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 **PROSPERIDAD
PARA TODOS**





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Promising NAMAs in Latin America Presentation by Colombia

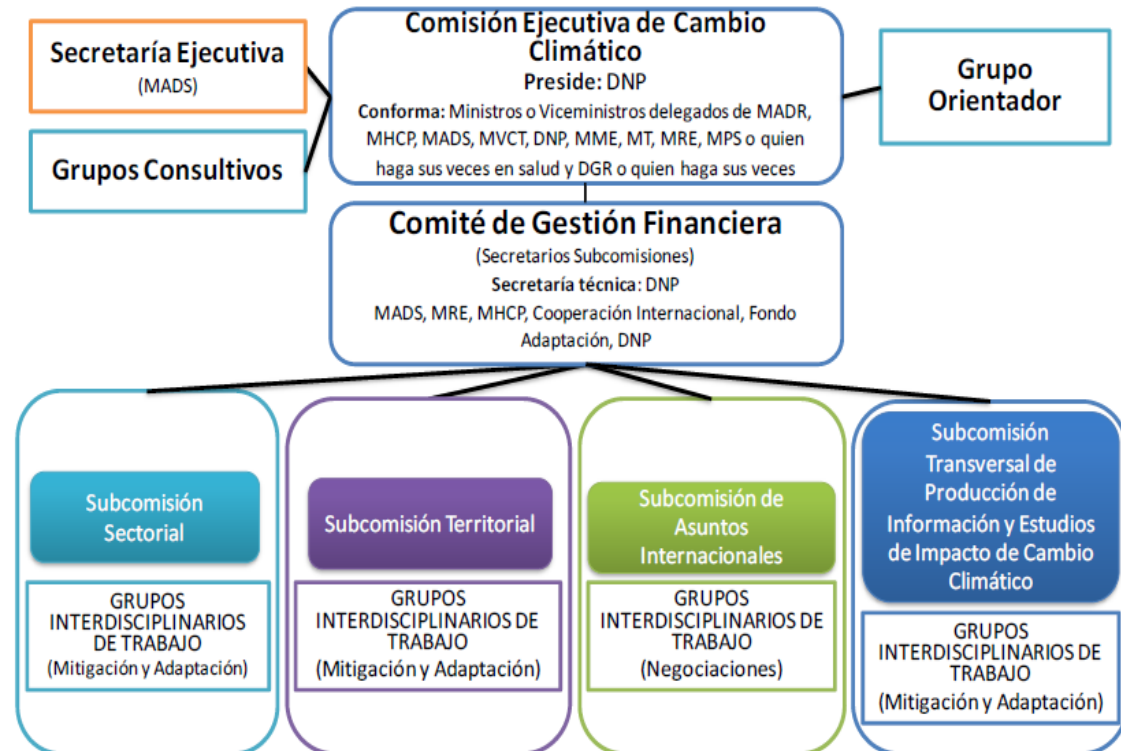
Maria Paula Mendieta
Ministry of Environment and Sustainable Development



Colombia Climate Change Strategy

The National Development Plan 2010-2014 established the need to enhance action in mitigation and adaptation to climate change.

A policy document (CONPES 3700 of 2011) established the institutional and main policies for national climate change action.





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Objectives of the CLDS

- Achieve the same level of expected growth while maintaining GHG emissions stable.
- The ECDBC aims to design along with the sectors and regions sector-based plans which include technology transfer needs and identification of barriers and opportunities for identified mitigation actions.
- NAMAs will be part of the CLCDS



Solid Waste NAMA

Background: Colombian waste sector

- 2003 – A two year period was established for regional authorities to close any dumps or inadequate waste disposal sites.
- Today: most of the final disposal has shifted towards landfilling.

