. The nature of the boundaries will depend on the type of NAMA being addressed. Three dimensions of scope are:</p> <ul style="list-style-type: none"> <li>• <b>Geographical scope</b> defines the reach of the project in terms of location.</li> </ul> <p><i>Example: Fatick region, Senegal</i></p>

- **Technological scope** defines target technologies for the project. This is important for NAMAs as mitigation options commonly employ a change or adoption of a technology.

*Example: compact fluorescent lamp (CFL).*

- **Scope related to stakeholders** defines a target-group of stakeholders who will be affected by the NAMA.

*Example: Low income households in rural areas.*

If there are other relevant areas to consider, these can also be added.

#### **1.4 Proponent**

What is the main entity that is proposing the NAMA? This could be, for example, a city, a government ministry, etc.

*Example: City of Accra, Ghana.*

This section defines in detail the various activities that will be carried out under the NAMA. A good level of detail is necessary to attract support for the NAMA, to estimate GHG impacts and to plan for its implementation.

It is useful to keep in mind that under the climate agreements, support is made available in the form of finance, capacity building and/or technology transfer. Activities in the NAMA may use any or all of these types of support, as necessary.

A good starting point for the definition of activities is to consider the various barriers which prevent mitigation in the identified sector or subsector.

#### **Barrier Analysis**

Barrier analysis is a useful tool to make an assessment of the current situation and help define activities. Although it is not a required step for a NAMA, a barrier analysis has been proven useful in different policy contexts. A barrier analysis compares a vision of the future with the current scenario and through a systematic approach, identifies the key variables that prevent a future scenario from becoming a reality. Depending on the characteristics of the selected NAMA, existing tools and approaches to barrier analysis for specific projects (e.g. energy efficiency) may also provide guidance.

**Erreur ! Source du renvoi introuvable.** shows some of the common technological, socio-economic, economic and market barriers to GHG reductions that have been identified and examples of individual actions that can be undertaken to overcome these barriers.

Mitigation potential	Examples of barriers	Examples of actions to overcome barriers
<b>Technological barriers</b>	Limited availability and knowledge of technologies  Undefined property rights	Demonstration of new technologies  Property rights regimes
<b>Socio-economic barriers</b>	Social norms  Individual habits  Attitudes  Vested interests	Information dissemination  Awareness-raising campaigns  Education programs
<b>Economic barriers</b>	Lack of competition  Trade barriers	Trade policies  Institutional reform  Subsidy reform
<b>Market barriers</b>	Lack of access to information and skills  Lack of access to credit	Training programs  Micro-credit

The activities of the NAMA should aim to address the different types of barriers identified. Designing effective interventions may require multidisciplinary teams that can assess the different barriers and propose options to mitigate them. A NAMA may include activities that lead to direct GHG emission reductions and it can also include enabling activities such as education and training, which will result in indirect GHG emission reductions.

*Example of NAMA activity addressing a specific barrier:*

- *Financial barrier: High upfront costs for compact-fluorescent lamps (CFL)*
- *NAMA activity: The introduction of a subsidy to help low-income households buy CFLs*
- *Knowledge barrier: Lack of qualified local electricians to install solar panels in rural areas*
- *NAMA activity: training programme for local electricians*

In addition to defining the NAMA activities the outputs and outcomes of each activity should be clearly identified as described below.

Section	Title	Guidance to complete
2.1	<b>Activities, outputs and outcomes</b>	<p>In this section, the detailed activities that are part of the NAMA should be listed. Not every activity has to be specified, and similar activities can be bundled together. What is important is to present a comprehensive overview of the work that will be undertaken to reach the overarching objective. The timeframe for each activity may also be indicated.</p> <p>For each activity, the main <b>outputs</b> and <b>outcomes</b> should be explained.</p> <p><b>Outputs</b> occur within the project boundaries, are achieved by the project directly and can be monitored.</p> <p><b>Outcomes</b> are the consequences of outputs of the project. They describe the effects of the project on its environment, in other words on partners, intermediaries and the target group.</p> <p>We recommend that the outputs and outcomes respect the SMART criteria. Outcomes and outputs should be:</p> <ul style="list-style-type: none"> <li>• Specific;</li> <li>• Measurable (either qualitatively or quantitatively);</li> <li>• Achievable;</li> <li>• Relevant; and</li> <li>• Timely (i.e. achievable in the initially adopted timeframe of the NAMA).</li> </ul> <p><i>Example of activity 2: Information campaign on benefits of CFLs (2013 - 2015)</i></p> <p><i>Output: Reach 500,000 low-income households through community-led education campaigns.</i></p> <p><i>Outcome: Household decision makers become aware of electricity savings potential and environmental benefits of CFL. Willingness to buy a CFL increases by 50 percentage points for target group.</i></p> <p><i>Example of activity 1: Distribute free CFL (2014 - 2018)</i></p> <p><i>Output: 100.000 CFL will be distributed to low-income households.</i></p> <p><i>Outcome: 100.000 low-income households will try CFL, helping break through economic and information barriers that prevent wider adoption.</i></p>

## Section 3 – Impacts

This section gives an overview of the GHG emission reductions and sustainable development benefits of the NAMA as well as an assessment of how these align with the climate, environmental and economic priorities of the country undertaking them. As the mitigation component is at the heart of NAMAs, providing robust information on how the NAMA will lead to emission reductions and increase mitigative capacity is crucial. The Monitoring Reporting and Verification (MRV) section of the proposal will complement this section on impact assessment. The MRV section elaborates further on measurement frequency and details of the impacts of a NAMA, including emission reductions, sustainable development benefits and mitigative capacity.

