MitigationMomentum

Status Report on Nationally Appropriate Mitigation Actions (NAMAs)

Mid-year update May 2012

Authors: Xander van Tilburg, Frauke Röser, Gesine Hänsel, Lachlan Cameron, and Donovan Escalante
With contributions from: Niklas Höhne, Martina Jung, Laura Würtenberger and Stefan Bakker.

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Table of contents

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Executive Summary

Nationally Appropriate Mitigation Actions (NAMAs) as introduced in Bali in 2007, continue to be an important item on the agenda of climate policy negotiators and practitioners. There is still not much detail available on definitions of NAMAs and procedures to channel NAMA support. However, a growing level of bottom-up preparatory activities is providing valuable insights into best practice approaches. Momentum on NAMAs is picking up, with many international activities and proposals underway. However, few NAMAs have reached the implementation stage.

At present, 50 countries have submitted NAMAs to the UNFCCC, ranging from projects to policies, as well as strategies and with varying degrees of detail. The number of NAMAs under development increased significantly, from 30 initiatives in November 2011 to a total of 52 in May 2012. A comparison of NAMA submissions to the UNFCCC and NAMAs activities tracked by the NAMA Database shows that currently one-third of the countries that made a submission to the UNFCCC are engaged in NAMA development activities on the ground.

NAMAs are a new instrument that is being defined and ground-tested in parallel. Nearly all activities associated with NAMAs currently under development are preparatory in nature. The support presently being provided for NAMAs is mostly focuses on creating 'readiness' by building capacity and raising awareness, by setting up processes and institutions, and by developing NAMA proposals.

NAMA practitioners broadly agree that the increase in NAMA related activities is positive. Rather than pushing for a clear definition of a NAMA, there may be an advantage in allowing flexibility for countries to pilot their own mitigation actions. The bottom-up exchange of experiences on piloting NAMAs is generally thought to be very helpful for understanding under which conditions support to NAMAs can be effective.

There are still gaps to fill in order for the NAMA mechanism to become operational and deliver GHG reductions at the scale needed to stay within the 2 degree limit. Financing will need to scale up significantly, and this will require a wider involvement of the private sector. Policy makers have to ensure that policy frameworks provide an enabling environment for private investors to leverage additional funds for mitigation activities. A successful launch of the NAMA registry will start the process of operationalising the mechanism and guiding on the types of activities that could be supported, providing, a concrete basis for further NAMA development.

NAMAs have the potential to become an important instrument in closing the emissions gap while enabling countries to develop sustainably and in light of their national circumstances. Action is needed to ensure that this mechanism can continue to develop and deliver on its potential. Seeing financed mitigation actions in developing countries in the run up to 2015 will be a positive signal to the negotiation process on the Durban Platform.

1. Introduction

Nationally Appropriate Mitigation Actions (NAMAs) as introduced in Bali in 2007, continue to be an important item on the agenda of many climate policy negotiators and practitioners. It is clear that in order to meet longer term climate change objectives, global mitigation efforts need to scale up fast across all countries. In light of this NAMAs are emerging as an important instrument through which developed countries support developing countries with their mitigations efforts.

There is still not much detail available on definitions of NAMAs and procedures to channel NAMA support. However, a growing level of bottom up NAMA activities is providing valuable insights into best practice approaches. These early mover experiences can inform the debate on an effective NAMA policy architecture, and it is of great importance that these experiences and lessons learned are shared among practitioners to provide constructive input to ongoing NAMA activities on the ground.

This report presents a snapshot of the state of play for NAMAs in the form of a concise mid-year update of the 2011 Annual Status Report on NAMAs (Röser *et al.*, 2011). The data presented show a significant uptake in NAMA activities in the last six months. It presents an overview of new submissions to the UNFCCC, of actual NAMA activities around the world, and a review of ongoing support activities to prepare for NAMA development and implementation. A key feature of the report is a discussion of key topics of the policy debate on NAMAs highlighting those aspects where more insight, clarity or action is required. This is based on the inputs of a range of experts and practitioners active in the field of NAMAs which were interviewed for the purpose of this report. The Annual Status Report on NAMAs strives to be an open and collaborative effort reflecting the viewpoints of the community of practice, and further editions will continue to expand this.

2. NAMAs after Durban

This chapter summarises progress on NAMAs at the Durban COP17 negotiations.

There are many good analyses on the outcomes of COP17 in Durban (Stavins, 2011; Morgan, 2011; Fuhr et al., 2012; IISD, 2012; Ecofys, 2012) which generally highlight the three main achievements of the Durban conference as follows:

- A mandate for a political process towards a legally binding agreement in 2020 that includes all Parties (i.e. introduction of the 'Durban Platform').
- More details on various components of the Cancun Agreements, including setting up the Climate Green Fund.
- A second commitment period for the Kyoto protocol

Negotiations concerning NAMAs are placed in the negotiation track of the Ad hoc Working Group for Long-term cooperative Action (LCA). Building on the *Cancun Agreements,* the new LCA text from COP17 in Durban, makes a stronger case than before that urgent mitigation action is needed in order to hold the increase in global average temperature below 2°C above preindustrial levels, and that current efforts are insufficient to achieve the range indicated in the latest IPCC report.

The LCA text shows that Parties remain committed to (supported) NAMAs, but that the definition should not be imposed top-down, at least not for now. Instead, the COP invites Parties to keep sharing examples, and encourages and facilitates discussion through workshops.

The main aspects relevant to NAMAs in the text are:

- The Conference of Parties (COP) appreciates the submission of ideas for NAMAs by developing countries, and continues to invite Parties to submit more. The discussion on what defines a NAMA continues in an open inclusive process, respecting that the current submissions display a wide variety of actions. Moreover, the COP requests the Subsidiary Body for Scientific and Technological Advice (SBSTA) to develop general guidelines on domestic MRV for unilateral NAMAs [IIIB: 32-38].
- The COP asks the Secretariat to make a prototype of a registry, primarily aimed at match making between donors and recipients of NAMA support. It should be operated by the Secretariat and should be flexible so as not to impose any restrictions on NAMAs – again respecting the wide variety found in submissions. There could be a link between the registry and the new multilateral climate finance architecture [IIIB: 45-55].
- In the new biennial update reports, the COP asks Parties to report basic information on NAMAs, and on their approach to domestic MRV [Annex III:IV 12-14].

3. NAMA Development

This chapter provides an overview of activities related to NAMA development to date. It includes a summary of the Party NAMA submissions made to the UNFCCC, as well as an overview of supported NAMAs currently under preparation.

3.1 NAMAs submitted to the UNFCCC

By the end of 2011, 47 developing countries have responded to the invitations in the Copenhagen Accord and the Cancun Agreements by submitting proposals for NAMAs to the UNFCCC Secretariat (UNFCCC, 2011). These submissions cover a broad range of NAMA types, varying from emission targets and strategies, to policies and projects (Röser et al., 2011). Submissions also differ with regard to the level of detail provided. Many NAMA submissions are "statements of intent" that do not provide further information on the proposed actions, on their status of development, or on the national policy framework in which the NAMA is planned to be embedded.

