



# Debunking Nationally Appropriate Mitigation Actions

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## 1. Introduction

Nationally Appropriate Mitigation Actions (NAMAs) is a term developed by climate negotiators and represents an instrument for promoting a transition to low emission growth paths in developing countries. Negotiating countries agreed to NAMAs in 2007 in Bali, and therefore it became an integral part of the Bali Action Plan. From the outset, the importance of NAMAs relies on the fact that it opened the door for developing countries to participate in the mitigation of the greenhouse gas (GHG) emissions by undertaking measures in respective countries to contribute to the global efforts in reducing emissions. However, such actions in developing countries should be supported and enabled by technology, financing and capacity

building, within the context of sustainable development, and in a manner which is measurable, reportable and verifiable. Two years later, during the Copenhagen climate summit in 2009, countries were invited to submit NAMAs to demonstrate commitment to low emission growth and promote economic development at the same time. In broader terms then, NAMAs can be defined as voluntary emission reduction proposals submitted by developing countries to the United Nations Framework Convention on Climate Change (UNFCCC). These government-prioritized actions aim at reducing GHG emissions from various sectors, and are expected to be the main vehicle for mitigation action in developing countries such as Lebanon

under any future climate agreement.

As the name implies, NAMAs are nationally appropriate actions. They can be implemented at national, regional, or local levels, and contribute to **sustainable development**.

Support can be requested for either the preparation of the NAMA concept or for its implementation. Developing countries can also choose to submit domestically-funded (or unilateral) NAMAs for recognition for which international support is not requested.

#### Box 1: Key aspects of NAMA

- Voluntary in nature
- In line with national or local development priorities
- Supported (technology, capacity building and financing) from domestic and/or international sources
- Reduces GHG emissions
- Transparent: MEAsurable, reportable and verifiable (MRV)

## Types of NAMAs

Throughout the climate change negotiations, three different types of NAMAs emerged. The first type is the “**unilateral NAMAs**”, which are not supported by any developed country funding. This means that they are entirely funded and executed by national efforts. In contrast, when a NAMA is implemented with financial, technological, and/or capacity building support from an external funding, it is considered as a **supported NAMA**.

A third type of NAMAs which had been discussed, but never agreed on, is the **credited NAMAs**, or NAMAs that generate revenues from selling carbon credits resulting from emissions reductions.

Furthermore, NAMAs can be divided based on the intervention level; therefore, they can cover **strategies**, such as a national renewable strategy, **policies**, such as energy efficiency standards, or feed-in-tariff, **programmes**, such as an energy efficiency lighting programme, or **projects**, such as a bus rapid transit lane. The 4 levels mentioned above can have awareness, capacity building and readiness components incorporated as part of the NAMA activities.

During the 17th Conference of Parties (COP) in Durban, South Africa, an important decision was taken by the establishment of the **NAMA Registry** as a dynamic web-based platform

managed by the UNFCCC secretariat where countries can voluntarily submit information on nationally appropriate mitigation actions seeking international support, to facilitate the matching of financial, technological and capacity-building support for these actions and to track and recognize the NAMAs being undertaken. During the COP 18 in Doha, Qatar, the UK and Germany announced the establishment of the “**NAMA Facility**” to facilitate financial flows for NAMAs, covering a total of €70 million, which was consequently committed during the last COP (COP 19) in Warsaw, Poland, paving the way for financing NAMAs, and therefore moving from planning to implementation of the first NAMAs.

## Why should a developing country embark on NAMA development?

The primary function of NAMAs is the direct reduction of GHG emissions. In addition, NAMAs have important social, economic and environmental benefits. Since NAMAs in the various sectors are considered as a discrete set of measures that feed into the transition to low-emission development, they provide an opportunity to achieve long term transformational change supporting sustainable economic growth. NAMAs also provide a great opportunity

to engage with the private sector.

## Measurement, Reporting and Verification requirements - MRV

One of the main requirements of NAMA implementation is the establishment of an MRV system, which entails having a strong, credible and transparent system for tracking GHG emissions that is consistent, comparable, complete and accurate. Therefore, one of the main challenges when designing and implementing a NAMA is its “MRV-ability”. The MRV in turn provides assurances that the NAMAs are indeed contributing to emissions reduction, and that this reduction is monitored, the progress is reported and the results are verified. NAMAs receiving international support are subject to both domestic and international MRV, while domestically-funded NAMAs are only subject to domestic MRV. All MRVs will be

“in accordance with guidelines to be developed under the UNFCCC.”

