Asia-Pacific Regional Workshop: Promoting the CDM and Market Mechanisms
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VOLUNTARY MARKETS AND NAMAS: MONETIZING CO-BENEFITS AND DESIGNING THE MRV SYSTEM


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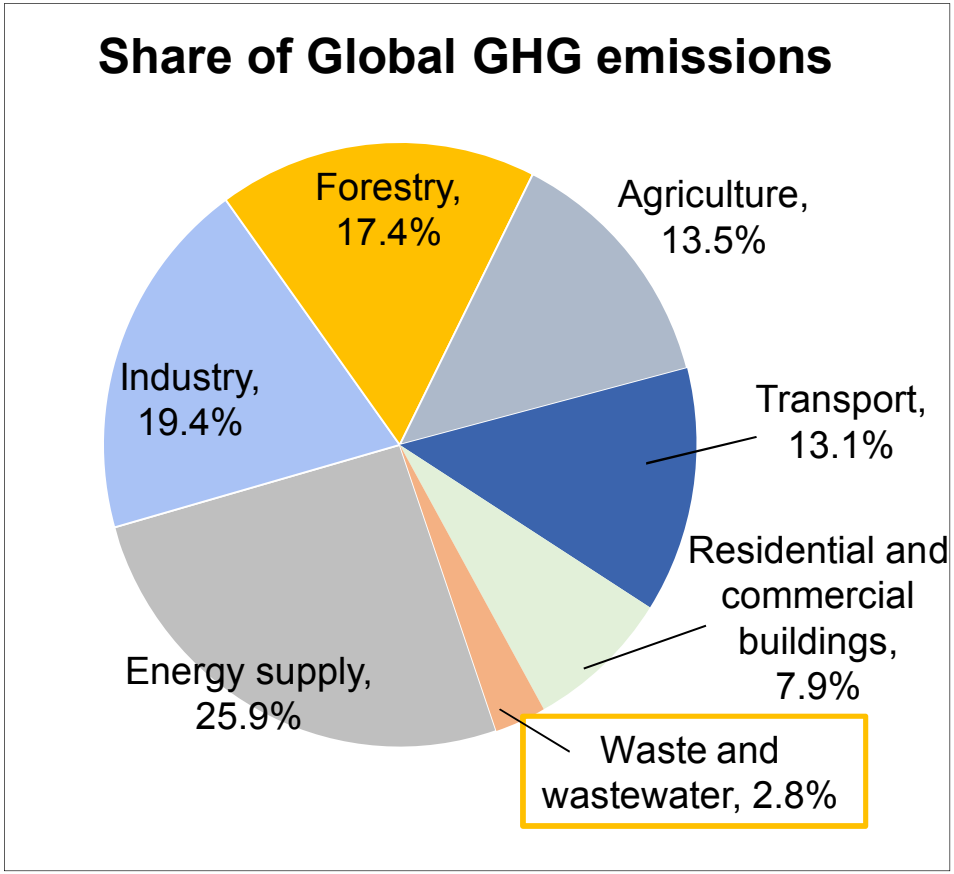
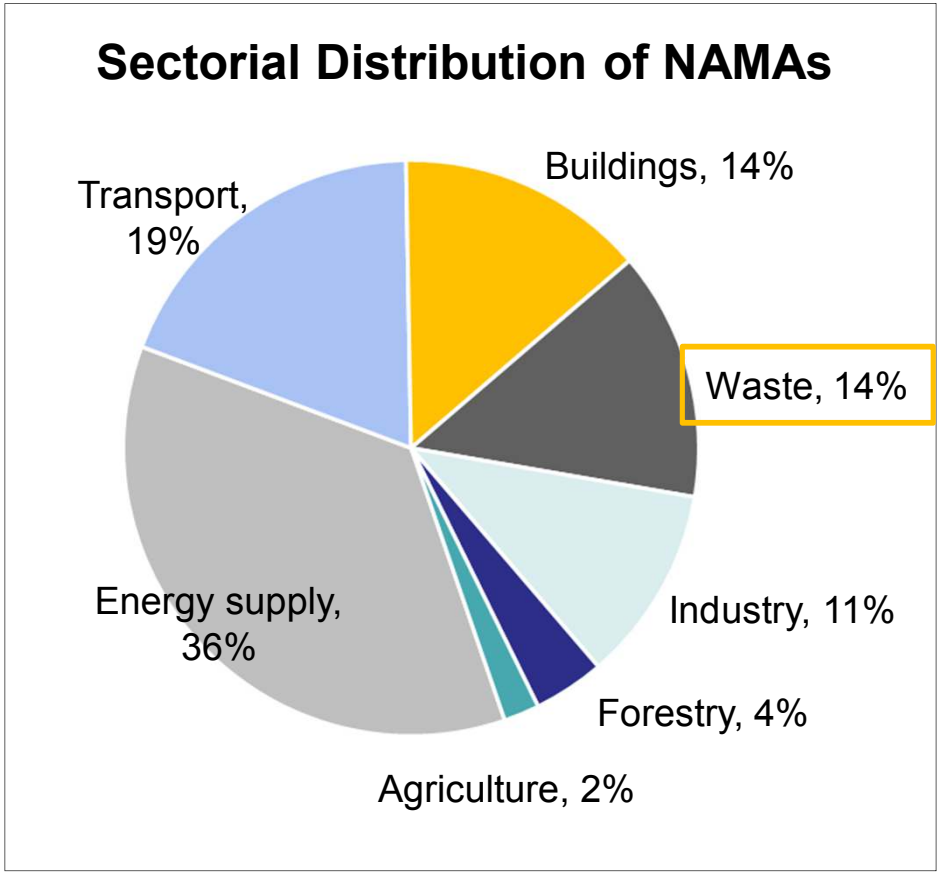
ESCAP work related to NAMAs