At the 17th Conference of the Parties (COP) in Durban in 2011, developing countries that had not yet submitted information on NAMAs were invited to do so. Countries who had previously communicated their NAMAs to the UNFCCC were encouraged to provide additional information to clarify their proposed mitigation actions and the support needed for their development and implementation. Parties are invited to submit, subject to availability, more information relating to NAMAs including: "underlying assumptions and methodologies, sectors and gases covered, global warming potential values used, support needs for implementation of nationally appropriate mitigation actions and estimated mitigation out-comes" (UNFCCC, 2012a).

By April 2012, Egypt, Malawi and Swaziland had responded to the (Durban) invitation by submitting NAMAs to the UNFCCC (UNFCCC, 2012b). On behalf of the African States, Swaziland further communicated a submission on agricultural NAMAs. The current submissions (from 50 countries) cover all sectors: energy supply, industry, transport, buildings, waste, agriculture and forestry (Figure 1). Most actions are proposed for the energy supply and forestry sectors, while the other NAMAs are more or less equally spread throughout the remaining sectors. 13 Out of 50 countries did not formulate NAMAs for specific sectors, but state for example national emission targets (e.g. India and China). For more detailed information on NAMA submissions, see the UNEP Risoe NAMA Pipeline[1], and the compilations of NAMA submissions prepared by the UNFCCC.

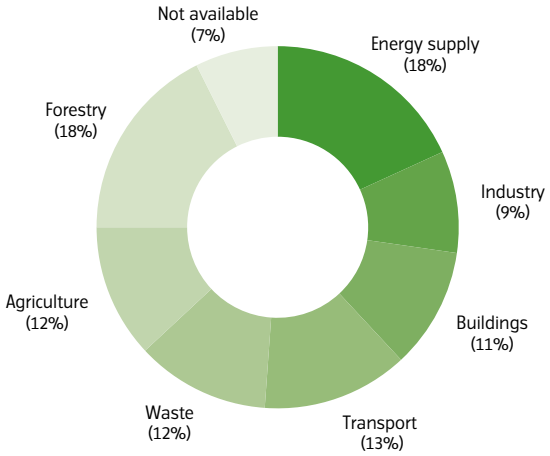

Figure 1: Sectoral distribution of NAMAs submitted to the UNFCCC Secretariat

[1] available at www.namapipeline.org

Box 1: Criteria for inclusion of activities in the NAMA Database

The NAMA Database lists "mitigation actions undertaken by a developing country with the intention to seek financing, capacity building and/or technology transfer support under UNFCCC agreements". The following criteria are used to classify NAMAs according to their stage of development, differentiating between a concept, proposal and implementation stage:

Concept: Specific mitigation objective is given, it is publicly published or has traceable sources, documentation in addition to (other than) the official UNFCCC is provided, and country and sector(s) are specified.

Proposal/planning: Cost estimates are presented, including a specification of support needs and an estimate of GHG mitigation potential; The activities (types) are clearly specified and the action has a clear proponent and is backed by the government;

Implementation: All of the above, plus (some) support secured to undertake implementation activities, and international funders and/or other organisations providing support have been specified.

3.2 Supported NAMAs under development

This section discusses activities related to the development of internationally supported NAMAs as recorded until May 1st 2012. Information is taken from the NAMA Database[2] which tracks supported NAMA activities that are carried out in developing countries using publicly available sources.

The NAMA Database is an expanding resource containing the latest activities taking place around the world on NAMAs. It is maintained by Ecofys and supported by the International Climate Initiative of the German government. The NAMA database currently contains information on 52 NAMAs in 24 countries (Ecofys, 2011).

Current status of NAMA development

NAMA development activities have picked up significantly in number in the months before COP17 in Durban and throughout early 2012. While the NAMA Status Report 2011 identified 30 NAMAs under development between 2009 and 2011 (Röser et al., 2011), 22 new initiatives have been added between November 2011 and April 2012. Figure 2 shows the total of 52 current NAMA activities by stage. The number of new NAMA concepts that has been announced shows increasing awareness and interest in the NAMA mechanism worldwide. However, so far very few NAMAs have reached a stage of implementation.. A NAMA for sustainable housing in Mexico and the South African Renewables Initiative (SARI) are currently under implementation.

[2] available at www.namadatabase.org

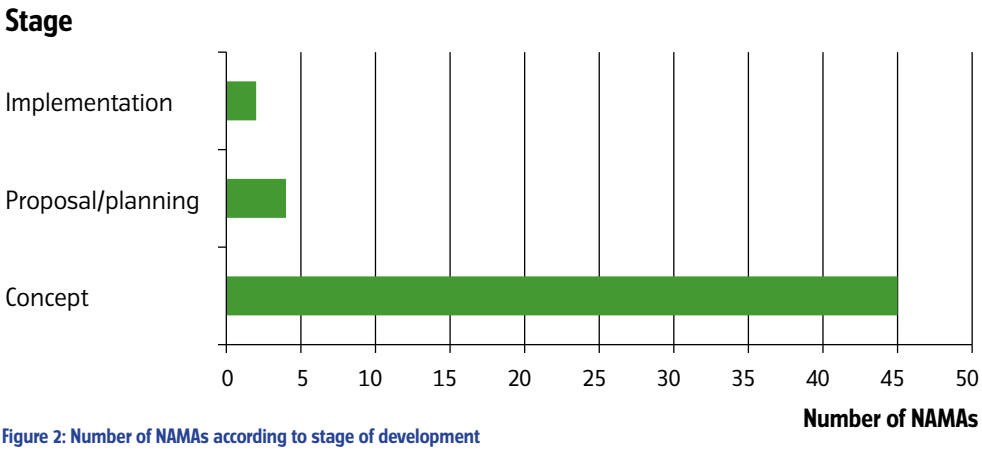

Figure 2: Number of NAMAs according to stage of development

For the most part, funds have been provided to countries to undertake preparatory activities such as capacity-building and the preparation of feasibility studies and concept notes. Financing needed to implement NAMAs has not yet been provided to the same extent as for NAMA preparation activities.

