# Renewable Energy NAMA Indonesia
## Status and (preliminary) lessons learned

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ECN Policy Studies

# Introduction

- **ECN**: Energy research Centre of the Netherlands since 1955

- Over 500 staff in seven research areas

- 60 staff unit Policy Studies

- Main think tank for Dutch government on energy and climate.

- Advice to international organisations including UNFCCC, UNEP, UNDP, WorldBank, and various governments
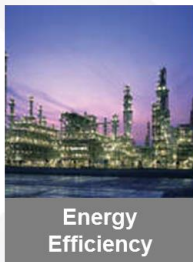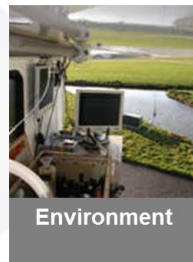


**Policy Studies**

**Biomass**

**Solar Energy**

**Wind Energy**

**Energy Efficiency**

**Energy Engineering**

**Environment**

# Introduction

## MitigationMomentum

- Collaboration between ECN and Ecofys.

- Funded by the German government (BMU/ICI)

- Provides assistance to NAMA development to Indonesia, Chile, Peru, Tunisia, and Kenya

- Keeps track of the state of play on NAMAs, and publishes NAMA Status Report

- Runs for two years to early 2014, project extension to 2014-2015 is in preparation.
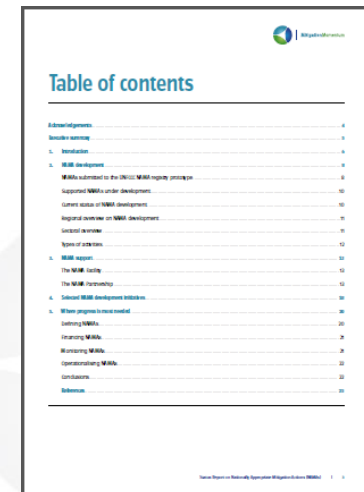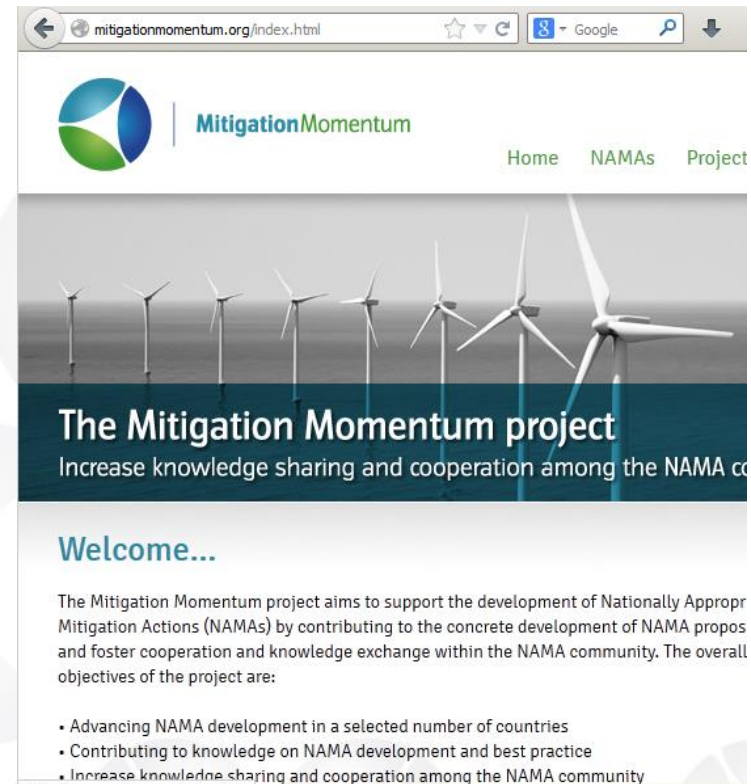
# Introduction

## MitigationMomentum

Objective in of the overall **project**: Encourage learning on NAMA development, and assist five countries with developing a NAMA proposal ready for finance

Objective in **Indonesia**: Develop a detailed NAMA proposal, a package of government interventions to promote renewable energy, in partnership with Indonesian stakeholders.

# NAMA context in Indonesia

**Indonesia**: 240 mln people spread over 6000 inhabited islands. 70% access to electricity, and GDP and energy demand grow at around 5% per year. The main source for power production is imported oil.

Indonesia has pledged **26-41% emission reduction** by 2020 from 'business as usual' levels, with the additional 15% reduction dependent on international support, in the form of supported NAMAs.