- ESCAP promoting low-carbon development strategies in Asia-Pacific
- In 2012 ESCAP developed the **Low Carbon Green Growth Roadmap** for Asia-Pacific – comprehensive list of policy options and practical implementing strategies to consider adopting, based on their own national priorities and circumstances
- Since 2009 ESCAP is promoting **pro-poor and sustainable solid waste management** in secondary cities and small towns, linking decentralized, community-based initiatives with carbon financing
- Initially looking at the CDM but following collapse of carbon markets now looking at other mechanisms, including NAMAs
  - **Bangladesh**: developing a multi-technology PoA to promote waste-to-resource
  - **Pakistan**: working with the Climate Change Division and the Alternative Energy Development Board for the development of a waste-to-energy NAMA
  - **Viet Nam**: working with the Institute of Meteorology, Hydrology and Environment (IMHEN) for the development of a NAMA based on the concept of waste-to-resource (3R)

Overview of NAMAs in the waste sector

- Although emissions from waste account for a small share of global GHG emissions, there has been a lot of interest in NAMAs in this sector
- This underscores the importance attached by developing countries to the waste sector for their sustainable development





Source: IPCC (2007) and Ecofys (2013)

Key considerations for MRV of waste NAMAs

- ESCAP organized the “Regional Workshop on Nationally Appropriate Mitigation Actions in Asia and the Pacific: Scaling-up climate change mitigation efforts and prospects for NAMAs in the waste sector” on 18 and 19 March 2014 in Bangkok
- Objective: review current status of development of NAMAs on waste in Asia-Pacific, share experiences and discuss key aspects of the design, including MRV
- Considerations from the workshop relevant for MRV:

1. MRV systems for NAMAs should balance simplicity and stringency, and be simplified compared to the CDM
2. NAMAs should be designed so as to enable effective engagement of sub-national actors
3. NAMAs should be designed so as to promote actions with high sustainable development benefits (co-benefits)

- URL to workshop: http://www.unescap.org/events/regional-workshop-nationally-appropriate-mitigation-actions-asia-and-pacific-scaling-climate

MRV of NAMAs should be simple

- MRV requires rigorous calculations, use of monitoring equipment, regular calibration, etc
- Many developing countries, especially LDCs face considerable challenges
  - Availability of data
  - Availability of equipment – as well as maintenance and calibration - in country
  - Limited capacities
- MRV under the CDM has often been too costly for the promotion of projects in LDCs
- Need to learn from CDM simplified baseline and monitoring methodologies for small-scale projects
- MRV of NAMAs should balance simplicity and stringency

Learning from the CDM experience in waste

1.689 active projects with a total of 120 mt CER/a
19% of all CDM projects and 9.3% of CDM's impact
1.200 non-active/candidate waste CDM projects

Source: South Pole Carbon

- Due to high transaction costs, stand-alone and small-scale projects with very high social and environmental benefits have been unable to take advantage of CDM opportunities
- CDM has worked well for projects with large GHG emission reduction potential
- CDM has not delivered for thousands of smaller waste projects
- NAMAs should maintain or improve what has worked within the CDM and address its limitations

Engaging sub-national actors

- Responsibility for waste management lies with local governments – but no or little resources are transferred to them
- The ability of local governments to raise revenues is also limited
- Design of NAMA framework at the national level, but implementation of MRV at the sub-national level
- NAMAs should be designed so as to involve sub-national actors, in particular in terms of:
  - Institutional arrangements
  - Incentives and financing
  - Capacities (design, implementation and MRV)
- In particular, building the capacities of local governments to collect reliable and good quality data will be critical

MRV of NAMAs should include co-benefits

- Sustainable development outcomes may be more important for developing countries
- These are usually referred as “co-benefits”, but actually main drivers of NAMAs
- Recent research by ESCAP in partnership with UNFCCC, Waste Concern and South Pole has shown that for every ton of CO2 eq. reduced, composting projects in Bangladesh generate at least US$100 of co-benefits (conservative figure)
- Keeping in mind the first recommendation (i.e. keep it simple) , MRV of co-benefits should focus on key indicators
- Chosen indicators should have easily available baseline data and be linked to national priorities