Country	Sector	Objective of NAMA	Stage of NAMA development
Peru	Buildings, industry	Reduction of energy consumption through the implementation of more efficient lighting technologies in the residential, industrial and public services sectors	Concept
Ethiopia	Transport	Increase in tonne-km of freight transported by electric rail (powered by renewable energy) as opposed to road transport	Concept
Loa People's Democratic Republic	Transport	Development of an urban transport master-plan for Vientiane	Concept
Tunisia	Energy supply	Implementation of 40 individual projects to promote wind and solar energy, biogas and the introduction of energy efficiency measures in the transport and building sector	Proposal
Mexico	Transport	Provision of complementary support to the federal mass transit programme	Proposal
South Africa	Energy supply	Mobilize funding and sector expertise to support the scaling-up of renewable energy	Implementation

Table 1: Examples of NAMAs in different development stages (NAMA Database, 2012)

Regional overview on NAMA development and international support initiatives

Figure 3 shows the regional distribution of NAMAs. There continues to be a strong regional focus in Latin America with 22 NAMAs in different stages of development. Prominent initiatives operating in Latin America include the Mitigation Action Plans & Scenarios (MAPS) program which is a south-south cooperation that aims to create long-term mitigation plans. In Latin America, the MAPS program has ongoing activities in Brazil, Chile, Colombia and Peru. The Mitigation Action Implementation Network (MAIN) led by the Center for Clean Air Policy (CCAP) and the World Bank Institute (WBI) is also supporting the design and implementation of NAMAs and Low Emission Development Strategies in eight countries in Latin America and in seven countries in Asia.

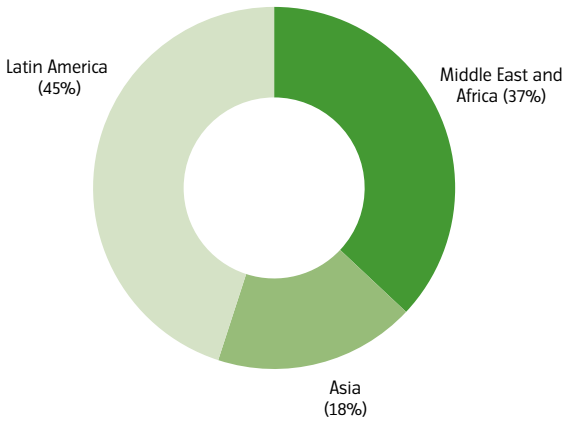

Figure 3: Regional distribution of NAMAs

In Africa, there were strong advances last year with the COP in Durban directing focus to the region. In South Africa, the South African Renewables Initiative (SARI) was launched as an international partnership with support from various European governments. SARI will provide funding to support the scaling up of renewable energy in the country. One of the first studies for defining NAMAs in the Middle East and North African region was carried out by the Regional Centre for Renewable Energy and Energy Efficiency (RCREEE) in November 2011. This study defined several new NAMA concepts for Algeria, Egypt, Jordan, Lebanon, Libya, Morocco, Syria, Tunisia and Yemen (RCREEE, 2011).

In Asia, NAMA development activities have been recorded for Indonesia, Vietnam and Thailand. The Indonesian government released their "Guidelines for implementing greenhouse gas emissions reductions action plan" (Bappenas, 2011) . It provides a policy framework for the central government and local governments to implement actions related to GHG emission reduction efforts, and proposes NAMAs in five priority sectors. The PAKLIM[3] initiative, an Indonesian - German cooperation programme, is an example for bilateral initiatives that provide long-term capacity building and institution building in Asia. It advises and supports national/local governments and industry on adaptation and mitigation, including NAMAs. It has set up a NAMA Development Office in the National Development Planning Agency (BAPPENAS) in Jakarta.

Sectoral overview

NAMA entries currently cover a wide spectrum of sectors, with every major sector represented (Figure 4). There has been a particularly strong interest in transport which represents around 30 percent of NAMAs in the database. Another sector that has seen strong NAMA activity is the energy supply sector, especially renewable energy from wind and solar. There is also significant energy efficiency related activity, reflected here in both the Buildings and Industry sectors.

[3] http://www.paklim.org/about/about-paklim/

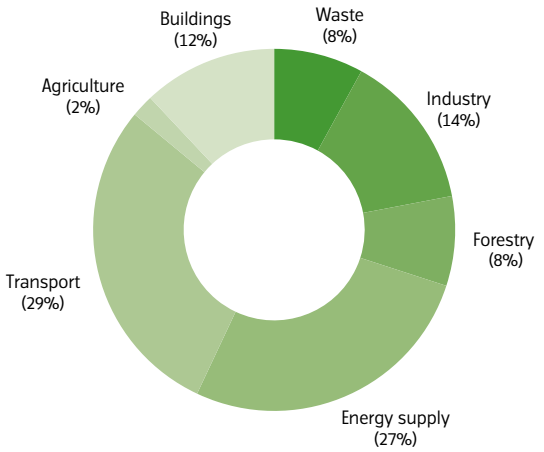

Figure 4: Sectoral distribution of NAMAs (in percent)

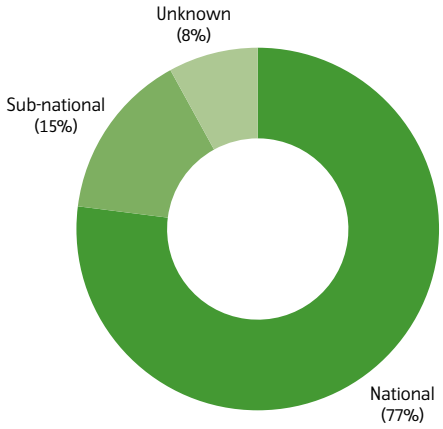

Figure 5: Level of activity

The current sectoral trend in development of NAMA related activities in developing countries only partially reflects their submissions made to the UNFCCC. While the amount of NAMAs that are developed in the transport and energy supply sectors represents the frequency of mentions in the submissions, few NAMA are currently being developed in the forestry and agriculture sectors even though many countries stated in their submissions that they plan to develop NAMAs in these sectors.

A comparison of NAMA submissions to the UNFCCC and NAMAs activities tracked by the NAMA Database shows that currently one-third of the countries that made a submission to the UNFCCC are engaged in NAMA development activities on the ground.

Scale of implementation and types of activities

A vast majority of the NAMAs being developed are aimed at the national level, while only a small proportion of NAMAs target the sub-national level (or do not define the level of activity; Figure 5). This reflects the current role of national governments in putting forth NAMA proposals to the UNFCCC.

It also shows that a wide spectrum of activities fit under currently existing (working) definitions of NAMAs, such as strategies, policies and programs, which are often applied at the national level.

Box 2: NAMA typologies and examples

The Ecofys NAMA Database distinguishes between three types of NAMAs.

A. Strategy – a long term comprehensive plan of measures and actions designed to achieve a common goal. It contains many types of activities with various degrees of impact. Examples include:

- 20% Renewable Energy target backed by a market and regulatory strategy to break barriers in RE development
- Master plan to improve transit management

B. Policy – a government led programme or measure that has been or is intended to be embodied in legislation. Examples include:

- Feed in tariff
- Emissions trading scheme
- Building code

C. Project – a localized capital investment in either infrastructure or machinery. Examples include:

- Building a concentrated solar power plant
- Building a bus rapid transit system
- Deployment of energy efficient industrial motors

Policies and strategies account for 80% percent of the NAMAs included in the Database, showing a current emphasis on transformative, long-term actions. An example of a NAMA strategy is Chile's E-Mobility Readiness Plan. The plan falls in the context of Chile's new "Low and Zero Emission Vehicle Policy and Renewable Energy Strategy", and aims for 70.000 electric vehicles on Chilean roads by 2020. A NAMA for sustainable housing developed in Mexico is another example for a long-term strategy. This NAMA aims to extend penetration of basic efficiency standards to the entire new housing market in Mexico and upgrade efficiency standards to more ambitious levels.

