



norden

Nordic Council of Ministers



NORDIC PARTNERSHIP INITIATIVE

ON UP-SCALED MITIGATION ACTION

The Nordic Partnership Initiative on Up-Scaled Mitigation Action (NPI) has been established in December 2011 to support climate change mitigation efforts in developing countries. The NPI is funded by Denmark, Finland, Iceland, Norway and Sweden and implemented in co-operation with Peru and Vietnam.

The aim of the Initiative is to demonstrate how innovative financial and regulatory incentives as well as the removing of barriers can achieve sector-wide greenhouse gas emission reductions in developing countries. The initiative also aims at building capacity in developing countries. Using a bottom-up methodology that draws heavily on the input of local stakeholders, NAMA Readiness Programmes have been conducted in Peru and Vietnam.

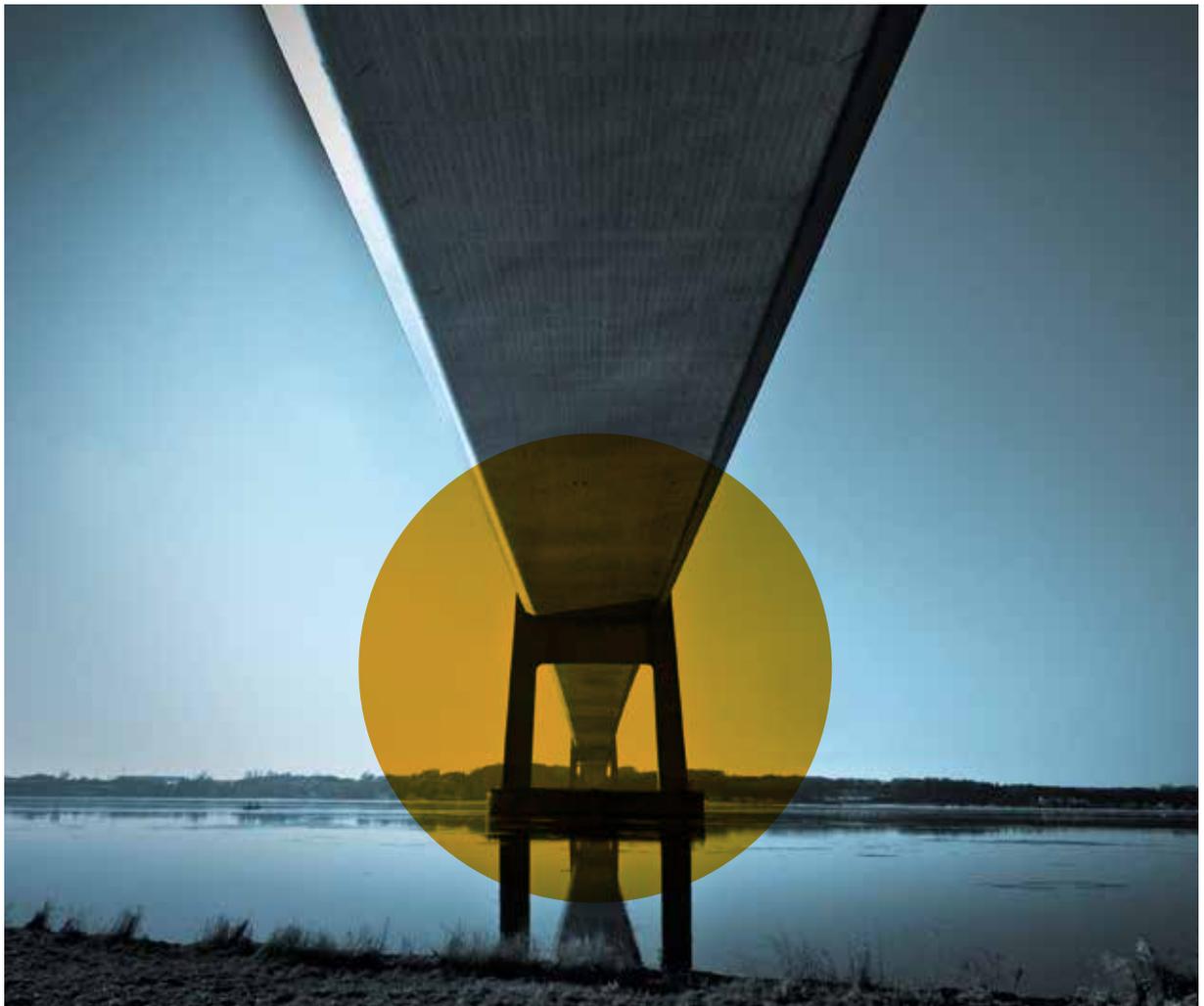


Photo: Colourbox.com

NEW NORDIC CLIMATE SOLUTIONS



Nordic Partnership Initiative for Up-Scaled Mitigation Action

Under the Nordic Partnership Initiative (NPI) two NAMA Readiness Programmes have been established. During the Readiness Programmes concrete financeable proposals of Nationally Appropriate Mitigation Actions (NAMAs) are developed as proof-of-concept activities that will drive the development and implementation of further NAMAs¹.