## How are NAMAs different from the Clean Development Mechanism - CDM?

CDM and NAMAs use divergent approaches, but both reduce GHG emissions. The primary difference is their rationale: whereas the CDM provides additional ways for **developed countries** to meet their emission reduction commitments under the Kyoto Protocol (KP) through the purchase of project-based emissions reductions from developing countries, NAMAs are primarily conceived as a means for **developing countries** to reduce domestic emissions in the context of sustainable development. Programmatic CDM – “Programmes of Activities (PoAs)” – is closer to the NAMA concept in terms of scale, since

	CDM	NAMA
<b>Definition</b>	One of the <b>flexible mechanisms</b> of the KP It allows a <b>developed country</b> with an emission - reduction commitment to implement an emission - reduction project in a developing country.	<b>Voluntary Commitment</b> under the UNFCCC <b>Internationally supported</b> NAMAs will be subject to both domestic and international MRV, while <b>unilateral NAMAs</b> will be subject to domestic MRV
<b>Actions</b>	Projects and programmes of activities	Policies, strategies, programmes and projects
<b>Initiator</b>	Typically <b>private sector</b> or <b>public sector</b>	Typically <b>Public Sector</b>
<b>Return on investment</b>	Certificates (certified Emission Reductions, CERs) CERs are issued by the <b>CDM Executive Board</b> based on project verification reports. CERs can be traded on carbon markets	Financial and technical support <b>Developed countries</b> provide enhanced financial, technological and capacity building support for the preparation and implementation of NAMAs of developing countries
<b>Preconditions</b>	Reductions in emissions must be additional to any that would occur in the absence of the certified project activity CDM to assist developing countries in achieving sustainable development	A NAMA, framed in the context of sustainable development, aims at achieving a deviation in emissions relative to 'business as usual' emissions in 2020
<b>Requirement</b>	Project supports sustainable development (proven by Government letter)	Action is nationally appropriate (proven by government registration under the UNFCCC)
<b>Financing</b>	Upfront financing, generally through the private sector. Certificates are issued ex-post based on regular verification reports. CERs are sold on a carbon market	Domestic resources and / or international support (e.g. through bilateral / multilateral agreements, development banks) for the preparation and implementation of NAMAs
<b>Rulebook</b>	Marrakech Accords and subsequent body of CDM Executive Board decisions	Relevant guidance, including MRV guidelines being developed under the Convention

Table 1: Differences between CDM and NAMAs - Evaluation (sources: GIZ and BMU, 2011)

PoAs can cover policies and measures rather than individual projects. However, PoAs still generate credits. The differences between CDM and NAMAs are summarized in Table 1 above.

Although the initiator of NAMAs is typically the public sector, as any facilitating national policy, well-designed NAMAs can define investment opportunities for business and the private sector, through their link to low-carbon development strategies. The political support that a NAMA holds, provides reduced political risk for the private sector investments in measures qualified as NAMAs – similarly, the listing of NAMAs in the UNFCCC Registry, and then support of multilateral institutions or bilateral agencies can further mitigate investment risk, reducing uncertainty for the private sector, and providing a clear and stable regulatory framework to guarantee private sector's engagement. In specific, public climate finance can focus on eliminating risks related with the NAMA implementation in order to leverage private investment such as providing local financing institutions to provide e.g., credit lines for renewable energy or energy efficiency. In that context, therefore, public finance mechanisms and supportive policy frameworks can attract private finance intended for NAMA implementation.

## What does the NAMA Process Look Like in Lebanon?

The Council of Ministers designated the Ministry of Environment as the National Coordinator of the Nationally Appropriate Mitigation Actions in Lebanon. A six-step process was designed for the NAMA preparation in Lebanon. It is worth mentioning that in Lebanon the NAMA process is being led by the Low Emission Capacity Building project, implemented by the United Nations Development Programme, and executed by the Ministry of Environment (<http://www.lowemissiondevelopment.org>).