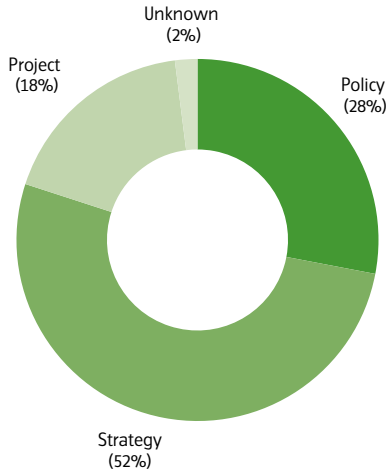

Figure 6: Type of activity

Mitigation impacts and co-benefits

The activities recorded in the NAMA Database vary significantly with regard to the thoroughness and completeness of the GHG mitigation estimates and reporting. This can be attributed to several causes. First, there are no concrete guidelines provided by the UNFCCC on how to estimate or actually measure mitigation impacts. Second, the challenge of providing impact estimates varies by type of NAMA: whereas estimating the emission reduction potential of a concrete action or project may be relatively easy, it is certainly more complex to estimate the impact of a policy or a strategy. Third, most of the NAMA activities are in an early stage, and the proposed action is not specified in enough detail to allow for adequate impact estimates.

There are a number of NAMA concepts and proposals that do provide detailed information on expected mitigation impact, in a multitude of formats including deviation from business-as-usual (BAU), total mitigation of the duration of the action, and yearly reduction potential. These existing estimates are difficult to compare as accounting methods vary, and in some cases essential information is missing (such as BAU emissions). See Annex1 presents a sample of greenhouse gas impact figures for comparison, with common format and base year.

Benefits beyond greenhouse gas reductions, also known as development co-benefits, are central to the NAMA mechanism and arguably the most important aspect for host countries. The UNFCCC (1992) is based on the principle that "Policies and measures. should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change". This link to national development has been strongly emphasized in the negotiating texts on NAMAs since its introduction in the Bali Action Plan (hence "Nationally Appropriate").

NAMAs that deliver economic, social and environmental improvements, in addition to GHG mitigation, are prominent among the initiatives that are being developed and implemented on the ground. A sample of the co-benefits which have been stated in existing NAMA concepts and proposals is listed in Annex 1 .

4. NAMA Support

This chapter discusses the various form of support for NAMA preparation, including capacity building and awareness raising, processes and institution building, propsal development, and finance and implementation.

The LCA negotiating text produced in Durban acknowledges that many developing countries are already taking mitigation actions, but "could enhance their mitigation actions, depending on provision of finance, technology and capacity-building support by developed country Parties". It goes on to reaffirm that "social and economic development and poverty eradication are the first and overriding priorities of developing country Parties" (UNFCCC, 2012). It is against this background that developed countries have agreed to provide support to prepare and eventually implement NAMAs.

As shown in the preceding chapter, almost all of the activities associated with the NAMAs currently undertaken around the world are preparatory in nature. Most of the current NAMA support aims at creating the right enabling environment or so called NAMA 'readiness': by building capacity and raising awareness, by setting up processes and institutions, and by developing NAMA proposals. It is expected that in the near future, support will be extended to financing and implementation of NAMAs. It is worth noting that this support for NAMA readiness is mostly independent of support for potential implementation of specific NAMAs: firm promises of support for implementation are far less prominent at this relatively early stage of NAMAs. Those who support preparation do not automatically promise to finance the NAMA(s) that may be chosen as priority.

The aim of this chapter is to give an introduction to the different forms of support currently provided for NAMAs. Here, the focus is only on those programmes, initiatives and efforts that explicitly label their intention to assist in the preparation of NAMAs or their readiness. Support activities are focused on four broad elements reflecting different phases in NAMA development[4] :

- Capacity building and awareness raising
- Processes and institution building
- Proposal development
- Finance and implementation

The first three are primarily focused on preparation and readiness, and the NAMA support initiatives seen today are often a combination of these elements. It is also likely that the finance and implementation plans of some NAMAs will contain elements of continued capacity building, process development and general readiness improvements.

Readiness for NAMAs (the capacity to develop them, and attract support) varies among countries. It depends on the capacity within government ministries and other institutional stakeholders, on sectoral organization and (local) expertise, the availability of data, and existing policies and regulations. Moreover, some countries are better positioned institutionally than others to receive finance and technology support.

Capacity building and awareness raising

NAMAs are a new instrument that is being defined and ground-tested in parallel. Neither supporting nor host countries have much experience with this new concept. As such, there is often a need for early-stage capacity building to provide information on aspects including the characteristics of NAMAs and the state of the international discussion, the

[4] The idea of different phases or stages of NAMA development is more fully explored by van Tilburg et al. (2011) and Lacy et al. (2012)

opportunities for receiving support through NAMAs, and the role that NAMAs are expected to play in national mitigation efforts and achieving national policy objectives. A wide variety of stakeholders, especially government institutions but also private sector, academia and civil society, need to establish a common understanding of the facts and the national position on what a NAMA should be. This emphasises the need for capacity building, awareness raising and training.

Even when support initiatives are not explicitly focussed on this early stage of NAMA readiness, capacity building and awareness raising are often valuable by-products of other support activities.

Processes and institution building

Political awareness and buy-in for the idea of NAMAs, is only the starting point for their development. National processes and frameworks need to be put in place to ensure that priority NAMAs are identified and developed, which are embedded in national policy and enjoy the appropriate level of political support. There is currently no consensus on a common approach, but it is acknowledged that the development of NAMAs is a process that requires technical input and policy decisions along the way, and should be strongly country-owned and country-driven.

Box 4: NAMA tool

The GIZ developed 'NAMA tool' (Lacy et al., 2012) aims to provide success factors and basic elements that could lead to viable NAMAs, effectively a form of process guidance.

The key factors in the design of such a process are therefore interaction between technical and policy input, ensuring stakeholder buy-in and government ownership, and preparations for implementation. Process and institutional needs are highly dependent on country context, but can include aspects such as:

- The linkages to national communications and GHG inventories, as well as the data needs for designing a NAMA,
- Integration of NAMAs into broader (low-carbon) development planning processes ,
- Setting up a stakeholder focussed approach for identifying and prioritising NAMAs,
- Designing an approach/methodology for identifying and agreeing on benefits, costs, actions, and milestones,
- the necessary MRV frameworks to achieve financing/support for implementation, and
- the roles and responsibilities of different ministries and appropriate institutional structures in support of the above.

While a common approach to NAMA development may not be necessary, there is a risk that in its absence opportunities for synergies and replication are lost.

