

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

UNFCCC Headquarters, Bonn, Germany
10–12 November 2008

RECOMMENDATIONS BY THE SSC WG TO THE EXECUTIVE BOARD

A. Opening of the meeting and adoption of the agenda

1. The Chair of the Small-Scale Working Group (SSC WG), Ms. Ulrika Raab welcomed the members of the working group. Mr. Kamel Djemouai, Vice-Chair and Mr. Felix Dayo Babatunde, member of the SSC WG were absent providing proper justifications.
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 submissions requesting revision to, or clarifications of, approved SSC methodologies as well as requests for creation of new methodologies. The detailed responses provided by the SSC WG are made publicly available at: <<http://cdm.unfccc.int/goto/SSCclar>> and <<http://cdm.unfccc.int/methodologies/SSCmethodologies/NewSSCMethodologies/index.html>>. They can also be accessed by clicking the hyperlinked submission number in the table below.

Proposed new methodologies		
Submission number	Title	Recommendation
SSC-NM012-rev	Integrated Refrigerator Energy Efficiency and Recovery of HFC-134a	(See paragraph 4)
SSC-NM013	Promotion of natural refrigerants in air-conditioning and refrigeration	WIP
SSC-NM014	Switch from High Carbon Intensive Energy Source (HCES) to Low Carbon Intensive Energy Source (LCES)	(See paragraph 11)
SSC-NM015	Energy management measures at brick works	(See paragraph 12)
SSC-NM016	Avoidance of HFC emissions in Standalone Commercial Ice Cream Cabinets	(See paragraph 13)

Requests for revisions		
SSC_208	New approach to determine the baseline emission factor of the traditional open-ended methods to produce charcoal	(See paragraph 6)
SSC_226	Revision of AMS-II.C to include guidance on equipment containing refrigerants	(See paragraph 7)
SSC_228	Revision of AMS-II.D to include guidance pertaining to changes in raw materials and/or production processes	(See paragraph 9)
SSC_240	Revision of AMS-II.J - project design requirements, T&D losses, <i>ex post</i> surveys, baseline penetration factor and estimation of cross-effects for CPA of PoA	(See paragraph 8)
SSC_241	Request for reconsideration of the requirement to charge minimal cost for CFL in AMS-II.J	(See paragraph 8)
SSC_242	Revision of AMS-II.C concerning level of service in the project and baseline	(See paragraph 7)
SSC_243	Revision of AMS-II.D for energy efficiency projects that reduce steam consumption	(See paragraph 10)

SSC_244	Revision of AMS-III.K to include Greenfield charcoal production	(See paragraph 6)
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Requests for clarifications		
SSC_222	Applicability of AMS-II.D for reduction of carbonate compounds in the aid feed stock	(See paragraph 14)
SSC_223	Applicability of AMS-III.B to fuel ratio switch in a self-generation power plant using Heavy Fuel Oil and Natural Gas	(See paragraph 15)
SSC_224	Applicability of AMS-I.D to a cogeneration project activity operating only in electricity generation mode	(See paragraph 16)
SSC_225	Applicability of AMS-III.B version 13 to a project activity involving multiple fuel switching	(See paragraphs 11 & 17)
SSC_227	Clarification on the use of alternative biomass type than stated in the PDD applying AMS-I.D	(See paragraph 18)
SSC_229	Clarification regarding the interpretation of grid import and determining baseline emission factor in AMS-I.C	(See paragraph 19)
SSC_230	Assessment of biomass availability in the region during verification of biomass energy generation projects	(See paragraph 20)
SSC_231	Applicability of Baseline Penetration Factor in AMS-II.C and AMS-II.J	(See paragraphs 7, 8 & 21)
SSC_232	Applicability of AMS-III.B for switching from fossil fuel to grid electricity	(See paragraph 22)
SSC_233	Clarification about the threshold of thermal energy savings in AMS-II.G	(See paragraph 23)
SSC_234	Applicability of AMS-II.B for the improvement of energy efficiency in the natural gas supply system of the combined cycle gas turbines	(See paragraph 24)
SSC_235	Clarification on application of the lamp failure rate from bench-tests to the field failure rate for calculating emissions reduction in AMS-II.J	(See paragraphs 8 & 25)
SSC_236	Applicability of SSC general guidance on leakage for biomass project activities using AMS-III.F	(See paragraph 26)
SSC_237	Applicability of AMS-III.H to waste water treatment plant already recovering biogas	(See paragraph 27)
SSC_238	Clarification regarding various baseline and project emissions parameters in AMS-III.D	(See paragraph 28)
SSC_239	Clarification regarding secondary market effects and free-ridership in AMS-II.J	(See paragraph 8)

