ASSESSMENT OF APPROVED METHODOLOGIES AND REGISTERED PROJECT ACTIVITIES

Background

1. The Meth Panel developed draft guidance for an enhanced barrier test for project activities that have a potentially high profitability without CER revenues and where only barrier analysis is used for the demonstration of additionality.

2. The draft guidance is applicable to project activities implemented in Greenfield industrial plants, where solid or liquid waste (including biomass residues), waste gas, waste heat, etc. are used as new feedstock for producing either a product or energy (heat or power).

3. The Board considered the draft guidance at its forty-first meeting and, *inter alia*, requested the secretariat to undertake an assessment of approved methodologies and registered project activities with a view to assessing the extent of project activity types covered by the applicability of the proposed guidance.

Assessment

4. The following eleven approved methodologies are applicable to project activity types that could be subject to the proposed guidance:

Table 1: Approved methodology for project activities utilizing waste gas/heat/substance

Approved methodology	Procedure for demonstration for additionality
AM0025 "Avoided emissions from organic waste through alternative waste treatment processes"	Application of the additionality tool. Barrier analysis may include: Investment barrier, technological barrier, common practice barrier.
AM0039 "Methane emissions reduction from organic waste water and bioorganic solid waste using co-composting"	Application of the additionality tool.
AM0047 "Production of biodiesel based on waste oils and/or waste fats from biogenic origin for use as fuel"	Application of the additionality tool.
AM0057 "Avoided emissions from biomass wastes through use as feed stock in pulp and paper production or in bio-oil production"	Application of the additionality tool. The barriers may include the following: • The use of agricultural waste may face technological barriers; • The raw material is either not used or, in the case of paper and pulp, less than 10% of production in the region is based on agricultural waste.

AM0063 "Recovery of CO2 from tail gas in industrial facilities to substitute the use of fossil fuels for production of CO2"	Application of the additionality tool.
AM0066 "GHG emission reductions through waste heat utilisation for pre-heating of raw materials in sponge iron manufacturing process"	Application of the combined tool. If the project activity is to be implemented in a Greenfield facility, Step 3 of the tool (investment analysis) is mandatory and scenario W5 (implementation of the project activity without being registered as a CDM project activity) along with other alternative scenarios remaining after Step 2 shall be included in the investment analysis. Project participants shall demonstrate that the project activity is not a common practice: If at least 50% of sponge iron plants in the geographical area have a pre-heater installed, the project activity shall be considered a common practice and as such is not additional.
ACM0005 "Consolidated Baseline Methodology for Increasing the Blend in Cement Production"	Application of the additionality tool. If the barrier analysis is used, the barriers may include among others: technological barriers, institutional barriers and Market acceptability barriers.
ACM0006 "Consolidated methodology electricity generation from biomass residues"	Application of the combined tool.
ACM0012 "Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects"	Application of the additionality tool.
ACM0014 "Mitigation of greenhouse gas emissions from treatment of industrial wastewater"	Application of the additionality tool.
ACM0015 "Consolidated baseline and monitoring methodology for project activities using alternative raw materials that do not contain carbonates for clinker manufacturing in cement kilns"	Application of the additionality tool.

5. Project activities applying AM0066 do not require enhanced barrier test since the use of the investment analysis is mandatory for project activities implemented in Greenfield facilities.

6. The table below presents the number of project activities, meeting criteria specified in the draft guidance and applying the above listed approved methodologies. ACM0004, which was withdrawn and replaced by the approved consolidated methodology ACM0012 is also included in the analysis.

Table 2: Project activities submitted for registration as of 16 October 2008 utilizing waste gas/heat/substance

Methodology	Project activities implemented in Greenfield facilities using waste substances					Total number of submitted project activities using the methodology
	Registered	Rejected	Requesting registration (including PAs under review and with a review requested)	Withdrawn	Total	
AM0025	6	0	0	0	6	6
AM0039	1	0	1	0	2	2
AM0047	0	0	0	0	0	0
AM0057	0	0	0	0	0	0
AM0063	0	0	0	0	0	0
ACM0005	0	0	0	0	0	22
ACM0006	21	4	1	1	27	73
ACM0012	0	0	0	0	0	4
ACM0014	0	0	0	0	0	0
ACM0015	0	0	0	0	0	0
ACM0004	5	0	1	0	6	129
TOTAL	**33**	**4**	**3**	**1**	**41**	**236**

7. Table 2 shows that 41 project activities or about 17% of all project activities utilizing waste gas/heat/substance could be subject to an enhanced barrier test. It also corresponds to 4.8% of all large-scale project activities submitted for registration as of 16 October 2007.