Box 5: Supporting the NCCRS in Kenya

The technical assistance provided in Kenya for the development of an Action Plan to implement the National Climate Change Response Strategy (NCCRS) is an example of process support in relation to the readiness for, and preparation of, NAMAs (CDKN, 2011). One of the sub-components of the project identifies mitigation options and characterises their costs and benefits to be used as an input to a NAMA preparation process.

Proposal development

NAMA proposals with a strong evidence base are an important ingredient for moving the discussion on NAMAs forward and getting to the stage where there are successful pilot NAMAs.

However, delivering a thorough proposal with a broad base of support is only a later stage of a process that progressively moves from identification of potential NAMAs, to prioritisation of actions to further develop, to preparing NAMA proposals for financing and implementation. Support for NAMA readiness and preparation needs to take this broader process into account along with the importance of stakeholder involvement; developing a NAMA proposal is not a matter of filling in a template.

When starting on this process of developing NAMAs, there is often a focus on solving technical issues, whereas the first challenge is, really, to secure commitment from domestic stakeholders (Ecofys, 2010). To build this support it is necessary to have a participatory approach with stakeholder consultations from the beginning of the process. Commitment does not just involve stakeholder buy-in, it also requires national government ownership of the NAMA development process.

The complimentary technical details and content of a NAMA must also be developed in parallel in order to enable stakeholders to make informed decisions. Furthermore, this must be provided at a level of detail appropriate to the stage of the process. Documentation that can be used by national stakeholders during early stages of the process, for example when prioritising which actions to take further, will be significantly less detailed than the documentation that sources of support are likely to seek (van Tilburg et al.,2011).

Regarding the final content of NAMA proposals, the Durban agreements provide a general framework of information that should be provided for NAMAs seeking international support via the registry (UNFCCC, 2012: par46). This framework however is so general that it doesn't provide clear enough guidance for a proposal structure. In addition, donors may have their own preferences for what should be included in a proposal. A number of organisations have proposed potential templates or building blocks that could provide a starting point for developing NAMA proposals[5], and while they broadly agree on many common elements – and with the requirements of the registry – for now it is unlikely that there will be convergence to a single common template. In the short term NAMA proposals will likely continue to be tailored to the individual preferences of host and supporting countries on a case-by-case basis.

Box 6: Supporting E-Mobility in Chile

The technical assistance provided in Chile for a transport e-mobility NAMA (MMA/MTT, 2012), could be considered as technical assistance in the preparation of a proposal. This national process of developing a detailed NAMA proposal emphasised the importance of a participatory approach in securing commitment from domestic stakeholders.

Finance and implementation

Support for financing and implementation of NAMAs is relatively uncharted at this stage. The development of a detailed finance and implementation plan can be seen as a separate step in the development of a NAMA proposal, ideally done in consultation with funders. This step also includes setting up a system for MRV, which is likely to be subject to donor and investor specific preferences. Whereas a NAMA proposal can be public, the detailed finance arrangements may not be, as they may contain competitively sensitive information.

Financing and implementation is increasingly moving into the centre of attention as more and more developing countries are presenting proposals for NAMAs to seek international support. Future editions of the NAMA Status Report will expand upon this starting point.

[5] Ecofys (2010); van Tilburg et al. (2011); CCAP (2011)

5. Where progress is most needed

This chapter shows where the community of practice sees the most need for progress. The Annual Status Report on NAMAs aims to provide a balanced and inclusive view point. To this end, the views presented here have been built up from interviews with a number of organisations active in NAMA development6, representing technical assistance practitioners, development agencies and potential sources of financial support.

The 2011 Status Report on NAMAs presented a number of open issues at the policy level, covering four main themes: defining, financing, monitoring and operationalising NAMAs. Overall, there is broad agreement that the increase in NAMA related activities is positive, but interview respondents also indicate that much still needs to be done to make NAMAs an effective international policy tool for mitigation support. This section presents priority areas as identified by the respondents and authors. Note that not all of these require action from negotiators.

Defining NAMAs

The Durban negotiations did not deliver a substantially clearer definition of what a NAMA is beyond the text of the Bali Action Plan. Furthermore, new submissions by Parties show that there continues to be a wide range of proposed NAMAs varying in scope and nature. Rather than pushing for a clear definition, many interview respondents indicated that for the time being at least, there may be an advantage in allowing flexibility for countries to define actions according to their national circumstances. As long as the selection, development and implementation of NAMAs is country-driven, the current flexibility can contribute to awareness raising, trust building, and broad acceptance of NAMAs.

The bottom-up exchange of experiences on developing and piloting NAMAs is generally thought to be very helpful to understanding the conditions under which NAMA support could be effective. In addition to focusing on current NAMA activities, there could also be benefit in analyzing the history of providing support for the integration of climate change (mitigation) and development. It was argued that there is a long history of supporting mitigation actions in developing countries without actually calling this NAMA support, for example within the framework of official development assistance (ODA) and through the activities of development banks. It would be especially useful to learn from these experiences when moving to the implementation of NAMAs in the near future.

Where progress is most needed

- Continued bottom-up exchange on developing and piloting NAMAs highlighting the importance of country driven, flexible approaches.
- Learning from the long history of development activities especially when moving into the implementation of NAMAs.

Financing NAMAs

Expectations on (financial) support for implementation of mitigation actions are high. In Copenhagen, developed countries pledged to provide US$ 30 bln. fast start finance by 2012, and mobilizing US$ 100 bln. in additional climate support annually by 2020 (from public and private sources, with a balance between mitigation and adaptation).

It was often voiced that developing country governments are concerned that commitments

[6] For a list of contributing organisations see the acknowledgments at the start of this report.

for implementation support are yet to materialize. In light of this, there was a consensus that donor countries will need to be explicit and transparent about the requirements and expectations for fundable NAMA proposals. Parties will need to find a balance between donor driven criteria and needs of developing countries. It was felt that, by and large, the responsibility for moving forward on this aspect now lies with developed countries.

Furthermore, there are concerns over what balance between loans and grants will be available with some suggesting that substantial parts of NAMA finance should be on a grant basis. Some developing countries, especially smaller ones, had expressed scepticism about NAMAs as they feared that yet another mechanism was being developed which ultimately may not provide significant finance for mitigation actions. It was therefore deemed important to demonstrate the reliability of climate finance and the NAMA concept by providing sufficient support for NAMA implementation at a scale large enough to address developing country needs.

Opinions on the importance of a multilateral finance structure (including the Green Climate Fund; GCF) vary. Some expect that first-movers in NAMA implementation will continue to be dependent on bilateral support, given the anticipated time to operationalise the GCF.

It was often heard that NAMAs should be public sector interventions that use limited public funds to leverage larger private sector investments. At the same time, there seems to be limited understanding amongst governments on how to create conditions for the private sector to start investing in mitigation actions (i.e. how to achieve this leveraging). Given the importance of involving the private sector, two key points for further efforts were raised: i) capacity building and awareness raising with governments on how to create conditions for the private sector to start investing in mitigation actions, and ii) credible and clear signals to private sector investors to show why supported NAMAs could be an interesting investment opportunity, despite substantial differences with carbon markets. For this aspect, successful pilot NAMAs that engage the private sector will be vital to act as examples.

