REPORT OF THE FORTY-SIXTH MEETING OF THE METHODOLOGIES PANEL

Langer Eugen, Bonn, Germany 25 - 29 October 2010

RECOMMENDATIONS BY THE METHODOLOGIES PANEL TO THE CDM EXECUTIVE BOARD

A. Opening of the meeting and adoption of the agenda

- 1. The Chair of the Methodologies Panel (the panel), Mr. Lex de Jonge opened the meeting.
- 2. The agenda was adopted as proposed.
- 3. The panel welcomed the new member, Mr. Alex Dunn.

B. Consideration of proposed new methodologies

- 4. The panel considered the proposed new methodologies listed in the table below, as well as desk reviews and public inputs received, where applicable.
- 5. The final recommendations, proposed by the panel for consideration by the CDM Executive Board (the Board), are made available on the UNFCCC CDM website at http://cdm.unfccc.int/goto/MPpropmeth.
- 6. In accordance with the procedures for the submission and consideration of a proposed new methodology, project participants may submit, via the DOE, technical clarifications to preliminary recommendations. Preliminary recommendations for which project participants submit clarification within four weeks shall be considered at the next meeting of the panel. If project participants do not provide clarification related to the preliminary recommendation by the panel within the timeframe of three months, the case will be considered withdrawn.
- 7. The panel agreed on the following recommendations:

Table 1: Proposed new methodologies

Proposed new methodology	Recommendation ¹
NM0302: Emission reductions in the cement production facilities of Holcim Ecuador S.A.	WIP (see paragraph 8 (a))
NM0328: Energy efficiency and fuel switching measures in new buildings	WIP (see paragraph 8 (b))
NM0330: Substitution of Fluorinated Compound (FC) gases for cleaning Chemical Vapor Deposition (CVD) reactors in the semiconductor industry	Preliminary recommendation
NM0337: Replacement of fossil fuel fired heaters with biomass residue fired heaters	Preliminary recommendation

Recommendations on the proposed new methodologies from the panel A (recommended for approval) and C (recommended for non-approval) are final recommendations to the Board. Preliminary Recommendations are technical clarifications requested by the panel from project participants before finalizing its recommendation to the Board.

- 8. The panel requested the Board to <u>take note</u> that it could not conclude its consideration of the following proposed new methodologies:
 - (a) NM0302 "Benchmark methodology for cement and clinker manufacturing" because the panel could not complete consideration of issues concerning the levels of the benchmarks for clinker and cement manufacturing. The panel agreed to continue the consideration of the methodology at its forty-eighth meeting with a view to providing a final recommendation to the Board.
 - (b) NM0328 "Energy efficiency and fuel switching measures in new buildings" because the panel, with the help of the secretariat will review the revised submission after interacting with project participants. The panel agreed to continue the consideration of the methodology at its forty-eighth meeting.

C. Requests for clarification on and revision to approved methodologies

9. The panel requested the Board to <u>take note</u> of the following responses to requests for clarification related to the application of approved baseline and monitoring methodologies and methodological tools and approve the following responses to requests for revision to approved methodologies. The requests submitted and the responses provided by the panel are made publicly available on the UNFCCC CDM website at <<u>http://cdm.unfccc.int/goto/MPclar</u>> and <<u>http://cdm.unfccc.int/goto/MPrev</u>>, respectively. The requests for revision/clarification that resulted in a recommendation by the panel to revise an approved methodology are reflected in section D below.

Table 2: Requests for clarification

Number of the request for clarification	Approved methodology	Title of the request for clarification	MP response
AM_CLA_0190	AM0036	Clarification on the definition of biomass residues in the AM0036 methodology	Clarified (fast track)
AM_CLA_0191	AM0001	Use of historical data if the key components of a HCFC-22 plants have been retrofitted or replaced	WIP (see paragraph 10)
AM_CLA_0192	AM0049	Clarification request on the interpretation of the word 'export' in relation to methodology applicability criterion restricting export of electricity to the grid to a maximum of 10%	Clarified
AM_CLA_0193	AM0049	Clarification request on the use of heat recovery steam generators to deliver steam to existing steam turbine generators for the generation of electricity from recovered heat	Clarified

