

NATIONALLY APPROPRIATE MITIGATION ACTION: Understanding NAMA Cycle

September 2014









Copyright © United Nations Environment Programme, 2014

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. UNEP would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from the United Nations Environment Programme.

Disclaimer

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Environment Programme concerning the legal status of any country, territory, city or area or of its authorities, or concerning delimitation of its frontiers or boundaries. Moreover, the views expressed do not necessarily represent the decision or the stated policy of the United Nations Environment Programme, nor does citing of trade

The findings, interpretations and conclusions expressed in this report are entirely those of the authors and should not be attributed in any manner to UNEP DTU Partnership.

names or commercial processes constitute endorsement.

UNEP
promotes environmentally sound practices
globally and in its own activities.
This publication is printed on 100%
recycled paper, using vegetable -based
inks and other eco-friendly practices.
Our distribution policy aims to reduce
UNEP's carbon footprint.

Nationally Appropriate Mitigation Action:

Understanding NAMA cycle

SEPTEMBER 2014

SUDHIR SHARMA AND DENIS DESGAIN

Nationally Appropriate Mitigation Action:

Understanding NAMA cycle

ACKNOWLEDGEMENTS

Co-Authors Sudhir Sharma, UNEP DTU Partnership Denis Desgain, UNEP DTU Partnership

This publication is prepared with support from the South East Asia Network of Climate Change Offices (SEAN-CC) and the Facilitating Implementation and Readiness for Mitigation (FIRM) projects.

SPECIAL THANKS

UNEP would like to thank the following individuals and organisations for providing data, and for their valuable comments and advice:

Miriam Hinostroza (UNEP DTU Partnership), Sebastian Wienges (GIZ), and Willy Alarcon Salas (UNFCCC Secretariat).

Content

ABBREVIATIONS	4
INTRODUCTION	5
CHAPTER 1. BACKGROUND	7
CHAPTER 2. GENERAL DESCRIPTION OF A NAMA CYCLE	10
The NAMA cycle	10
NAMA cycle: general description	11
CHAPTER 3. DESCRIPTION OF NAMA IDENTIFICATION AND	
PRIORITIZATION, POLITICAL ENDORSEMENT OF PRIORITY NAMA	
IDEAS, AND SUBMISSION OF NAMA IDEAS TO THE UNFCCC REGISTRY	
NAMA identification and prioritization	
Political endorsement of priority NAMA ideas	
Submission of NAMA ideas to the UNFCCC Registry	18
CHAPTER 4. DESCRIPTION OF THE NAMA DESIGN AND FORMULATION STEP	20
Institutional arrangements	21
Designing an action Plan	22
Developing a financing plan for implementing the NAMA	23
Developing an MRV approach for the NAMA	23
CHAPTER 5. DESCRIPTION OF NATIONAL ENDORSEMENT;	
SUBMISSION TO UNFCCC REGISTRY; AND APPROVAL BY INTERNATIONAL	
SUPPORT PROVIDERS	
National Endorsement	
Submission of NAMA to UNFCCC Registry	
Approval by International Support Providers	26
CHAPTER 6. DESCRIPTION OF NAMA IMPLEMENTATION AND	
MEASUREMENT, REPORTING AND VERIFICATION	
NAMA Implementation	
Measurement	
National Reporting and Verification	29
Reporting to International Support Providers; International Reporting	
and International Consultation and Analysis	30
CHAPTER 7. DESCRIPTION OF ASSESSMENT OF IMPLEMENTATION	
OF NATIONAL CLIMATE STRATEGY	31
REFERENCES	32

Abbreviations

BAP Bali Action Plan

BUR biennial update reports

CDM Clean Development Mechanism

COP Conference of the Parties

CPB climate policy body

CTCN climate technology centre and network

DOE designated operational entity

FM financial mechanism GCF Green Climate Fund

GEF global environment facility

GHG greenhouse gas

ICA international consultation and analysis
 LCDS low-carbon development strategies
 MRV measurement, reporting and verification
 NAMA Nationally Appropriate Mitigation Action

NC national communication

NIMT NAMA implementation management team

NSC NAMA steering committee

SC standing committee
SD sustainable development

SNOE sector NAMA overseeing entity

TCE technical central entity

UNFCCC United Nations Framework Convention on Climate Change

Introduction

There is no internationally defined or agreed Nationally Appropriate Mitigation Action (NAMA) cycle, as was the case, for example, with the Clean Development Mechanisms (CDM) project cycle. However, there are some common steps that NAMA identification, formulation, and implementation will all go through.

This paper provides a comprehensive overview of these steps in the form of a NAMA cycle, from the identification of NAMA ideas to the implementation of a NAMA and of the Measuring, Reporting and Verification (MRV) system related to the NAMA. It should be noted that the term 'NAMA' is used for both nationally determined voluntary mitigation action to address GHG emissions and specific mitigation actions identified at the sectoral, sub-sectoral or local levels. In the rest of this paper, the term NAMA will refer to specific mitigation action.

Although many countries are developing NAMAs, many questions are still being raised regarding the steps involved in identifying, formulating and implementing a NAMA. Questions asked by policy-makers, the private sector and other national stakeholders range from how to start the NAMA development process, how NAMA is linked to climate change policies or strategies, who is responsible for various aspects of NAMA development, what is the role of the private sector, and is there a decision-making process for considering and approving NAMAs, etc. Though a number of publications found in the literature address the NAMA formulation process, these usually focus on either the contents of NAMAs or on the involvement of stakeholders at the national level.¹

The aim of this paper is to provide national stakeholders involved in NAMA identification, formulation or implementation with answers to the questions listed above and develop among them a clear understanding of the NAMA cycle, as well as the roles and responsibilities of various actors at each step in the cycle. A common understanding of the cycle should allow stakeholders to improve their interactions among themselves and acquire a better understanding of the enabling environment and institutional interactions that are needed to ensure successful implementation of national climate-change policies through NAMAs.

¹ For further details on stakeholder involvement and institutional arrangements, see *Institutional aspects of NAMA development and implementation* (M. Hinostroza, et al.; published by UNEP Risoe, 2014).