Photo: Jenna Hytti / GreenStream

Key to the success of these Programmes is the fact that the NAMAs are embedded in the countries' development plans and strategies by the local regulatory authorities. To ensure sustainability and transformational change, the NAMA proposals will include different types of actions that will take place in the short, medium and long-term perspective: pilot projects, targeted policy instruments and policy reform, supported by financial schemes. Financial sustainability of the actions, including plans for phase-out of international support in the long term, is taken into account in the development process.

The NPI will provide lessons learned from early activities to the international climate negotiations and serve as a model to encourage other Parties to take similar actions. The principles of matching NAMAs with developed country support are in a nascent stage and the Nordic sponsors of the Initiative are confident that the NPI will enhance the tool box of options available to developing countries to address climate change.



Photo: Hannu Eerola/NDF

Background

The concept of NAMAs was first established in the Bali Action Plan in 2007, and developing countries submitted first suggestions for NAMAs as part of the Copenhagen Accord in 2009. Currently there are 165 NAMAs in developing countries, of which 19 are in the implementation stage.² The official UNFCCC NAMA registry was established in 2013 as a forum for facilitating the matching of finance, technology and capacity-building support with NAMAs.³

In 2009 at the COP-15 in Copenhagen it was agreed that the developed countries would provide 30 billion USD of fast-start finance during 2010-2012 to developing countries for mitigation and adaptation. This goal was exceeded by the end of 2012. At the COP-2016 Cancun in 2010 these climate finance commitments were broadened to USD 100 billion per

year by 2020. The work done under the NPI is part of the Nordic countries' contribution in this context.



Photo: Jenna Hytti / GreenStream

A comprehensive Feasibility Study⁴ was conducted in 2010-2011 in consultation with Peru and Vietnam in order to identify promising sectors where NAMA Readiness Programmes could be started. The municipal waste sector in Peru and the cement sector in Vietnam were selected as the most appropriate pilot sectors.

The NPI was officially launched at a side event in Durban, South Africa in December 2011. Ministers from four Nordic countries as well as from Peru and Vietnam participated in the event.

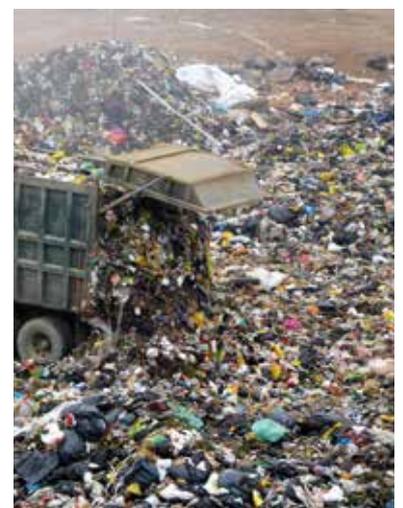


Photo: Jenna Hytti / GreenStream

¹ NAMAs are large-scale host country driven emission reduction actions that are supported and enabled by international and domestic financing, technology, and capacity building

² <http://www.nama-database.org/>, situation 20.11.2015

³ http://unfccc.int/cooperation_support/nama/items/7476.php

⁴ http://www.nefco.org/files/NOAK-NEFCO_FS_Final_Report_2011-08-08_FINAL_approved_to-NEFCO.pdf

Rationale behind the NAMA Readiness Programmes

Peru's economy and population are growing rapidly and consequentially the issue of waste management is of increasing importance to its development path. Peru's waste sector is relatively undeveloped and is handled to a large extent by the informal sector, such as waste pickers who collect trash from the streets or landfills and separate recyclable materials from it. The implementation of an effective waste management strategy is expected to have significant environmental benefits (including the mitigation of greenhouse gases) and secondary benefits for public health, productivity and quality of life.

Peru is in an excellent position to develop a NAMA proposal for its solid waste management sector, as it is in the process of updating its General Waste Law and National Waste Management Plan. The NAMA appears in a critical moment for Peru's waste sector, as 80 % of the less formal dumpsites are near closure, and several sanitary landfills are going to be opened in the near future. It is key to take the climate change mitigation considerations into account in this process.

