

**REPORT OF THE EIGHTH MEETING
OF THE SMALL-SCALE WORKING GROUP**

UNFCCC Headquarters, Bonn, Germany
4 - 6 December 2006

RECOMMENDATIONS BY THE SSC WG TO THE EXECUTIVE BOARD

A. Opening of the meeting and adoption of the agenda

1. The Vice Chair of the Small Scale Working Group (SSC WG), Mr. Richard Muyungi opened the meeting.
2. The agenda was adopted as proposed.

**B. Revision of the simplified modalities and procedures
for small-scale CDM project activities**

3. The SSC WG considered the requests for clarifications/revisions related to the application of approved SSC methodologies. The requests submitted and the responses provided by the SSC WG are made publicly available on the UNFCCC CDM web site at:
<http://cdm.unfccc.int/methodologies/SSCmethodologies/Clarifications>.
4. The SSC WG took into account of the methodological issues in the submissions and made recommendations for new methodologies in section C, revision & response to revision of approved methodologies in section D, response to request for new methodologies in section E and response to clarification in section F, below.

Submission number	Title	Recommendations
SSC_065	Request to revise AMS.I.D to include weighted average grid CEF calculation.	Refer to section D
SSC_066	Proposed new type III category for avoidance of fluorinated gas fugitive emissions in air conditioning systems and refrigeration applications.	Refer to section E
SSC_067	Request for clarification on the applicability of AMS III.H	Refer to section D
SSC_068	Proposed new Type III category - Avoidance of methane production from biomass decay through controlled pyrolysis	Refer to section E
SSC_069	Proposed new Type III category - Chemical and biological stabilization of solid waste carbon content for permanent storage, through controlled pyrolysis.	Refer to section E
SSC_070	Proposed new Type III category - Avoidance of methane production from palm oil mill effluent and empty fruit bunches (solid waste) through co-compositing.	Refer to section D
SSC_071	Revision of AMS I.C to include technical line losses where electricity is the baseline.	Refer to section D
SSC_072	Request for revision of AMS II.C to include additional option for monitoring of operating hours under AMS II.C.	Refer to section D
SSC_073	Clarification on fuel switch from fossil fuel to blended fuel	Refer to section F
SSC_074	Proposed new Type III category - Reduction in consumption of electricity by recovering soda from paper manufacturing process	Refer to section E

C. Recommendations for new methodologies

5. Taking into account the submissions SSC_059 and SSC_053, the SSC WG agreed to recommend a new small scale category titled **SSC III.K** for the ‘Avoidance of methane release from charcoal production by shifting from pit method to mechanized charcoaling process’ as contained in annex 1. The new category is applicable to:

(a) Activities that avoid the release of methane from pit charcoal production by producing charcoal in new facility(ies) equipped with recovery and flaring/combustion of methane generated in the production process;

(b) Where no relevant changes in greenhouse gas emissions other than methane, occur as a consequence of the project activity and/or need to be accounted for, except for the possibilities of leakage;

(c) The implementation of the project activity does not result in changes in the type and source of biomass raw material used for the production of charcoal (e.g. if in the baseline charcoal was produced from coconut shells, the project activity will only produce charcoal from coconut shells).

6. In making these recommendations the SSC WG took into account the approach of the approved methodology AM0041 for the ‘Mitigation of Methane Emissions in the Wood Carbonization Activity for Charcoal Production’.

D. Revision & requests for revision of approved methodologies

7. **Revision of AMS III.E:** In response to the submissions SSC_054 and SSC_056 the SSC WG agreed to recommend revision of AMS III.E, as contained in annex 2. The proposed revision of the category included the following changes:

(a) The applicability conditions were expanded to include biomass wastes that have been already disposed in a landfill site and therefore are partially degraded;

(b) Options for the calculation of age distribution of the waste and the related methane emissions avoided, which can be determined:

- (i) based on the weighted average age of the waste; or
- (ii) based on the yearly methane generation potential of the disposal site and the relative amount of waste removed from it for combustion; or
- (iii) based on the profile of the disposal site and historic waste disposal data.

(c) Parameters of the first order decay (FOD) model have been revised in accordance with the Methodological Tool titled “Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site”, available on the CDM website¹.

8. **Revision of AMS III.G:** The SSC WG agreed to recommend revisions to AMS III.G to take into account the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. The revised category, as contained in annex 3, includes a revision of the parameters of the first order decay (FOD) model as per the Methodological Tool titled “Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site”, available on the CDM website¹.

