

Policy Brief

Energy NAMAs for Indonesia:

This Policy Brief aims to introduce the concept of ‘Nationally Appropriate Mitigation Actions’ (NAMAs) and show the relevance for Indonesia, and specifically for the Ministry of Energy and Natural Resources (ESDM). It summarises current NAMA activities in Indonesia, and provides an overview of energy related ambitions in the current RAD-GRK action plans that could benefit from the NAMA concept. Moreover, it discusses the challenges and next steps for ESDM with regards to NAMAs.

The NAMA concept will become an important element of Indonesia’s ambition to enhance energy and resource efficiency, contributing to its target to reduce GHG emissions by 26% compared to business-as-usual levels in 2020 (and an additional 15% with international support). The Government of Indonesia intends to achieve these GHG emission reduction target through the implementation of NAMAs, embedded in the National Action Plan for GHG emission reduction (RAN-GRK)¹. In turn, many NAMAs will need to be translated to, and implemented at, the provincial level in order to work towards achieving the goals of provincial action plans (RAD-GRKs).

What are NAMAs?

NAMAs are a new international climate policy instrument aiming to address developing country GHG emissions while supporting sustainable development. NAMAs refer to actions (such as policies and programmes) that developing countries can voluntarily implement, and for which they may receive international support. NAMAs do not necessarily imply that countries reduce their emissions versus current levels: Instead, they present low carbon alternatives for development, so that future emissions are lower than what they would have been without the NAMA.

At present, neither the UNFCCC negotiating text nor the individual country submissions help narrow down what will be eligible as a NAMA. They can include longer term strategies, policies (such as a feed-in tariffs or building regulations), packages of policy measures, as well as specific projects that are government led or approved by government as a NAMA.

NAMAs and MRV

The negotiating text is clear that NAMAs will be subject to some form of Measurement, Reporting, and Verification (MRV). There is no agreed or common approach to MRV, but a technology and context specific MRV system should be part of a NAMA proposal. For supported NAMAs, donors may have their own requirements for MRV, while from the Indonesian perspective the MRV system should try to align to the national Monitoring, Evaluation, and Reporting (MER) scheme that is currently evolving.

Support for NAMAs

One of the key aspects to be considered, is *how* NAMAs can be supported and, especially, how financial support is structured. It is likely that financing will come from (a combination of) two sources:



1. *domestic funding* by the developing country (so-called '**unilateral NAMAs**'); that could include actions that are primarily undertaken for development reasons, or actions that are comparatively easy and financially attractive to government ('low-hanging fruit'),
2. *international support* ('**supported NAMAs**'); could be allocated directly on a bilateral basis, or multilaterally through an international fund such as the Green Climate Fund (GCF). Support can be sought for either initial preparation of NAMA proposals, or for actual implementation of NAMAs.

In the near future, the most likely avenue for receiving international support for NAMAs is from the second source, the international community, in the form of bilateral agreements. For multilateral funding through a body such as the Green Climate Fund, it is not yet clear how developing countries will be able to access this, what NAMAs will be eligible for support (and who decides), and what guarantees of results will be required under an MRV agreement.

Given the scale of financing required for climate mitigation actions, investments by the private sector are indispensable. Therefore NAMA support should ideally go into government interventions that leverage (or mobilise) larger scale private investment. How this can be achieved depends on the type of action, sector and country context. In general, NAMAs (as government interventions) should create an enabling environment for private sector investments, addressing barriers such as access to capital, or compensating for the incremental costs of low-carbon actions.

NAMA development in Indonesia

The government of Indonesia has developed a national plan for the reduction of GHG emissions (RAN-GRK) and provinces are close to completing all provincial action plans (RAD-GRKs). Each RAD-GRK contains many emission reduction actions that can be further defined and pushed towards implementation (with or without international support), by designing them as NAMAs.

Both DNPI and Bappenas recognize the importance of NAMAs, both domestically and internationally. Indonesia has shown itself to be one of the most progressive countries at the negotiations, when it took a leadership role in communicating emission reduction commitments (26% and 41%) and by being one of the first countries to submit a NAMA to the UNFCCC registry.

Current activities on NAMAs in Indonesia

After the international climate conference COP15 in Copenhagen, countries were invited to submit their first NAMAs. In 2010, Indonesia submitted a list of 7 priority areas for NAMAs: i) sustainable peat land management; ii) reducing the rate of deforestation and land degradation; iii) development of carbon sequestration in forestry and agriculture; iv) promotion of energy efficiency; v) development of alternative and renewable energy; vi) reduction of solid and liquid waste; vii) shift to low-emission transport².

Since this time, some NAMA proposals are being developed in more detail. These include:

- **MitigationMomentum**: ECN is working with ESDM and the province of North Sumatra to prepare a NAMA proposal for small scale renewable electricity³.

