

**REPORT OF THE FIFTY-FIRST MEETING OF
THE METHODOLOGIES PANEL**

Langer Eugen, UN Campus, Bonn, Germany

15 - 19 August 2011

**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. Philip Gwage opened the meeting.
2. The agenda was adopted as proposed.

B. Proposed new methodologies

3. The panel considered the proposed new methodologies listed in the table below, as well as desk reviews and public inputs received, where applicable.
4. 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>.
5. In accordance with the procedures for the submission and consideration of a proposed new methodology, project participants may submit to the secretariat, copying the DOE, clarifications to preliminary recommendations. If project participants provide the clarifications within four weeks of receiving the preliminary recommendation, then the panel considers the proposed new methodology at its next meeting. If project participants do not provide clarifications related to the preliminary recommendation within a timeframe of three months after the date of the published report of the Meth Panel meeting at which the proposed new methodology received its preliminary recommendation, the submission will be considered withdrawn.
6. The panel agreed on the following recommendations:

Table 1: Proposed new methodologies

Proposed new methodology	Recommendation¹
NM0292: Highly efficient power plant fuelled with blast furnace gas at TKCSA, in Rio de Janeiro, Brazil	A (see paragraph 7 and annexes 1 and 18)
NM0332: PFCs emission reduction from installation of an abatement device in a semiconductor manufacturing facility	A (see annex 2)
NM0334: Installation of high efficient technology for power transmission	A (see annex 3)
NM0338: Methodology for GHG emission reductions using advanced electric arc furnace integrated with high-efficiency shaft-type scrap preheater	Work in progress (see paragraph 8(a))

¹ 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.

NM0343: Methodology for RHF-based energy efficient iron-making technology	C
NM0344: Introduction of a New Natural Gas Based Gas Turbine Cogeneration in Existing CHP Facilities Connected to the Electricity Grid	Work in progress (see paragraph 8(b))
NM0345: Methodology for conversion of a Combined Cycle Power Plant to an Integrated Solar Combined Cycle (ISCC)	Work in progress (see paragraph 8(c))
NM0346: Utilization of ammonia-plant off gas for heat generation	A (see annex 4)
NM0347: Biomass residue co-firing at an existing or a new boiler(s)	A (see paragraph 9 and annex 5)
NM0349: Avoidance of N ₂ O formation by switching over to the catalytic oxidation with oxygen from oxidation with nitric acid in manufacturing of substituted benzoic acids at GIDC, Ankleshwar, India	C
NM0350: Improving Energy Efficiency in Data Centers through Dynamic Power Management	Preliminary recommendation

7. NM0292 “Highly efficient power plant fuelled with blast furnace gas at TKCSA, in Rio de Janeiro, Brazil”

In response to the request contained in paragraph 15 of the report of the sixty-second meeting of the Board, the panel requested the Board to take note of the information note providing the outcome of its consideration of the Board’s request. The information note is contained in annex 18.

8. The panel requested the Board to take note that it could not conclude its consideration of the following proposed new methodologies:

- (a) NM0338 “Methodology for GHG emission reductions using advanced electric arc furnace integrated with high-efficiency shaft-type scrap preheater”, as further work is needed on issues concerning: (i) the project boundary; (ii) the default baseline emission factors;
- (b) NM0344 “Introduction of a New Natural Gas Based Gas Turbine Cogeneration in Existing CHP Facilities Connected to the Electricity Grid”, as further work is needed on issues concerning: (i) the calculation of baseline emissions for the heat component; (ii) the determination of the lifetime of the existing boiler;
- (c) NM0345 “Methodology for conversion of a Combined Cycle Power Plant to an Integrated Solar Combined Cycle (ISCC)”, as further work is needed on issues concerning: (i) the calculation of electricity generation from solar heat; (ii) the identification of the monitoring points.