Section	Title	Guidance to complete
<b>3.1</b>	<b>Overview of NAMA benefits</b>	<p>Provide a brief summary of the GHG and non-GHG benefits that can be expected from this NAMA.</p> <p><i>Example of GHG benefits: 230 tCO<sub>2</sub>e reduced each year over a period of 15 years.</i></p> <p><i>Example of non-GHG benefits: creation of employment opportunities.</i></p>
<b>3.2</b>	<b>GHG impacts</b>	<p>Indicate the best estimate for total GHG emission reductions in tonnes of CO<sub>2</sub> equivalent (tCO<sub>2</sub>e) as a direct or indirect result of the NAMA activities during the period of implementation or during the period for which support is provided in the case of internationally supported NAMAs. Direct GHG emission reductions and indirect emission reductions should be clearly distinguished. Detailed calculations, sources and figures should be indicated.</p> <p>* See Box 3 below for more information on how GHG impacts can be calculated.</p>

<p><b>3.3</b></p>	<p><b>Sustainable development benefits</b></p>	<p>In this section provide either quantitative or qualitative assessments of the sustainable development benefits of the NAMA, including environmental, economic and social benefits.</p> <p>Examples of <b>environmental benefits</b> include reductions in local pollutants and protection of ecosystems.</p> <p><b>Economic benefits</b> include those related to improvements in the economic welfare of citizens. Examples are job-creation, decreases in the cost of goods and services, and time savings.</p> <p><b>Social benefits</b> relate to improvements in the living conditions and standing of citizens and society as a whole. Examples include capacity development and enhanced access to vital goods and services such as energy, transport and healthcare.</p>
<p><b>3.4</b></p>	<p><b>Impacts on mitigative capacity</b></p>	<p>This part describes how the NAMA would contribute to increasing the mitigative capacity of the target country and sector<sup>24</sup>. Describe the cause-and-effect relationship of how changes in mitigative capacity might lead to (indirect) emissions impacts.</p> <p><i>Example: a NAMA activity consists of setting up an institution in charge of coordinating all NAMA activities, which are to be implemented by various entities. This activity improves the institutional framework, which results in enhanced coordination and information sharing on climate change between those entities. In the long term, this new institutional forum will offer the opportunity to discuss how to expand existing mitigation activities and enhance their enforceability, which will result in GHG reductions in other sectors/areas than the ones targeted by the NAMA.</i></p>

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<sup>24</sup> The mitigative capacity of a country relates to its ability to reduce GHG emissions or maintain natural (carbon) sinks. Particular ways in which this capacity can be increased are (1) developing human resources, (2) developing or strengthening organisations and institutions, (3) coordination among stakeholders/government agencies and network-building, and (4) developing policy fields. Improved institutional framework contributes to mitigative capacity as it allows coordination and information sharing, which results in informed and enforceable policymaking.

### **Box 3. How can the emission impacts be assessed?**

Calculating emission impacts will be one of the main challenges in the preparation of a NAMA proposal. Fortunately, considerable information and ready-to-use tools exist that can simplify this process. A great source of information is the UNFCCC's Mitigation Assessment Portal<sup>1</sup>. It contains comprehensive information and tools that range from general guidebooks on GHG assessment to sectoral tools which allow practitioners to develop their own models and calculations. It is recommended to adhere to common standards such as IPCC standards or The GHG Protocol<sup>2</sup> when undertaking a GHG assessment.

Three important questions should be considered when undertaking a GHG assessment:

#### ***What is the baseline?***

The baseline defines the likely evolution of GHG emissions in the absence of the NAMA within the measurement boundaries (see below). Setting a baseline considers how various factors might develop over time. As such, it is an economic, sociological, and technological exercise. As the baseline marks a reference point in GHG terms, its value determines the potential emission reductions of the NAMA.

#### ***What are the measurement boundaries?***

The measurement boundary captures the primary impacts of the NAMA. The boundary specifies the set of elements whose emissions will be measured. Without clear boundaries, an estimation of GHG impacts is not possible. The boundary should contain a time horizon (e.g. 2012-2020) and a measurement scope (e.g. sector, technologies, gases covered, facilities, geographic and other boundaries, etc.). Measurement boundaries can be different than the NAMA scope. There could be emissions that fall outside of the scope of the NAMA but nonetheless should be considered (i.e. leakage).

#### ***How should the emission impacts be estimated?***

Once the boundary and baseline variables have been defined, there is a need to decide how to model the expected emission impacts. There are two general approaches available:

**Top-down estimation** – Top-down estimates use large economic models such as Computable General Equilibrium (CGE) models. They use aggregate economic data and assess costs and benefits through impact on outcome, income and GDP (UNFCCC, 2006 p.20). Top-down models are most appropriate when modelling GHG impacts for policies and programmes that extend beyond sectors and where intra-sectoral effects can be expected (e.g. to assess impacts of an economy-wide carbon tax on GHG emissions in the electricity sector).

**Bottom-up estimation** – Bottom up estimations focus on the individual sectors and subsectors of an economy. They make use of activity data such as fuel consumption or total electricity production to calculate emission impacts. Bottom up approaches are more appropriate for NAMAs that have a more limited scope such as individual projects and programmes.

It is also strongly recommended to refer to any future guidance that may emerge from the UNFCCC process in the near future.

<sup>1</sup> [http://unfccc.int/resource/cd\\_roms/na1/mitigation/index.htm](http://unfccc.int/resource/cd_roms/na1/mitigation/index.htm)

<sup>2</sup> <http://www.ghgprotocol.org/>

## Section 4 – Costs and support needs

An assessment of overall costs should be included in the NAMA proposal. This will form the basis for a request of support as well as for budget planning.

Determining the costs of a NAMA is similar to other types of financial assessments. The proponent should consider the various categories of costs and make an assessment of these throughout the implementation of the NAMA. For example, implementation costs include capital costs, administration costs, operational costs, etc. Examples of cost categories are shown in Table 2.