C. Proposed new methodologies

4. **Integrated Energy Efficiency and Refrigerant Recovery in Domestic Refrigerators:** in response to the submission [SSC-NM012-rev](#), the SSC WG agreed to recommend a new methodology titled “SSC-III.X Energy Efficiency and HFC-134a recovery in residential refrigerators” as contained in annex 1. This methodology is for demand side activities for replacement of existing functional domestic refrigerators with more efficient units utilising refrigerants and foam blowing agents having no ozone depleting potential (ODP) and low global

warming potential (GWP). Baseline refrigerator demanufacturing¹ and reclamation of refrigerants (e.g. HFC-134a) is an integral part of the project activity.

5. **Methane avoidance through separation of solids from wastewater or manure treatment systems:** in response to a number of requests for revision (e.g. SSC_179) and request for clarifications, the SSC WG agreed to recommend a new methodology titled “SSC-III.Y Methane avoidance through separation of solids from wastewater or manure treatment systems” as contained in annex 2. The methodology comprises activities for removal of (volatile) solids from the wastewater or manure slurry stream using mechanical solid/liquid separation technologies (e.g. stationary, vibrating or rotating screens, centrifuges, hydrocyclones, press systems/screws) and/or thermal treatment technologies thereby avoiding methane production.

D. Revisions & requests for revision of approved methodologies

6. **Revision of AMS-III.K:** in response to [SSC 208](#), the SSC WG agreed to recommend a revision of AMS-III.K as contained in annex 3. The proposed revisions include a new approach involving helium tracing to determine the baseline methane emission factor in charcoal production. In response to [SSC 244](#), the SSC WG clarified that in the absence of existing baseline kilns (e.g. greenfield projects), the project proponent may determine the emission factor for charcoal production based on experiments with existing kilns of other producers having comparable characteristics, or build a representative baseline kiln for the purpose of determining the emission factor.

7. **Revision of AMS-II.C:** in response to [SSC 226](#), [SSC 231](#) and [SSC 242](#), the SSC WG agreed to recommend a revision of AMS-II.C as contained in annex 4. The recommended revisions clarify the consideration of capacity increase of the project equipment, electricity transmission and distribution (T&D) losses in the baseline and cross effects² of lighting and heating. With regard to equipment containing refrigerants, the proposed revisions clarify the calculations of direct emissions from refrigerants.

8. **Revision of AMS-II.J:** in response to [SSC 235](#), [SSC 241](#), [SSC 239](#), [SSC 231](#) and [SSC 240](#), the SSC WG agreed to recommend a revision of AMS-II.J as contained in annex 5. The proposed revisions clarify the project design requirements, consideration of electricity T&D losses in the baseline, frequency of *ex post* surveys, and estimation of cross-effects of lighting and heating.