The first chapter gives a brief overview of the origin of the NAMA concepts and describes how the concepts of NAMA, MRV and international support have evolved through the different Conferences of Parties (COPs). The second chapter proposes a general NAMA cycle, from the identification and prioritization of NAMAs to the implementation of a NAMA and its corresponding MRV systems. This chapter describes briefly the key steps in the cycle and the interactions between the national and international stakeholders involved in these steps. The third chapter addresses the identification and prioritization steps in the NAMA cycle. The chapter describes the general process of identifying and prioritizing NAMA ideas, focusing on the links with climate-change policies or strategies, and on institutional interactions between the different stakeholders. It also covers political endorsement of the prioritization results by the national authorities and the submission of NAMA ideas to the UNFCCC Registry. The fourth chapter discusses the design and formulation of a NAMA document. The chapter describes the key stakeholders involved in the design and formulation process and includes a brief description of the three key sub-steps: designing an action plan; developing a finance plan for implementing the NAMA; and developing an MRV approach for the NAMA. The fifth chapter covers endorsement of the NAMA by the appropriate national authority, the submission of the NAMA to the UNFCCC Registry and approval by international support providers (in the case of internationally supported NAMAs). The sixth chapter addresses the implementation of the NAMA and the Measurement, Reporting and Verification (MRV) process. It focuses on the key stakeholders and institutional interactions related to these steps. Finally, the last chapter discusses the monitoring and evaluation of NAMA impacts on emissions reductions based on sustainable development priorities beyond NAMA implementation and the assessment of the implementation of national climate-change policies and strategies.

BACKGROUND

In recent years, Nationally Appropriate Mitigation Actions (NAMAs) have become a key element in the mitigation framework of the United Nations Framework Convention on Climate Change (UNFCCC). At present the NAMA is considered to be a key policy tool for developing countries to address their emissions reductions. Many countries are in the process of identifying specific mitigation actions and developing detailed plans to implement these actions.

The concept of the NAMA originated in the Bali Action Plan (BAP) adopted by the Parties to the UNFCCC during COP13 in 2007. The subsequent COPs held in Copenhagen (COP15 in 2009), Cancun (COP16 in 2010) and Durban (COP17 in 2011) have clarified the mitigation framework for developing countries, but none of the decisions taken have clearly defined either the scope or the content of NAMAs. Nonetheless, in the context of the mitigation framework defined for developing countries, a NAMA can be regarded as any mitigation action tailored to the national context, characteristics and capabilities, and embedded in national sustainable-development priorities (Sharma and Desgain, 2013).

The mitigation framework for developing countries agreed at COP 16 is based on the principle of voluntary efforts (UNFCCC, 2010). In this context, a NAMA will be nationally determined and voluntarily undertaken by a developing country to address its GHG emissions (Sharma and Desgain, 2013). In addition, the Cancun Agreements state that "developing country Parties will take nationally appropriate mitigation actions ... aimed at achieving a deviation in emissions relative to 'business as usual' emissions in 2020 ...". This provides a common goal for all developing countries to mitigate their GHG emissions.

The Copenhagen Accord (UNFCCC, 2009) agreed at COP15 uses the term "supported NAMA" to refer to a NAMA seeking international support for its implementation. The Cancun Agreements (UNFCCC, 2010, *ibid.*) adopted by the Parties during COP16 distinguish between internationally supported actions and domestic supported actions, depending on whether they are implemented with or without international support.

² BAP states that, in order to achieve "Enhanced national/international action on mitigation of climate change ...", developing countries will take "Nationally appropriate mitigation actions ... in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner ...".

An important element of NAMA, namely measurement, report and verification (MRV), was mentioned for the first time in the BAP. The Copenhagen Accord states that supported NAMAs will be subject to international MRV. The Cancun Agreements further define the MRV framework for NAMAs as follows: "... internationally supported mitigation actions will be measured, reported and verified domestically and will be subject to international measurement, reporting and verification in accordance with guidelines to be developed under the Convention ..." and further: "... domestically supported mitigation actions will be measured, reported and verified domestically in accordance with general guidelines to be developed under the Convention ..." General guidelines for domestic MRV of domesticsupported NAMAs were developed under the UNFCCC and adopted by the Parties during COP19 in Warsaw (UNFCCC, 2013). Internationally supported NAMAs will also be subject to international MRV in accordance with guidelines developed for International Consultation and Analysis (ICA) adopted at COP17. Biennial Update Reports (BUR) will be the main channel for reporting (R) to the UNFCCC all the mitigation efforts undertaken by developing countries through domestically and internationally supported NAMAs. Information included in BURs will be subject to international consultation and analysis under the ICA.

The Convention clearly established that mitigation actions taken by developing countries will be internationally supported. With regard to financial support to developing countries, the Cancun Agreements re-iterate that, "... in accordance with Article 4, paragraph 3, of the Convention, developed country Parties shall provide enhanced financial, technological and capacity building support for the preparation and implementation of nationally appropriate mitigation actions of developing country Parties ..." (UNFCCC, 2010, *ibid.*). In addition, with regard to international arrangements for supporting NAMAs, the Parties at COP16 established different bodies with the aim of strengthening the Financial Mechanism (FM) of the Convention and providing support to developing countries. These include (Sharma and Desgain, 2013):

- The Registry established as a platform to facilitate provision of the support received from bilateral and multilateral channels. The Registry has been developed as a web-based platform managed by the Secretariat of the Convention. Its role is "to record nationally appropriate mitigation actions seeking international support and to facilitate matching of finance, technology and capacity-building support for these actions."
- The Green Climate Fund (GCF), established as one of the channels through which to provide financial support to developing countries. The GCF is an operating arm of the FM.

• The Standing Committee (SC) as an organ to assist the COP in exercising its functions with respect to the FM. The role of the SC will be to act as an advisory body to the UNFCCC Convention. The SC will make recommendations on improving coherence and coordination in the delivery of climate-change financing; rationalization of the financial mechanism; the mobilization of financial resources; and the measurement, reporting and verification of support provided to developing-country Parties (UNFCCC, 2011).

The NAMA is a central instrument in addressing the GHG emissions reductions of developing countries. Developing countries are now in the process of identifying and formulating NAMAs to satisfy their obligations under the UNFCCC. This bottom-up, country-driven process will contribute to the understanding of NAMAs and of the institutional arrangements and interactions needed for their identification, formulation and implementation.

At Durban, member countries initiated a new round of negotiations to define the international mitigation framework under the UNFCCC post-2020. The new agreement will cover all countries. It is expected that by 2015 countries will produce their nationally determined contributions to GHG emissions reductions, which will be implemented after 2020. Capacity development of the process of identifying, formulating and implementing NAMAs will thus provide a sound foundation for developing countries to implement the international mitigation framework post-2020. In this context, defining a NAMA cycle can help developing countries create the necessary capacity for identifying, formulating and implementing NAMAs pre-2020, as well as preparing them for the post-2020 phase.

GENERAL DESCRIPTION OF A NAMA CYCLE

Developing countries will implement NAMAs in order to address their emission reductions and by doing so contribute to the global effort to tackle climate change. In the absence of a clear definition given by the COP decisions, the term 'NAMA' is used for both nationally determined voluntary mitigation actions to address GHG emissions, and specific mitigation actions directed at the sectoral, sub-sectoral or local levels (Sharma and Desgain, 2013). In this paper, the term NAMA will refer to specific mitigation action.