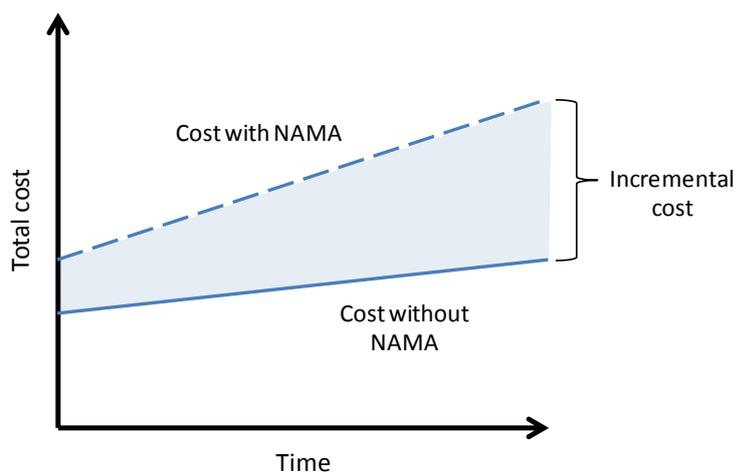
One further aspect to consider is that the UNFCCC NAMA Registry makes a distinction between implementation costs and preparation costs. Activities that support the implementation of a NAMA such as feasibility studies, technical assessments and trainings could be submitted for support as “preparatory activities”.

**Table 2. Cost categories for NAMAs**

Cost item	Examples	Classification under NAMA Registry
Costs related to the preparation of a NAMA	Undertaking a feasibility study to assess potential of carrying out a project as a NAMA.	Preparation
Costs related to the administration of mitigation activities, including set up of the relevant structures	Set up and operation of an institutional department administrating mitigation actions at the national level	Implementation
Costs related to “enabling” the respective mitigation action: capacity building, technical support, awareness raising, marketing, etc.	Training of technical experts, information and training materials for NAMAs.	Implementation
Investment costs of technical equipment	Investment costs for renewable energy equipment	Implementation
Operation and maintenance costs for technical equipment	Operation and maintenance costs for a biogas plant + income received.	Implementation
End-of life costs	Costs related to the recycling of photovoltaic panels.	Implementation
Macroeconomic costs	Costs that fall outside of the boundary of the NAMA and extend to the national economy. This includes knock on costs of the NAMA to society as well as opportunity costs	-

## Calculating incremental costs

The Registry makes a distinction between two types of implementation costs: total costs and incremental costs. There is no agreed method for calculating incremental cost for NAMAs. In general terms, the incremental cost is the difference in cost between a baseline scenario and a mitigation scenario as illustrated in Figure 4. In the context of mitigation actions this may be interpreted as additional costs associated with transforming a project with national benefits into one with global GHG mitigation benefits (GEF, 1995).



**Figure 4. Incremental costs v. total costs**

Assessing incremental costs can be challenging because it is prone to uncertainty. Incremental cost contains the outcomes of two cost scenarios – the baseline and the mitigation scenario. Because it involves scenarios in the future, this requires forecasting which can be highly subjective. It is therefore important to clearly document the methodology used and all assumptions made. Most likely, the final determination of incremental costs will be made through a negotiating process with donors.

The example below provides a simple illustration of how the different cost categories relate to a NAMA and the total amounts that could receive financing:

Scenarios		Total cost	Incremental cost	Preparation support
<b>Baseline scenario:</b> Install a 1MW diesel generator to provide electricity to a rural community.	<b>Mitigation scenario:</b> Install an equivalent amount of solar panels to provide electricity to a rural community.	Cost of solar system + operation and maintenance cost	Total cost of solar system – total cost of diesel system = incremental cost	Feasibility assessment of solar system

Section	Title	Guidance to complete
4.1	<b>Costs and support needs</b>	<p>Please indicate an estimate of costs for preparation and implementation for the NAMA, including currency, for each cost item if possible.</p> <p><i>Example:</i>  <i>NAMA preparation costs:</i>  <i>Cost item 1: Costs related to the preparation of a NAMA: 100 000 USD</i></p> <p><i>NAMA implementation costs:</i>  <i>Cost item 2: Investment costs of technical equipment: 3 200 000 USD.</i></p> <p>Also indicate total incremental costs, including currency.</p> <p>Please specify costs for which international support is sought as well as other types of support needs, such as technological and capacity building support.</p>

## Section 5 – MRV framework

MRV stands for Measurement, Reporting and Verification. MRV of NAMAs is important to ensure transparency of mitigation actions and of support provided to such actions. In general MRV means to monitor how something is going, to make this information available to a certain audience and to ensure that the information made available can be trusted. With regards to NAMAs, various issues might be subject to MRV: the impacts of the NAMA (see section 3), the implementation of the NAMA and the support received for the NAMA.

No international guidance on the MRV process of a NAMA is yet available. Some institutions are currently discussing and working on MRV guidance for mitigation policies, which may be relevant for NAMAs in the future. Building on current MRV related discussions, this section aims to provide basic guidance on establishing a MRV framework, which needs to be further developed according to the NAMA type and the country's circumstances as well as any future UNFCCC requirements (for additional resources, see Appendix I).

Monitoring MRV processes are already applied now in the context of the CDM and GHG inventories (i.e. submitted in National Communications and Biennial Update Reports to the UNFCCC for developing countries) following internationally agreed guidelines, which can refer to specific methodologies to calculate GHG emission reductions. While guidelines for MRV of unilateral NAMAs are discussed within the UNFCCC, MRV of supported NAMAs is likely to depend mainly on expectations from funding organisations. It is worth noting that MRV of NAMAs is probably not limited to emission reductions but also applies to other outcomes resulting from the NAMAs like mitigative capacity or co-benefits (see section 3).

Setting up the MRV framework starts with defining, which impacts – potentially further broken down into outcomes and outputs - a mitigation measure would achieve based on specific indicators. Further indicators might then be selected to monitor the implementation of the mitigation action. Through this approach, the MRV process will demonstrate on a regular basis whether the activity is implemented as planned and whether it achieves the expected results.