Table 3: Requests for revision

Table 5: Requests for revision						
Number of the request for revision	Approved methodology	Title of the request for revision	MP response			
AM_REV_0141	AM0024	Extension of methodology AM0024 to cases where the project activity displaces both grid electricity and electricity from an identified power generation source	WIP (see paragraph 11)			
AM_REV_0157	ACM0012	The applicability of the methodology has been expanded to accommodate the usage of waste energy for supply of heat of reaction with or without process heating	WIP (see paragraph 12)			
AM_REV_0190	AM0070	Revision to facilitate the calculation of benchmarks based on data available to PPs and definition of default values	To revise			
AM_REV_0197	AM0063	Revision of AM0063 for applicability to new industrial facilities/integrated complex	WIP (see paragraph 13)			
AM_REV_0198	ACM0018	Revision of ACM0018 to include CO ₂ emissions from energy consumption for mechanical treatment of the biomass residues in Project Emissions	To revise			
AM_REV_0199	ACM0006	Revision of ACM0006 to include biogas from anaerobic wastewater treatment	To revise			
AM_REV_0200	AM0031	Expansion of applicability conditions	To revise			
AM_REV_0201	ACM0014	The aim of this request for revision of an approved methodology is to allow its use to a project where the wastewater is dewatered and subsequently directed to land application	To revise			
AM_REV_0202	AM0028	Revision of AM0028 to expand applicability to thermal decomposition of N ₂ O version 5	WIP (see paragraph 14)			

- 10. The panel requested the Board to <u>take note</u> that it could not conclude its consideration of the request for clarification AM_CLA_0191 on AM0001 "Incineration of HFC 23 waste streams". The panel expects to conclude its consideration at a future meeting.
- 11. The panel requested the Board to <u>take note</u> that it could not conclude its consideration of the request for the revision AM_REV_0141 as the ongoing work on the consolidation of the methodology AM0024 "Methodology for greenhouse gas reductions through waste heat recovery and utilization for power generation at cement plants" with the methodology ACM0012 "Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects" could not be finalized due to time constraints. The panel expects to conclude its consideration of both methodologies at its next meeting.

- 12. The panel requested the Board to <u>take note</u> that it considered the request for revision AM_REV_0157 related to the methodology ACM0012 "Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects" but could not finalize it due to time constraints. The panel intends to conclude the revision of the methodology ACM0012 at its next meeting.
- 13. The panel requested the Board to <u>take note</u> that it could not conclude its consideration of the request for revision AM_CLA_0197 on AM0063 "Recovery of CO₂ from tail gas in industrial facilities to substitute the use of fossil fuels for production of CO₂". The panel needs to discuss the possibility to broaden the applicability of the methodology to new plants. The panel expects to conclude its consideration of this issue at its forty-eighth meeting.
- 14. The panel requested the Board to <u>take note</u> that it could not conclude its consideration of the request for revision AM_REV_0202 on AM0028 "Catalytic N_2O destruction in the tail gas of Nitric Acid or Caprolactam Production Plants". The panel needs to gather and analyze information on the different terminologies used for various options for N_2O and NO_X reduction and assess the incorporation of the proposed S(N)CR notion to avoid any ambiguity. The panel expects to conclude its consideration at its forty-eighth meeting.

D. Revision to approved methodologies

15. AM0031 "Baseline Methodology for Bus Rapid Transit Projects"

The panel recommended the Board to approve a revision of the methodology AM0031 based on the request for revision AM_REV_0200. The draft revision expands the applicability of the methodology by allowing more gaseous fossil fuels to be used in the project scenario than in the baseline scenario. The revision does not increase the conservativeness of the methodology over its previous version. The draft revised methodology is contained in annex 1.

16. AM0070 "Manufacturing of energy efficient domestic refrigerators"

The panel recommended the Board to approve a revision of the methodology AM0070 based on the request for revision AM_REV_0190. The draft revision adds an option to calculate the market benchmark based on data from a national labelling scheme where such a labelling scheme exists and where labelled refrigerators are the most efficient refrigerators in the host country. The revision does not increase the conservativeness of the methodology over its previous version. The draft revised methodology is contained in annex 3.

- 17. AM0086 "Installation of zero energy water purifier for safe drinking water application" The panel recommended the Board to approve a revision of the methodology AM0086 to improve clarity and correct units of several parameters. The revision does not increase the conservativeness of the methodology over its previous version. The draft revised methodology is contained in annex 4.
- 18. ACM0006 "Consolidated methodology for electricity and heat generation from biomass residues"

The panel recommended the Board to approve a revision of the methodology ACM0006 based on the request for revision AM_REV_0199. The draft revision expands the applicability of the methodology to project activities that use biogas produced from wastewater treatment as fuel. The revision does not increase the conservativeness of the methodology over its previous version. The draft revised methodology is contained in annex 7.

19. ACM0014 "Mitigation of greenhouse gas emissions from treatment of industrial wastewater" The panel recommended the Board to approve a revision of the methodology ACM0014 based on the requests for revision AM_REV_0201. The draft revision expands the application of the methodology to include a situation in the project scenario where the wastewater is dewatered and

directed to land application. The revision does not increase the conservativeness of the methodology over its previous version. The draft revised methodology is contained in annex 8.