Vietnam is one of the top cement producers and consumers in the world,



Photo: Jenna Hytti / GreenStream



Photo: Sara Almqvist / Swedish EPA

and its cement sector is one of the most energy intensive industries in the country. Operational practices at the cement plants are often sub-optimal, leading to higher-than-necessary energy consumption. In August 2011 Vietnam adopted the "Master Plan for Development of the Cement Industry for the 2011-2020 period, with a vision to 2030". It contains ambitious targets to reduce the energy intensity of the sector.

The Readiness Programme will deliver a NAMA proposal ready for implementation. The proposal will contain recommendations for GHG mitigation actions in Vietnam's cement sector, such as energy efficiency measures, the use of alternative low-carbon fuels or the substitution of the energy-intensive clinker by other materials. The proposal will also design a regulatory and institutional framework for the implementation of the NAMA, including the monitoring, reporting and verification of GHG emissions and environmental and social co-benefits. Finally the proposal will include a plan on how the mitigation activities can be financed, both from domestic sources and international support.

The NAMA will enable Vietnamese cement plants to better take energy efficiency and carbon emissions into account in their processes. This can

generate financial benefits through reduced energy consumption as well as health benefits, via lower dust emissions.

Expected results of the NAMA Readiness Programmes

The NAMA Readiness Programme in Peru has been completed in July 2015 and the Programme in Vietnam is currently being conducted. It is expected that once the two NAMA Readiness Programmes have been completed the most potential climate change mitigation and policy options, as well as institutional structures and financing plans are identified and selected for the NAMA proposals. The Readiness Programmes will develop and enable the monitoring, reporting and verification (MRV) systems of the greenhouse gas emissions for the proposed NAMAs, and ensure that the NAMAs are ready to apply for and receive international funding e.g. through the carbon market or other climate finance.

Opportunities of the NPI

Opportunities of the Initiative include addressing barriers to up-scaled climate change mitigation, strengthening government institutions and capacities at national and sub-national level, and identification of appropriate support instruments for mitigation action. It also provides capacity building of private sector actors and other actors involved in the implementation of the NAMA to participate in low-emission actions and to measure and report emission reductions.



Photo: Ulla Jennische / Swedish EPA

Waste sector NAMA Readiness Programme in Peru

The NAMA Readiness Programme in Peru started in August 2013 and continued until June 2015. The recently completed NAMA Readiness Programme was focused on municipal solid waste, i.e. household waste and waste from commercial and tourist activities. Other waste types such as industrial and agricultural waste are outside of the scope of the proposed NAMA.



Photo: Jenna Hytti / GreenStream

The budget for the NAMA Readiness Programme was €2.3 million and it was financed by NEFCO and the Nordic governments. The implementing partner was the Ministry of Environment of Peru (MINAM).

Objectives of the NAMA Readiness Programme

The overall objective of the Programme was to strengthen Peru's ability to prepare, propose and implement a full-scale NAMA in the municipal solid waste sector. The Programme has identified and proposed suitable NAMA options to mitigate greenhouse gas emissions in the waste sector and enables Peru to benefit from international climate finance. As a basis for the development of the NAMA, gaps in data availability and data quality in the solid waste sector in Peru have been addressed.

At the end of the NAMA Readiness Programme a proposal of the setup for the monitoring, reporting and verification system for the proposed NAMA is in place. Further studies and preparatory work are still needed to

make the programme ready to receive international funding.

“Municipal solid waste was chosen for this NAMA because of the importance of the waste sector in Peru and because it is a field that affects to people's health, social status, quality of the environment and creates emissions those have not yet been measured clearly enough.”

*Eduardo Durand, Director General,
Ministry of Environment of Peru (MINAM)*

The readiness activities consisted of the following:

- A solid waste inventory
- Assessment of mitigation options in the waste sector
- Identification of barriers to implement the mitigation options and how to overcome those barriers
- Development of a NAMA proposal integrated in the national solid waste strategy
- Setting up a system for monitoring, reporting and verification (MRV)
- Identifying relevant institutional arrangements
- Identification of financing options and setting reference levels for possible emissions trading or results-based finance
- Capacity building and training.

Result: Waste sector NAMA proposal

The waste sector NAMA proposal was finalized by June 2015, and it is ready to seek international funding. The following mitigation actions have been selected by Peru to be included in this NAMA based on a number of factors, including their mitigation potential, cost effectiveness, and consistency with Peru's sustainable development goals:

1. Landfill gas to electricity (LFGE);
2. Landfill gas flaring; and
3. Composting of organic waste separated at the source.

Policy reform

Peru's NAMA proposal includes substantial regulatory and policy changes in the municipal waste sector, and improving incentives for implementing the mitigation actions.



Photo: Jenna Hytti / GreenStream

Policy reform is crucial in overcoming barriers to effective climate change mitigation and creating an enabling environment for private and public actors in the sector. Policy actions are important for the long term sustainability of the sector and to drive transformational change.