9. **Revision of AMS I.D:** The SSC WG took into account the recommendations of the Meth Panel (annex 9 of the twenty-third meeting of the Meth Panel) on type I capacity addition activities and agreed

¹ <http://cdm.unfccc.int/Reference/Guidclarif>

to recommend a revision to AMS I.D, as contained in annex 4. The proposed revision includes the following changes:

- (a) Only the aggregate capacity of the units added to the project determines the eligibility of the project as a small-scale project i.e. the output capacity of the added units is less than or equal to 15 MW;
- (b) The added units need to be physically distinct for the project to be eligible;
- (c) Where the existing and added units share the use of common and limited renewable resources (e.g. stream flow, reservoir capacity, biomass residues), the category provides procedures to:
 - (i) address situations where the project activity may reduce the amount of renewable resource available to existing units and thereby the electricity generation by these units, and;
 - (ii) address the situations of the existing units shutting down, being derated, or otherwise limiting their electricity generation capacity.

10. **Revision of AMS I.C:** The SSC WG agreed to recommend revisions to the guidance on capacity addition and retrofit activities under AMS I.C to be consistent with the revisions of AMS I.D, as contained in annex 5.

11. **Revision of AMS I.A:** The SSC WG agreed to recommend the following revisions to AMS I.A, as contained in annex 6 to maintain consistency across categories particularly in relation to AMS I.D. The revisions include revised guidance on capacity addition activities and a default emission coefficient of 0.8 kg CO₂ /kWh for diesel generation, as opposed to 0.9 kg CO₂ /kWh.

12. **Revision of AMS II.D:** The SSC WG agreed to recommend revision of AMS II.D to broaden the applicability of the category to include retrofit project activities as contained in annex 7.

13. Furthermore the SSC WG agreed to recommend a definition of ‘retrofit’ to be included in the CDM glossary of terms, pertinent to SSC CDM, as follows: “To modify existing industrial, commercial and residential facilities, automobiles, energy conversion systems etc. which are already in service using new, improved or more efficient parts and equipment developed or made available after the time of original manufacture or installation of the facility. The retrofit should also be consistent with the current guidance by the Board on the lifetime of plants and equipment”.

14. **Revision of AMS III.H:** In response to the submission SSC_067, the SSC WG agreed to recommend a revision of AMS III.H to broaden its applicability to include activities that add a sequential stage of anaerobic wastewater treatment with methane recovery to the existing wastewater treatment system without methane recovery, as contained in annex 8. Furthermore the following changes were proposed to the category taking into account the 2006 IPCC Guidelines for National Greenhouse Gas Inventories:

- (a) A range of values for the methane correction factor (MCF) determined by wastewater discharge pathways or type of treatment has been provided;
- (b) More accurate default values for the estimation of emissions from sludge treatment, particularly for degradable organic carbon (DOC) and methane correction factor (MCF) have been provided.

15. **Revision of AMS III.I:** As requested by the Board at its twenty-fifth meeting the SSC WG analyzed the applicability conditions of AMS III.I particularly those relating to temperature. The SSC WG noted that the IPCC 2006 Guidelines (for example Chapter 6, item 6.3.1.1) have considered that “below 15°C, significant methane production is unlikely as methanogens are no longer active, and the lagoon will serve principally as a sedimentation tank, but when the temperature rises above 15°C methane production is likely to resume”. The WG further noted that the equations for simplified baseline

calculations in AMS III I do not factor the temperature at which methane generation takes place. The SSC WG agreed to recommend that for activities applying AMS III.I in geographic locations where lagoon temperature is above 15⁰C for only a part of the year, only those months are to be accounted for in the calculation of baseline emissions. The WG agreed to recommend further revisions to the AMS III.I, analogous to AMS III.H based on 2006 IPCC Guidelines for National Greenhouse Gas Inventories. The revised category is contained in annex 9.

16. **Revision of AMS III.F:** In response to the submission SSC_070, the SSC WG agreed to recommend revisions to AMS III.F, as contained in annex 10, which includes:

(a) Expanding the applicability of the category to include co-composting of wastewater along with biomass solid wastes, and;

(b) Methods to calculate baseline emissions from the co-composted wastewater, which are analogous to the revised methods of AMS III.H detailed above, and;

(c) Revised parameters for avoided methane emissions from the composted solid waste, as per the Methodological Tool titled “Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site”, available on the CDM website¹.

17. **Request for revision of AMS I.C to include technical line losses where electricity is the baseline (SSC_071):** The submission requested an amendment to AMS I.C to account for technical line losses in situations where grid electricity is the baseline quoting that this is provided for under AMS I.D. The SSC WG clarified that the combined margin approach of AMS I.D is a method to estimate the emission factor of a hypothetical plant that would have been used in the absence of the project activity. The CDM project activity may have two impacts on the grid i.e. to delay the investment in new plants and to reduce the dispatch of present plants. As the combined margin is a means to estimate a counterfactual baseline scenario the SSC WG agreed to clarify that it is not possible to expand the estimation method applying a factor to consider the technical line losses.