### *Step 1 GHG Emissions Inventories and Assessment of Presiding Framework Conditions*

The first step serves at identifying the main GHG emission sources and sectors and preparing baseline and business-as-usual scenarios for the different sectors. In parallel, the assessment of the national framework conditions for mitigation, including the governance framework and general barriers for climate policy implementation, are considered. The Ministry of Environment has already undertaken this work, within the broader national context, through the **National Communication and Technology Needs Assessment** processes. These served as a starting platform since both processes were conducted with extensive stakeholder involvement. Other stakeholders used their respective national/sectoral strategies/plans for the same purpose.

### *Step 2 NAMA Identification and Scoping*

The Ministry of Environment, with inputs from **stakeholders**, identified opportunities for mitigation actions that can be packaged as potential NAMAs for Lebanon. The evaluation of emission reduction potential, associated costs at both national and sectoral levels, co-benefits, and feasibility of implementation were considered important at this stage because once **Lebanese NAMAs** are submitted and financing is secured, they are subject to the agreed MRV requirements. A long-list of NAMAs ideas were identified with the inputs and involvement from the various stakeholders. This culminated in 13 concrete NAMA ideas; 7 proposals aiming at the enhancement of the national 12% renewable energy target by 2020, 2 proposals aiming at improving conditions at the thermal power plants, a proposal tackling the building sector, and a final three NAMA ideas dealing with the transport sector (Box 2).

### *Step 3 NAMA Prioritization and Selection*

Based on a national consensus, the long-list of NAMAs (step 2) has been shortened by using two “requirement criteria”: 1) financing source and type, and 2) transformational aspect of the

NAMA idea. Prioritization of the most feasible options to be further elaborated according to specific selection criteria developed for Lebanon (Box 3) followed suit. Prioritized NAMAs can be developed into **concept notes** aimed at policy-makers that provide a brief explanation of how each NAMA would work.

This step required strong stakeholder involvement, with a clear identification of the roles and responsibilities of the different institutions at this stage, especially in terms of who would be leading the preparation of the NAMAs in different sectors in order to avoid duplication of work, and secure buy-in of the relevant stakeholders. Applying the criteria mentioned in box 3, the long-list has been shortened to include waste-to-energy (75.5 MW), enhanced hydropower (233 MW new and 92 MW rehabilitation), wind farm

(500 MW), scaling up renewable energy and energy efficiency in the Lebanese building sector, while the first two transport NAMA ideas were combined to make the final fifth short-list passenger car swap by hybrid electric and fuel efficient vehicles.

A NAMA concept idea targeting the “Assessment of the National Grid and Establishment of the Grid Code for the Integration of Wind and Other Renewable Energy Sources” has emerged during the various discussion sessions, as an important prerequisite for the integration of renewable energy power plants to the energy production mix. The UNDP proposal has been endorsed by the Ministry of Energy and Water, making this NAMA idea the 6th shortlisted NAMA to be pursued in Lebanon.

#### Box 2: Long - list of NAMA ideas

1. Targeting the national 12% renewable energy target
  - a. Waste - to - Energy (75.5MW)
  - b. Photovoltaic systems (10 MW)
  - c. Enhanced hydropower (233 MW new and 92 MW rehabilitation)
  - d. Wind farm (500 MW)
  - e. Enhanced micro - hydropower (5 MW)
  - f. Energy production from anaerobic digestion (15 - 25 MW)
  - g. Waste - to - energy from wastewater (7.32 - 11.68 MW)
2. Thermal Power plant improvements
  - a. Rehabilitation of the Ziuk and Jieh power plants
  - b. Heavy - fuel oil conditioning in Zouk, Jieh and Hreiche power plants
3. Building sector
  - a. Scaling up renewable energy and energy efficiency in the Lebanese building sector
4. Transport sector
  - a. Passenger car swap by hybrid electric vehicles
  - b. Passenger car swap by fuel efficient vehicles
  - c. Bus mass transit on dedicated lanes

#### Box 3: Selection Criteria

- GHG reduction potential
- Sustainable development co-benefits
- Institutional readiness to implement
- MRV - ability
- High - level political support
- Market readiness

### Step 4 NAMA Preparation

With guidance and assistance provided by the Ministry of Environment, concerned Ministries/institutions will develop fully detailed NAMA proposals and submit them to the Ministry of Environment to be a basis for negotiation of support and implementation conditions between the government and sources of support. Key challenges anticipated in the development of a full NAMA proposal are the

elaboration of robust financing and MRV plans. For this purpose, the Ministry of Environment has prepared NAMA submission templates, one for NAMA proposals requesting support for preparation, and another for NAMA proposals requesting support for implementation, which a check-list that stakeholders need to submit documentation for (see Box 4).

