National Development Objectives as a Key Driver for Successful NAMA

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About Us: Large portfolio of impact rich projects

- 220 contracted projects in over 20 countries
- Total volume: 60 million tCO_2e until 2020, 21 mil tCO2 delivered to clients
- 50% market share of “impact” rich projects (Gold Standard registered)
- We already quantify social, environmental and economic impacts of our projects.

…from a broad project pipeline

…and from the most important project types

- Renewable Energy (Biomass, Hydro, Wind, Geothermal)
- Waste Treatment (liquid and solid)
- Energy Efficiency
- Reduction of Waste Gas (Oil, Gas and Chemical Industries)
- Forestry
- Programmatic Approach (PoAs)

Global presence & recognition

- 2006: Incorporation in Zurich / Switzerland
- 2012: present on all continents
- 2011 and 2012: Best Project Developer**
- Swiss Social Entre-preneur of the Year 2011***
- 120 professionals from 22 countries
- Projects in 25 countries
- Specialized in impact rich projects "Gold Standard"

*Majority stake in *Climate Friendly* ** *Environmental Finance's* Voluntary Carbon Market Survey 2011, and again 2012; *** Schwab Foundation/WEF

Large CDM in Waste Management (avg. annual 140 kt CER)

Meth Number	Meth Name (all versions included)	No. of active projects	Avg. CER/a
AM0057	Avoided emissions from biomass wastes through use as feed stock in pulp and paper, cardboard, fibreboard or bio-oil production	1	91,804
AM0073	GHG emission reductions through multi-site manure collection and treatment in a central plant	2	231,308
AM0080	Mitigation of greenhouse gases emissions with treatment of wastewater in aerobic wastewater treatment plants	2	218,821
AM0083	Avoidance of landfill gas emissions by in-situ aeration of landfills	1	18,590
AM0093	Avoidance of landfill gas emissions by passive aeration of landfills	-	-
AM0112	Less carbon intensive power generation through continuous reductive distillation of waste	-	-
ACM0001	Flaring or use of landfill gas	255	45,166,282
ACM0010	GHG emission reductions from manure management systems	19	1,590,663
ACM0014	Treatment of wastewater	37	4,006,120
ACM0022	Alternative waste treatment processes	11	856,590
ACM0024	Natural gas substitution by biogenic methane produced from the anaerobic digestion of organic waste	-	-
AM 0025	Alternative waste treatment processes	79	10,643,858
ACM0002	Consolidated Methodology for grid connected renewable electricity generation (Biogas, Biomass, Methane)	32	3,263,352
ACM0006	Consolidated methodology for electricity and heat generation from biomass	154	15,995,146
	Total	**593**	**82,082,533**

Small CDM in Waste Management (avg. annual 70kt CER)

Meth Number	Meth Name (all versions included)	No. of active projects	Avg. CER/a
AMS-III.E.	Avoidance of methane production from decay of biomass through controlled combustion, gasification or mechanical/thermal treatment	21	1,468,292
AMS-III.F.	Avoidance of methane emissions through composting	70	1,892,083
AMS-III.G.	Landfill methane recovery	37	1,088,580
AMS-III.H.	Methane recovery in wastewater treatment	204	7,139,755
AMS-III.I.	Avoidance of methane production in wastewater treatment through replacement of anaerobic systems by aerobic systems	5	177,797
AMS-III.L.	Avoidance of methane production from biomass decay through controlled pyrolysis	1	43,879
AMS-III.Y.	Methane avoidance through separation of solids from wastewater or manure treatment systems	4	168,302
AMS-III.AF.	Avoidance of methane emissions through excavating and composting of partially decayed municipal solid waste (MSW)	-	-
AMS-III.AJ.	Recovery and recycling of materials from solid wastes	-	-
AMS-III.AO.	Methane recovery through controlled anaerobic digestion	9	342,321
AMS-III.D.	Methane recovery in animal manure management systems	134	3,300,316
AMS-I.D.	Grid connected renewable electricity generation (Biogas, Biomass, Methane)	300	10,890,499
AMS-I.C.	Thermal energy production with or without electricity (Biogas, Biomass, Methane)	311	11,119,780
	Total	**1,096**	**37,631,606**

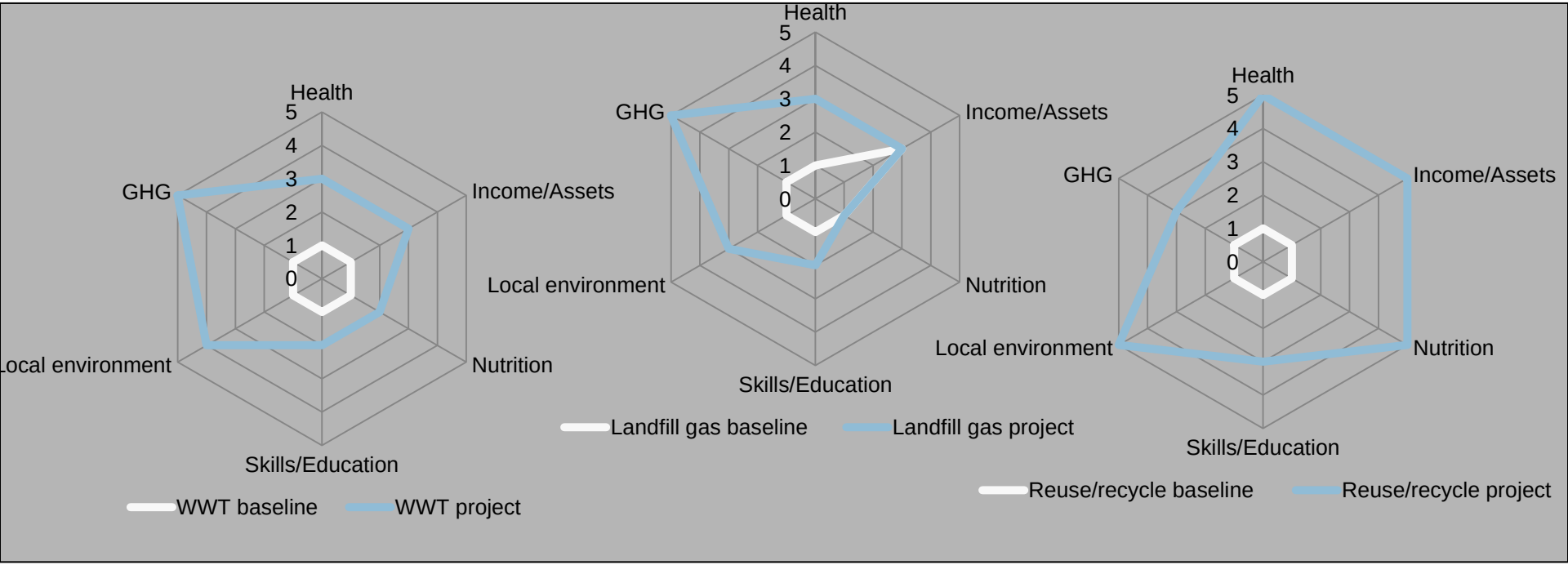
Summary of the CDM in waste experience I