9. NM0347 “Biomass residue co-firing at an existing or a new boiler(s)”

The panel recommended the Board to approve the draft consolidated methodology based on the proposed new methodology NM0347 and the approved methodology AM0085 “Co-firing of biomass residues for electricity generation in grid connected power plants”. Consequently, the panel also recommended the Board to withdraw the approved methodology AM0085 as it is fully incorporated into the new consolidated methodology.

C. Development of new methodologies and tools

10. Top-down development of the draft methodology “Renewable energy power generation in isolated grids”

In response to the task of developing top-down methodologies and tools, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it developed a first draft of the methodology. The panel recommended the Board to launch a call for public inputs on the draft methodology, with the aim that the panel may take these inputs into consideration while preparing the final draft of the methodology to be recommended to the Board for approval at a future meeting. The panel will also consider at its next meeting the possibility to include procedures to allow renewable energy projects using biomass residues to use the methodology, and whether elements of this methodology could be integrated in the “Tool to determine the emission factor of an electricity system”. The draft methodology is contained in annex 6.

11. Top-down development of the draft methodological tool “Project and leakage emissions from composting”

In response to the task of developing top-down methodologies and tools, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it developed a first draft of the tool. The tool calculates project and leakage emissions associated with the composting process, and it offers options for estimating most parameters, using conservative default values or monitored data. The panel also recommended the Board to launch a call for public inputs on the draft tool, with the aim that the panel may take these inputs into consideration while preparing the final draft of the tool to be recommended to the Board for approval at a future meeting. The draft tool is contained in annex 13.

12. Top-down development of the draft methodological tool “Project and leakage emissions from road transportation of freight”

In response to the task of developing top-down methodologies and tools, as contained in the 2011 work plan of the panel, the panel recommended the Board to approve the draft tool. The draft tool offers project participants two options to determine emissions from freight transport by allowing for the monitoring of the actual fuel consumption or by using conservative default values. The draft tool is contained in annex 14.

D. Revisions of approved methodologies and tools

13. The panel requested the Board to consider the following responses to requests for revision related to the application of approved baseline and monitoring methodologies and methodological tools. The requests submitted and the responses provided by the panel are made publicly available on the UNFCCC CDM website at <<http://cdm.unfccc.int/methodologies/PAmethodologies/revisions>> and <<http://cdm.unfccc.int/methodologies/PAmethodologies/tools-revisions>>.

Table 2: Requests for revision

Number of the request for revision	Approved methodology or tool	Title of the request for revision	MP response
AM_REV_0212	ACM0006	Inclusion of mechanical and other forms of power in the methodology	To amend (see paragraph 19)
AM_REV_0213	ACM0005	Consolidated Baseline Methodology for Increasing the Blend in Cement Production	Work in progress (see paragraph 18)

AM_REV_0214	AM0029	To enlarge the applicability of AM0029 to power plants using secondary fuels beside natural gas and to situations where natural gas is insufficiently available, option 1	Not to revise
AM_REV_0215	AM0029	To enlarge the applicability of AM0029 to power plants using secondary fuels beside natural gas and to situations where natural gas is insufficiently available, option 2	Not to revise
AM_REV_0216	AM0036	Request for revision of approved methodology AM0036	Not to revise
AM_REV_0217	AM0009	Partial utilization of the recovered associated gas and/or gas-lift gas as one of the possible baseline scenarios	Work in progress (see paragraph 14)
AM_REV_0218	AM0009	Inclusion of prior processing with mobile facilities and transport CNG to gas pipeline in AM0009	Work in progress (see paragraph 14)
AM_REV_0219	AM0009	Revision of AM0009 to expand its applicability to project activities which recovered gas is first compressed to CNG (Compressed Natural Gas), then transported via trailers or carriers, and later decompressed and gasified again, before it finally enters the gas pipelines to end-users	Work in progress (see paragraph 14)
AM_REV_0220	ACM0017	Revision to: 1) Exclude biodiesel end-users from project boundary. 2) Simplify the applicability regarding consumption of biodiesel. 3) Use 2 methods for determination of BDy in different cases	Not to revise

14. AM0009 “Recovery and utilization of gas from oil wells that would otherwise be flared or vented”

The panel requested the Board to take note that it could not conclude its consideration of the requests for revision AM_REV_0217, AM_REV_0218 and AM_REV_0219 on AM0009, as further work is needed on issues concerning:

- (a) The partial on-site/off-site recovery of associated gas before the project implementation;
- (b) The implications of movable gas processing plants; and
- (c) Adjustments to the baseline and project activity diagram.