18. To ensure consistency between methodologies the SSC WG agreed to recommend revisions of AMS II.C, AMS II.D, AMS II.E and AMS II.F to exclude technical line losses from the calculation, as contained in the annexes 11, 7, 12 and 13.

19. **Request for revision of AMS I.D to include weighted average grid CEF calculation (SSC_065):** In response to this request, the SSC WG clarified that, for the option 9.b to calculate emission coefficient in AMS I.D, the calculation of the weighted average emissions of the current generation mix should be done ex post, every year during the crediting period, and that for the purpose of emission reduction estimation in the PDD, the most recent available information at the time of the PDD submission shall be considered. The SSWG also clarified that if the project proponent considers this option impractical for the project then option 9.a could be used. In that case the emission factor is calculated as a combined margin (CM) consisting of the average of the operating margin (OM) and build margin (BM) factors. Three of the four options for the OM calculation (simple OM, simple adjusted OM and average OM) and the BM calculation could be performed ex ante, using the last available data at the time of the PDD submission

20. **Request for revision of AMS II.C to include additional option for monitoring of operating hours under AMS II.C (SSC_072):** The SSC WG considered the submission and agreed that the suggested amendments to change the monitoring requirements to rated/estimated lifetime of the devices do not provide a credible alternative to the existing options for monitoring.

E. Response to request for new methodologies

21. **Request for a new Type III methodology for avoidance of fluorinated gas fugitive emissions in the refrigeration and air conditioning sector (SSC_066):** The SSC WG agreed not to accept the proposal in its current form for the following reasons:

(a) It is not credibly demonstrated that the used HFC refrigerant that is replaced with hydrocarbon refrigerants will be destroyed or other measures are taken to ensure it is permanently stabilized or disposed or stored, nor does the proposed methodology includes 'leakage' calculations to address inefficiencies concerning recovery and disposal of used refrigerant.

(b) The methodology as proposed is applicable to diverse applications such as domestic refrigeration, commercial refrigeration (cold storage, retail food, transport refrigeration), industrial process refrigeration, motor vehicle air-conditioning (cars, trucks, buses, trains), and domestic and commercial air-conditioning including chillers. The percentage of HFC emissions of lifetime system GHG emissions for certain application sectors is reported² to be low (e.g. 2-3% for domestic refrigeration), hence there is no justification provided for the inclusion of these sectors in the proposed methodology.

22. **Request for a new Type III methodology for reduction in consumption of electricity by recovering soda from paper manufacturing process (SSC_074):** In response to the request the SSC WG agreed to request further improvements to the proposed methodology, which includes the following:

(a) In calculating emissions in the baseline scenario, the caustic soda statistics that will be used should exclude imports of the material to ensure that emission reductions are only claimed for the supply of the materials produced in the in-country facilities;

(b) The monitoring protocol for this method should include the monitoring of specific energy consumption of electricity in the in-country caustic soda production facilities to ensure that the baseline premises of higher specific emissions remain valid through the crediting period.

23. **Request for a new Type III methodology - Avoidance of methane production from biomass decay through controlled pyrolysis (SSC_068):** The SSC WG agreed that the proposed methodology requires further work by the project proponents, which includes the following:

(a) For wastes disposed in landfills the use of the FOD model will correctly calculate the baseline emissions. This will not be correct for wastes deposited in unmanaged waste dumps, as the use of the FOD model in this case will lead to an overestimation of baseline emissions;

(b) A framework, similar to that used in the approved methodology AM0025, may be more appropriate for determining the fractions of biogenic and non-biogenic components of the waste.

24. **Request for a Type III methodology - Chemical and biological stabilization of solid waste carbon content for permanent storage, through controlled pyrolysis (SSC_069):** The SSC WG noted the submission related to the conversion of renewable biomass to activated carbon using pyrolysis, a thermo-chemical conversion process. The methodology proposed calculating emission reductions for avoiding methane emissions and for fixing carbon, with the latter comprising the larger portion of the emission reductions. The SSC WG agreed that the carbon fixation portion in this proposed methodology involves the removal of GHG from the atmosphere and could therefore be considered as a sequestration project activity and requested guidance from the Board on how to proceed in this regard.

² Safeguarding the ozone layer and the global climate system- Issues related to Hydrofluorocarbons and Perfluorocarbons, IPCC TEAP (2005)

F. Response to request for clarification

25. **Clarification on fuel switch to biofuel or blended biofuel (SSC_073):** The submission requested a clarification on application of AMS III.C for activities in transport sector, that displace partially the diesel fuel use, by biofuel or blends of biofuel. The SSC WG agreed that currently AMS III.C is not applicable to activities involving use of biofuel, as the category does not include the calculation of emissions pertaining to the production of biofuels, nor does it reflect the guidance by the Board on double counting of emission reductions.