20. ACM0018 "Consolidated methodology for electricity generation from biomass residues in power-only plants"

The panel recommended the Board to approve a revision of the methodology ACM0018 based on the requests for revision AM_REV_0198. The draft revision expands the applicability of the methodology to project activities in which biomass residues undergo shredding, bricketting or pelletization prior to combustion. The revision does not increase the conservativeness of the methodology over its previous version. The draft revised methodology is contained in annex 9.

E. Requests from the Board to the Meth Panel

- 21. AM0034 "Catalytic reduction of N₂O inside the ammonia burner of nitric acid plants" In response to the request contained in paragraph 29 of the report of the fifty-sixth meeting of the Board, the panel recommended the Board to approve the revision of the methodology to include the definition of the abnormal campaign. The revision does not increase the conservativeness of the methodology over its previous version. The draft revised methodology is contained in annex 2.
- 22. AM0089 "Production of diesel using a mixed feedstock of gasoil and vegetable oil" In response to the request contained in paragraph 21 of the report of the fifty-sixth meeting of the Board, the panel considered whether consumers may be excluded from project boundary and agreed to recommend the Board to approve the revision of the methodology by excluding the consumers from the project boundary. The revision does not increase the conservativeness of the methodology over its previous version. The draft revised methodology is contained in annex 5.
- 23. ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources"

In response to the request contained in paragraph 25(a) of the report of the fifty-sixth meeting of the Board, the panel recommended the Board to approve a revision of the methodology to include a definition for a reservoir and apply approved clarification on the term "existing reservoir". The revision does not increase the conservativeness of the methodology over its previous version. The draft revised methodology is contained in annex 6.

24. Request from the Board for the Meth Panel to work on HFC projects

The panel requested the Board to <u>take note</u> that in response to the request contained in paragraph 25 of the report of the fifty-fifth meeting of the Board, the panel continued its work as requested with a view to deliver a report to be considered by the Board at its fifty-eighth meeting.

25. Methodology improvement. The revision of approved methodologies to further improve their objectivity, applicability, usability and consistency.

In response to the requests contained in paragraph 21 of the report of the forty-ninth meeting of the Board and paragraph 34 of the report of the fifty-sixth meeting of the Board, the panel requested the Board to <u>take note</u> that the panel analyzed 32 methodologies with the view to further improve their objectivity, applicability, usability and consistency. A list of the methodologies is contained in annex 11.

The panel identified several areas of improvement, including a broader use of conservative default values or discount factor, further improving the clarity and objectivity of the language, the development of new tools to ensure consistency among methodologies, the removal of minor emission sources and improvement in formulation of applicability conditions to ensure that the methodology is applied in a correct way. Based on this analysis, the panel agreed to initiate a revision of the following methodologies:

- (a) AM0055, with the view to improve the clarity of the language, to refer to relevant tools, to assess the internal consistency of the methodology and to consider the use of default values as a simplified option to determine baseline emissions;
- (b) ACM0007, with the view to improve the clarity of the language, to refer to relevant tools, to assess the internal consistency of the methodology and to simplify the methodology, where possible, by including the use of a default value for the difference between net and gross electricity generation.

The panel agreed to consider initiating further revisions at its next meeting. The panel also agreed to analyze 16 additional methodologies for consideration at its forty-eighth meeting.

26. "Tool to calculate the weighted average cost of capital (WACC)"

In response to the request contained in paragraph 28 of the report of the fifty-fifth meeting of the Board, the panel recommended the Board to approve a revision of the "Guidelines on the Assessment of Investment Analysis". The proposed revision provides further guidance on determining the financial benchmark, including guidance on the determination of the expected return on equity, the cost of debt and the percentage of debt and equity funding. The panel agreed that this additional guidance could be incorporated in the existing guidelines and therefore, the development of a new "Tool to determine the weighted average cost of capital", as envisaged earlier, may not be necessary.

A key element of the draft revised guidelines is a table providing default values for the expected return on equity for different project types by host countries. The default values are composed of a risk free rate, an equity premium, a country specific risk premium and an adjustment factor for different project types. The draft revised guidelines are contained in annex 10.

27. AM0024 "Baseline methodology for greenhouse gas reductions through waste heat recovery and utilization for power generation at cement plants"

The panel requested the Board to <u>take note</u> that it considered the issue related to the monitoring requirement of the parameter "Waste heat use within the cement works and normal uses of waste heat in cement production commonly practiced in the region or Host country", contained in the methodology AM0024, as per the request made by the Board, through the secretariat, while evaluating a specific project case requesting registration. The panel agreed that the requirement to monitor the above parameter is redundant, hence the parameter need not be monitored.

28. Guidance on how values should be validated or whether default values could be applied (AM0033, ACM0015)

In response to the request contained in paragraph 29(d) of the report of the forty-fifth meeting of the Board, the panel requested the Board to <u>take note</u> that further consideration of the issue is required before a final response is provided to the Board. The panel will continue to consider the issue at its forty-eighth meeting.