15. AM0023 “Leak reduction from natural gas pipeline compressor or gate stations”

In response to the task of improving approved methodologies and tools, as contained in the 2011 work plan of the panel, the panel recommended the Board to approve a draft revision of the approved methodology AM0023. The draft revision, inter alia:

- (a) Expands the applicability of the methodology to refinery gas and other natural gas operations;

- (b) Introduces an additional alternative to calculate baseline and project emissions using default values;
- (c) Removes one measurement method to determine baseline emissions, as the method was not regarded as appropriate in the context of the applicable project activities; and
- (d) Undertakes several editorial improvements.

The draft revised methodology was finalized at the fiftieth meeting of the panel. Subsequently, the Chair of the panel launched a call for public inputs on the draft and these inputs were considered by the panel during the finalization of the draft revision to the methodology. The draft revised methodology is contained in annex 7.

16. AM0031 “Baseline methodology for bus rapid transit projects”

In response to the task of improving approved methodologies and tools, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it has continued its work to improve the approved methodology AM0031. The panel intends to continue its work on the methodology at a future meeting.

17. AM0034 “Catalytic reduction of N₂O inside the ammonia burner of nitric acid plants”

In response to the request for clarification AM_CLA_0211, the panel recommended the Board to approve a draft editorial amendment of the approved methodology AM0034. The draft editorial amendment provides more clarity on how baseline as well as project data should be analyzed. The draft editorially amended methodology is contained in annex 8.

18. ACM0005 “Consolidated Baseline Methodology for Increasing the Blend in Cement Production”

The panel requested the Board to take note that it could not conclude its consideration of the request for revision AM_REV_0213 on ACM0005, as further work is needed on issues concerning:

- (a) How to assess a benchmark for the blending in cement, taking into consideration imports;
- (b) Monitoring of parameters; and
- (c) Adjustment to the algorithms.

19. ACM0006 “Consolidated methodology for electricity and heat generation from biomass residues”

In response to the request for revision AM_REV_0212, the panel recommended the Board to approve a draft amendment of the approved methodology ACM0006. The draft amendment broadens the applicability of the methodology to situations where mechanical energy is produced using process heat generated from biomass. Furthermore, the panel agreed to amend the methodology to increase the maximal share of the co-fired fossil fuels, in the total fuel fired, from 50% to 80% on an energy basis. The panel also agreed to introduce the identical change in the methodology ACM0018 “Consolidated methodology for electricity generation from biomass residues in power-only plants” for consistency reasons, as indicated in paragraph 23 of this report. The draft amended methodology is contained in annex 9.

20. ACM0013 “Consolidated baseline and monitoring methodology for new grid connected fossil fuel fired power plants using a less GHG intensive technology”

In response to the request contained in paragraph 19 of the report of the sixty-second meeting of the Board, the panel requested the Board to take note that the panel was not able to conclude its thorough analysis on the issues related to the methodology ACM0013, as identified in the information note prepared by the panel at its fiftieth meeting. The panel could not gather the necessary data and expertise required to undertake the analysis within the short timeframe since the sixty-second meeting of the Board. The panel intends to finalize its analysis and the report at its next meeting.

21. ACM0016 “Baseline Methodology for Mass Rapid Transit Projects”

In response to the task of improving approved methodologies and tools, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it prepared a draft revision of the approved methodology ACM0016. The draft revision:

- (a) Introduces a new innovative approach to additionality demonstration;
- (b) Reduces key monitoring requirements;
- (c) Removes an applicability condition requiring a demonstration that the project system partially replaces a traditional public transport system in the city hosting the proposed project activity;
- (d) Removes the requirement to conduct a sensitivity analysis of data and parameters used to determine baseline, project and leakage emissions;
- (e) Introduces references to relevant approved tools and guidelines; and
- (f) Improves the language, readability and consistency of the methodology.