At present, many countries are in the process of identifying NAMAs and developing detailed plans to implement these actions. So far only two NAMAs are under implementation, and no NAMA has completed its implementation phase (Ecofys, 2013).

However, no formal NAMA cycle has been agreed at the international level. Many publications found in the literature address the identification or development of NAMAs. However, they usually focus on the involvement of stakeholders at the level and do not address interactions between the national and international levels.

Even if no formal NAMA cycle has been agreed, the identification, formulation and implementation of a NAMA will have to follow common elements based on best practice and on similar mechanisms such as the Clean Development Mechanisms (CDM).

This chapter presents a general NAMA cycle. It gives a general description of the key steps in the cycle. Further, it explains briefly the key national and international entities involved in each step and the interactions between the national and international levels.

The NAMA cycle

In this paper, we refer to a NAMA cycle as a set of events or actions that happen again and again in the same order to address national GHG emissions through the climate-change strategy as a continuous process.

Cancun Agreements encourage "... developing countries to develop low-carbon development strategies or plans in the context of sustainable development ..." NAMAs will be identified and implemented within the context established in the low carbon development strategies (LCDS) or any other national climate strategy (UNEP Risoe, 2011).

A NAMA cycle will start with the identification of NAMA ideas based on the LCDS/national climate strategy and will end with an assessment of the implementation of this strategy. The NAMA cycle has a within-country process which, at various points, interacts with international players. Figure 1 proposes a general NAMA cycle. The figure shows the steps involved in establishing the NAMA cycle, the key reports produced during the cycle and the interaction with international players.

It should be noted that the NAMA process is in pursuance of the obligations agreed by developing countries under the UNFCCC. The NAMA cycle described in Figure 1 reflects the steps that countries will take in meeting these obligations. Further, it should be noted that the countries have agreed to voluntarily submit information on NAMAs to the UNFCCC Registry (step 6 in Figure 1) and have committed to reporting regularly on NAMAs through BURs, which will be subject to ICA (steps 11 & 12 in Figure 1).

NAMA cycle: general description

The NAMA cycle as shown in Figure 1 has seven steps at the national level: NAMA identification and prioritization, the political endorsement of priority NAMA ideas, NAMA design and formulation, national endorsement, NAMA implementation, measurement, and national reporting and verification. The first four steps are performed prior to the implementation of the NAMA, while the last two are performed during the lifetime of the NAMA. In addition, the NAMA cycle includes five points of interaction with international players: submission of NAMA ideas to the UNFCCC Registry, submission of the NAMA to the UNFCCC Registry, approval by international support providers in the case of internationally supported NAMAs, reporting to international support providers, international reporting, and subsequent international consultation and analysis. If all the steps at the national level apply to both internationally supported NAMAs and domestically supported NAMAs, some steps at the international level are optional or are linked to the design and implementation of internationally supported NAMAs.

The first step in the NAMA cycle is the **identification and prioritization of NAMAs**. NAMAs can be undertaken in a wide variety of sectors where there is a potential for greenhouse gas (GHG) emission reductions based on sustainable development (SD) priorities. The outcome of this first step will be a list of prioritized NAMA ideas. The identification and prioritization process will be carried out taking into account the national context and development priorities. The process will involve a large range of national stakeholders and will be coordinated by an entity called the Technical Central Entity (see Chapter 3).

The second step in the NAMA cycle is the **political endorsement of prioritized NAMA ideas**. The endorsement will be the responsibility of a higher authority called the Climate Policy Body (see Chapter 3). Once the prioritized NAMA ideas have been endorsed, they can be **submitted to the UNFCCC Registry** by the NAMA Approver (see Chapter 3). This

Figure 1. General NAMA cycle.

is the third step in the cycle. It should be noted that this third step is optional and that the country can move directly from the political endorsement of NAMA ideas to NAMA design and formulation, especially if no international support is requested for the latter.

The fourth step in the NAMA cycle is **NAMA design and formulation**. At this stage, a large panel of national and international stakeholders will be involved. NAMA design and formulation will be overseen by the Sector NAMA Overseeing Entity and could be undertaken by governmental or non-governmental entities (see Chapter 4). The output of this step will be a NAMA document, which includes the action plan and the financing plan for implementing the NAMA, as well as describing the MRV approach for the NAMA. This step is critical if the NAMA is to be successfully implemented. Indeed, the NAMA document will be the reference document for all stakeholders involved in the implementation of the NAMA. It can also be used for establishing contacts with potential support providers with the aim of leveraging international support for NAMA implementation.

Once the NAMA document has been developed, it will be submitted for **national endorsement**. This is the fifth step in the cycle. National endorsement includes political approval and financial approval. Endorsement will be the responsibility of the Climate Policy Body (see Chapter 5) and will enable an allocation of national budgetary resources for implementation of the NAMA, as well as signalling the country's commitment to implementation.

Once the NAMA has been endorsed at the national level, it can be **submitted to the UNFCCC Registry** by the NAMA Approver. In the case of a NAMA that is seeking international support for implementation, the NAMA has to be **approved by international support providers**. These are the sixth and seventh steps (see Chapter 5), though both steps could be skipped so that the country can move directly from national endorsement to NAMA implementation.

Once a NAMA has been endorsed by the national authorities, **NAMA implementation** can start. This is the eighth step. At this stage, all the investments from the national and international private sectors will be made (see Chapter 6). Implementation of the NAMA will lead to GHG emissions reductions compared to a baseline scenario, as well as to sustainable development benefits.

Together with implementation of the NAMA, the MRV process starts (steps nine to twelve). Based on regular **measurements** of data to track the progress and impacts of the NAMA, the NAMA implementation management team prepares a NAMA report (see Chapter 6), which is submitted to the entity responsible for **NAMA verification** at the national level. The NAMA verification process provides feedback both for improvement of the measurement plan and for improving NAMA implementation. Once NAMA verification has been completed, the NAMA report will be used as input for preparing the BURs to UNFCCC. These BURs will be subject to **international consultation and analysis** (ICA) akin to international verification.

In the case of internationally supported NAMAs, the NAMA report will also be submitted to the international support provider (see Chapter 6).

The NAMA cycle ends with the international reporting and ICA step. However, the country should continue to monitor the sustainable development and GHG emissions parameters that indicate the intended impacts of the NAMA. The information collected from all the NAMAs will be used to perform a **national assessment of implementation of the climate change strategy**. The outcome of this assessment will allow the national climate change strategy to be adjusted and new national priorities and objectives laid down, thus starting a new cycle.

Countries should consider the general NAMA cycle described in this paper as a guide to developing their own cycles based on the national processes for other programmes and based on the institutions and arrangements that are already in place in the country.