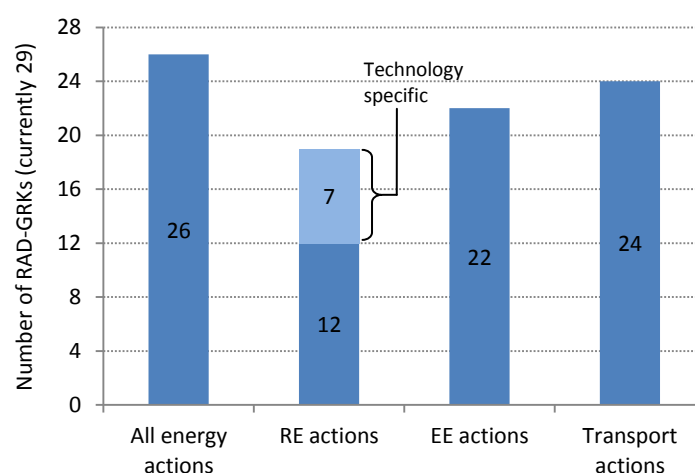


- **Sustainable Urban Transport Initiative:** The Ministry of Transport submitted the first Indonesian NAMA to the UNFCCC registry late 2012⁴. The NAMA is developed as part of the TRANSfer project, with support from the German government⁵.
- **Energy efficient street lighting:** An joint initiative of PAKLIM (in cooperation with BAPPENAS, MEMR and the provinces Central and East Java) and the producer of lighting systems OSRAM, aims at developing a NAMA for the use of LED street lighting in urban areas. It addresses relevant institutions on national, provincial and city level¹.
- **V-NAMA:** Standing for vertically integrated NAMA, this initiative is led by GIZ to try and develop a NAMA proposal for the waste sector by engaging at the national, provincial and city level⁶.

NAMAs in the energy sector

Internationally, more than a one-third of NAMA initiatives currently being developed are related to the energy sector⁷. A similar picture emerges from the provincial climate change action plans (RAD-GRK). Out of 29 completed RAD-GRK action plans, 26 include energy sector actions covering a wide range of topics (see figure at right⁸).

Examples of actions from RAD-GRKs that could be designed as NAMAs include: improvement of household energy efficiency, development of micro-hydro power plants and implementation of bus rapid transit systems. They key steps that are required for implementing these actions in provinces (e.g. deciding how the actions will be put into practice through policy, estimating their costs and impacts, deciding on roles and responsibilities and agreeing on how to measure progress) are all compatible with the requirements of designing a NAMA. There may also be actions that are designed as NAMAs at the national level, for example in relation to geothermal power, that ESDM would need to take the lead on.



Challenges and next steps

NAMAs provide a powerful climate policy instrument that can help achieve energy goals (including access to modern energy services, and increased security of supply) while keeping GHG emissions to a minimum. But NAMAs are a relatively new concept and there is little experience with the development of proposals with sufficient detail to attract serious investments and support. This is not only the case in Indonesia, but holds for almost all countries.

On a national level, Indonesia faces the challenge to decide which NAMAs cover the 26% and which for the additional 15%. This will help Indonesia structure its eventual portfolio of NAMAs to decide which ones should be promoted for a share of international support (assuming NAMAs include a mix of both



domestic and international funding), and also which ones need to be designed in more detail to meet the needs of this support.

It will also be important to continue to learn-by-doing – both for different line/sectoral ministries and for different levels of governance – through preparing NAMAs and expanding this process. This makes the current (pilot) NAMA initiatives important in order to see what works in the Indonesian context and provide templates/approaches that can be used across Indonesia. The challenge is to learn from the process of developing these NAMAs with the aim to replicate and scale up existing initiatives.

NAMAs can offer a number of benefits for Indonesia in structuring their mitigation efforts as compared to the usual implementation of energy efficiency and renewable energy policies and measures.:

- Provinces need to detail the actions in the RAD-GRK and move these to implementation. NAMAs can be an effective vehicle for structuring and replicating actions and moving towards implementation.
- NAMAs can play a role in linking and aligning the national RAN-GRK with the provincial RAD-GRKs. For example, they could provide the additional detail that will be needed to integrate at the national level, as well as show clearly what roles the different levels of governance will have.
- NAMAs may be used to attract international support for these actions at the provincial and national level to supplement domestic funding, particularly if costs are high compared to business-as-usual.
- Current RE/EE policies may not always be as effective as desired. NAMAs can be used to target specific barriers and complement existing policies in order to realise the RAN and RAD-GRKs.

Notes

- ¹ PAKLIM (2012) *Energy efficient street lighting – an approach towards GHG mitigation actions in urban areas*, PAKLIM–OSRAM Development Partnership, available at <http://www.paklim.org/wp-content/uploads/downloads/2011/10/dpp-paklim-eesl-eng.pdf>
- ² Thamrin, S. (2011) *Indonesia's National Mitigation Actions: Paving the Way towards NAMAs*; available at <http://www.oecd.org/environment/cc/48304156.pdf>
- ³ MitigationMomentum (2013) <http://www.mitigationmomentum.org/>
- ⁴ UNFCCC (2013) *UNFCCC NAMA Registry: NAMAs Seeking Support for Implementation*, available at http://unfccc.int/cooperation_support/nama/items/6982.php
- ⁵ TRANSfer (2013) *Towards climate-friendly transport technologies and measures*, available at <http://www.transferproject.org/index.php>
- ⁶ GIZ (2012) *V-NAMAs – vertically integrated NAMAs for including subnational actors in national climate strategies*, available at <http://www.bmu-klimaschutzinitiative.de/en/projects?p=1&d=847>
- ⁷ Hänsel, G. et al. (eds., 2012) *Annual status report on nationally appropriate mitigation actions (NAMAs) 2012*, available from http://www.mitigationmomentum.org/downloads/Annual_Status_Report_27-11-2012.pdf
- ⁸ Own analysis

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