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 **CCAP**  
CENTER FOR CLEAN AIR POLICY

# NAMAs Overview and the Development of Integrated Solid Waste Management NAMA in Colombia

Global Methane Initiative Expo 2013

Vancouver, March 15 2013



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# Mitigation Action Implementation Network

**15 countries in Latin America and Asia**

## Goals:

Create regional networks of policymakers involved in NAMAs (Asia, Latin America)

Build national capacity to identify, design and develop financeable NAMAs

Facilitate financing for implementation of early NAMAs

Impact the design of bi-/multilateral NAMA finance programs, GCF

## Components:

1. Regional dialogues of policymakers, experts, potential funders
2. Video conferences with policymakers
3. Harvesting of best practices, case studies, policy analysis, policy papers
4. On-the-ground support for NAMA design, in-country workshops
5. Global dialogues, policy lunches for negotiators

**Principal funders:** Germany ICI, Environment Canada, Denmark



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# NAMAs: Key to Transformation

- **Can receive up-front financing from developed nations for:**
  - **Capacity building**
  - **Catalyzing private sector investment in mitigation actions**
- NAMAs can take the form of programs, policies, regulations, taxes or subsidies, etc.
- NAMAs are broader than CDM project-level actions and can finance efforts in sectors that CDM has ignored (transport, buildings, etc.)

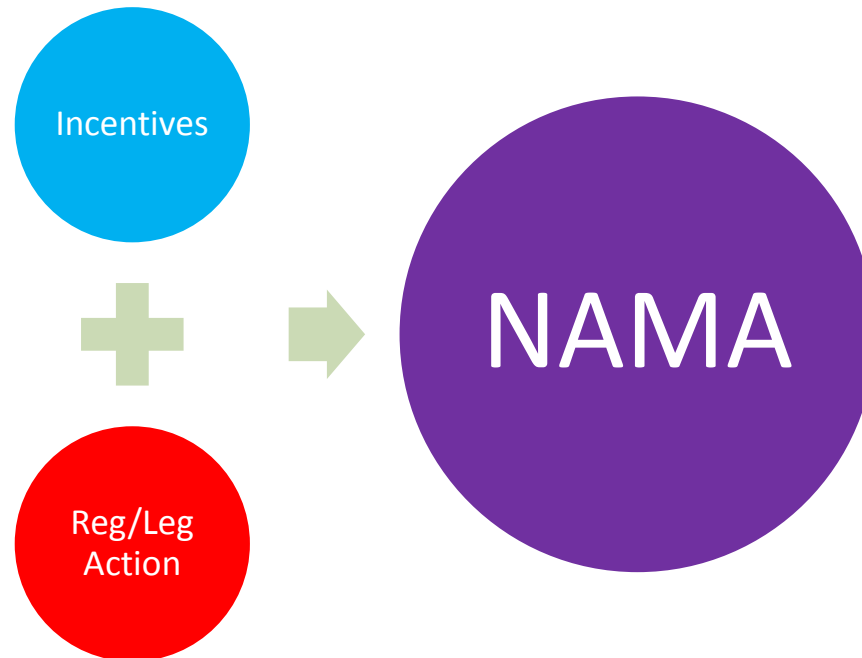


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## Equation for a successful NAMA



Plans that includes significant developing country action (regulation, legislation, improved enforcement of existing laws, etc.), are more attractive to potential donors.