DESCRIPTION OF NAMA IDENTIFICATION AND PRIORITIZATION, POLITICAL ENDORSEMENT OF PRIORITY NAMA IDEAS, AND SUBMISSION OF NAMA IDEAS TO THE UNFCCC REGISTRY

The steps described in this chapter (NAMA identification and prioritization, political endorsement of priority NAMA ideas, submission of NAMA ideas to the UNFCCC Registry) are the first three steps in the NAMA cycle shown in Figure 1. The two steps concerning NAMA identification and prioritization, and political endorsement of priority NAMA ideas take place at the national level, while the step concerning the submission of NAMA ideas to the UNFCCC Registry takes place at international level (Figure 2). As shown in Figure 2, the output of the NAMA identification and prioritization step is a prioritized **NAMA ideas list**. These NAMA ideas are then developed into NAMAs, as explained further in chapter 4.

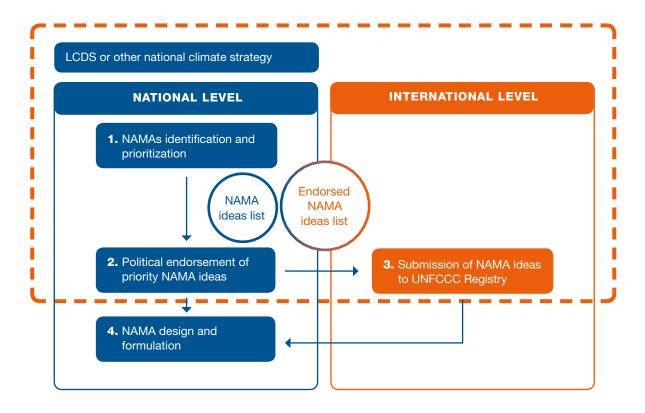


Figure 2. Three first steps of the general NAMA cycle: NAMA identification and prioritization, political endorsement of priority NAMA ideas, submission of NAMA ideas to UNFCCC Registry.

NAMA identification and prioritization

As seen in the previous chapter, the Cancun Agreements (COP16) encourage "...developing countries to develop low-carbon development strategies or plans in the context of sustainable development..." This statement was reiterated during COP17 in Durban and COP18 in Doha, encouraging developing country Parties to develop low-emission development strategies (LCDS), and recognizing the need for financial and technical support by developed country Parties for the formulation of these strategies.

LCDS are forward-looking, long-term, comprehensive, holistic, national economic development plans or strategies that encompass options for achieving economic growth through low-emission and/or climate-resilient pathways (Clapp *et al.*, 2010). The ultimate aim of a LCDS is to promote a sustainable development pathway through options that enable growth using low-emission options (van Tilburg *et al.*, 2011). LCDS identifies the areas where opportunities for GHG emissions reductions exist. LCDS thus provides the national climate policy framework for the implementation of concrete mitigation options, including NAMAs. Sustainable development at the national and global levels provides the context for LCDS and NAMAs (Olsen, 2013).

In most countries, endorsing a LCDS or a national climate strategy is the responsibility of a central entity consisting of high-level policy-makers. We refer to this entity as the Climate Policy Body (CPB).³ The endorsement creates political ownership of the national LCDS or national climate strategy. Normally the CPB is supported by a technical entity (secretariat) which undertakes analysis to support the decision-making. We call this the Technical Central Entity (TCE).

The identification, formulation and implementation of NAMAs at the national level will require coordination efforts by a government entity. A country may choose to establish a NAMA coordinating office to be responsible for liaising with and supporting NAMA-related efforts. This office could be housed in the TCE, or a country may choose to establish it as a separate entity. In this publication we assume that the TCE will host the NAMA coordination office.

If a LCDS is available in the country, it provides the required information on the national climate policy framework enabling a long list of NAMAs to be identified. If a country has not developed a LCDS, the identification of a long list of NAMAs should start with the analysis of the national climate policy framework in the context of national sustainable development goals. As part of this analysis, it is important to understand the national GHG emission trends (past, current, and expected future growth in GHG emissions) and the drivers that contribute to GHG emissions, either directly or indirectly. This analysis will allow stakeholders to identify the opportunities for GHG emissions reductions. In order to

³ This is, for example, the Prime Minister's Council on Climate Change in India, and the National Climate Change Committee in Indonesia.

perform this analysis, stakeholders may refer to existing national documents such as climate change plans, national development plans, government strategies and legislation relating to climate change mitigation, the country's development priorities, etc.

Once the national climate-policy framework has been defined, stakeholders can move to the **identification of NAMAs.** The identification process should be country-owned and country-driven. This process requires the active involvement of the government and the participation of stakeholders (ministries and governmental agencies; regional/local institutions; research and training organisations; service institutions, including private and public entities; non-governmental organisations; etc.). The identification of NAMAs usually happens at the sectoral level. This is expected to be coordinated by the ministry responsible for the respective sector. Ministries may establish sectoral working groups to facilitate the identification of NAMAs. In this case these groups would provide the TCE with a list of NAMA ideas for its sector.

The output of the identification step will be a national long list of NAMA ideas compiled by the TCE based on inputs provided by the sectoral working groups. Once the national long list of NAMA ideas has been compiled, a wider and more structured stakeholder consultation process should be undertaken. The stakeholders could include relevant research organizations, technical institutes and experts, civil-society organizations, business associations, etc.

In addition to the sectoral lists of NAMA ideas, the working groups should provide a NAMA idea document for each NAMA idea identified. This NAMA idea document is a one to two-page document providing basic information on each NAMA. These NAMA ideas documents will be used in the next step, the prioritization process.

Based on the national long list of NAMAs, the process of the **prioritization of NAMAs** can start. This process should be country-owned and country-driven. Prioritization of the long list of NAMA ideas is carried out using a set of predefined criteria (GHG-, environmental-, social-, economic-related criteria), identification of which is based on the national context and sustainable development priorities. The information included in the NAMA ideas document is used to score the NAMA ideas based on these criteria. The TCE will coordinate the prioritization process, which involves stakeholders representing the different working groups and may also involve other key institutions and organizations. The output of the prioritization process will be a list of prioritized NAMAs, referred to as the NAMA ideas list in Figures 1 and 2.

The next step is the **political endorsement of the NAMA ideas list**.

For further details on the identification and prioritization of NAMAs, see *Guidance for NAMA design: building on country experiences* (UNDP, UNFCCC & URC, 2013); *NAMA Tool* (GIZ, 2012): *Steps for Moving a NAMA from Idea towards Implementation*, at http://mitigationpartnership.net/nama-tool-steps-moving-nama-idea-towards-implementation.