Furthermore, in accordance with paragraph 21(a) of the “Procedure for the submission and consideration of requests for revisions of approved baseline and monitoring methodologies and tools for large scale CDM projects”, the Chair of the panel launched a call for public inputs on the draft revised methodology ACM0016, starting on 29 August 2011. The call will be open for 10 calendar days. The draft revised methodology is contained in annex 10.

22. ACM0017 “Production of biodiesel for use as fuel”

During its consideration of the request for revision AM_REV_0220, the panel identified and improved several issues in the methodology ACM0017. Consequently, the panel recommended the Board to approve a draft amendment of the approved methodology. The draft amendment:

- (a) Simplifies the determination of quantity of biodiesel eligible for crediting in year y; and
- (b) Improves the methodology by:
 - (i) Including missing parameters in the monitoring table;
 - (ii) Removing not required parameters from the monitoring table; and
 - (iii) Correcting editorial errors in the description for several parameters.

The draft amended methodology is contained in annex 11.

23. ACM0018 “Consolidated methodology for electricity generation from biomass residues in power-only plants”

During its consideration of the amendment to the methodology ACM0006 “Consolidated methodology for electricity and heat generation from biomass residues”, as presented in paragraph 19 of this report, the panel agreed that the proposed change should also be introduced in the methodology ACM0018 for consistency reasons. Consequently, the panel recommended the Board to approve a draft amendment of the approved methodology ACM0018 to increase the maximal share of the co-fired fossil fuels, in the total fuel fired, from 50% to 80% on an energy basis. The draft amended methodology is contained in annex 12.

24. “Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site”

In response to the task of improving approved methodologies and tools, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it finalized a draft revision of the tool. The draft revision:

- (a) Updates the procedures for the estimation of several parameters;
- (b) Improves the usability of the tool by providing a monthly estimation model, a definitions section and clarity on monitoring requirements; and
- (c) Expands its applicability to stockpiles.

In accordance with paragraph 21(a) of the “Procedure for the submission and consideration of requests for revisions of approved baseline and monitoring methodologies and tools for large scale CDM projects”, the Chair of the panel launched a call for public inputs on the draft revised tool due to its technical complexity, starting on 29 August 2011. The call will be open for 10 calendar days. The draft revised tool is contained in annex 15.

25. “Tool to calculate the emission factor for an electricity system”

The panel:

- (a) In response to the requests contained in paragraph 25 of the report of the fifty-fourth meeting of the Board and in paragraph 32 of the report of the fifty-sixth meeting of the Board, concerning the analysis to determine if the use of *ex-ante* dispatch analysis is suitable when compared with other methods of estimating the operating margin, requested the Board to take note that the panel concluded its analysis of the issue. In that regard, the panel agreed that the use of *ex-ante* dispatch analysis is not suitable when compared with other methods of estimating the operating margin. The panel also requested the Board to take note of an information note which outlines the analysis performed by the panel and substantiates its conclusion. The information note is contained in annex 20.
- (b) Further recommended the Board to approve a draft editorial amendment of the tool. The draft editorial amendment corrects equations (4) and (6) in the tool, and provides other editorial improvements. The draft editorially amended tool is contained in annex 16.

26. “Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period”

With regard to the tool, the panel:

- (a) In response to the requests contained in paragraph 30 of the fifty-sixth meeting of the Board and paragraph 43 of the report of the sixtieth meeting of the Board, concerning a revision of the tool in order to cover cases when the end of the technical lifetime of the baseline equipment occurs before the end of the crediting period, recommended the Board to approve a draft amendment of the tool, which is annexed to the “Procedures for renewal of the crediting period of a registered CDM project activity”. The draft amended tool is contained in annex 17.
- (b) In response to the request contained in paragraph 31 of the fifty-sixth meeting of the Board, requested the Board to take note that the panel considered the request to adjust all methodologies which are identified as not complying with the Board ruling on the reassessment of baseline emissions by removing reference to the reassessment of the baseline scenario. The panel agreed to address this request by initiating the revision of methodologies and prioritize those methodologies that are used by CDM project activities currently requesting the renewal of the crediting period.