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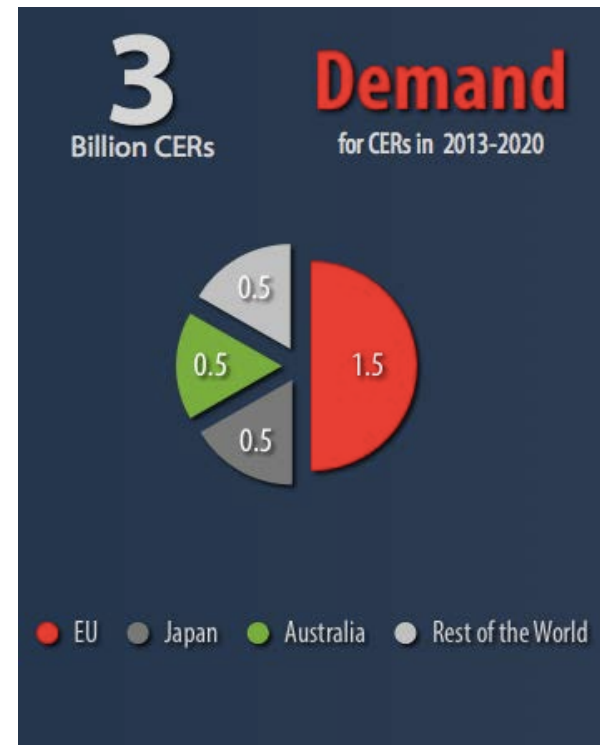
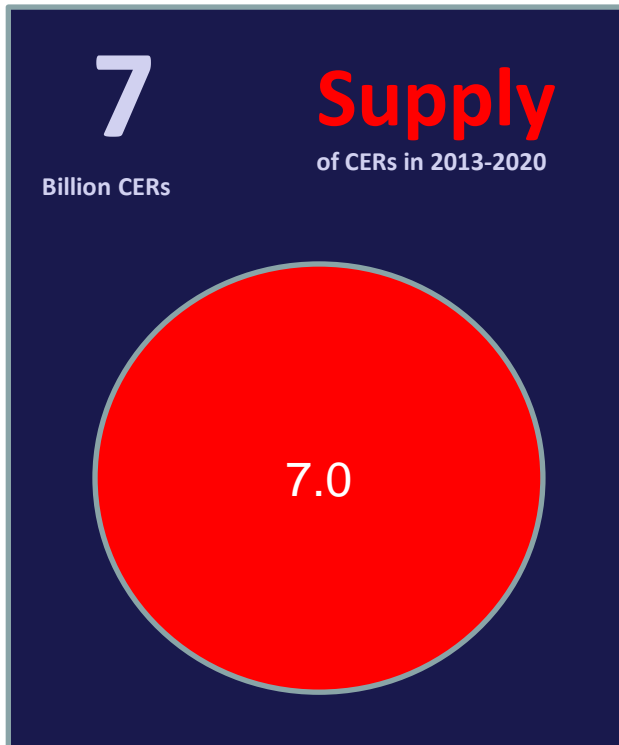


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## CDM: supply and demand



Current price (2/8/13): 0.34 EUR/CER (expected to stay like this)

**Large surplus = few new CDM projects will be developed, unless demand is increased through more ambitious developed-country targets**



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# What will it take to make NAMAs work?

***Tailored approaches.*** NAMAs must meet the specific sustainable development needs of individual countries and produce multiple benefits beyond mitigation.

***Leveraging private-sector resources.*** NAMA investment must leverage private-sector investment and enable initiatives to become self-sustaining.

***Effective MRV.*** MRV will need to assure both implementing and donor countries that NAMA financing is received, effectively applied and that results are achieved on a full set of metrics.

***National buy-in and Institutional capability.*** Implementing countries must build the institutional capability to attract NAMA finance, transform national policies, engage successfully with the private sector, and deliver the promised results.



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## Status of NAMAs post-Doha

- The COP established a new work program under Subsidiary Body for Implementation (SBI) for NAMAs
  - SBI will further define the diversity of NAMAs and address the finance needed to scale-up NAMAs
  - UNFCCC NAMA Registry will be fully operational
- UNFCCC process is leaving much of NAMA design to on-the-ground action
- GCF still years from first disbursements. Initial NAMA support will be bilateral
- First NAMA already being financed (Mexico housing)
  - Others receiving support for development of concept, feasibility studies, etc.



**DOHA 2012**  
UN CLIMATE CHANGE CONFERENCE  
COP18|CMP8





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# NAMAs supported by CCAP in Latin America

Sector	Country	NAMA
Energy	Chile	RE Price Stabilization Fund
Energy	Uruguay	Wind farms
Transport	Chile	Taxis fleet renewal
Transport	Uruguay	Trucks fleet renewal
Transport	Colombia	TOD
Transport	Mexico	TOD
Agriculture	Costa Rica	Coffee Industry
Waste	Peru	Biogas
Waste	Mexico	Cement kilns
Waste	Costa Rica	ISWM
Waste	Colombia	ISWM
Waste	Chile	Organics Diversion
Waste	Dominican Republic	Heat generation for hotels



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## Chile waste NAMA

- Mitigate GHGs emissions promoting organics diversion. The NAMA addresses current barriers (dumps, uncertainty, local opposition, private financing) through a coordinated work between industries and municipalities (scale).
- Lines of support: initial investment co-financing (\$10M fund), partial credit guarantees (\$20M fund), regulatory improvements, co-financing of feasibility studies.
- Operates through national tenders, requires showing sustainability and municipal support.
- The NAMA creates the incentives to spur purely private development of diversion projects, breaking the inertia of the sector.
- Total Expected Emissions Reductions: 12 million tCO<sub>2</sub>e.