Where progress is most needed

- Clear and transparent criteria for fundable NAMA proposals which balance donor interests and the needs and circumstances of developing countries.
- Reliable climate finance for NAMA implementation at scale large enough to enable deep mitigation action.
- Practical experience to demonstrate how the private sector can be involved in NAMA finance.

Monitoring NAMAs

Defining guidelines on the MRV of NAMA impacts and support is currently the most widely discussed aspect of NAMAs, alongside finance. The 2011 Annual Status Report on NAMAs presented an overview of the international discussion on MRV (Röser et al., 2011: Table 3) which is still relevant today. Developing country governments require clarity on MRV guidelines and reporting requirements of NAMAs in order to develop credible proposals. To date it is not clear how NAMAs should be reported, for example in the Biennial Update Reports or elsewhere. MRV for NAMAs will need to reflect the range of impacts a NAMA can have: direct/indirect impacts, transformation potential, mitigation capacity, and possibly quantification of development benefits. So far much of the discussion has been more conceptual in nature, but there is a need for concrete examples that show that MRV can be sufficiently flexible in order to not limit the scope of NAMAs.

Tracking of financial support for NAMAs is important for the credibility of the support commitments of developed countries. It was argued that MRV of financial support should therefore be given as much attention as the MRV of NAMA impacts. Given the focus on MRV, some went as far as to state that support for NAMAs seems essentially similar to the traditional ODA but with the addition of MRV of GHG emissions.

At the same time, practitioners warned against overly high expectations on using the MRV framework to aggregate impacts of individual NAMAs to get a reliable overview of total emission reductions in a sector or country. Attribution of impacts to specific NAMAs are often difficult, and the level of detail achievable varies with the type of action. It may be difficult to link direct impacts to specific NAMAs or there may be overlaps: policies and measures may not be strictly separate but rather reinforce or impact each other. If the aim is to get an overview of the emission (reductions) of a sector or country, then some felt that it may be worth considering MRV at sectoral or (sub)national level, with links to national communications and biennial update reports.

Where progress is most needed

- Concrete and clear examples of MRV of different types of NAMAs.
- Sufficient attention for the MRV of support in order to build trust and ensure credibility of the NAMA concept.

Operationalising NAMAs

Throughout 2011, countries shared ideas on the design of the registry for NAMAs. During the Bonn session in May 2012, the UNFCCC secretariat presented a prototype of the registry for feedback from Parties. It was noted by interviewees that this feedback will be important to ensure that the registry not only fulfils formal requirements, but also becomes a useful and accepted tool to facilitate the matching of NAMAs with available support.

The establishment of a UNFCCC registry is generally seen as a positive initiative and a step towards operationalising NAMAs. While some expected the registry to have an automated match-making process, linking NAMAs with support based on key criteria, there was strong scepticism as to whether this match-making could be achieved given the current rather minimal requirements for registration. Furthermore, many noted that a strong link between the registry and any multilateral finance architecture may prove controversial.

Given the loose definition of what constitutes a NAMA, there was concern expressed about allowing open access to the registry, to register new NAMAs. It was suggested that national focal points in host countries could be established as a conduit to the registry, to ensure that only nationally approved information is submitted. This aligns with feedback from some developing countries that NAMAs should be strongly country-driven, and that there may be a need for a national focal point, a government appointed person who is responsible for all NAMA related communication with the UNFCCC.

It was also observed that there is no prescribed context within which NAMAs should be pursued: they could be individual actions or embedded within a broader government strategy. Having said that, there was the perception that developing NAMAs in the context of a low carbon development strategy was a more attractive approach for host countries than individual NAMAs. This also offers the opportunity to build on the increasing interest in low-carbon development strategies. Integrating these concepts, however, raises another issue, which is the importance of ensuring coordination of efforts, not just institutionalbut also of sources of support.

One aspect that came out of the interviews was a perceived gap in how NAMAs are understood by negotiators and NAMA practitioners. It was felt that current practical efforts to develop NAMAs could offer a number of important lessons as input to the political discussions on NAMAs. However, the links for establishing this feedback are sometimes weak or unavailable. Greater efforts could be made by both sides to link the political and practitioner worlds.

Where progress is most needed

- Progressing with the NAMA registry and developing the match making facility based on feedback from Parties.
- Coordination of NAMA activities at national level and creation of national focal points to streamline and make official the communication with the registry.
- Increased feedback and communication between NAMA practitioners and negotiators to ensure that practical experience is duly reflected in the policy process.

6. Conclusions

NAMA development activities have advanced quickly in the months before COP 17 and throughout early 2012, and early experiences are being shared among practitioners and policy makers. This level of activity shows the increasing awareness and interest in the NAMA mechanism worldwide.

To date however, international support has mainly been provided for preparatory activities and there are very few concrete promises of support for implementation. While the funding of NAMA readiness activities demonstrates the political will to explore the concept of NAMAs, action on financing the implementation of NAMAs is now important. Implementation of pilot NAMAs is not only essential to maintain the momentum in developing countries to advance NAMA ideas and proposals, but also to give credibility to the mechanism as a whole.

It is generally accepted, that the scale of investments needed to stay within a 2°C limit will require the involvement of the private sector, and that where possible public interventions should aim to mobilize and leverage private sector investments. At the same time there seems to be only a limited understanding with governments on what the private sector requires. The same holds for the private sector with respect to consequences of NAMAs in terms of opportunities and risks.

The importance of bottom-up processes is reflected at the international level where parties are invited to keep sharing experiences and encouraged to engage in open dialogue. Care is taken not to prescribe a definition or any of the characteristics of what constitutes a NAMA, but to maintain a flexible and inclusive approach. The current flexibility is advantageous as it encourages countries to get started with piloting NAMAs according to their own national circumstances and development priorities.

On the other hand countries are looking for guidance on specific aspects such as reporting requirements. One of the key issues to be resolved here is the MRV of NAMAs. This lies at the heart of the international climate finance debate, where a need to receive robust information on (mitigation) impacts must be balanced with a flexible MRV framework which does not limit the scope of NAMAs.

Trust is an essential ingredient in international climate negotiations, and to build confidence in NAMAs as part of a new climate regime developed countries will need to provide the promised support in a transparent way.

Annex 1 – impacts and co-benefits

There are a number of NAMA concepts and proposals that do provide detailed information on expected mitigation impact (see Chapter 3). Figure 7 below presents a sample of greenhouse gas impact figures for comparison, with common format and base year.