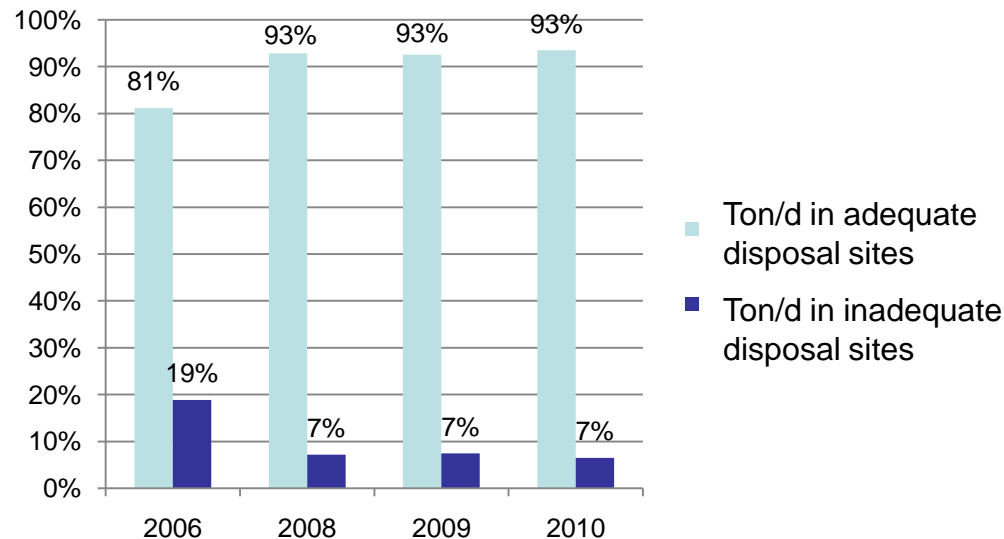


Figure 1. Final disposal in Colombia 2006 - 2010.

Source: Colombian Ministry of Housing, City and Territory.



Challenges

- Low energy prices of the Colombian grid (hydro-power based).
 - Low GHG emission reduction potential (relatively clean energy grid).
- No incentive for use of biogas as a source of renewable energy.
- Waste collection tariffs are charged by amount of waste disposed .
 - No incentives for waste reduction at the source, recycling or reuse.
- Growing informal recycling sector

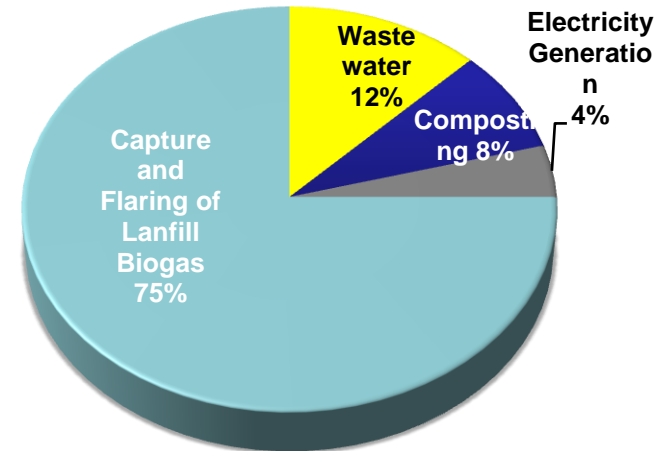


Figure 2. Type of project within the waste sector in the Colombian CDM portfolio.



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March, 2012

**Workshop
to
understand
needs**

Defined national priorities and convened public, private, and NGO stakeholders

**Steering
Committee**

Department of National Planning, Superintendence for Household Services, Ministry of Environment and Sustainable Development, Ministry of Housing, City and Territory

**Waste
NAMA
technology
alternatives**

Package of measures that target various stages of the waste stream

Selection of pilot cities

**Feasibility
Studies**

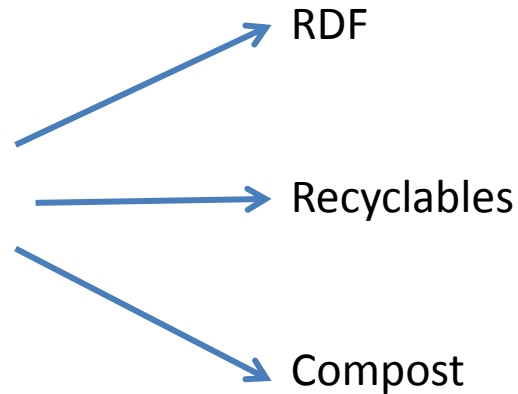
Perform techno-economic feasibility and analyze GHG benefits of alternative technologies and processes

March, 2013



Potentially Viable Technologies and Processes based on Scoping Study

**Mixed Waste
MBT Facility**



RDF

Recyclables

Compost

Supporting Factors

- Potential for tariff reform
- Strong interest shown from Argos Cement Co
- Robust recyclables market
- Transport cost savings potential