29. Methodological approaches applicable to the estimation of baseline emissions for possible CDM project activities using less GHG intensive raw materials in Greenfield cement plants (ACM0015)

In response to the request contained in paragraph t28 of the report of the fifty-third meeting of the Board, the panel requested the Board to <u>take note</u> that further consideration of the issue is required before a final response can be provided to the Board. The panel will continue to consider the issue at its forty-eighth meeting.

F. Requests from CMP

30. "Tool to calculate the emission factor for an electricity system"

The panel requested the Board to <u>take note</u> that it could not conclude its consideration of the "Tool to calculate the emission factor for an electricity system" to further improve it for project activities hosted in countries with a paucity of relevant data, including providing flexibility for the calculation of grid emission factors (paragraph 34 of decision 2/CMP5). The panel <u>agreed</u> to continue the consideration of the improvement of the tool at its forty-eighth meeting.

31. Methods for including in baseline and monitoring methodologies, as appropriate, a scenario where future anthropogenic emissions by sources are projected to rise above current levels due to specific circumstances of the host Party

The panel requested the Board to <u>take note</u> that it could not conclude its consideration of issues related to methods for including in baseline and monitoring methodologies, as appropriate, a scenario where future anthropogenic emissions by sources are projected to rise above current levels due to specific circumstances of the host Party (paragraph 35 of decision 2/CMP5). The panel <u>agreed</u> to continue the consideration of this issue at its forty-eighth meeting.

G. Issues of general guidance and tools

32. "Tool for baseline scenario identification and baseline emission calculations"

The panel agreed to request the Board to open a call for public comments on the draft "Tool for baseline scenario identification and baseline emission calculations". The call should be aimed at collecting opinions and ideas that might be used in further development of the tool in order to ensure that it meets expectations of project developers before it is recommended to the Board. The panel further requested the Board to organize a workshop with CDM stakeholders on the issues from the outcome of the call to be used as input for the discussion.

H. Schedule of meetings and rounds of submissions of proposed new methodologies

- 33. The panel confirmed that the date for its forty-seventh meeting is 15 16 November 2010, as per paragraph 40 of the report of the fifty-sixth meeting of the Board, this is an extraordinary meeting to allow the panel to finalize work on the request for the panel to, inter alia, continue work on HFC projects as contained in annex 19 of the report of the fifty-fifth meeting of the Board.
- 34. The panel also confirmed that the tentative date for its forty-eighth meeting is 17 21 January 2011, as per annex 5 of the report of the fifty-seventh meeting of the Board.
- 35. The panel informed project participants that methodologies could be submitted at anytime. Project participants may note that the deadline for the 37th round of submission of proposed new methodologies to be considered at the forty-eighth meeting of the panel on 17 21 January 2011 is 8 November 2010.

Following the guidance contained in paragraph 5 of the "Procedure for the submission and consideration of a proposed new baseline and monitoring methodology for large scale CDM project activities", the panel considers the proposed new methodologies submitted by a deadline at a subsequent meeting conditional to priorities set by the Board and if necessary, due to a high workload, further priorities set by the Chair of the Meth Panel.

36. The panel also informed project participants that the deadline for submission of requests for revision and requests for clarification to be considered at the forty-eighth meeting to be held from 17 - 21 January 2011 (tentative date as per annex 5 of the 57th meeting of the Board) shall be 29 November 2010, 24:00 GMT.

I. Roster of experts

37. The panel noted the satisfactory completion of the desk reviews undertaken for the proposed new methodologies.

Annexes to the external report of the forty-sixth meeting of the Methodologies Panel

- Annex 1: Draft revision of AM0031 "Baseline Methodology for Bus Rapid Transit Projects"
- Annex 2: Draft revision of AM0034 "Catalytic reduction of N₂O inside the ammonia burner of nitric acid plants"
- Annex 3: Draft revision of AM0070 "Manufacturing of energy efficient domestic refrigerators"
- Annex 4: Draft revision of AM0086 "Installation of zero energy water purifier for safe drinking water application"
- Annex 5: Draft revision of AM0089 "Production of diesel using a mixed feedstock of gasoil and vegetable oil"
- Annex 6: Draft revision of ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources"
- Annex 7: Draft revision of ACM0006 "Consolidated methodology for electricity and heat generation from biomass residues"
- Annex 8: Draft revision of ACM0014 "Mitigation of greenhouse gas emissions from treatment of industrial wastewater"
- Annex 9: Draft revision of ACM0018 "Consolidated methodology for electricity generation from biomass residues in power-only plants"
- Annex 10: Draft revision of the "Guidelines on the Assessment of Investment Analysis"
- Annex 11: List of methodologies and tools assessed by the Meth Panel for simplification and improvement