From a technical perspective, indicators are quantitative or qualitative variables (e.g. the market share of an energy-efficient technology) associated to a target that refers to a qualitative value (e.g. a value of 25% for this market share) or quantitative value (e.g. the level of satisfaction of CFL users). Measurement means assessing the value of the indicator after a certain timeframe, which thus serves as a standard for measuring, reporting and verifying the attainment of the outcomes. The process of selecting indicators and setting targets for these indicators can be helpful in validating whether the desired outcomes of a NAMA are realistically achievable (for information on how to define outcomes, see sections 2 and 3). Indicators should be formulated in a SMART manner to ensure their appropriateness in showing whether an outcome has been achieved. SMART indicators are:

- **Specific:** indicators should be defined precisely, so there is no room for interpretation, whether the target has been achieved or not;
- **Measurable:** it is possible to assess the value of the indicator during or after the implementation of the NAMA;
- **Achievable:** the target associated to the indicator can be realistically reached by the NAMA activities within the set timeframe;
- **Relevant:** the indicator is helpful in showing whether the desired outcome has been achieved;
- **Timely:** the indicator specifies the timeframe for reaching the target set.

Section	Title	Guidance to complete
5.1	<b>Activities and outcomes subject to MRV</b>	<p>Please list the specific activities and expected outcomes that will be subject to MRV. Not every activity needs be specified, similar activities can be bundled together.</p> <p>Use activities, outputs and outcomes as indicated in section 2.1.</p>
5.2	<b>Key indicators</b>	<p>For each activity, provide indicators and the associated target that will be used to assess the progress towards the outcome of each activity.</p> <p>The value of the indicators can be quantitative or qualitative. It is recommended to determine them with all stakeholders involved in the NAMA.</p> <p><i>Example of a quantitative indicator: the number of fuel-efficient cars on the road if the NAMA activity is a subsidy for the purchase of fuel-efficient cars.</i></p> <p><i>Example of a qualitative indicator: the level of satisfaction of clients who have bought an electric vehicle using electricity from renewable sources.</i></p>

**5.3 Responsible entity**

Describe the entity(s) that will be responsible for applying the indicators for each activity.

*Example: The city department in charge of new car registration will be in charge of counting the number of fuel-efficient cars for which registration is sought within a specific amount of time.*

**5.4 Frequency and measurement details**

Describe how often which indicator will be monitored and describe the details of how they will be monitored-

*Example: if the outcome of the NAMA activity is that 100.000 low-income households will use CFLs distributed for free, the indicators will be the number of CFL distributed, assuming that five CFL are distributed to each household. To measure the number of CFL received, the number of CFL initially bought (e.g. through invoices) will be compared to the number of CFL left in stocks. This might be done e.g. every six months.*

Frequency of measurement of each activity should also be indicated. The frequency of measurement will depend on the availability of information that is necessary for measurement and on time expectations regarding the outcome.

**5.5 Reporting**

Describe how NAMA activities and outcomes will be reported. Reporting forms the basis of the verification process.

There is no international standard requiring using a specific reporting tool for NAMAs. However, Parties are invited to report mitigation actions in National Communications and Biennial Update Reports to the UNFCCC invite.

For internationally supported NAMAs, donors may require specific information to be reported under a specific format.

We recommend creating a specific reporting tool (e.g. report and/or database) for each NAMA, which will aim to centralize the outcomes and associated indicators as well as results from measurement in a single document. This document will include background data, which allows the validation of the reported figures. The preparation of the document will also facilitate the verification process, which may require specific information on the NAMA.

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## 5.6 Verification

This part will describe how the outcomes will be verified in order to assess whether the values assessed for each indicators can be trusted. The responsibility for verification and the strictness applied depends on the type of activity. A third-party verification could be required for specific activities only. For example, in the case of a supported NAMA, the details of the verification process are to be agreed with the donor.

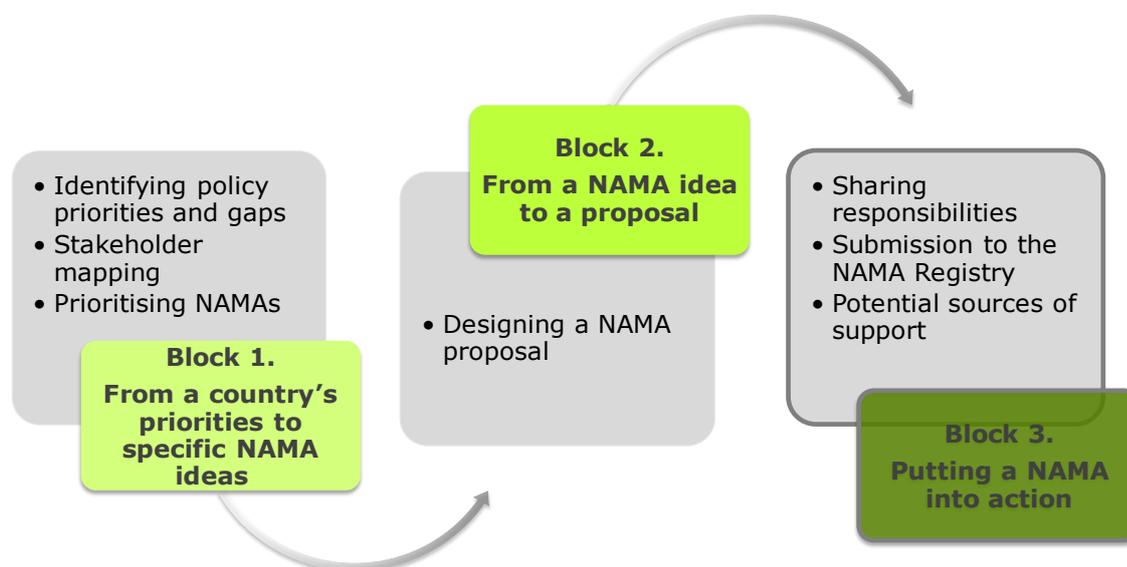
*Example: to verify the outcome that 100.000 low-income households used CFL distributed for free, surveys and site visits at sampled households to which CFL were distributed can be made to verify that CFL are used.*

The verification should be based on the output of the reporting process, e.g. the document in which the outcomes and associated indicators as well as results from measurement are gathered. It may also include further information collected through e.g. site-visits, interviews with stakeholders involved in the implementation of the NAMA, independent research, statistical data, etc. Any evidence supporting the reported indicator values might be used. The verification should be set up in a way that guarantees impartiality. In the case of supported NAMAs, the donor and NAMA owner will agree on who should lead the verification process.