- 1.689 active projects with a total of 120 mt CER/a
- This represents 19% of all CDM projects and 9.3% of CDM's mitigation impact
- Waste contributes 4% to global GHG emissions: CDM contributes over-proportionally to mitigating waste's climate footprint.
- 1.200 non-active/candidate waste CDM projects. Why?: failed additionality test, too small to be commercially attractive at current carbon prices).
  - Side note: some of these projects are actually operating, creating GHG emission reductions (as a free service of developing countries to global mitigation efforts)
- About 1/3 of all large landfill waste CDM projects are implemented as public-private partnerships, usually with municipal government entities.

Summary of the CDM in waste experience II

- CDM has transformed – on a sector-basis - best-practice in large industrial waste-water management, landfill gas and animal-manure management, driven by financial reward from methane destruction.
- CDM has not delivered for thousands of smaller waste projects (in small/medium cities), places without central waste management planning capacity and projects without big methane baseline.

Multi-dimensional impacts of waste projects



The CDM worked for projects with high relative GHG impacts (methane avoidance) but did not work for projects with high “co-benefits” for a simple reason: CDM only monetizes GHG mitigation (which it was designed for) …

Getting beyond the reach of the CDM; National development impacts as driving force for waste NAMAs

- Which key development impacts do waste projects address? (or: why is your government really interested in waste management projects?)
- Can you help me complete this list?
  1. Waste management improves the health of the near-by community (reduced smell, spread of diseases)
  2. Waste management improves water quality
  3. Waste management can power our energy system, displacing other (commercial fuels)
  4. Waste management (RRR) produces valuable raw materials at low costs
  5. Waste management creates better jobs for members of local communities and reduces poverty
  6. Waste management improves resource efficiency and the competitiveness of local economies
  7. Waste management reduces global GHG emissions
  8. ….

What is the value of getting those impacts (from a waste project)?

1. How much does it cost society to treat a sick person?
2. How much does it cost to clean up dirty water or bring in clean water from elsewhere?
3. What is the value/willingness to pay for energy from waste?
4. What is the value/willing to pay for raw materials from waste?
5. What is the value of having people with higher income?
6. What is the value of a more competitive economy (that generates more GDP?
7. What is the value of GHG mitigation impacts?

NAMA Incentive Structures

- What is the simplest way to transform society's valuation (willingness to pay) for those impacts to waste management project implementers?
  - Tipping fees
  - Feed-in-tariffs
  - Tax exemptions
  - Subsidies
  - Carbon credit payments
  - Pay for performance schemes
  - …
- An ideal incentive structure would broker a transfer from those that benefit from having the impact to those that create the impact. This is the role of government.

Learning from CDM: simplifying the delivery of incentives

- NAMA must provide incentives for actions the CDM could not reach…
  - NAMA incentives must be “easier to get” (fast, simple process) and more “bankable” than CDM carbon credits (carbon credits take three years to issue, prices are volatile, some red-tape, many banks in developing countries never recognized them as collateral)
  - NAMA incentives need to be based (in part) on the value of local benefits.
- … which need to be easily accessible (financial) to qualified project-level implementers.
  - Side note: mitigation impacts still result from on the ground investment decisions and will continue to be managed by non-government entities (incl. private sector).

Learning from CDM: mainstreaming institutional arrangement

- NAMA should start to work quickly, integrate and leverage carbon markets.
- NAMA should integrate domestic policy, local objectives and intl. climate finance
- NAMA should go beyond project-level additionality, focus on voluntary targets
- Projects within NAMA framework should operate with simplified MRV.
- NAMA design should in fact be driven by domestic development priorities; mitigation actions are a co-benefit.

The role of government in good NAMA design

- Be the catalyst that creates a business case (win/win outcome for everyone involved) (PPP approach) and measureable impacts that contribute to achieving a set of valued development objectives.
- Create very tangible and accessible (bankable) incentives that transfer value from those who benefit from the impacts created by waste projects to the operators of those projects.
- Carbon credits - under CDM or other governance mechanisms, incl. domestic schemes - are one impact currency that deals primarily with climate mitigation related impacts. BUT: the existing carbon market infrastructure, with its focus on verification, pay-for-performance can be used to deliver additional incentives that is related to other impacts.
- The actual design elements of NAMA incentives are context and country-specific.

Thank you

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