**NAMAs are building blocks** for the RAN-GRK and RAD-GRK. Indonesia has submitted one NAMA, and has at least 8 NAMAs in preparation at the moment.

Bappenas **coordinates** NAMA activities nationally, and DNPI represents NAMAs to the international community.

# Indonesian Renewable Energy NAMA

ECN is providing assistance to the government of Indonesia, with a NAMA to make it more attractive for the private sector to invest in small and medium scale grid connected renewable electricity generation.

Characteristics:

- Small and medium scale renewable energy (1-10 MWe)

- Pilot provinces North Sumatra and NTB

- Government counter parts are Bappenas and ESDM, and province level equivalents.

- Local expert team covers Jakarta, Medan and Mataram.

- Analysis is backed up by dedicated stakeholder interviews and stakeholder validation workshops.

# Indonesian Renewable Energy NAMA

Process is designed to gradually make the case, and together with stakeholders find the optimal design.
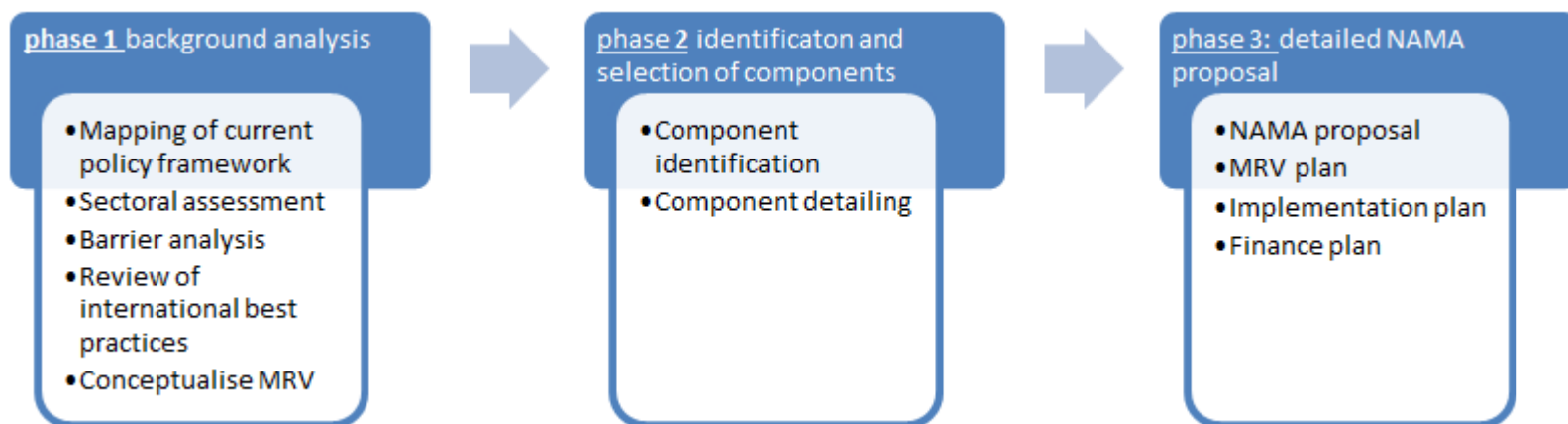


Three step approach, moving towards the third step. The aim is to have a proposal ready for submission before COP19.

# Indonesian Renewable Energy NAMA



| Finance option 1 Loan facility | Finance option 2 Credit line | Finance option 3 Guarantee | Finance option 4 Regulation |
|---|---|---|---|

Short term loan / grant facility (for project preparation)

Minimum revenue guarantee in PPA (take-or-pay)

Capacity building (financial and technical)

Small scale IPP support centre (national)

UNDER CONSTRUCTION

**Current status**: Sector and barrier analysis are done, and based on the outcomes, we currently have four different design concepts, each addressing a specific subset of barriers, and each with their own financial characteristics.

# Lessons learned (1/2)

Preliminary lessons learned, based on the experience with the current process. Cultural aspects are key, but not mentioned here. Further analysis and reporting is expected early 2014, based on experiences across five countries.

- **Framing and communication** needs to be tailored to the stakeholder type, and appeal to their context and interests. Requires attention at the beginning, since engagement with NAMAs asks an investment. Need to get a common understanding as basis for discussion.

- **Stakeholders and coordination**: typically a NAMA has quite a variety of stakeholders, especially when the private sector is involved. The coordination within government and between donors (and development partners) is not always ideal – best to be pragmatic. Do build on existing policies, regulation, and supported efforts.