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The NAMA proposal is only a starting point and not the end result. Once the NAMA proposal is complete, additional work will be needed to plan and discuss with funders on items such as costs, impacts and MRV. Further considerations may also contribute to bring the NAMA proposal to a more concrete level of action as presented in the next chapter (Block 3).

## Block 3. Putting a NAMA into action



Block 3 describes important elements that can facilitate successful NAMAs. To help transform the NAMA from vision to concrete action, it is important to lay out in detail how the NAMA will be implemented and identify the people and institutions responsible for its implementation (subsection 3.1). For NAMAs seeking support, an articulating strategy to approach potential donors will be key to the success of the NAMA (subsection 3.2).

### Section 1 - Sharing responsibilities and setting up an action framework

Planning for implementation should begin as early as feasible in the NAMA development process once a country has decided to undertake a NAMA and has agreed on an overarching objective. The task of identifying individual activities to meet that objective should be considered a shared responsibility amongst the various stakeholders within the government, civil society and the private sector (see Box 4).

#### Box 4. Potential role of businesses and private sector in NAMAs

There is an ongoing debate about the shares of public vs. private funding for NAMAs at the international level. The private sector is likely to have a role in supporting NAMAs in the future.

Therefore, it can be useful to involve private sector stakeholders from the beginning in the NAMA development process through dialogues with stakeholders for example. It is important to communicate the objectives in undertaking a NAMA, and to work together to identify win-win solutions that will be part of the success of the NAMA.

It is important to identify the entity with overall responsibility for the implementation of the NAMA. This may be the NAMA owner – i.e. the organisation taking the lead in the NAMA development – or another organisation. Responsibilities for the different activities of the NAMA can then be shared between different stakeholders. A NAMA action plan should be developed which clearly sets out roles, responsibilities, lines of communication as well as timelines for the different activities..

Figure 5 shows an example of how the activities of a NAMA could be shared between different stakeholders.

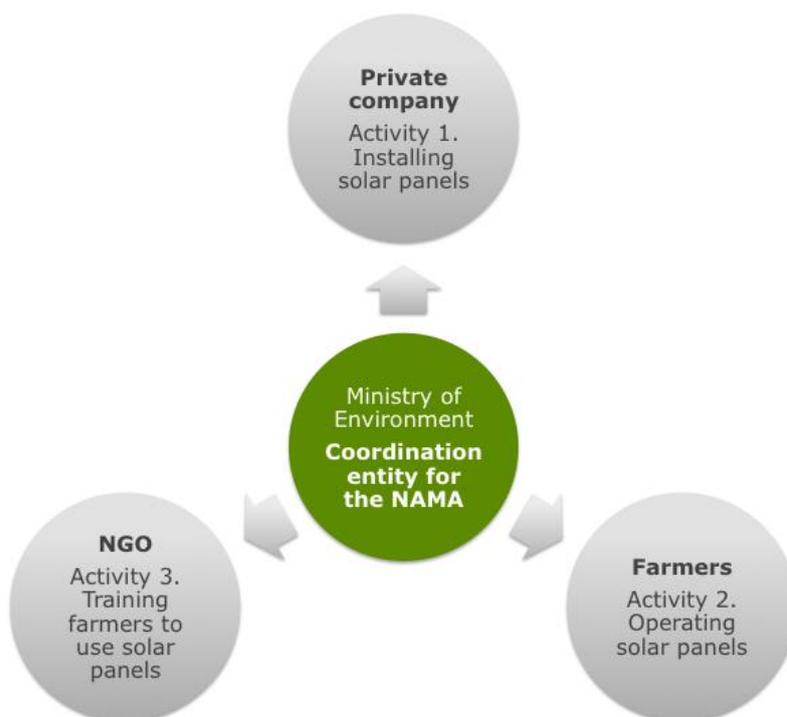


Figure 5. Example of an action framework for a solar panel NAMA in rural areas

This action plan could also help to identify potential risks related to the NAMA (e.g. implementation risks or risks of cost overrun) and ways to mitigate those risks. For example, the stakeholders involved in the NAMA may consider it as a risk that users will be reluctant to try CFLs, even when received for free. To address this risk, they may decide that the distribution of free CFLs will be tied to an education campaign that emphasizes financial benefits of switching to CFLs. Stakeholders may also decide to apply a discount factor or method to address lost, broken or unused CFLs.

- Making a submission to the UNFCCC NAMA Registry

The UNFCCC NAMA Registry is expected to be in place early 2013 in the form of a web-based platform. It will allow applicant countries to submit information on NAMAs for which they seek support or for which they seek recognition. The applicant country needs to fill the Registry template in the web-based portal<sup>25</sup>. Applicants may also upload additional information such as a word or PDF document.

- Potential sources of financial or technical support

In case the NAMA needs international financial, technical and/or capacity-building support, the NAMA proposal will be of great help to provide key information to potential donors. Coordination amongst responsible entities for the NAMA needs to determine who is responsible for looking for international support, e.g. through making a submission to the UNFCCC NAMA Registry and/or approaching donors.