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# Dominican Republic waste NAMA

- The goal of the NAMA is to reduce emissions by achieving wide-spread adoption of alternative energy technologies and address waste management in the tourism sector.
- CCAP is currently conducting a study for five hotels in the Eastern region of the island, with approximately 2,700 rooms, with a huge replicability potential (up to 330K - 1.5M tCO<sub>2</sub>e per year)
- Technologies analyzed are very attractive in economic terms. However, there are some barriers that prevent their development (utilities comfortable position, hotels balance sheet, lack of information, permits to develop RE projects)
- Currently analyzing best financial mechanism to address these barriers.



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# Colombian ISWM NAMA development process

- ❖ Cooperation funding from Environment Canada.
- ❖ Launch (*March 2012*):
  - Organized sector-wide workshop March 2012 & formed Steering Committee with national government entities to guide NAMA development process.



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- ❖ Launch (*March 2012*):
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- ❖ Phase 1: “Scoping Study” (*April 2012 – September 2012*)
  - CCAP ranked various technologies.
  - economic feasibility and abatement potential.
  - Identification of those viable in Colombian context.
  - Barriers were identified.
- ❖ Phase 2: “Comprehensive NAMA design approach” (*October 2012 – March 2013*)
  - CCAP and consultants performed 6 studies to provide in-depth analytical foundation for NAMA design.



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## Phase I: “Scoping study” (I)

- ❖ CCAP organized workshop in October 2012: present to the Steering Committee results of the “scoping study”.
- ❖ Steering Committee eliminated technologies such as incinerators and biodigestors.
- ❖ Steering Committee chose technologies for second phase:
  - Mechanical-Biological Treatment (MBT)
    - Production of Refuse-derived Fuel (RDF).
    - Production of compost or recyclables.
  - Biogas-to-energy.



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## Phase I: “Scoping study” (II)

### ❖ Barriers identified:

- outdated regulations (lack of incentives and policy measures),
- lack of feasibility studies,
- uncertainty and weakness in recyclables market,
- challenges in formalizing informal waste collectors.





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# Phase I: Colombian solid waste sector - lessons learnt. (I)

- ❖ High amount (94%) of MSW being successfully sent to sanitary LFs.
- ❖ Well developed private sector presence in MSW management.





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# Phase I: Colombian solid waste sector - lessons learnt. (I)

- ❖ High amount (94%) of MSW being successfully sent to sanitary LFs.
- ❖ Well developed private sector presence in MSW management.
- ❖ Solid waste operators are paid using nationally set tariff rules which are skewed towards promoting LFs.
- ❖ Currently tariff rules allow for paying for recycling activities limited to collection and transport of recyclables and not for treatment or transformative technologies.



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## Phase I: Colombian solid waste sector - lessons learnt. (II)

- ❖ The Colombian supreme court has instructed city and national government to recognize role of informal sector in MSW management.
- ❖ Increasing public awareness about environmental impacts of LFs and GHGs creates opportunity for ISWM NAMA.



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# Phase II “Comprehensive NAMA design”: List of studies

Study	Objective
Regulatory reform	Amend existing regulations to encourage next generation waste management technologies Suggest new regulations to encourage recycling, use of RDF and compost etc.
Feasibility studies for MBT and LFG-to-energy projects [Cali & Barranquilla]	To analyze economic cost of selected technologies to design appropriate tariffs and for design financing structures
Study of recyclables and compost markets	To identify growth opportunities and policy recommendations for strengthening of markets
Study for formulating strategies for formalizing informal sector	To identify job creation and sector formalization opportunities in NAMA
NAMA financial structure	To provide pvt. sector and multilateral finance institutions with investment opportunities



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## Preliminary results – Regulatory reform

- ❖ The Steering Committee has made a joint submission to the government requesting for inclusion of technologies such as MBT facilities as technologies eligible for receiving tariffs
  - Currently submission is being made for tariff authority that develops a methodology for ascribing tariffs to management technologies apart from LFs
- ❖ Such modifications should be made during 2013 there creating a level playing field between LF and other tech
- ❖ Further technical studies are required to write regulations about technical standards and monitoring of such technologies



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# Thank you

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