

**REPORT OF THE THIRTY-FIRST MEETING OF
THE SMALL-SCALE WORKING GROUP**

UNFCCC Headquarters, Bonn, Germany
9–12 May 2011

RECOMMENDATIONS BY THE SSC WG TO THE CDM EXECUTIVE BOARD

A. Opening of the meeting and adoption of the agenda

1. The Chair of the Small-Scale Working Group (SSC WG), Ms. Fatou Gaye, opened the meeting.
2. The agenda was adopted as proposed.

B. Proposed new methodologies

3. The SSC WG considered submissions requesting creation of new methodologies. The detailed responses provided by the SSC WG are made publicly available at: <http://cdm.unfccc.int/methodologies/SSCmethodologies/NewSSCMethodologies/index.html>. They can also be accessed by clicking the hyperlinked submission numbers in the table below.

Request for new methodologies		
Submission number	Title	Recommendation
SSC-NM064	Introduction of natural gas in the fuel mix of iron-ore pellet induration process	(See paragraph 4)

4. In response to SSC-NM064, the SSC WG agreed not to recommend the methodology. Amongst other issues, the group is of the view that for Greenfield/Capacity expansion projects involving fuel switch in manufacturing processes whose primary output is not heat/electricity, a rigorous procedure would be required to determine the baseline, for example mandatory investment analysis applying the “Combined tool for demonstration of baseline and additionality” or the “Tool for demonstration of additionality”. The group is of the opinion imposing such requirements e.g. mandatory investment analysis in the small-scale methodology framework runs counter to the guidance from the Board keeping SSC methodologies simplified. The author was, however, advised to explore the possibility of requesting a revision of ACM0009¹ to expand its applicability to Greenfield/capacity expansion project activities.

¹ ACM0009 “Consolidated baseline and monitoring methodology for fuel switching from coal or petroleum fuel to natural gas”

C. Development of new methodologies and tools

5. The SSC WG prepared a top-down draft methodology for low-flow showerhead hot water saving devices, as contained in annex 1. The methodology is for determining emission reductions associated with reduced water heating requirements based on installation of low-flow showerheads in residences. Although the methodology in its current structure is limited to low-flow showerheads, it can be adapted to other water saving devices if adequate, reliable and conservative data and methods for determining usage patterns for applications are proposed. The methodology presents two options for calculating emission reductions i.e. use of a default energy savings value for water heating energy savings (per showerhead) and an approach based on monitoring. The monitoring approach calls for: (a) One-time measurements of project and baseline showerhead flow rates; and (b) Shower water consumption measurements for at least two, thirty-day periods. The SSC WG agreed to request the Board to launch a call for public inputs for issues specified in annex 2 to facilitate further development of this methodology.

6. The SSC WG agreed to request the Board to launch a call for public inputs on the key issues identified in relation to the development of a solar cooker methodology, as contained in annex 3 (e.g. reliable and verifiable monitoring procedures for solar cooker use in households). The SSC WG also agreed to prepare a final recommendation for EB 63 with either a proposed new methodology or proposed revisions to existing SSC methodologies to include specific procedures for solar cooker projects or an indication that additional research and data are required before finalizing a methodology.

7. The SSC WG agreed to continue working on the top-down development of a demand side energy efficiency methodology for agricultural pumping and irrigation activities, taking into account the input from the Practitioners Workshop on SSC Renewable Energy and Demand side Energy Efficiency Methodologies, <http://cdm.unfccc.int/Panels/ssc_wg/workshop/100514/index.html>, possibly using standardized baseline approaches. The replacement of inefficient pumps with efficient ones will be the primary focus, efforts will also be made to include efficient irrigation e.g. drip irrigation.