9. **Requests for revision of AMS-II.D:** in response to [SSC 228](#), the SSC WG agreed to indicate to the project proponent that a request for deviation from an approved methodology can be submitted in accordance with the procedures, and that it should indicate accounting for project/leakage emissions from the use of electricity/fossil fuel. Furthermore, any upstream emissions associated with the use of cement/lime and/or other aggregates in the project activity need to be considered unless it can be shown that there is an equivalent amount of upstream emission in the baseline. It shall be noted that it is the prerogative of the Board to approve deviations. The SSC WG is also developing a new methodology in response to SSC-NM0015 and other related submissions that combines elements of AMS-II.D and guidance on energy-efficiency projects involving fuel switch, changes in raw materials and/or production processes. The methodology under development also includes guidance on how to consider the level of service of the product in the project case as opposed to baseline product.

¹ Process of breaking down equipment into metallic and non-metallic parts that can be recycled.

² For example lighting may influence the heating and/or cooling load.

10. In response to [SSC 243](#), the SSC WG agreed to indicate that the draft revision to AMS-II.D as proposed by the submission does not contain adequate guidance to ensure that reduced energy consumption in one elemental process does not lead to increased energy consumption in another elemental process of the facility, thereby reducing the energy efficiency gains. The SSC WG suggested that the project proponent consider the approaches in the approved methodologies such as AMS-II.I, e.g. benchmark specific energy consumption value (ratio of process output to steam energy consumption) and to propose a new methodology including the essential elements of AMS-II.D.

E. Response to request for new methodologies

11. **Revision of AMS-III.B:** in response to the submission [SSC-NM014](#) and other related submissions (e.g. [SSC_225](#) and [SSC 232](#)), the SSC WG commenced developing a revised AMS-III.B, including project activities that use low carbon intensive energy source to displace high carbon intensive energy source. The proposed revisions will broaden the applicability to include multiple fuel use during the project and the baseline. The SSC WG agreed to continue to work on the case and make a recommendation at the next meeting.

12. **Energy management measures at brick works:** [SSC-NM015](#) is for project activities primarily switching from the use of fossil fuels to biomass residues in existing brick production facilities with a possible increase of energy efficiency of the facility. The SSC WG agreed that a methodology of this nature should belong to type I. In addition, it agreed to request further clarifications from the project proponent such as co-firing of biomass and fossil fuel, monitoring of biomass input and production output.

13. **Avoidance of HFC emissions in Commercial Refrigeration:** [SSC-NM016](#) is for project activities avoiding fugitive HFC-134a emissions during manufacturing, usage, servicing and disposal of commercial standalone freezers (e.g. those used in storage and vending of ice cream). The SSC WG agreed to request further improvements from the project proponent such as elaboration of the methods of estimation of baseline fugitive emissions duly referring to tier 2a and 2b methods of IPCC guidelines, data vintage for baseline calculations, before finalizing its recommendation.

F. Response to request for clarification - considered prior to the meeting³

14. [SSC 222](#) requested a clarification on the applicability of AMS-II.D version 11 for an activity reducing aid feed stock containing the carbonate in the production of sodium dichromate resulting in reduced heat load of the kiln. The SSC WG clarified that a new methodology may have to be proposed as AMS-II.D is not applicable, and in so doing, guidance on leakage emissions related to residue use should be included.

15. [SSC 223](#) requested a clarification on AMS-III.B version 13 with regard to the applicability of the methodology for situations where project activity normally using a low GHG intensive fuel is constrained to use the baseline fossil fuel for a period of time during the year, resulting in a lower GHG intensive fuel ratio on an annual basis as compared to the baseline. The SSC WG clarified that the current version of AMS-III.B is not applicable, however a revision of the methodology may be proposed to cover the described situation including appropriate and reliable monitoring procedures.

16. [SSC 224](#) requested a clarification on the applicability of AMS-I.D version 13 in conjunction with ACM0006 for installing a new more efficient biomass cogeneration facility to replace the existing one to cater to the steam and power needs of the sugar mill during the sugar

³ Considered in accordance with paragraph 8 of annex 6 of the thirty-fourth report of the Board.

production season. The operation strategy during off-season involves purchase of biomass abundant in the region to run the facility in power only mode to solely export the generated electricity to the grid and to apply AMS-I.D for this period. SSC WG agreed to clarify that AMS-I.D is not applicable to the proposed project and the project proponent may wish to explore if the entire project activity is suitable for implementation under ACM0006.