Markets and financial mechanism

Beside the support to Peru waste sector's regulatory and policy changes, the NAMA aims to create markets for waste-based commodities. Such markets could utilize a certification program for high quality composting and incentive financing for municipalities who pursue regional aggregation of waste and regional waste reduction facilities including LFGE, and composting.

The proposed financial mechanism to catalyze investment from public and private sectors aims to create a competitive selection process for investing in implementation of alternative technologies in municipalities. Those technologies should reduce both GHGs and other impacts of waste.

Cement sector NAMA Readiness Programme in Vietnam

The specific sector selected for the implementation of the NAMA Readiness Programme in Vietnam was the cement sector, with a focus on its energy efficiency. Vietnam is one of the top cement producers and consumers in the world, with a total of 75 production lines in operation and more than 61 million tonnes of clinker and cement produced in 2013. The cement sector is one of the most energy intensive industries in the country.

Technologies used in Vietnam's cement sector are relatively advanced. However, actual operational practices are often sub-optimal, leading to higher than necessary energy consumption. In addition, greenhouse gas emission control is not a core focus of the country's cement enterprises. The NAMA Readiness Programme will bring the goal of climate change mitigation into the heart of cement production processes.

The Ministry of Construction of Vietnam (MOC) is in charge of planning, managing and regulating the cement market in Vietnam, and therefore the Ministry is the implementing partner in this NAMA Readiness Programme. The primary environmental issues in the sector currently are carbon dioxide and dust emissions from cement production, and ineffective use of resources in production processes.

The budget of the NPI Programme in Vietnam is €1.6 million, and it is financed by the Nordic Development Fund (NDF) and the government of Vietnam. The Vietnam cement sector NAMA Readiness Programme has started in March 2014 and will be completed by April 2016.

Goals of the NAMA Readiness Programme

The overall objective of the NAMA Readiness Programme is to strengthen Vietnam's ability to prepare, propose and implement a full-scale scheme of

a clearly specified NAMA in the cement sector. The Programme will identify and propose suitable NAMA options to mitigate greenhouse gas emissions in the cement sector and enable Vietnam to benefit from international climate finance.

The readiness activities consist of the following:

- Collection of up-to-date data on emission reduction potential
- Development of baseline emission projections
- Estimation of emission reduction impact of mitigation actions
- Developing a measurement, reporting and verification (MRV) system for emissions
- Identification of barriers to mitigation actions and proposals to overcome them
- Identification of appropriate support instruments for mitigation actions
- Relevant institutional arrangements, capacity building and training.

At the end of the NAMA Readiness Programme, it is expected that the MRV system of the cement sector has been developed and the NAMA is ready to receive international funding e.g. through the carbon market or other climate finance instruments.

Challenges and opportunities in the cement sector NAMA development

One of the main challenges in the NAMA development in Vietnam cement sector has been how to involve and incentivize the cement companies in Vietnam to take part in the MRV system and report their emissions. Some of the companies are wary of sharing information on their emissions, especially if they do not benefit from such system directly.

Opportunities of the NAMA Readiness Programme include increasing the knowledge and capabilities of the cement sector actors to take energy

efficiency and emission control into account in their processes, which can generate financial benefits through smaller energy consumption and health benefits through smaller dust emissions.

Partners involved in the NPI

- Nordic Council of Ministers
- Nordic working group for global climate negotiations (NOAK)
- Nordic Development Fund (NDF)
- Nordic Environment Finance Corporation (NEFCO)
- Ministry of Construction of Vietnam (MOC)
- Ministry of Environment of Peru (MINAM)



Photo: Ulla Jennische / Swedish EPA

Contacts for more information

Ms. Sara Almqvist (NOAK)

sara.almqvist@swedishepa.se
+4610 698 15 51

Ms. Outi Leskelä (NOAK)

outi.leskela@ymparisto.fi
+358 40 154 9701

Mr. Ash Sharma (NEFCO)

ash.sharma@nefco.fi
+358 40 08 11 327

Ms. Martina Jägerhorn (NDF)

martina.jagerhorn@ndf.fi
+358 10 618 002

Did you know that...

- Peru's population is 30.4 million, growing 1 % per year. 1/3 of population live in the capital area.
- Daily amount of municipal solid waste in Peru is estimated at 17 000 tons.
- Waste sector emissions account for around 5 % of Peru's greenhouse gas emissions and are constantly growing.
- Vietnam's population is 90.73 million and growing by 1% per year in the period 2009 - 2014. It is the 14th most populous country in the world.
- In 2014 Vietnam was among the top10 cement producing countries in the world.
- The CO² intensity of Vietnam's cement industry is significantly higher than that of India, Thailand or the Philippines.