Political endorsement of priority NAMA ideas

The objective of this step is to confirm that the NAMAs are nationally appropriate and match national climate priorities. Endorsement of the list implies considering competing interests from different ministries. The endorsement should thus be the responsibility of a higher authority. The TCE will submit the NAMA ideas list to the CPB, which, as the climate change policy-making body, could be the most appropriate body to take responsibility for the endorsement.

Endorsement by the government establishes the priorities for allocating resources (national and/or international) to NAMAs. The NAMA ideas list should be reviewed periodically with a view to updating it with new NAMA opportunities and to take into consideration any changes in national and sectoral goals.

Some countries have established a national registry for NAMAs. In this case, the **endorsed NAMA ideas list** should be displayed on the national registry. The national registry will be managed by the TCE. This enables a sharing of information with the stakeholders in the country, including national focal points for the UNFCCC (responsible for communications to UNFCCC), GEF, GCF, CTCN, etc.

The endorsed NAMA ideas list can also be **submitted to the UNFCCC Registry**.

Submission of NAMA ideas to the UNFCCC Registry

Submission of the endorsed NAMA ideas to the UNFCCC Registry will be carried out by the designated person responsible for uploading information on to the UNFCCC Registry. This person is referred to as the "NAMA Approver" on the UNFCCC Registry website. The NAMA Approver has to be nominated by the country and communicated to the UNFCCC through the UNFCCC National Focal Point. The NAMA Approver could be located either in the entity responsible for communication to the UNFCCC or in the TCE.

The UNFCCC Registry⁶ is a web-based platform created under the UNFCCC. Its objective is to facilitate the matching of support made available by developed countries and the NAMAs submitted by developing countries that are seeking support. The UNFCCC Registry can also be used by developing countries to share information on the NAMAs they are implementing using domestic resources (Sharma and Desgain, 2013). Domestically supported NAMAs can be submitted as "NAMAs for recognition", while internationally supported NAMAs can be submitted as "NAMAs either seeking support for preparation" or "seeking support for implementation".

The UNFCCC Registry states that the NAMA can be uploaded by the NAMA Approver or NAMA Developer. In either case the right to upload the documents can be granted on the recommendation of the country's UNFCCC focal point. Thus the term "NAMA Approver" does not imply that it is the entity having the authority to approve a country's NAMAs. The NAMA Approver only confirms that the NAMA being submitted can be listed in the UNFCCC Registry as a country's NAMA.

 $^{^{6} \ \} http://www4.unfccc.int/sites/nama/SitePages/Home.aspx$

It should be noted that the submission of endorsed NAMA ideas to the UNFCCC Registry is optional. A country may choose to skip this step and move directly to NAMA design and formulation. This can be the case, for example, if a country does not want to share information with the international community on specific domestically supported NAMAs or if no international support is requested for NAMA design and formulation.

However, the listing of NAMA ideas on the UNFCCC Registry creates the possibility of attracting the attention of international support providers. Such providers may either provide support for the development of NAMAs, if needed, or may express an interest in providing support for NAMA implementation. It would be helpful to provide contact information for interested international support providers.

Based on the priority NAMA ideas included in national registry, the TCE informs the ministries who have submitted these ideas which of them have been included in the national registry. The next step in the NAMA cycle is **NAMA design and formulation.**

DESCRIPTION OF THE NAMA DESIGN AND FORMULATION STEP

The NAMA design and formulation step includes three key sub-steps (Figure 3): designing an action plan; developing a financial plan for implementing the NAMA; and developing an MRV approach for the NAMA. The step takes place at the national level, its outcome being a NAMA document. It should be noted that there is no standard template for the NAMA document, though many templates are available in the literature.⁷

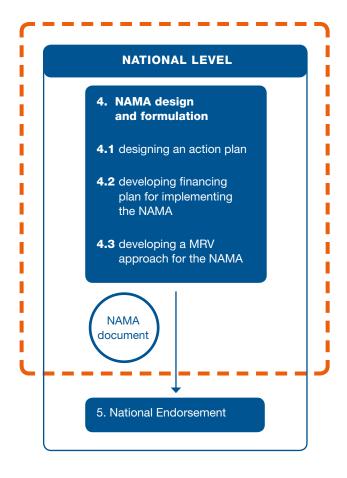


Figure 3. NAMA design and formulation step

Examples of templates can be found at www.lowcarbondev-support.org/PUBLICATIONS (developed by URC), http://www.nama-database.org/index.php/Downloads (developed by Ecofys), or in *Guidance for NAMA design: building on country experiences* (UNDP, UNFCCC & URC, 2013).

In order to have a smooth process for designing and formulating the NAMA, it is important to clarify at the outset the institutional arrangements for designing, formulating and implementing the NAMA. These arrangements should clearly identify the implementing entity, the executing entity and the arrangements for the overall management of NAMA implementation, including day to day operations.

It should be noted that the design and formulation of a NAMA will require finance in order to undertake the work. This could either be allocated from the budget of the respective ministry or come from an international support provider.

Institutional arrangements

Once the NAMA ideas have been prioritized and endorsed, it is important to clarify the responsibilities for "overseeing" the design, formulation and implementation of all the NAMAs, as well as of each individual NAMA.

The ministries responsible for NAMA ideas included in the national registry should be responsible for "overseeing" the design and formulation of all the NAMAs in their respective sectors. The reason is that the management of a sector is the responsibility of the corresponding ministry, including the development of policy and regulatory frameworks for that sector.

In most sectors, management responsibilities are shared between the national-level ministry and provincial or local government entities. For example, the national Ministry of Urban Development in India is responsible for urban transport planning-related policies and regulation, while the state and local government entities are responsible for the implementation of urban transport projects. Even in such cases it would be appropriate for the national line ministry to be responsible for "overseeing" the design and formulation of all the NAMAs in the sector. This responsibility will be assigned to a small group or department within the ministry. In this paper we refer to this group as the Sector NAMA Overseeing Entity (SNOE).

Implementing a NAMA requires an implementing entity. This entity is the primary entity receiving funds for the implementation of the NAMA, being responsible for managing the funds, as well as for overseeing implementation. In the case of domestic NAMAs, the SNOE could be the implementing entity.

Implementing a NAMA also requires an executing entity responsible for the day-to-day management of the implementation. In the case of domestic NAMAs, the SNOE as the implementing entity could also be the executing entity. In this case, the executing entity could be an identified team/department within the implementing entity. Alternatively the SNOE could appoint another entity as the executing entity.

The term "overseeing" does not imply that the SNOE has to be in charge of designing and formulating a NAMA. The SNOE should identify an entity to lead design and formulation, which could be done by governmental or non-governmental entities, such as local government, the private sector, research institutes, civil-society organizations, etc. This entity could either be appointed directly by the SNOE or identified through a process of soliciting interest in designing and formulating the NAMA. The entity responsible for design and formulation could also be the executing entity.