17. [SSC 225](#) requested clarification on AMS-III.B version 13 for situations where the baseline includes several elemental processes, each using a different fossil fuel whereas the project uses a single low carbon content fossil fuel. SSC WG agreed to clarify that the described project activity is not applicable using AMS-III.B version 13 and a request for revision may be proposed. Please also refer to paragraph 11.

18. [SSC 227](#) requested clarification on the eligibility and procedures to use a different renewable biomass residue than the one mentioned in the registered project design document when applying AMS-I.D version 07. With regard to the methodological issue raised in the submission, the SSC WG agreed that AMS-I.D is applicable to the situation of the project activity as the methodology covers the use of multiple renewable biomass sources where it can be demonstrated that there is no leakage in accordance with the guidance for leakage in biomass project activities.

19. [SSC 229](#) requested a clarification on the applicability of AMS-I.C version 13 for a project activity that adds a turbine-generator to the existing facility to utilize the biomass generated steam more efficiently (project generates the same amount of steam as the baseline) to enable export of excess electricity to the grid. The SSC WG agreed to clarify that the project proponent may explore applying AMS-III.Q for a project activity utilizing waste pressure to generate electricity that will be supplied to grid, or apply AMS-I.D for renewable based electricity generation displacing grid.

20. [SSC 230](#) requested a clarification on the verification of a registered biomass project with regard to the requirements for assessment of abundance of biomass in the region. The SSC WG clarified that an assessment of leakage as per EB 28 Annex 35 would be required during verification of the biomass projects referred to by the query author.

21. [SSC 231](#) requested clarification on the baseline penetration factor (BP) applied to CPAs of a PoA using AMS-II.C and AMS-II.J. The SSC WG noted that this request, and other submissions, has elaborated a number of issues associated with the application of BP. The SSC WG is of the opinion that properly defined baselines are critical to ensuring that GHG emission reductions are incremental and thus consideration of BP and Net to Gross Adjustments (NTG) should be included in the analyses. However, the SSC WG understands that there is some potential confusion on how BP and NTG are determined and when they are applicable and therefore will continue to work to develop options for more thoroughly defining the calculation of NTG and BP and when they are applicable.

22. [SSC 232](#) requested clarification on the applicability of AMS-III.B version 13 for switching from fossil fuel to grid electricity in aluminium smelting. The SSC WG clarified that AMS-III.B version 13 is not applicable for switching from fossil fuel to electricity. Please also refer to paragraph 11.

23. [SSC 233](#) requested a clarification on the applicable size limits of project activities eligible under AMS-II.G in terms of thermal energy savings. The SSC WG agreed to clarify that AMS-II.G is applicable to project activities with maximum thermal energy savings of 180 GWh per year.

24. [SSC 234](#) requested clarification on the applicability of AMS-II.B for project activities upgrading the gas pipeline equipment to enable gas supply to electricity generating units at higher

pressures thereby avoiding the operation of compressors to boost the gas supply pressure. The project would displace an equivalent amount of electricity from the grid required to operate the compressors. The SSC WG agreed AMS-II.B is not applicable to the proposed project activity as the consideration of baseline emissions from the displacement of grid electricity and combined margin approach to calculate grid emission factor, which will be needed in emission calculations of the proposed project activity are not covered under AMS-II.B. The SSC WG is of the opinion that a new methodology may have to be proposed to include all components of the proposed project activity with appropriate and reliable monitoring procedures and leakage considerations.

25. [SSC 235](#) requested a clarification on the application of lamp failure rate from bench-tests versus the monitored value of field failure rate for calculating emissions reduction in AMS-II.J. The SSC WG clarified that the existing method is sufficiently conservative.