- (c) Further requested the Board to take note that it discussed the possible need to provide further guidance in the tool, concerning the consideration of changes in circumstances at the renewal of the crediting period. The panel did not reach consensus on this matter and, therefore, agreed to request the Board to consider the following two different views from the panel:
- (i) It is considered that further guidance in the tool is required regarding the assessment of circumstances at the renewal of the crediting period, for the case where the baseline is the continuation of the current practice without any investment. The proposed amendment is reflected within brackets in the draft revised tool contained as an appendix in the information note, prepared by the panel, referred to hereunder;
 - (ii) It is considered that further guidance in the tool is not required regarding the assessment of circumstances at the renewal of the crediting period.

The arguments for the different views are elaborated in an information note prepared by the panel. The information note is contained in annex 21.

E. Clarifications to approved methodologies and tools

27. The panel requested the Board to consider the following responses to requests for clarification related to the application of approved baseline and monitoring methodologies and methodological tools. The requests submitted and the responses provided by the panel are made publicly available on the UNFCCC CDM website at <<http://cdm.unfccc.int/methodologies/PAmethodologies/clarifications>> and <<http://cdm.unfccc.int/methodologies/PAmethodologies/tools-clarifications>>. If requests for clarification resulted in a recommendation by the panel to revise an approved methodology or approved tool they are reflected in section D.

Table 3: Requests for clarification

Number of the request for clarification	Approved methodology or tool	Title of the request for clarification	MP response
AM_CLA_0210	AM0025	Clarification regarding the identification of the baseline alternative scenarios	Clarified
AM_CLA_0211	AM0034	Clarification on the meaning of “extreme values” when considering the measurements for the statistical analysis	Clarified (see paragraph 17)
AM_CLA_0212	AM0034	Calculation of project emission factor and moving average for cases where the abatement catalyst is installed after the start of a campaign	Clarified
AM_CLA_0213	AM0035	Application of AM0035 in case data does not exist enough	Clarified
AM_CLA_0214	AM0045	Proposals for the monitoring plan and applicability in order to permit projects in initial phases to apply CDM	Clarified Fast track
AM_CLA_0215	ACM0002	Definition of an existing reservoir	Clarified Fast track
AM_CLA_0216	ACM0012	Application of ACM0012 to PoA	Work in progress (see paragraph 28)

28. The panel requested the Board to take note that it could not conclude its consideration of the request for clarification AM_CLA_0216 on the use of ACM0012 "Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects" under a PoA. The panel also requested the Board to consider the information note on the issues identified by the panel in relation to the request. The information note is contained in annex 19.

F. Other issues

29. Development of standardized baselines derived from approved methodologies

In response to the task of developing standardized baselines, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it identified the following approved methodologies and tools as possible candidates for the development of standardized baselines derived from approved methodologies:

- (a) AM0070: "Manufacturing of energy efficient domestic refrigerators";
- (b) AM0091: "Energy efficiency technologies and fuel switching in new buildings";
- (c) AM0057: "Avoided emissions from biomass wastes through use as feed stock in pulp and paper, cardboard, fibreboard or bio-oil production"; and
- (d) "Tool to calculate the emission factor for an electricity system".

30. Review of the draft tables of calculation developed by the secretariat

In response to the task of developing tables of calculation for approved methodologies, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that the tables of calculation for three tools, as prepared by the secretariat, have been reviewed by the panel and are deemed as appropriate, after editorial comments from the panel are incorporated. The tables for the following tools were reviewed:

- (a) "Tool to calculate the emission factor for an electricity system";
- (b) "Tool to calculate baseline, project and/or leakage emissions from electricity consumption";
- (c) "Tool to determine the mass flow of a greenhouse gas in a gaseous stream".