In the case of internationally supported NAMAs, the implementing entity must be accredited by the international support provider, meaning that it may be a different entity than the SNOE. The accreditation requires that the implementing entity fulfils the requisite fiduciary standards to ensure financial accountability, and it may include other criteria as well. In general in internationally funded projects, the UN Agencies (UNDP, UNEP, UNIDO, etc.) or other international or regional organizations are the implementing entities. This would also be the case for internationally supported NAMAs. However, a number of international donors and climate funds (for example, the GCF) have initiated a process to enable direct access by countries, in which case national entities could be accredited as the implementing entity.

If the country has established a climate-change finance-coordinating entity, this entity could apply to be the national implementing entity for internationally supported NAMAs.

Designing an Action Plan

The purpose of this sub-step is to design an action plan that defines the key activities to be implemented in order to achieve the objectives of the NAMA. In addition, the action plan specifies the actors responsible for implementing the activities.⁸

The entity responsible for designing and formulating the NAMA should set up a small working group to seek information and ideas in designing the action plan. The working group should include policy-makers, technical and financial experts and institutions, and other key stakeholders relevant for the NAMA. Members of the working group should be invited by the respective appropriate authority, so that each member has the mandate of the organization it represents. Private-sector representatives too should be included in the working group, as NAMA activities will either influence the behaviour of the private sector or involve private-sector investments.

Once the draft action plan has been finalized by the working group, a wider and more structured stakeholder consultation process should be undertaken. The stakeholders

For further details on designing an action plan, see *Guidance for NAMA design: building on country experiences* (UNDP, UNFCCC & URC, 2013); NAMA Tool (GIZ, 2012): Steps for Moving a NAMA from Idea towards Implementation, at http://mitigationpartnership.net/nama-tool-steps-moving-nama-idea-towards-implementation.

could include relevant research organizations, technical institutes and experts, civil-society organizations, business associations, etc. Stakeholders negatively impacted by the NAMA should also be included in the consultation.

Developing a financing plan for implementing the NAMA

A fully developed action plan is the starting point for estimating the financial resources required to implement the NAMA. In addition, the sources of finance (national and international sources, private-sector investments, financing institutions, etc.) needed to implement the activities included in the NAMA action plan should be identified in order to structure the financing of the NAMA.

The entity responsible for designing and formulating the NAMA should involve financing experts to draw up estimates of the financial resources required and the financial structuring of the NAMA.

In this sub-step some of the key entities that should be involved are: the finance department of the relevant ministries; the ministry responsible for development planning; the government entity responsible for international cooperation, the ministry of finance, etc. The banking and financial sector will also be relevant in structuring the financing of the NAMA.

Further, if it is decided that international financial support is needed to implement the NAMA, potential international support providers could be approached. Consultation with climate-change finance-coordinating institutions would be important, assuming such an institution has been established in the country concerned.⁹

Developing an MRV approach for the NAMA

Once the action plan and financing plan have been developed, all the necessary information needed to undertake the development of a detailed measurement plan and establish the arrangements for MRV will be available.

If a domestic MRV system has been established in the country, the MRV requirements of the system should be considered in order to develop the measurement plan and the procedures for reporting. If a domestic MRV system has not been established, the measurement plan and the reporting requirements should be based on internationally accepted good practice. ¹⁰ In the case of internationally supported NAMAs, the donors' requirement for the MRV process and procedures should be taken into consideration.

⁹ For further details on developing a financing plan for implementing the NAMA, see Financing Supported NAMAs (ECN and Ecofys, 2012): http://www.mitigationpartnership.net/ecn-2012-financing-supported-namas, and The Climate Finance Cascade (GIZ, 2013): http://www.mitigationpartnership.net/giz-2013-climate-finance-cascade-nama-financing-mechanism-nutshell.

¹⁰ For further details on MRV practises, see the International Partnership on Mitigation and MRV, at http://www.mitigationpartnership.net/.

The entity responsible for designing and formulating the NAMA should involve MRV experts to undertake the design measurement plan and establish the arrangements for MRV of the NAMA. The entity responsible for preparing reports (BURs and NCs) to the UNFCCC should be consulted. The TCE should also be consulted, as it is responsible for coordinating the implementation of all the NAMAs in the country and for compiling information on the status of implementation of NAMAs.

This completes the design and formulation of the NAMA and results in a **NAMA document** (Figure 3). During this process all the key stakeholders and key government entities that will be involved in NAMA implementation will have been consulted.

DESCRIPTION OF NATIONAL ENDORSEMENT; SUBMISSION TO UNFCCC REGESTRY; AND APPROVAL BY INTERNATIONAL SUPPORT PROVIDERS

The output of the NAMA design and formulation step is a NAMA document. Before proceeding to implementation, the NAMA document requires to be **endorsed by the appropriate national authority**. This step will take place at the national level. The NAMA can then be **submitted to the UNFCCC Registry** and for **approval by international support providers** (in the case of internationally supported NAMAs). These two last steps will take place at the international level. The link between these three steps is shown in Figure 4.

National Endorsement

The entity responsible for designing and formulating the NAMA submits the NAMA document to the SNOE for approval at the ministry level. The SNOE will be responsible for seeking national endorsement by submitting it through a predetermined process to the CPB, which is responsible for national endorsement.

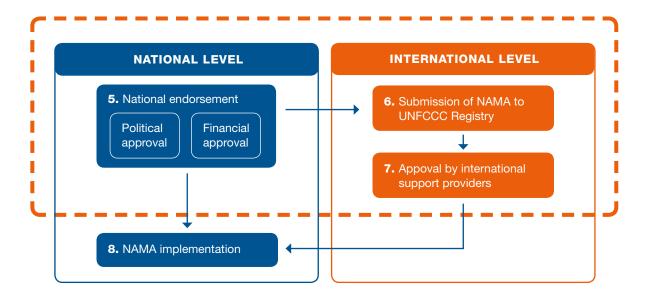


Figure 4. Link between National endorsement, Submission of NAMA proposal to UNFCCC Registry and Approval by international support provide

The formal process of national endorsement includes seeking comments from various key government ministries, including the ministry of finance responsible for financial approval and the ministry for development planning. This is the first step in initiating political approval by the CPB.

Endorsement by the appropriate national body is important for both national-level implementation and seeking international support. At the national level such endorsement enables the allocation of national budgetary resources for implementation of the NAMA. Endorsement by the national authority signals the country's commitment to implement the NAMA, which creates confidence in the international support providers.

At this stage the endorsed NAMA could be uploaded on to the national registry, assuming the country has established one. This provides an efficient way of communicating nationally endorsed NAMAs to national and international actors. The key national focal points that should receive the information are the GEF, GCF, UNFCCC and also the entity responsible for bilateral and multilateral cooperation. This is especially important if the country is seeking international support.