The UNFCCC NAMA Registry also invites various entities to submit information on support available (developed countries, entities entrusted with the operation of the UNFCCC financial mechanism, including the GEF and the GCF, multilateral, bilateral and other public donors, and private and non-governmental organisations). Those entities could be approached to probe their interest in supporting a specific NAMA. Bilateral and multilateral entities can also be approached outside the context of the NAMA Registry.

Specific entities that have been providing support to activities leading to emission reductions in developing countries may also have an interest in supporting NAMAs. Table 3 below provides a comprehensive, but non-exhaustive, list of potential entities that provide support for activities with mitigation effects in different countries and regions.

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<sup>25</sup> The template for NAMA seeking support for preparation is available here: [http://unfccc.int/cooperation\\_support/nama/items/6948.php](http://unfccc.int/cooperation_support/nama/items/6948.php).  
The template for NAMA seeking support for implementation is available here: [http://unfccc.int/cooperation\\_support/nama/items/6982.php](http://unfccc.int/cooperation_support/nama/items/6982.php).

**Table 3. Non-exhaustive list of potential entities willing to provide support for mitigation initiatives in different countries and regions**

Programme/ Fund (Click on title to access website)	Organisation/ Country	Size	Sectors	Region	Type of support	Type of Financial Support	Accessible by	Access points
<a href="#">Africa Enterprise Challenge Fund (AECF) Renewable Energy &amp; Adaptation to Climate Technologies (REACT)</a>	Department for International Development (DFID)	USD 100 million	renewable energy	East African Community	financial	private sector fund, venture capital fund	private companies	Application (business idea, commercial viability, development impact) anjali.saini@aecafrica.org
<a href="#">Clean Technology Fund</a>	World Bank, Climate Investment Funds	USD 4.5 billion (replenishment of fund not yet confirmed)	energy, transport, industry	Middle East and North Africa, Algeria, Egypt, Jordan, Morocco, Tunisia, Turkey, Kazakhstan, Ukraine, Colombia, Mexico, Indonesia, Philippines, Thailand, Viet Nam, South Africa	financial	fund: grants, concessional loans, risk mitigation, guarantees, equity	national governments	Country (Government) request for mission by the World Bank; regional multilateral development bank to prepare climate investment plan, CIFAdminUnit@worldbank.org
<a href="#">Climate Development Knowledge Network (CDKN)</a>	DFID, Netherlands	GBP 50,000/project	energy (efficiency, renewable), industry, forestry, agriculture	any	financial, technical	funding for technical assistance	individual project developers	enquiries@cdkn.org

Programme/ Fund (Click on title to access website)	Organisation/ Country	Size	Sectors	Region	Type of support	Type of Financial Support	Accessible by	Access points
<a href="#">Climate Technology Initiative (CTI) Private Financing Advisory Network</a>	Public-private partnership by CTI, Expert Group on Technology Transfer (EGTT)	USD 140 million	energy (efficiency, renewable), transport, buildings	any	technical	technical assistance facility	individual project developers	project is reviewed, coach is assigned, kuroda@icett.or.jp
<a href="#">ClimDev-Africa Special Fund (CDSF)</a>	African Development Bank (AfDB), United Nations Economic Commission for Asia (UNECA), African Union Commission	USD 136 million	energy, forestry, agriculture	Africa	financial, capacity building	Fund	African entities	Call for proposal, f.tobin@afdb.org
<a href="#">Deutsche Investitions-und Entwicklungsgesellschaft (DEG)</a>	DEG	EUR 25 million	energy (efficiency, renewable), transport, waste, forestry, agriculture	any	financial, technical	debt, loan, risk management, mezzanine finance equity	N/A	info@deginvest.de
<a href="#">GEF Small Grants Programme</a>	GEF, UNDP	USD 50,000/project	energy (efficiency, renewable), transport, buildings	any	financial	Fund	community-based organisations	contact Small Grants Programme National Coordinator (in UNDP country office) agp.info@undp.org
<a href="#">Global Climate Change Alliance (GCCA)</a>	EU	EUR 139.6 million	forestry, disaster risk reduction	low income countries	financial, technical	grants, technical assistance	national governments	mamadou.diakhite@gcca.eu

Programme/ Fund (Click on title to access website)	Organisation/ Country	Size	Sectors	Region	Type of support	Type of Financial Support	Accessible by	Access points
<a href="#">Global Climate Partnership Fund (GCPF)</a>	KfW, Bankengruppe/Deutsche Bank, International Climate Initiative	USD 200 million	energy (efficiency, renewable)	Brazil, Chile, China, India, Indonesia, Mexico, Morocco, South Africa, Philippines, Tunisia, Turkey, Ukraine, Viet Nam	financial	fund, mezzanine subordinated equity shares	1. financial institutions 2. project developers	1. selection of financial institution, info@gcpf.lu 2. selection of projects for co-financing or direct investment, info@gcpf.lu
<a href="#">Global Energy Efficiency and Renewable Energy Fund</a>	European Investment Bank (EIB)	EUR 108 million	energy (efficiency, renewable)	any	financial , technical	fund: equity, channels financing to regional funds	regional funds, private equity funds	geeref@eib.org
<a href="#">Global Environment Facility (GEF)</a>	Global Environment Facility (GEF)	USD 3 billion (allocated to date)	energy (efficiency, renewable), transport, forestry, agriculture	non-Annex I countries (UNFCCC)	financial	tranches of financing (replenished): grants, co-financing	national governments	Submit Project Identification Form through GEF Agency with endorsement letter from the Operational Focal Point of the host country, omizuno@thegef.org
<a href="#">Hatoyama Initiative</a>	Japan	USD 15 billion (funds have been frozen)	energy (efficiency, renewable) , agriculture	any	technical, financial	equity, guarantees (public part and private part)	developing country governments	bilateral negotiations with Japanese government, na@na.na