Name	Country name	GHG reductions in 2020 ($MtCO_2e/yr$)
Incentivize energy efficiency in copper mining	Chile	4,7
Morocco solar plan	Morocco	3,7
Supporting up-scaled mitigation in the cement sector	Vietnam	3,5
Incentivize electricity generation with geothermal energy	Chile	3,0
Financing upgraded energy specifications of new low-income housing	South Africa	3,0
Renewable energy programme	Chile	2,0
Improving the efficiency of electric motors used in industry and mining	Chile	1,2
Electric vehicles NAMA	Colombia	0,9
City wide mitigation programme of Greater Amman Municipality	Jordan	0,6
NAMAs in the Costa Rican coffee sector	Costa Rica	0,5
Process improvement in the cement industry	Chile	0,2
E-mobility readiness plan	Chile	0,2
Demand-side energy efficiency programme for water pumping stations	Jordan	0,1

Figure 7: Potential GHG impacts of selected NAMAs

NAMAs can deliver co-benefits beyond greenhouse gas mitigation (see Chapter 3). Table 3 below shows a sample of the co-benefits which have been stated in existing NAMA concepts and proposals.

		Social benefits					Economic benefits				Environmental benefits					
NAMA Title	**Country**	Improved living conditions	Employment creation	Reduced traffic accidents	Positive health impacts	Increased access to services	Time savings	Energy security	Industrial development	Cost savings	Improvements in air quality	Avoidance of noise pollution	Reduce deforestation	Reduction of odors and leachate	Biodiversity protection	Enhanced awareness on env. Issues
Energy efficiency in residential buildings	Algeria		•						•							
Development of CSP plants in Algeria	Algeria		•						•							
E-Mobility Readiness Plan	Chile		•					•	•		•					
Nationally Appropriate Mitigation Action in the Coffee Sector	Costa Rica				•				•	•			•		•	•
Egyptian renewable energy investment	Egypt							•	•							
Rural energy and efficient stoves	Ethiopia	•	•		•	•			•				•			•
Shifting freight to electric rail	Ethiopia		•	•		•				•	•	•				
Sustainable peatland management in Indonesia	Indonesia															•
Public transport development in Lebanon	Lebanon		•	•		•	•				•	•				
NAMA based on the Federal Mass Transit Programme	Mexico			•	•						•					
Efficient lighting: a NAMA proposal	Peru									•						
Enhanced energy specifications for new low-income housing	South Africa				•	•										•
NAMA for sustainable housing	Mexico	•	•													
South African Renewables Initiative (SARI)	South Africa					•		•	•		•					
Comprehensive mobility plan for Belo Horizonte	Brazil			•				•		•						
Waste and waste water management	Thailand								•					•		

Table 3: examples of co-benefits associated with existing NAMAs under development (source: Ecofys/NAMA Database).

Annex 2 – international support for NAMA readiness

This section presents selection of NAMA related support initiatives that span more than one country. Also included are initiatives that are not focused on support for specific countries, but rather cataloguing NAMA development activities, such as the NAMA Pipeline and NAMA Database.

This edition of the NAMA Status Report does not attempt to provide an exhaustive inventory of support initiatives and does not consider the topic of bilateral assistance efforts. A more detailed study of NAMA support – including bilateral efforts – will be presented in the next edition of this report for COP18.

Initiative	Lead organisation(s)	Partner countries
NAMA Database	Ecofys	n/a
NAMA Pipeline	UNEP-Risoe	n/a
MAIN dialogue	CCAP and the World Bank Institute	Argentina, Chile, Colombia, Costa Rica, Dominican Republic, Panama, Peru, Uruguay, China, Indonesia, Malaysia, Pakistan, Philippines, Thailand and Vietnam
Low Emission Capacity Building Programme	UNDP	Argentina, Chile, China, Colombia, Democratic Republic of the Congo, Ecuador, Tanzania, Ghana, Bhutan, Thailand and Vietnam
MAPS programme	SouthSouthNorth and the Energy Research Centre (ERC)	South Africa, Brazil, Chile, Columbia and Peru
FIRM	UNEP	Costa Rica, Senegal, Ethiopia, Vietnam, Indonesia, Ghana, and Morocco
Nordic Partnership Initiative (NPI) on Upscaled Mitigation Action		Peru and Vietnam
GovNAMAs	CSPR at Linköping University	Brazil
TRANSfer	GIZ	Colombia, South Africa and Indonesia
Regional Center for Renewable Energy and Energy Efficiency (RCREEE)	Perspectives CC and Alcor	Jordan, Lebanon, Syria, Yemen, Algeria, Morocco, Egypt, Tunisia and Libya
Mitigation Momentum	ECN and Ecofys	To be announced
Analysing issues and options for implementing NAMAs	Energy and Resources Institute (TERI)	India, Brazil, South Africa and China
Proklima - Green cooling for a warming world	GIZ	India, Mexico and South Africa
Integrated Approach for the Development of Climate-Friendly Economies in Central Asia	DIW econ	Uzbekistan, Turkmenistan, Kyrgyzstan and Tajikistan

Table XX: NAMA related readiness and preparation support initiatives that span more than one country[7]

[7] The International Partnership on Mitigation and MRV (http://www.mitigationpartnership.net/) provided a starting point for this list. Launched in the framework of the Petersberg Climate Dialogue in May 2010, the partnership is open for all countries to join, with the aim to support a practical exchange on mitigation-related activities and MRV between developing and developed countries. It keeps a list of many of the projects and activities related to NAMAs.

NAMA Database

The NAMA Database[8] is an expanding resource containing the latest activities taking place around the world on NAMAs. Its mission is to create a resource for policy makers, researchers and other interested stakeholders to increase knowledge-sharing and cooperation in this emerging field. The project is sponsored by the BMU International Climate Initiative and executed by Ecofys Germany.

NAMA Pipeline

The UNEP Risoe Centre (URC) NAMA pipeline analysis and database[9] contains all submissions to the UNFCCC from developing countries and countries in transition for NAMAs. The 104 entries (last updated on September 13th 2011) are a list of the Copenhagen Accord submissions[10] and submissions to the so-called 'chapeau to the Copenhagen Accord'[11].

MAIN dialogue

The MAIN Dialogue (Mitigation Action Implementation Dialogue)[12] is implemented by CCAP and the World Bank Institute (WBI); sponsored by WBI's CF-Assist programme and the BMU International Climate Initiative. MAIN is a multinational initiative to support the design and implementation of Low Emissions Development Strategies (LEDS) and NAMAs through regional dialogues and practitioner networks. The initiative has two focus regions, Latin America and Asia, and works with Argentina, Chile, Colombia, Costa Rica, Dominican Republic, Panama, Peru, Uruguay, China, Indonesia, Malaysia, Pakistan, Philippines, Thailand and Vietnam.

Low Emission Capacity Building Programme

The EU/UNDP Low Emission Capacity Building Programme[13] promotes essential cooperation between relevant institutions, engaging the public sector and industry in a concerted effort to address climate change consistent with national development priorities around the world. Programme-supported projects include the identification of opportunities for NAMAs as well as other activities related to LEDS, MRV and GHG inventory management systems.