Submission of NAMA to UNFCCC Registry

Once the NAMA has received national endorsement, the NAMA Approver can submit the NAMA to the UNFCCC Registry.

Countries can submit both domestic NAMAs and internationally supported NAMAs. Domestic NAMAs are submitted for international recognition, whereas internationally supported NAMAs are submitted to invite the interest of international support providers.

To upload the NAMA on to the UNFCCC Registry, the form provided in the Registry should be used. It is good practice to upload the NAMA document as an attachment, as this enables easier access to details.

Approval by International Support Providers

This step is only involved where a country is seeking international support in implementing the NAMA. Though for simplicity Figures 1 and 4 show uploading of the NAMA on to the Registry as a previous step to approval by international support provider, this is not compulsory. Interaction with potential international support providers can start before or run in parallel to uploading of the NAMA on to the UNFCCC Registry.

Interaction with international support providers would involve the national climate change fund (if established) or would take place through the national entity responsible for bilateral and multilateral cooperation or through the national focal points of the international climate funds.

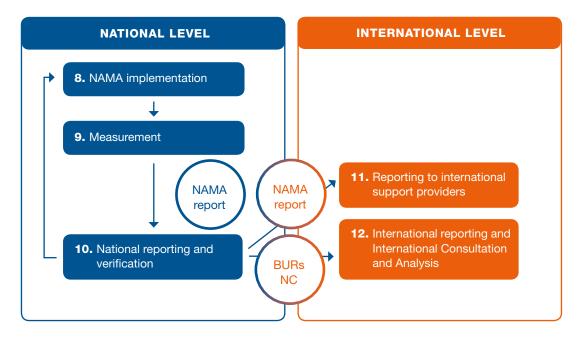
It should be noted that each donor may have its own format for submitting NAMAs. However, the basic information required to complete the format will be the same as the information included in the NAMA document.

DESCRIPTION OF NAMA IMPLEMENTATION AND MEASUREMENT, REPORTING AND VERIFICATION

National endorsement is the starting point in implementing the NAMA. Even for internationally supported NAMAs implementation could start in parallel to the approval of international support providers. The **NAMA implementation step** takes place at the national level. The **MRV process** starts together with implementation and involves steps at both the national and international levels (Figure 5).

NAMA Implementation

This step starts with the operationalization of the arrangements for implementation. This includes contractual arrangements between the executing entity and the implementing entity. Though the SNOE is responsible for overseeing the implementation of the NAMA, the executing entity needs to establish a NAMA implementation management team (NIMT), which will be responsible for day-to-day management. This responsibility includes the planning, coordination, administration, and financial management of the NAMA. NIMT will also be responsible for facilitating outreach and stakeholder involvement.



 $\textbf{Figure 5.} \ \mathsf{NAMA} \ \mathsf{implementation} \ \mathsf{and} \ \mathsf{MRV} \ \mathsf{steps}$

If a national MRV system is not established in the country, the arrangements should include a body that is responsible for evaluating the implementation through the national verification of reported information. This body could be made up of key stakeholders and should be independent of the NIMT. It could also steer the implementation through review and address any issues arising. We refer to this as the NAMA Steering Committee (NSC). The NSC could be established by the SNOE as part of its responsibility to oversee implementation of the NAMA.

All investments are made during the implementation step.

The MRV process starts together with implementation of the NAMA.

Measurement

The regular measurement of data for tracking progress and impacts of the NAMA starts with implementation. Data measurements are undertaken by the relevant actors, as outlined in the measurement plan. The NIMT will be responsible for collecting and compiling this information in order to prepare a **NAMA report**.

National Reporting and Verification

The NAMA report is prepared by the NIMT in pre-agreed formats and submitted to the entity responsible for national verification.

If a country has established a domestic MRV system, national verification could be undertaken by entities designated by the authority responsible for the domestic MRV system or by the authority itself, and in accordance with the procedures established. This would be the case for both domestically and internationally supported NAMAs. In this case, it is quite likely that international support providers will not implement additional requirements for reporting and verification.

If a domestic MRV system has not been established, the NSC would be responsible for national verification. In the case of internationally supported NAMAs, it is likely that the international support provider will be part of the NSC. In this case, the national verification procedures will include the requirements of the international support provider. The NSC may undertake national verification through an independent entity with expertise in climate change and verification processes, similar to CDM Designated Operational Entities (DOEs), and in accordance with the requirements adopted by the NSC.

National verification will result in feedback to improve the implementation, as well as in the measuring and reporting of information. The information will be used by the NIMT to review the reports, as well as to improve implementation as suggested.

After the national verification process, it is good practice to make available the NAMA report on the national registry (assuming the latter has been established). This increases the transparency of the NAMA implementation process and enables information to be disseminated to the national and international stakeholders.

Reporting to International Support Providers; International Reporting and International Consultation and Analysis

Once national verification has been completed, the NAMA report is used to prepare the international reporting to the UNFCCC (through BURs). In the case of internationally supported NAMAs, the NAMA report will also be submitted to the international support provider.

The NIMT will submit the NAMA report through the SNOE. The NAMA report should be submitted to relevant national entities, including the entity responsible for preparing reports to the UNECCC and the TCE.

The NAMA reports of all the NAMAs implemented at the national level will be used by the entity responsible for preparing reports to the UNFCCC as an input for preparing BURs every two years. This is in accordance with the requirements for the international reporting of NAMAs. The information on NAMAs included in the BURs will be subject to international consultation and analysis akin to international verification.

DESCRIPTION OF ASSESSMENT OF IMPLEMENTATION OF NATIONAL CLIMATE STRATEGY

NAMAs are instruments for implementing national climate change strategies or LCDS. As mentioned earlier the prioritised NAMAs are based on national sustainable development priorities and national climate change strategies. In this regard, information on the outcomes and impacts of NAMAs beyond their implementation period is important in assessing the achievements of these priorities and strategies. This assessment is used in identifying further actions to address climate change in the context of national sustainable development (Figure 6).

To perform the assessment beyond NAMA implementation, a monitoring and evaluation system should be put in place. The assessment will be based on indicators for GHG impacts and the sustainable development benefits of implementing the NAMA. These indicators could be based on the indicators included in the NAMA measurement plan. As the SNOE is responsible for overseeing the implementation of NAMAs in the sector, it would be effective to make it responsible for the monitoring and evaluation of NAMAs beyond their implementation. The monitoring and evaluation system should also clarify the reporting frequency. The reports should be submitted to the CPB through the TCE. The CPB will use these reports to evaluate overall implementation of the national climate change strategy or LCDS. Further, these reports could also be shared with the entity responsible for communication to the UNFCCC as an input for preparing the BURs.