**Landfill
Gas to
Energy**



Landfills that
are currently
flaring

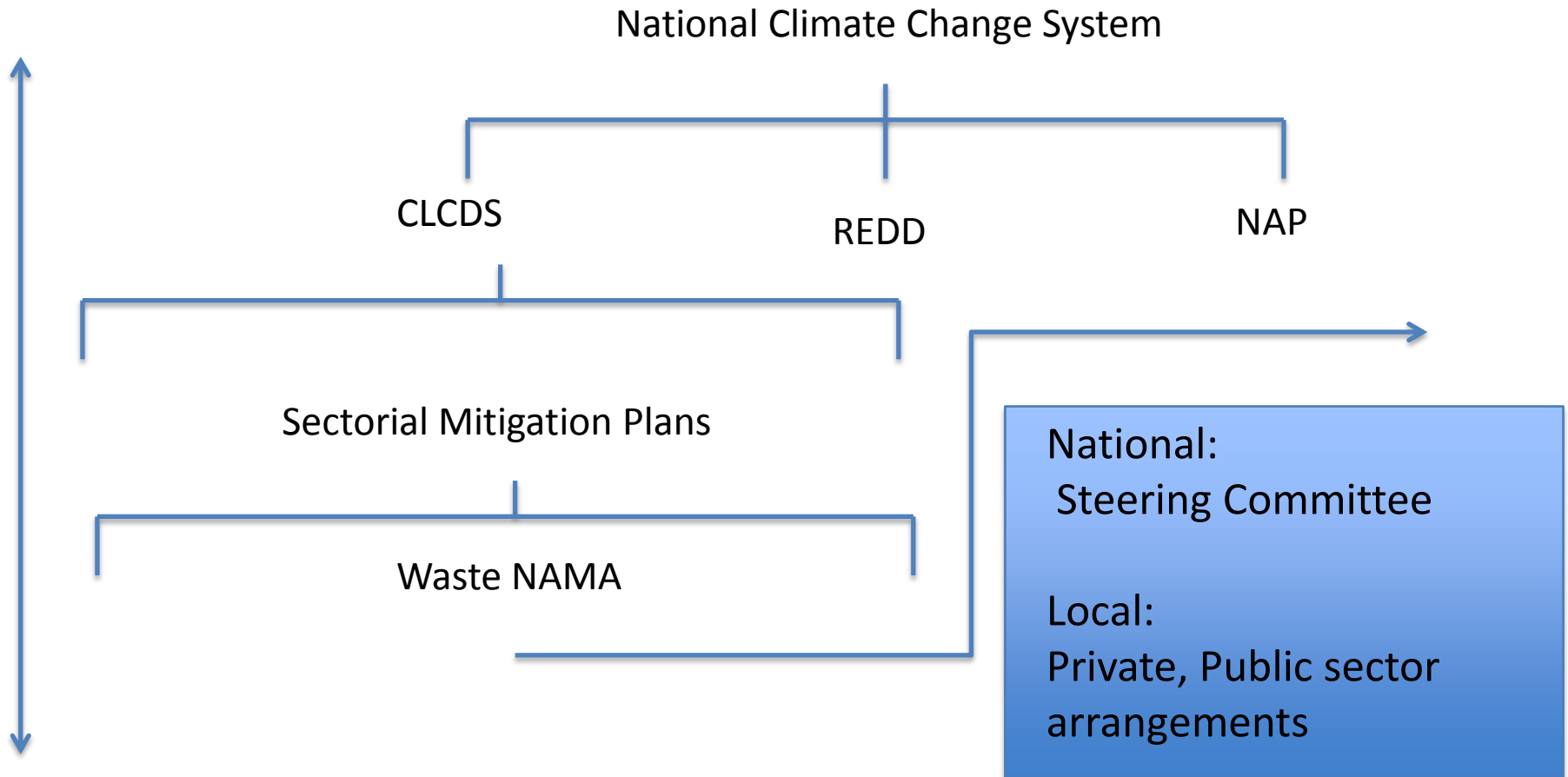
- Gas collection is already in place



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Institutional Arrangements





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Next Steps

1. Perform techno-economic **feasibility and analyze GHG benefits** of alternative technologies and processes (source separation, MBT for RDF, composting etc.) in two cities (Cali and Sogamoso) as pilot locations
2. Analyze **drivers of commodity markets** linked to waste management such as recyclables, compost, RDF etc.
3. Analyze impact of **tariff reform**
4. Provide **recommendations on strategies** for inclusion of informal sector in the integrated waste management plans
5. **Scale up** city-level analyses to design a **comprehensive integrated waste management NAMA** for Colombia with details on unilateral and supported components



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Transit Oriented Development NAMA

Background:

- Transport is a big challenge for our cities.
- Each city in Colombia has to have a Land use plan (POT).
- Transport represents 12% of national GHG emissions.

Benefits:

- Air quality/health
- Traffic
- Travel time

Objective:

Achieve emissions reductions by including climate change mitigation criteria into land use urban planning.

Promote or ensure different uses in areas around public transport infrastructure/stations.

Increase the use nonmotorized transportation.



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NAMA developing process

- National Agencies Involved:
Ministry of Transport
National Planning Department
Ministry of Housing
Ministry of Environment
- Local governments



Members of some of these institutions visited Washington D.C. to learn about the concept of TOD and all were interested.

Some cities (Bogota and Cali) have identified projects or areas where the concept of TOD could be introduced.



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Next Steps

- Formalize a committee/group of national and local agencies to work on approving the design of the NAMA and related studies.
- Build additional institutional arrangements required for developing and implementing the NAMA.
- Studies for specific pilot cities such as Cali and Bogota (baselines, mitigation potential, other benefits, costs, etc.)
- Identify possible sources of finance for the NAMA
- Build a NAMA proposal



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Muchas Gracias