The main programme is supported by the EU and the German government, and runs to 2015, while for implementation, the countries are supported by UNDP. Countries are in the process of defining their project plans phased over two country groups. Group one being: Argentina, Chile, China, Colombia, Democratic Republic of the Congo, Ecuador; group two consisting of: Tanzania, Ghana, Bhutan, Thailand and Vietnam.

MAPS programme

MAPS (Mitigation Action Plans and Scenarios) programme[14] is designed to build national capacity to accelerate political commitment to reduction in emissions of greenhouse gases by key developing countries. Its focus on a stakeholder-driven approach, scenarios and rigorous modelling could be considered to overlap greatly with the development needs of NAMAs. It runs from 2010-2013 and is sponsored by the Children's Investment Fund Foundation (CIFF). It is implemented through a consortia lead by SouthSouthNorth (SSN) and the Energy Research Centre (ERC) at the university of Cape Town. As well as 'base' team in South Africa MAPS has four teams in Brazil, Chile, Columbia and Peru.

[8] http://namadatabase.org/
[9] http://namapipeline.org/
[10] http://unfccc.int/meetings/cop_15/copenhagen_accord/items/5265.php
[11] http://unfccc.int/meetings/copenhagen_dec_2009/items/5276.php
[12] http://www.ccap.org/index.php?component=programs&id=43
[13] http://www.lowemissiondevelopment.org/
[14] http://www.mapsprogramme.org/

FIRM

FIRM (Facilitating Implementation and Readiness for Mitigation)[15] is a UNEP project supporting Costa Rica, Senegal, Ethiopia, Vietnam, Indonesia, Ghana, and Morocco in strengthening national mitigation plans, and identifying and elaborating NAMAs. FIRM builds on existing mitigation analyses, such as Technology Needs Assessments (TNAs), in an effort to allow partner countries to quickly engage and move from project planning to implementation. The project is funded by the Danish Government and is jointly implemented by UNEP and URC.

Nordic Partnership Initiative on Upscaled Mitigation Action

The Nordic Partnership Initiative (NPI) on Upscaled Mitigation Action[16] is a partnership between the Nordic Ad-Hoc Group on Climate Change (NOAK) and the Nordic Environment Finance Corporation (NEFCO). The initiative seeks to build host countries' capacity to evaluate, structure and implement NAMAs, which make use of international finance and possible new market mechanisms. The NPI programme in Peru focuses on exploring possibilities to lower emissions in the waste sector, while in Vietnam the focus is on the highly energy intensive cement production sector. These countries are currently engaged in a two year technical assistance programme to assess and improve NAMA readiness with a view to moving towards implementation.

GovNAMAs

GovNAMAs (Governing NAMAs: Matching design and support for low carbon trajectories)[17] explores, through three case studies in Brazil, how NAMAs by developing countries can be mobilized to meet both developed and developing countries perspectives. Specifically the project aims to assess how NAMAs can be designed to meet the dual goals of 1) attracting international funding that contribute to development and 2) spurring innovation and diffusion of technology that mitigate climate change. The project is executed by the CSPR at Linköping University in Sweden, runs from early 2012 until the end of 2013 and is sponsored by Swedish Energy Agency.

TRANSfer

The TRANSfer project[18] aims to enable decision-makers in developing countries to develop climate change strategies in the transport sector to be registered as NAMAs. During the 3-year project, project partners will develop the online handbook "Navigating Transport NAMAs" with practical advice on how to develop and implement a mitigation action in the transport sector, based on case studies in Colombia, South Africa and Indonesia. The project is led by GIZ, with expert support from ECN and the Wuppertal Institut, and funded by ICI.

Regional Center for Renewable Energy and Energy Efficiency

The Regional Center for Renewable Energy and Energy Efficiency (RCREEE) with the support of the CDM-JI Initiative for the MENA region of BMU carried out a study on the potential for NAMAs and sectoral mechanisms to finance energy efficiency and renewable energy projects in the region[19]. The study was performed by a consortium of Perspectives CC and Alcor, and covered the RCREEE members states of Jordan, Lebanon, Syria, Yemen, Algeria, Morocco, Egypt, Tunisia and Libya.

[15] http://uneprisoe.org/FIRM/index.htm
[16] http://www.nefco.org/en/financing/nordic_partnership_initiative
[17] http://www.cspr.se/forskning/namas?l=en
[18] http://www.transferproject.org/
[19] http://www.rcreee.org/studies.html

Mitigation Momentum

The project Mitigation Momentum[20] project aims to support the development of NAMAs by contributing to the development of concrete NAMA proposals, and foster cooperation and knowledge exchange within the NAMA community. The overall objectives of the project are: 1) advancing NAMA development in a selected number of countries, 2) contributing to knowledge on NAMA development and best practice, 3) to increase knowledge sharing and cooperation among the NAMA community, and 4) advancing the international climate policy debate on mitigation. A collaboration between ECN Policy Studies and Ecofys Germany, the project is sponsored by the BMU International Climate Initiative and will run from March 2012 to December 2014.

Analysing issues and options for implementing NAMAs

The project "Analysing issues and options for implementing NAMAs"[21] aims to develop a framework to assess appropriateness of a given mitigation action in a particular developing country context. It will also examine some mitigation options in BASIC countries to illustrate applicability of this framework. It is led by The Energy and Resources Institute (TERI), with partners Vitae Civilis (Brazil), University of Cape Town (South Africa) and Tshingua University (China), and is sponsored by The Norwegian Ministry of Foreign Affairs as part of a broader framework of support to India on mitigation and energy security[22].

Proklima - Green cooling for a warming world

The GIZ 'Proklima' project[23] has now been working for some 15 years to help introduce environment and climate-friendly alternatives to ozone depleting industrial gases in partner countries. Since 2008 Proklima has also been working on behalf of the BMU International Climate Initiative to disseminate climate-friendly technologies in support of mitigation objectives. Of particular relevance is the project "Development of NAMAs in the refrigeration, air-conditioning and foam manufacturing sectors"[24]. Under this initiative a number of selected partner countries (India, Mexico and South Africa) are supported in the development of their national strategies and preparation of requests for funding of NAMA proposals in these sectors.

Integrated Approach for the Development of Climate-Friendly Economies in Central Asia

As part of a broader programme of assistance DIW econ, along with partner organisations, will support the development of a NAMA in four Central Asian countries (Uzbekistan, Turkmenistan, Kyrgyzstan and Tajikistan). The project[25] is supported by the BMU International Climate Initiative.

[20] http://www.mitigationmomentum.org/
[21] http://www.teriin.org/projects/nfa/2b-analysing.php
[22] http://www.teriin.org/projects/nfa/
[23] http://www.gtz.de/en/themen/13841.htm
[24] http://www.gtz.de/de/dokumente/giz2011-en-proklima-namas.pdf
[25] http://www.diw-econ.de/en/examples_climate_centralasia.html

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Xander van Tilburg
Senior Researcher
ECN
T: +31 (0) 224564863
vantilburg@ecn.nl

Frauke Röser
Senior Consultant
Ecofys
T: +49 (0)30 29773579-32
f.roeser@ecofys.com