#### Box 4: Requirements for NAMA proposals

- Letter of Confirmation (Willingness) from the Beneficiary (ies)
- Financial Analysis Report
- GHG Emission Reduction Estimation - Methodology Report
- Baseline Scenario Report
- MRV Arrangements Report
- Contribution to Sustainable Development Report
- Stakeholder Consultation Report
- Environment Impact Assessment Report submitted and approved by the Ministry of Environment (in case the proposed NAMA requires an EIA)

### Step 5 Submission NAMA Registry

The UNFCCC has set up a NAMA Registry to record submitted NAMAs and to facilitate the matching of finance, technology and capacity-building support for those NAMAs seeking international support.

NAMA proposals should be presented and approved by the Ministry of Environment, to be officially submitted to the NAMA Registry on behalf of the Lebanese government. However, it is worth noting that submission to the NAMA Registry is not mandatory.

There are three types of relevant submission templates that can be used, depending on the request put forward:

- 1) NAMA seeking support for **preparation**;
- 2) NAMA seeking support for **implementation**;
- 3) NAMA for **recognition**.

### Step 6 Implementation and MRV

The last step is the implementation of the NAMA within the relevant sectors once funding is secured and terms of the implementation are agreed upon with the supporting countries. Throughout the lifetime of the action, there is a need for **measuring, reporting and verifying** the different aspects of NAMAs according to the MRV plan elaborated and agreed upon with the investor.

In general, the more specific and quantified the NAMA is, the easier it will be to define a metric for MRV. Both the development and the implementation of the MRV system are a shared responsibility of the NAMA implementer and the Ministry of Environment, as different types of NAMAs require “custom-made” MRV systems. It is important that government departments willing to develop and implement NAMAs do so in close coordination with the Ministry of Environment. This coordination will also facilitate progress during the implementation phase of the NAMA, since NAMA implementers will have to report to the Ministry of Environment on the progress of their respective NAMAs.

To pilot an MRV system on a national level, the Ministry of Environment has issued a Ministerial Decree 99/1 (2013) requesting commercial and industrial institutions to report their greenhouse gas emissions on an annual basis. The Decree 99/1 provides guidance on the different methodologies an institution may use, along with information on submission procedures.

### Why is it important to report to the Ministry of Environment as part of the MRV system?

The UNFCCC Convention requests developing countries, including Lebanon, to prepare and submit **Biennial Update Reports (BURs)** on a biannual basis. Among other things, the BUR provides information on mitigation actions – including NAMAs under implementation and planning – including a description of associated methodologies and assumptions, analysis of impacts, financial support received, and an update on implementation progress. The MRV report submitted by the NAMA implementer to the Ministry of Environment (in Step 6) serves as a basis for the BUR. The BUR is then subject to an **International Consultations and Analysis (ICA)** process conducted by an independent technical body of experts in consultation with Lebanon, which will result in a detailed analysis report available to the public.

### What comes next?

At the government level, several important issues, such as the institutionalization of the overarching framework supervising the NAMA process, were resolved. Several stakeholder meetings were conducted, which included capacity building and an inclusive process in preparing the groundwork for NAMAs in Lebanon was undertaken. The next steps include the finalization of the NAMA prioritization process, and receiving the lock-in of the involved institutions in leading the proposed NAMAs. Support in the preparation or the implementation of the proposed NAMAs are also part of the steps the government should undertake. There are funds already

secured to prepare one or two NAMAs, through the Low Emission Capacity Building project, bringing them up to the level of implementation, at which stage, support for the implementation of the NAMAs will be sought allowing to move from planning to implementation on the ground getting us closer to a low emission economy.

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