

Valuing climate change co-benefits in the waste sector: an approach for NAMAs





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The need for valuing co-benefits

- NAMAs have the potential to be a meaningful and powerful driver of sustainable development in developing countries
- In order to do so, NAMAs should maintain or improve what has worked within the CDM and address its limitations
- The CDM has been particularly successful with projects with high relative GHG emission reductions (e.g. landfill gas recovery), but did not work for projects with high "co-benefits" (such as small-scale community-based projects)
- One of the reasons: CDM only monetizes GHG emission reductions.
 However, this is just one source of "value to society" → Good
 projects have many other sources of value that should be
 unlocked, recognized, quantified and, if possible, monetized

CDM and the waste sector

 An analysis of the CDM database shows that the CDM has lead to the implementation of a large waste-sector project portfolio

Registered projects	Projects claiming CERs	Mitigation impact (million t/y)	% of all CDM projects	% of total CDM mitigation impact	Inactive projects
1089	452	42.67	16.4	8.7	> 1,200

- Compared to the contribution of the waste sector of 4 per cent to global GHG emissions, we conclude that the CDM contributes overproportionally to mitigating waste's climate footprint
- At the same time, the database also accounts for some 1.200 nonactive/candidate waste CDM projects
- These are projects for which the CDM application was never completed or that have stopped issuing carbon credits because there are too small to justify CDM related costs at current carbon prices

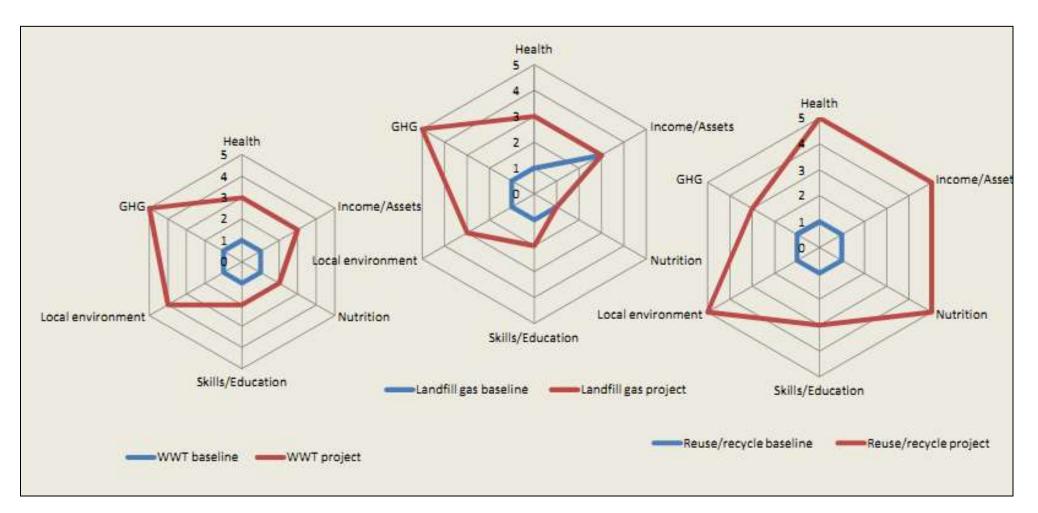
CDM performance of waste projects

Type of project	Registered projects	Projects issued CERs	%
Flaring or use of landfill gas (large scale)	140	111	79.29
Methane recovery from animal manure management (small scale)	117	50	42.74
Methane recovery in wastewater treatment (small scale)	177	51	28.81
Composting (large scale)	23	4	17.39
Composting (small scale)	54	11	20.37

Source: IGES database - based on UNFCCC CDM EB - 31/03/2015

Co-benefits of different waste projects

 Reduce, reuse, recycle (3R) projects have much higher co-benefits than endof-the-pipe projects such as landfill gas recovery or wastewater treatment



NAMAs design 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 the South Pole Group has shown that for every ton of CO2 eq. reduced, composting projects in developing countries generate US\$100-200 of co-benefits
- 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				

Learning from the CDM experience in waste

- Due to high transaction costs, standalone 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





Co-benefits of composting projects



Reduces 0.5 tons of GHG emissions



Reduces the spread of over 40 diseases



Generates 2-3 jobs



improved waste collection - for 2,000-3,000 citizens





Saves 1.1 m3 of landfill area

预览已结束, 完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5 4319