G. Response to deviation

26. The SSC WG considered the request for deviation for a project activity applying AMS I.D and agreed that the procedure provided to demonstrate that only biomass and no fossil fuel can be combusted is acceptable. Therefore the project proponents need not monitor the amount of biomass combusted.

H. Development of new type III categories without a 25 ktCO₂e/yr limit

27. The Board at its twenty fourth meeting noted that type III project activities may be able to achieve significant emission reductions, without exceeding the direct emissions limits i.e.15 kilo tonnes CO₂e, and requested the SSC WG to develop new type III categories including procedures for more precise estimations of emission reductions and more detailed monitoring by the SSC WG seventh meeting. The Board also agreed to include in the applicability conditions a 25 ktCO₂e/yr limit on annual emission reductions of all Type III categories as an interim measure. Noting that the definitions of type II and III project activities have been revised by the COP/MOP at its second session, the SSC WG agreed to recommend to suspend further work on developing the new type III categories, as requested by the Board at EB24, and further recommended to remove the applicability condition 25 ktCO₂e/yr limit on annual emission reductions of all Type III categories, as the SSC WG has since recommended revisions to a number of these categories to include more precise estimations of emission reductions and monitoring provisions.

I. Project activities with more than one component

28. The SSC WG agreed to recommend for inclusion in the CDM glossary of terms, pertinent to SSC CDM, a definition of 'project activity with more than one component' (e.g. methane recovery and production of electricity from the recovered methane) as follows: "a single project activity composed of two or more distinct project activities being implemented by the same project participant, each applying an approved category/methodology separate from the other. Each component of a project activity should receive or provide an input from/to other components of the project activity".

29. The SSC WG further agreed to recommend that the sum of the size of components of a project activity belonging to the same type (capacity for type I, energy savings for type II and emission reductions for type III) should not exceed the limits for small-scale CDM project activities as set in paragraph 28 of the decision -/CMP.2.

30. The SSC WG further agreed to recommend that a project activity with more than one component may submit one PDD, provided the information regarding the sections covering the type and categories and technology / measure of the SSC project activity and application of the baseline and monitoring methodology in the CDM-PDD are provided separately for each component.

J. Revision of the Guidelines for completing CDM-SSC-PDD, forms and CDM Glossary

31. The SSC WG agreed to recommend the revision of Guidelines for completing CDM-SSC-PDD and F-CDM-SSC-Subm, F-CDM-Bundle, and the CDM project design document for small-scale activities CDM-SSC-PDD, as contained in annexes 14 and 15. In recommending these revisions the SSC WG took into account the Guidelines for completing CDM-PDD, CDM-NM. The SSC WG also

recommended revisions to the CDM glossary of terms, over and above those proposed in paragraphs 13 and 28 above, as contained in annex 16.

K. Revision of General guidance on leakage in biomass project activities

32. The SSC WG agreed to recommend to revise the general guidance on leakage in biomass project activities (attachment C to appendix B) to include additional guidance on estimation of leakage due to competing uses of biomass, as contained in annex 17.

L. Application of General guidance in completing the PDD

33. The SSC WG agreed to recommend a paragraph to be included in all approved methodologies as follows: “Project participants must take into account the general guidance to the methodologies, information on additionality, abbreviations and general guidance on leakage provided at <http://cdm.unfccc.int/methodologies/SSCmethodologies/approved.html>.”

M. Gratitude

34. The SSWG expresses its deep appreciation for the outgoing Chair Ms. Gertraud Wollansky for her dedication and commitment to the work of the working group.

N. Schedule of meetings

35. The SSC working group agreed to schedule its ninth meeting from 18 to 20 March 2007, taking into account the schedule of the Board and depending on the small-scale methodology submissions received.

List of Annexes:

Annex 1. SSC III.K. Avoidance of methane release from charcoal production by shifting from pit method to mechanized charcoaling process

Annex 2. Revision of AMS III.E

Annex 3. Revision of AMS III.G

Annex 4. Revision of AMS I.D

Annex 5. Revision of AMS I.C

Annex 6. Revision of AMS I.A

Annex 7. Revision of AMS II.D

Annex 8. Revision of AMS III.H

Annex 9. Revision of AMS III.I

Annex 10. Revision of AMS III.F

Annex 11. Revision of AMS II.C

Annex 12. Revision of AMS II.E

Annex 13. Revision of AMS II.F

Annex 14. Revision of Guidelines for completing CDM-SSC-PDD and F-CDM-SSC-Subm, F-CDM-Bundle

Annex 15. Revision of CDM project design document for small-scale activities CDM-SSC-PDD

Annex 16. Revisions to CDM Glossary

Annex 17. Revisions to general guidance on leakage in biomass project activities