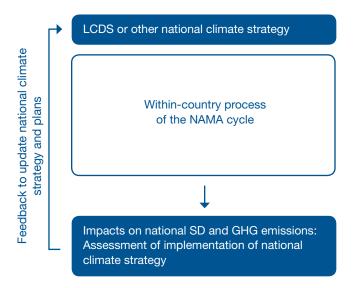


Figure 6. Assessment of the implementation of the national climate strategy

References

- Clapp, C., Briner G. and K. Karousakis, 2010. Low Emission Development Strategies: Technical, Institutional and Policy Lessons. COM/ENV/EPOC/IEA/SLT(2010)2, OECD and IEA.
- Ecofys, 2013. Annual Status Report on Nationally Appropriate Mitigation Actions (NAMAs).
- GIZ, 2012. The NAMA Tool: Steps for Moving a NAMA from Idea towards Implementation. http://www.mitigationpartnership.net/nama-tool-steps-moving-nama-idea-towards-implementation
- Olsen, K.H., 2013. Sustainable Development Impacts of NAMAs: an integrated approach to assessment of co-benefits based on experience with the CDM. Low Carbon Development Working Paper No. 11. Publisched by UNEP Risoe Center, Denmark.
- Sharma, S. and D. Desgain, 2013. Understanding the concept of Nationally Appropriate Mitigation Action. Published by UNEP Risoe Center, Denmark.
- UNDP, UNFCCC, 2013. Guidance for NAMA Design: Building on Country Experience. http://www.mitigationpartnership.net/undp-unep-unfccc-2013-guidance-nama-design-building-country-experiences
- UNFCCC, 2009. Decision 2/CP.15, Page 4, "Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009, Addendum, Part Two: Action taken by the Conference of the Parties at its fifteenth session", FCCC/CP/2009/11/Add.1.
- UNFCCC, 2010. Decision 1/CP.16, Page 2, "Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010, Addendum, Part Two: Action taken by the Conference of the Parties at its sixteenth session," FCCC/CP/2010/7/Add.1.
- UNFCCC, 2011. Decision 2/CP.17, Page 4, "Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011, Addendum, Part Two: Action taken by the Conference of the Parties at its seventeenth session". FCCC/CP/2011/9/Add.1.
- UNFCCC, 2013. Decision 21/CP.19, Page 16, "General guidelines for domestic measurement, reporting and verification of domestically supported nationally appropriate mitigation actions by developing country Parties". FCCC/CP/2013/10/Add.2.
- UNEP Risoe, 2011. Low Carbon Development Strategies: A Primer on Framing Nationally Appropriate Mitigation Actions (NAMAs) in Developing Countries. Authors: Søren Lütken, Jørgen Fenhann, Miriam Hinostroza, Sudhir Sharma, and Karen Holm Olsen. Published by UNEP Risoe Center, Denmark.
- van Tilburg X., L. R. Cameron, L. Würtenberger and S.J.A. Bakker, 2011. On developing a NAMA proposal, Discussion paper. Energy Research Centre of the Netherlands (ECN).

About the UNEP Division of Technology, Industry and Economics

Set up in 1975, three years after UNEP was created, the Division of Technology, Industry and Economics (DTIE) provides solutions to policy-makers and helps change the business environment by offering platforms for dialogue and co-operation, innovative policy options, pilot projects and creative market mechanisms.

DTIE plays a leading role in three of the six UNEP strategic priorities: climate change, harmful substances and hazardous waste, resource efficiency.

DTIE is also actively contributing to the Green Economy Initiative launched by UNEP in 2008. This aims to shift national and world economies on to a new path, in which jobs and output growth are driven by increased investment in green sectors, and by a switch of consumers' preferences towards environmentally friendly goods and services.

Moreover, DTIE is responsible for fulfilling UNEP's mandate as an implementing agency for the Montreal Protocol Multilateral Fund and plays an executing role for a number of UNEP projects financed by the Global Environment Facility.

The Office of the Director, located in Paris, coordinates activities through:

- The International Environmental Technology Centre IETC (Osaka), which implements integrated waste, water and disaster management programmes, focusing in particular on Asia.
- > Sustainable Consumption and Production (Paris), which promotes sustainable consumption and production patterns as a contribution to human development through global markets.
- > **Chemicals** (Geneva), which catalyses global actions to bring about the sound management of chemicals and the improvement of chemical safety worldwide.
- > **Energy** (Paris and Nairobi), which fosters energy and transport policies for sustainable development and encourages investment in renewable energy and energy efficiency.
- > **OzonAction** (Paris), which supports the phase-out of ozone depleting substances in developing countries and countries with economies in transition to ensure implementation of the Montreal Protocol.
- > **Economics and Trade** (Geneva), which helps countries to integrate environmental considerations into economic and trade policies, and works with the finance sector to incorporate sustainable development policies. This branch is also charged with producing green economy reports.

DTIE works with many partners (other UN agencies and programmes, international organizations, governments, non-governmental organizations, business, industry, the media and the public) to raise awareness, improve the transfer of knowledge and information, foster technological cooperation and implement international conventions and agreements.

For more information, see **www.unep.org/dtie**

For more information, contact:

UNEP DTIE Energy Branch

15 rue de Milan 75441 Paris CEDEX 09, France Tel: + 33 1 4437 1450

Fax: +33 1 4437 1474 E-mail: unep.tie@unep.org www.unep.org/energy

www.unep.org

Jnited Nations Environment Programme P.O. Box 30552 Nairobi, Kenya Tel.: ++254-(0)20-762 1234 Fax: ++254-(0)20-762 3927 E-mail: uneppub@unep.org



Although many countries are developing NAMAs, there are still many questions raised regarding process cycle for designing and implementing a NAMA. Questions asked by policy makers, private sector and other national stakeholders range from: how to start the NAMA development process, how is NAMA development linked to climate change policies or strategies, who is responsible for various aspects of NAMA development, what is the role of private sector, is there a decision making process for considering and approving NAMAs, etc. Though a number of publications found in the literature address the design process but these usually focus on either content aspects of NAMAs, or on the stakeholders' engagement at national level.

The objective of this publication is to provide national stakeholders involved in the development of NAMAs with answers to the questions listed above and develop among them a clear understanding on the whole process cycle as well as roles and responsibilities of various actors at each step of the NAMA process cycle.

The publication proposed here describes:

- (i) The steps included in the process of designing a NAMA linking the process up to the low carbon development strategies and climate change policy making as well as feed back of NAMA implementation into policy review.
- (ii) Activities to be undertaken at each step at the national level.
- (iii) Involvement of national and international stakeholders as well as their roles and their responsibilities. Particular emphasis is made on the role and responsibilities of national government as a key player leading the NAMA design process at national level.
- (iv) Linkages and interactions with international level at various steps in NAMA development and implementation.