# Lessons learned (2/2)

Preliminary lessons learned (cont'd)

- **Process and intervention logic**: to ensure buy-in and ownership, and to have a solid basis for the proposal, it makes sense to "build the argument" during the NAMA design. A step-wise approach first gathers information on the existing situation including barriers, after which the 'set' of policy instruments is selected, and further detailed.

- **Levels of governance**: depending on the NAMA, subnational government bodies can have a significant role in the implementation. Be aware that they are key stakeholders. Articulating different interests and incentives can be a helpful starting point for the dialogue.

- **Level of detail**: There is no guidance on how detailed a proposal should be. The UNFCCC requires only four pages, but in general it should be detailed enough to get buy-in and ownership from the stakeholders, while leaving room for tailoring to the wishes of the donor.

# Overview of NAMA development



Figure 2: Regional development of NAMAs



Figure 3: Sectoral distribution of NAMAs

- NAMA Database: 66 NAMAs and 35 feasibility studies

- Significant increase from last December, mainly due to Registry Prototype

- Latin America still leading region

- Energy supply still leading sector with notable participation of transport

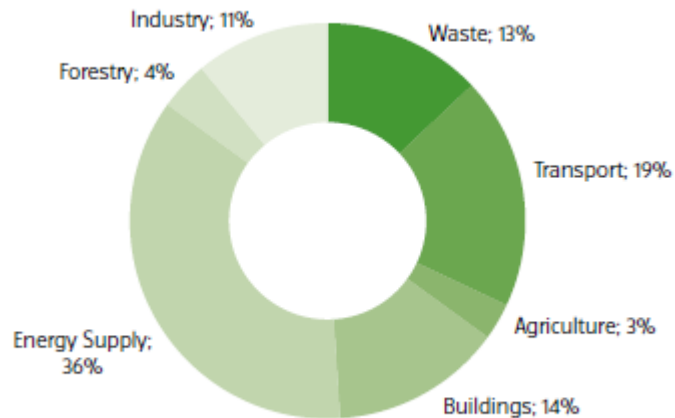- Strategies (27%), Policies (32%) and projects (16%) with unspecified (25%)

Source: www.nama-database.org

# Framing and communication

NAMAs are talked about in rather general and abstract terms.

- Negotiating text doesn't give much clarity

- Development partners and donors have no 'definition'

- Practical examples are scarce

The challenge is to present the NAMA instrument in its conceptual beauty, to translate this to the reality of the stakeholder, and communicate it in a way that is accessible.

The aim should be to get a (minimum) common understanding among the stakeholders on NAMAs in general and the specific NAMA. It helps if they are aware of each other's perspective.

*How do we handle framing and communication in Indonesia?*

# Stakeholders and coordination

Involvement of stakeholders from the start of the NAMA development is key.

- Ministries and agencies (and sub national government bodies)

- Donors and development partners

- Private sector developers/investors and the financial sector

- Analysts and technical experts

- Sector representatives

What makes it challenging:

- Awareness on NAMAs varies widely – process is often first of its kind

- Initial investment to understand the concept and translate it to own context

- Other non-NAMA specific aspects of complex stakeholder processes

*How do we handle stakeholders and coordination in Indonesia?*

# Process and intervention logic

NAMA development typically doesn't start from a green field: there are existing strategies and ambitions, policies and regulation, a network of stakeholders, and often existing support efforts.

Process designed to gradually make the case, and together with stakeholders find the optimal design.

- Define scope and focus of the NAMA
- Analyze existing context and identify barriers (and underlying market failures)
- Choose instruments to address specific barriers
- Do the math! Get the numbers right to provide a solid analytical basis for the proposal.

*How do we handle process and intervention logic in Indonesia?*

# Levels of governance

NAMAs are thought of as coordinated by the national government. The actual implementation of the NAMA may have implications for national and sub-national government bodies.

It is good to articulate the different interests and incentives *within* government to participate in the NAMA (these may actually differ significantly).

Interesting aspects:

- National and subnational elements (design and process tailoring)
- Roles and responsibilities
- Support flows
- Up-scaling and duplication

*How do we handle levels of governance in Indonesia?*

# Level of detail

How detailed does a NAMA proposal need to be?

- UNFCCC Registry: about four pages of information

- Donors: depends

- All stakeholders: as much as necessary to make a convincing argument and get their buy-in and support.

The level of detail required by the potential donor(s) depends entirely on the organization. It is fair to say that the proposal shouldn't be too detailed, in order to leave room for tailoring to the wishes of the donor.

The level of detail required to support the discussions and decisions of the stakeholders is difficult to assess a priori, and should be flexible to actual needs.

*How do we handle the level of detail in Indonesia?*