8. Table 3 provides details of Greenfield project activities applying ACM0006.

Table 3: Greenfield project activities applying ACM0006

	Project activity title	Status	Additionality demonstration
0258	Nueva Aldea Biomass Power Plant Phase 1	Registered	Investment analysis and barrier analysis
0346	Nueva Aldea Biomass Power Plant Phase 2	Registered	Barrier analysis
0259	Trupan Biomass Power Plant in Chile	Registered	Investment analysis and barrier analysis

0694	R K Powergen 20MW grid connected renewable energy biomass power project	Registered	Barrier analysis
0778	Hebei Jinzhou 24MW Straw-Fired Power Project	Registered	Investment analysis and barrier analysis
0811	Shandong Yucheng Xinyuan Biomass Heat & Power ("Yucheng Biomass CHP")	Registered	Investment analysis and barrier analysis
0825	Henan Luyi 25MW Biomass Cogeneration Project	Registered	Investment analysis and barrier analysis
0819	Zhongjieneng Suqian 2*12MW Biomass Direct Burning Power Plant Project	Registered	Investment analysis and barrier analysis
0820	Zhongjieneng Jurong 2*12MW Biomass Direct Burning Power Plant Project	Registered	Investment analysis and barrier analysis
0865	26 MW Biomass (Cogeneration) based Power generation Project activity	Registered	Barrier analysis
01016	Kunak Jaya Bio Energy Plant	Rejected (reason: investment analysis)	Investment analysis and barrier analysis
01032	Shandong Shanxian 1*25MW Biomass Power Plant Project	Registered	Investment analysis and barrier analysis
01014	Kunak Bio Energy Project	Rejected (reason: investment analysis)	Investment analysis and barrier analysis
01026	A.T. Biopower Rice Husk Power Project in Pichit, Thailand	Registered	Barrier analysis
01069	BCML Haidergarh Bagasse Co-generation Project (India)	Withdrawn	Barrier analysis
01109	M/S. Kothari Sugars and Chemicals Ltd (KSCL)'s Bagasse Based Co-generation Project, at Perambalur district, Tamil Nadu, India	Rejected (reason: common practice analysis)	Barrier analysis
01263	Shandong Wudi Biomass Generation Project	Registered	Investment analysis and barrier analysis
01293	Heilongjiang Tangyuan Biomass Cogeneration Project	Registered	Investment analysis and barrier analysis
01339	Greenfield power project at Dwarikesh Dham	Registered	Barrier analysis
01375	Shandong Gaotang 30MW Biomass Power Generation Project	Registered	Investment analysis and barrier analysis

01366	Biomass generation project, in Sheyang county, Jiangsu province, P.R. China	Registered	Investment analysis and barrier analysis
01458	Guyana Skeldon Bagasse Cogeneration Project	Registered	Barrier analysis
01493	Fray Bentos Biomass Power Generation Project	Registered	Barrier analysis
01519	Surat Thani Biomass Power Generation Project in Thailand	Registered	Barrier analysis
01479	USJ Açúcar e Álcool S/A – Usina São Francisco Cogeneration Project	Rejected (reason: baseline determination)	Investment analysis
01546	Straw generation project in Wei county Hebei province, P.R. China	Registered	Investment analysis and barrier analysis
01787	Valdivia biomass power plant	Review requested	Barrier analysis

9. In 55% of the Greenfield project activities applying ACM0006 a combination of an investment analysis and a barrier analysis was used to demonstrate additionality. In 37% of project activities only a barrier analysis was used.

10. In the four rejected Greenfield project activities applying ACM0006 the demonstration of additionality was as follows: a barrier analysis only was used in 1 project activity; a combination of an investment analysis and a barrier analysis was used in 2 cases and an investment analysis was used in 1 project activity.

11. Table 4 provides details of project activities applying ACM0004 and being implemented in Greenfield facilities.

Table 4: Greenfield project activities applying ACM0004

	Project activity title	**Status**	**Additionality demonstration**
0351	Power generation from waste heat of non-recovery type coke ovens at JSPL	Registered	Barrier analysis
0818	MSPSPL Waste Heat Recovery Based Captive Power Project	Registered	Barrier analysis
01266	20MW Waste gas based captive power project based at Kharagpur, West Bengal	Registered	Barrier analysis
01324	Power generation from waste heat of submerged arc furnaces	Registered	Barrier analysis
01469	Recycled Energy Electricity Generation Project by AMLSPL	Registered	Barrier analysis

01608	Anshan Iron and Steel Group Corporation (Yingkou) Blast Furnace Gas Combined Cycle Power Plant Project	Corrections (following review)	Investment analysis and barrier analysis

12. In the majority of project activities applying ACM0004 and being implemented in Greenfield facilities the demonstration of additionality was through a barrier analysis (83%). It should be noted that only 4.7% of project activities applying ACM0004 are Greenfield project activities.

- - - - -