Example of co-benefits in the waste sector
Job creation
Better income and safer conditions for informal sector
Access to services
Diversion of waste from landfill
Cost avoidance
Disease prevention
Pollution reduction (soil, water, air)
Resource generation (recyclables, compost)
Energy production
Reduced use of chemical fertilizers
Increased crop yields

Co-benefits of reducing 1 ton of CO2eq

- With Waste Concern we have monetized the co-benefits of reducing 1 ton of CO2eq through pro-poor composting projects in Bangladesh

 Value of co-benefits of pro-poor projects dwarfs market values for GHG reductions

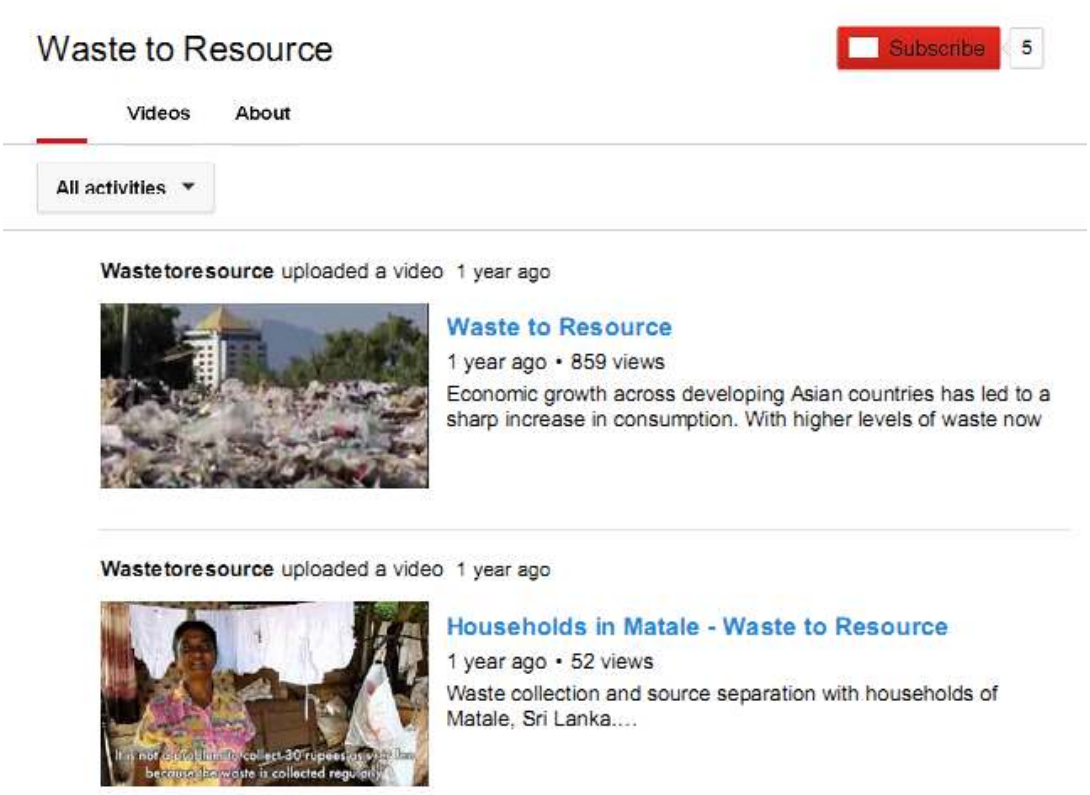
Co-benefit	Equivalent in US$
Creation of new jobs	8.5
Reduced disease burden	Not yet calculated
Community benefit of improved waste collection	Not yet calculated
Avoided costs of landfilling	10
Avoided use of chemical fertilizer	17
Avoided irrigation	Not yet calculated
Avoided pollution	Not yet calculated
Increased crop yield	64
Total	99.5

Source: Waste Concern

Recommendations

- Governments should prioritize projects high in co-benefits as part of their NAMAs
- In order to do this a framework for the identification, quantification and monetization of co-benefits needs to be put in place
- The value of mitigation projects high in co-benefits should go beyond the narrow market value for GHG emission reductions
- Governments should develop a system of incentives so as to monetize the willingness to pay for the co-benefits generated and transfer it to the producer of the co-benefits
- Public resources for the implementation of NAMAs should also be pulled from the various line ministries that have a stake on the co-benefits generated – e.g. ministries of health, agriculture or energy in the case of waste-to-resource initiatives

Thank you for the attention!



www.waste2resource.org

YouTube http://www.youtube.com/user/Wastetoresource

http://www.unescap.org/our-work/environment-development/urban-development