Programme/ Fund (Click on title to access website)	Organisation/ Country	Size	Sectors	Region	Type of support	Type of Financial Support	Accessible by	Access points
<a href="#">International Climate Initiative (ICI)</a>	Germany	EUR 120 million (annually)	energy, transport, buildings, waste, industry, forestry, agriculture	N/A	financial	grants, concessional loans	individual project developers	annual call for proposals, programmhuero@pr ogrammhuero- klima.de
<a href="#">KfW Development &amp; Climate Finance</a>	KfW, Germany	EUR 20- 50 million (per programme)	energy (efficiency, renewable), transport, buildings, waste, forestry, agriculture	any	financial	grants, concessional loans, structured financing	national governments	agreement in intergovernmental negotiations, info@kfw- Entwicklungsbank.d e
<a href="#">Multilateral Development Bank (MDB) Pilot Programme for Climate Resilience (PPCR)</a>	World Bank, Climate Investment Funds	USD 1 billion	energy, forestry, agriculture	Selected countries: Mozambique , Zambia, Small Island Developing States, Bangladesh, Bolivia, Cambodia, Nepal, Niger, Tajikistan	financial, technical	fund: grants, loans, technical assistance	national governments	country-led joint mission with MDB, CIFAdminUnit@worl dbank.org
<a href="#">Nordic Climate Facility</a>	Nordic Countries	EUR 6 million	energy (efficiency, renewable), transport, waste, forestry, agriculture	any	financial	funding: calls for proposal	Organisations in Nordic countries with local partners in developing countries	concept phase: submission of proposal (annual deadline), ncf@ndf.fi
<a href="#">Nordic Partnership Initiative (NPI) on Upscaled Mitigation Action</a>	Nordic Governments	N/A	various	N/A	financial	N/A	N/A	N/A

Programme/ Fund (Click on title to access website)	Organisation/ Country	Size	Sectors	Region	Type of support	Type of Financial Support	Accessible by	Access points
<a href="#">Public-Private Infrastructure Advisory Facility (PPIAF)</a>	OECD	USD 15 million	energy (efficiency, renewable), transport, buildings, waste, agriculture	any	technical, capacity building , legislation, risk allocation	public-private partnership	individual project developers	Submission of concept note, ajones3@worldbank .org
<a href="#">Scaling-up Renewable Energy Program (SREP)</a>	World Bank, Climate Investment Funds	USD 318 million (currently fully subscribed , new funding in near future)	energy, forestry	Ethiopia, Honduras, Kenya, Maldives, Mali, Nepal	financial	fund: equity, grants, loans, co-financing	low income countries	Proposals for co- financing (how to scale-up, demonstration, removal of barriers for private investments), CIFAdminUnit@worl dbank.org

## Appendix 1. Additional resources

<b>Overview of NAMAs</b>	<ol style="list-style-type: none"> <li>1. UNEP Risoe NAMA Pipeline: <a href="http://www.namapipeline.org">www.namapipeline.org</a>.</li> <li>2. Overview of current NAMA activities in different countries: <a href="http://www.nama-database.org">www.nama-database.org</a>.</li> <li>3. UNFCCC (2011). Compilation of information on nationally appropriate mitigation actions to be implemented by Parties not included in Annex I to the Convention FCCC/AWGLCA/2011/INF.1</li> <li>4. Presentations on NAMAs made at UNFCCC workshops: <a href="http://unfccc.int/bodies/awglca/items/5988.php">http://unfccc.int/bodies/awglca/items/5988.php</a> and <a href="http://unfccc.int/meetings/bonn_may_2012/workshop/6660.php">http://unfccc.int/meetings/bonn_may_2012/workshop/6660.php</a></li> </ol>
<b>Additional resources on mitigation initiatives</b>	<ol style="list-style-type: none"> <li>1. Early submission of Information to the NAMA Registry Prototype: <a href="http://unfccc.int/cooperation_support/nama/items/6945.php">http://unfccc.int/cooperation_support/nama/items/6945.php</a>.</li> <li>2. List of CDM projects: <a href="http://cdm.unfccc.int/Projects/projsearch.html">http://cdm.unfccc.int/Projects/projsearch.html</a>.</li> <li>3. List of Poverty Reduction Strategy Papers prepared by various countries: <a href="http://www.imf.org/external/np/prsp/prsp.aspx">http://www.imf.org/external/np/prsp/prsp.aspx</a>.</li> <li>4. List of submitted National Communications: <a href="http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php">http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php</a></li> <li>5. List of submitted Technology Needs Assessment: <a href="http://unfccc.int/ttclear/jsp/CountryReports.jsp">http://unfccc.int/ttclear/jsp/CountryReports.jsp</a>.</li> </ol>
<b>Updates on NAMA activities</b>	<ol style="list-style-type: none"> <li>1. Röser, F., X. van Tilburg, S. Davis, N. Höhne (2011). Annual Status Report on Nationally Appropriate Mitigation Actions (NAMAs).</li> <li>2. Wuppertal Institute (2011). Current Developments in Pilot Nationally Appropriate Mitigation Actions of Developing Countries (NAMAs), JIKO Policy Paper 01/2011.</li> </ol>
<b>Discussion papers on NAMAs and climate finance</b>	<ol style="list-style-type: none"> <li>1. Ecofys (2010). Nationally Appropriate Mitigation Actions - Insights from example development, Ecofys Policy Update.</li> <li>2. Ecofys (2010). How to get Nationally Appropriate Mitigation Actions to work, Ecofys Policy Update.</li> <li>3. Tilburg, X. van, L.R. Cameron, L. Wurtenberger, S.J.A. Bakker (2011). On developing NAMAs – Discussion Paper, ECN Policy Studies, Amsterdam, September 2011.</li> <li>4. CCAP (2011). Emerging Trends in Climate Finance, Discussion Paper, November 2011.</li> <li>5. CCAP (2011). MRV for NAMAs, Tracking Progress While Supporting Sustainable Development.</li> <li>6. RCREE (2011). Mobilizing NAMAs and new market mechanisms to harness mitigation in RCREEE member states beyond 2012, RCREEE/Perspectives, November 2011.</li> <li>7. <a href="http://www.climatefundupdate.org">www.climatefundupdate.org</a></li> </ol>
<b>Stakeholder's</b>	<ol style="list-style-type: none"> <li>1. United Nations Development Programme (UNDP) (2010). Technology Needs</li> </ol>

