

Overview of the CDM in the agriculture sector

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Methane to Markets 30 October – 1 November 2007 Beijing China



United Nations Framework Convention on Climate Change



Carbon market | First steps on a long road

- First commitment period of Kyoto (2008-2012) only the first step
- Required annual emission reductions of the order of 3.3 Gt CO2eq
- Remarkable progress in the CDM in the short time since Kyoto entered into force in February of 2005



Breakthrough in Bali | What would constitute a success?

- Common understanding of the required building blocks (not agreement on the specifics)
- **Decision to negotiate** a comprehensive post-2012 agreement
- Establishment of a negotiating process with clear tasks
- Agreement on a timeframe (2009-2010)

What is the CDM Incentives



CDM | Regulatory and support system





CDM Growth of the CDM



CDM | Key project data

Projects to date	Total number	CERs expected*			
Project activities in pipeline	> 2,600*	> 2,500 million by 2012			
Project activities requesting registration	47	110 million by 2012			
Project activities with review requested	38	20 Million by 2012			
Project activities registered	> 822	> 1,060 million by 2012			
CERs issued to date	> 171,161,604				



Project locations

Status: October 2007

* assuming all project activities simultaneously deliver their expected annual average emission reductions and there are no renewals of crediting periods

CDM Data on methodologies

CDM Methdological Standards	Total numbers		
Total approved large-scale methodologies	57		
non-A/R methodologies	45		
non-A/R consolidated methodologies	12		
Total methodological tools (non-A/R & A/R)	6 + 7		
used in large scale non-A/R methodologies	50		
used in large scale A/R methodologies	3		
used in small scale non-A/R methodologies	8		
Total approved A/R methodologies (LS & SSC-A/R)	10 + 1		
Total approved SSC methodologies	28		



CDM Characteristics

- Market mechanism offering developing country (non-Annex I) opportunities to participate in the carbon market
- Participation is voluntary and both public and private entities can participate
- Lowest marginal cost of abatement
- Ensures sustainable development (as defined by the host country)
- Projects or programs must result in real, measurable and long-term greenhouse gas (GHG) emission reductions
- Additional to any E.R's that would occur in the absence of the project
- An international supervisory and standards setting body (CDM EB)
- Is open to regulatory and stakeholder scrutiny, at all times
- Employs bottom-up, re-use and broad application principles for standards
- Offers o low cost option (SSC)
- Offer a large scale option (A/R and non-A/R)
- Offers a multi-project option (PoA and bundling)
- A global currency (CERs) with a strong SD and ToT spin-offs



CDM Lifecycle



- It has a clear and transparent life-cycle:
 - project design and development of the PDD by the project proponent;
 - approval of Sust.Dev. aspects by the host country;
 - validation by a DOE;
 - registration with the CDM EB;
 - project monitoring by the PP;
 - verification and certification by a DOE;
 - issuance of CERS by the CDM EB.





CDM Accountability

- The Executive Board is answerable to COP/MOP
 - Publicly available annual report
 - Contact group at sessions of the COP/MOP
 - Q&A sessions with EB
- Other entities answerable to Executive Board
 - DOE/AE: Interaction at each Board meeting
 - Panels, Working Groups and Teams



CDM Compliance

- CERs are compliance instruments
- CERs are issued into the CDM registry
- Part of international registry system (ITL, national registries)
- Each CER has a unique serial number
- Serial number contains the project identifier
- National registries (and account holders) can easily identify the project type and individual project
- ITL ensures that
 - Units are held in one account only
 - Units are used (retired or cancelled) only once



CDM Transparency

- All project documentation is publicly available
 - PDD, including annexes
 - Validation report
 - Letters of approval and authorization
 - Methodology employed
 - Monitoring reports
 - Verification and certification reports
 - Requests for reviews
 - Responses to requests for reviews
 - Scope of reviews
 - Reasons for rejection

CDM | Concept Additionality



- Investment barrier availability of a financially more viable alternative that would have led to higher emissions
 - Technological barrier existence of a less technologically advanced alternative that involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions
- Common practice barrier prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions

Project participants have to demonstrate to a validator that the project activity would otherwise not be implemented due to the existence of one or more barriers

CDM **Registration procedure**



para. 37

http://cdm.unfccc.int/Reference/Procedures http://cdm.unfccc.int/Reference/Guidclarif

CDM Methodology procedure

possible in-meeting real-time written dialogue with PPs





Distribution of project activities in pipeline by scope





Distribution of registered project activities by scope





Approved methodologies by scope



- Energy industries (renewable / non-renewable sources)
- Energy distribution
- 3 Energy demand
- 4 Manufacturing industries
- 5 Chemical industries
- 6 Construction
- 7 Transport

1 2

- 8 Mining/mineral production
- 9 Metal production
- 10 Fugitive emissions from fuels (solid, oil and gas)
- 11 Production and consumption of halocarbons and SF6
- 12 Solvent use
- 13 Waste handling and disposal
- 14 Afforestation and reforestation
- 15 Agriculture

_ http://cdm.unfccc.int (c) 02.10.2007 22:21



Registered projects by emission reductions. Total 803



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* Emission reductions in metric tonnes of CO² equivalent per annum



CDM Agriculture projects

Number of agriculture related projects in the pipeline



Number of projects					MW
	At	Request	Registered	Total	Total
	validation	registration			
Bagasse power	73	21	58	152	3894
Palm oil solid waste	20	4	10	34	236
Agricultural residues	117	10	87	214	1834
Forest biomass	27	1	14	42	341
Biodiesel	3	0	0	3	
Ethanol	0	0	0	0	

Source UNEP Risoe



CDM Agriculture standards

(AMS II F) Energy efficiency and fuel switching measures for agricultural facilities and activities

(AMS IIII F) Avoidance of methane production from biomass decay through composting

(AMS III I) Avoidance of methane production in wastewater treatment through replacement of anaerobic lagoons by aerobic systems

(ACM0006) Consolidated methodology for electricity generation from biomass residues (ACM0010) Consolidated methodology for GHG emission reductions from manure management systems

- (AM0013) Avoided methane emissions from organic waste-water treatment
- AM0047) Production of biodiesel based on waste oils and/or waste fats from biogenic origin for use as fuel
- (AM0053) Biogenic methane injection to a natural gas distribution grid
- (AM0057) Avoided emissions from biomass wastes through use as feed stock in pulp and paper production





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Announcements

Employment opportunities

Events

17.8.2007. L. Latin American CarbonForum

Publications

15.8 2007. L. Overcoming Berriers to CDM



CDM Bazaar: http://www.cdmbazaar.net

Catalogue of EB Decisions (beta): http://test.cdmis.net/catalogue-test

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