31. Work plan for the "Guidelines for the establishment of sector specific standardized baselines"

In response to the request contained in paragraph 35 of the sixty-second meeting of the Board, the panel requested the Board to take note that it has considered a draft work programme, as prepared by the secretariat, to further improve and implement the "Guidelines for the establishment of sector specific standardized baselines" and that it provided feedback on the draft. The secretariat has taken note of the feedback and it will be considered during the finalization of the work programme to be presented to the Board.

32. Work plan for the "Guidelines on the consideration of suppressed demand in CDM methodologies"

In response to the request contained in paragraph 33 of the sixty-second meeting of the Board, the panel requested the Board to take note that it has considered a draft work programme, as prepared by the secretariat, to further improve and implement the "Guidelines on the consideration of suppressed demand in CDM methodologies" and that it provided feedback on the draft. The secretariat has taken note of the feedback and it will be considered during the finalization of the work programme to be presented to the Board.

G. Schedule of meetings and rounds of submissions

33. The panel confirmed that the date for its fifty-second meeting is 3 to 7 October 2011, as per annex 16 of the report of the sixty-second meeting of the Board.

34. 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 proposed new methodologies submitted by a deadline at a subsequent meeting conditional to priorities set by the Board and by the Chair of the panel.

35. Project participants may note that the deadline for the 42nd round of submissions of proposed new methodologies to be considered at the fifty-second meeting was 8 August 2011 and the deadline for the 43rd round of submissions of proposed new methodologies to be considered at the fifty-third meeting, to be held on 31 October to 4 November 2011, was 5 September 2011, 24:00 GMT.

36. The panel also informed project participants that the deadline for the submission of requests for revision and clarification to be considered at the fifty-second meeting was 22 August 2011, 24:00 GMT.

H. Desk Reviews

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

Annexes to the external report of the fifty-first meeting of the Methodologies Panel

- Annex 1: Draft reformatted baseline and monitoring methodology based on NM0292;
- Annex 2: Draft reformatted baseline and monitoring methodology based on NM0332;
- Annex 3: Draft reformatted baseline and monitoring methodology based on NM0334;
- Annex 4: Draft reformatted baseline and monitoring methodology based on NM0346;
- Annex 5: Draft reformatted consolidated baseline and monitoring methodology based on NM0347 and AM0085;
- Annex 6: Draft methodology “Renewable energy power generation in isolated grids”;
- Annex 7: Draft revision of AM0023 “Leak reduction from natural gas pipeline compressor or gate stations”;
- Annex 8: Draft editorial amendment of AM0034 “Catalytic reduction of N₂O inside the ammonia burner of nitric acid plants”;
- Annex 9: Draft amendment of ACM0006 “Consolidated methodology for electricity and heat generation from biomass residues”;
- Annex 10: Draft revision of ACM0016 “Baseline Methodology for Mass Rapid Transit Projects”;
- Annex 11: Draft amendment of ACM0017 “Production of biodiesel for use as fuel”;
- Annex 12: Draft amendment of ACM0018 “Consolidated methodology for electricity generation from biomass residues in power-only plants”;
- Annex 13: Draft methodological tool “Project and leakage emissions from composting”;
- Annex 14: Draft methodological tool “Project and leakage emissions from road transportation of freight”;
- Annex 15: Draft revision of the “Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site”;
- Annex 16: Draft editorial amendment of the “Tool to calculate the emission factor for an electricity system”;
- Annex 17: Draft revision of the “Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period”;
- Annex 18: Information note on NM0292 “Highly efficient power plant fuelled with blast furnace gas at TKCSA, in Rio de Janeiro, Brazil”;
- Annex 19: Information note on AM_CLA_0216 regarding the application of approved methodology ACM0012 to PoAs;
- Annex 20: Information note on requests concerning the use of *ex-ante* dispatch analysis for estimating the operating margin;
- Annex 21: Information note on the “Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period”.