<b>mobilization</b>	<p>Assessment for Climate Change Handbook.  <a href="http://content.undp.org/go/newsroom/publications/environment-energy/www-ee-library/sustainable-energy/technology-needs-assessment-for-climate-change-handbook.en">http://content.undp.org/go/newsroom/publications/environment-energy/www-ee-library/sustainable-energy/technology-needs-assessment-for-climate-change-handbook.en</a></p> <ol style="list-style-type: none"> <li>Food and Agriculture Organization (FAO) Stakeholder Analysis  <a href="http://www.fao.org/Participation/tools/stakeholderanalysis.html">http://www.fao.org/Participation/tools/stakeholderanalysis.html</a></li> <li>Peter O'Hara for FAO (2010). Enhancing stakeholder participation in national forest, programmes: A Training Manual.  <a href="http://participatorynrm.com/yahoo_site_admin/assets/docs/Pnfp_training_manual_OK1.13543317.pdf">http://participatorynrm.com/yahoo_site_admin/assets/docs/Pnfp_training_manual_OK1.13543317.pdf</a></li> <li>Low Emission Development Strategies (LEDS) Gateway:  <a href="http://en.openei.org/wiki/Identify_roles_and_responsibilities_for_LEDS_process">http://en.openei.org/wiki/Identify_roles_and_responsibilities_for_LEDS_process</a></li> </ol>
<b>Barrier analysis</b>	<ol style="list-style-type: none"> <li>UNFCCC (2006). Barriers to Mitigation: Module 4.  <a href="http://unfccc.int/resource/cd_roms/na1/mitigation/index.htm">http://unfccc.int/resource/cd_roms/na1/mitigation/index.htm</a></li> <li>UNEP Risoe Centre (2012). Overcoming Barriers to the Transfer and Diffusion of Climate Technologies. <a href="http://tech-action.org/Guidebooks/TNA_Guidebook_OvercomingBarriersTechTransfer.pdf">http://tech-action.org/Guidebooks/TNA_Guidebook_OvercomingBarriersTechTransfer.pdf</a></li> <li>GHG Protocol: <a href="http://www.ghgprotocol.org/">http://www.ghgprotocol.org/</a></li> </ol>
<b>GHG Assessments</b>	<ol style="list-style-type: none"> <li>Greenhalgh, Suzie, Janet Ranganathan, and Heidi Sundin (2010). The GHG Protocol for Project Accounting. pp.25-35  <a href="http://www.ghgprotocol.org/files/ghgp/ghg_project_protocol.pdf">http://www.ghgprotocol.org/files/ghgp/ghg_project_protocol.pdf</a></li> <li>Bader, Nikolas, and Raimund Bleischwitz (2009). Measuring Urban Greenhouse Gas Emissions: The Challenge of Comparability', Cities and Climate Change. pp.4-7.  <a href="http://sapiens.revues.org/854">http://sapiens.revues.org/854</a>.</li> <li>Meyers, Jayant Sathaye and Steve (1995). Greenhouse Gas Mitigation Assessment: A Guidebook. <a href="http://ies.lbl.gov/iespubs/ggma/ghgcontents.html">http://ies.lbl.gov/iespubs/ggma/ghgcontents.html</a></li> <li>Bappenas (2011). Guidelines for implementing greenhouse gas emissions reductions action plan – translated English version, Jakarta, 2011</li> </ol>
<b>Cost analysis</b>	<ol style="list-style-type: none"> <li>Victoria Transport Policy Institute (2011). Transportation Cost Benefit Analysis II – Economic Evaluation. <a href="http://www.vtppi.org/tca/tca03.pdf">http://www.vtppi.org/tca/tca03.pdf</a></li> <li>GEF (1995). Incremental Costs and Financing Modalities. GEF Council Meeting. GEF/C.2/6/Rev.2.<a href="http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.C.4.10.IncrementalCostsandFinancingModalities.pdf">http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.C.4.10.IncrementalCostsandFinancingModalities.pdf</a></li> </ol>
<b>MRV</b>	<ol style="list-style-type: none"> <li>Hinostroza, M.; Lütken, S.; Aalders, E.; Pretlove, B.; Peters, N.; Olsen, K.H. (2012). Measuring, Reporting, Verifying - A Primer on MRV for Nationally Appropriate Mitigation Actions. (UNEP Risoe Centre on Energy, Climate and Sustainable Development, Roskilde, 2012), 31 p.  <a href="http://www.uneprisoe.org/MRVprimer/MRV_NAMAs_Primer.pdf">http://www.uneprisoe.org/MRVprimer/MRV_NAMAs_Primer.pdf</a></li> <li>International Partnership on Mitigation and MRV:  <a href="http://www.mitigationpartnership.net/">http://www.mitigationpartnership.net/</a></li> </ol>

## Appendix 2. Indicative outline of a NAMA proposal

### **Section 1 General information**

- 1.1 Overarching objective
- 1.2 Sector
- 1.3 Scope
- 1.4 Proponent

### **Section 2 Activities**

- 2.1 Activities, outputs and outcomes

### **Section 3 Impacts**

- 3.1 Overview of NAMA benefits
- 3.2 GHG impacts
- 3.3 Sustainable development benefits
- 3.4 Impacts on mitigative capacity

### **Section 4 Costs and support needs**

- 4.1 Costs and support needs

### **Section 5 MRV framework**

- 5.1 Activities and outcomes subject to MRV
- 5.2 Key indicators
- 5.3 Responsible entity
- 5.4 Frequency and measurement details
- 5.5 Reporting
- 5.6 Verification

## Appendix 3. Bibliography

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