26. [SSC 236](#) requested clarification on the applicability of the general guidance on leakage in biomass project activities to projects applying AMS-III.F. The project activity is composting of Municipal Solid Waste to avoid methane production from decay of biomass (MSW). The SSC WG clarified that there is no need to apply the requirements of the guidance as long as it can be proven that the biomass waste would have remained in the landfill or solid waste disposal site through the crediting period and beyond.

27. [SSC 237](#) requested clarification on the applicability of AMS-III.H when the baseline equipment and facility to recover the biogas from the sludge treatment system are present, however the equipment and facility to flare the recovered biogas and/or use it are lacking. The SSC WG agreed to clarify that AMS-III.H treats methane recovery and methane combustion as an inter related and integral activity. The SSC WG requested additional information, e.g. justification of the baseline scenario.

28. [SSC 238](#) requested clarification on estimating annual average population for a growing population of meat animals, (e.g. broilers, turkeys, beef cattle, and market swine) when applying AMS-III.D version 14, as most of these animals are alive for only a portion of the year. The SSC WG agreed to clarify that the project proponent may use the methods and relevant equations contained in the approved methodology ACM0010.

29. The Board at its forty-first meeting considered a draft proposal prepared by the Methodologies Panel on the enhanced barrier test for project activities that have a potential for high profitability without CER revenues but only use a barrier analysis to demonstrate additionality. The Board at that meeting requested the SSC WG to assess the potential relevance of this issue for small-scale project activities. The SSC WG is of the opinion that application of this test may be necessary for small-scale methodologies, particularly for the sectors indicated by the Methodologies Panel (this comprises all Type I methodologies, AMS-III.P and AMS-III.Q). It would also be necessary for large infrastructure projects under small-scale CDM (e.g. modal shift transport project activity). The SSC WG will further work on the definition of large infrastructure projects.

30. In response to the request from the Board at its forty-third meeting, the SSC WG recommended that the requirements of the general guidance on leakage in biomass project activities (attachment C of appendix B), i.e. type k in the region is at least 25% larger than the quantity of biomass residues of type k that is utilized, shall be applicable to all AMS-I.C biomass project activities. Furthermore, the SSC WG recommended that the Board may wish to consider providing guidance to the project participants to take note of the header of SSC methodologies stating "Project participants shall 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>", which implies

attachment C of appendix B is to be applied in conjunction with a SSC methodology *mutatis mutandis*.

31. As requested by the Board at its thirty-sixth meeting⁴, the SSC WG analysed the leakage from equipment transfer taking into account an expert input on the issue. The SSC WG agreed the emission impact of continued use of displaced equipment outside the project boundary is subject to uncertainty and difficult to quantify, and therefore recommended to the Board that leakage from equipment transfer from the project boundary to the outside can be excluded from consideration in SSC methodologies. It also considered the potential situation of used renewable energy equipment being transferred into the project boundary and its resultant leakage and concluded that the existing methodologies adequately address the issue.

G. Schedule of meetings

32. The SSC WG agreed to schedule its nineteenth meeting from 24–27 February 2009 taking into account the schedule of the Board. The deadline for new methodology submissions to this meeting is 30 December 2008 and the deadline for submitting request for revisions for this meeting is 27 January 2009.

H. Desk Reviews

33. The SSC WG noted the satisfactory completion of the desk reviews undertaken for the proposed new SSC methodologies considered at the meeting.

⁴ An interim recommendation was made at SSC WG 14 (see paragraph 33).

External annexes to the eighteenth meeting of the SSC WG

- Annex 1: SSC-III.X Energy Efficiency and HFC-134a recovery in residential refrigerators
- Annex 2: SSC-III.Y Methane avoidance through separation of solids from wastewater or manure treatment systems
- Annex 3: Revision of AMS-III.K
- Annex 4: Revision of AMS-II.C
- Annex 5: Revision of AMS-II.J