8. Per SSC WG CDM MAP objective/deliverable 3 (a), simplified methodologies serving agreed priority sectors, the SSC WG agreed to continue working on the development of a new top-down, small-scale methodology for comprehensive energy efficiency measures in buildings using computer simulation, deemed savings values, and/or metering approaches. In addition, the SSC WG agreed to continue working on a revision of AMS-III.AE² and AMS-II.E³ to include thermal applications and other technologies and measures currently not covered. The goal is to have new or modified methodologies for consideration by the CDM Executive Board, and submission for public comment finalized by SSC WG 34 or before. Such methodologies will be informed by experience with existing methodologies such as AMS-III.AE, inputs obtained from proponents of SSC-NM053, the assessment of the methodology NM0328⁴ by the Meth Panel, inputs received at the Buildings Under UNFCCC Flexible Mechanisms workshop <<http://cdm.unfccc.int/stakeholder/index.html>>, and expert consultancy inputs.

D. Revisions of approved methodologies and tools

9. The SSC WG considered submissions requesting revisions to approved SSC methodologies. The detailed responses provided by the SSC WG are made publicly available at: <<http://cdm.unfccc.int/methodologies/SSCmethodologies/clarifications>>. They can also be accessed by clicking the hyperlinked submission numbers in the table below.

² AMS-III.AE “Energy efficiency and renewable energy measures in new residential buildings”

³ AMS-II.E “Energy efficiency and fuel switching measures for buildings”

⁴ NM0328 “Energy efficiency and fuel switching measures in new buildings”

Requests for Revisions		
SSC_488	Revision of AMS-III.W to include the utilization of methane as an option	(See paragraph 10)
SSC_529	Revision of AMS-I.I regarding the measurement of fossil fuel consumption	(See paragraph 11)
SSC_531	Revision of AMS-III.Q for project activity with no three years historical data	(See paragraph 12)
SSC_532	Revision of AMS-I.C to include additional baseline scenario for a new cogeneration project	(See paragraph 13)

10. **Revision of AMS-III.W “Methane capture and destruction in non-hydrocarbon mining activities”**: in response to the submission SSC_488 requesting revision of AMS-III.W to include the utilization of methane captured from exploration boreholes, the SSC WG, based on the input received from the Meth Panel agreed to seek external expertise on this matter in order to complete the assessment of the request. Please also refer to paragraph 34 of 49th meeting of the Meth Panel.

11. **Revision of AMS-I.I “Biogas/biomass thermal applications for households/small users”**: in response to the submission SSC_529 requesting revision of AMS-I.I regarding the measurement of fossil fuel consumption at the households, the SSC WG agreed to recommend a revision of AMS-I.I, as contained in annex 4, to provide simplified options for the measurement of fossil fuel consumption.

12. **Revision of AMS-III.Q “Waste energy recovery (gas/heat/pressure) projects”**: in response to SSC_531 requesting revision of AMS-III.Q to cover project activities with less than three years historical data, the group indicated that all relevant parameters shall be available for the immediately prior three years to the start date of the project activity. For facilities with less than three years operational data, all historical data shall be available (a minimum of one year data would be required). The group agreed to clarify these issues in the methodology the next revision of AMS-III.Q.

13. **Revision of AMS-I.C “Thermal energy production with or without electricity”**: taking into account the numerous submissions⁵ made, the SSC WG agreed to recommend a revision, as contained in annex 5. The proposed revisions simplify the monitoring requirement for the quantity of biomass used, its NCV and moisture content, the procedure to cross-check the measurements (e.g. biomass consumption and energy output). The revision also expands the baseline scenarios for co-generation project activities. The group thanked the stakeholders and project proponents for their inputs on the revised drafts during the consultation process.

14. **Revision of AMS-III.AR “Substituting fossil fuel based lighting with LED lighting systems”**: the SSC WG agreed to continue considering the revision of the methodology and make a recommendation at a future meeting.

⁵ SSC_422 “Revision of AMS-I.C to expand its applicability to include steam/heat produced from combined sources - biomass and fossil fuel”; SSC_478 “Clarification on AMS-I.C for baseline selection”; SSC_410 “Clarification on the options for calculating the baseline and project emissions under AMS-I.C”; SSC_460 “Clarification on estimating baseline emissions for fuel switch project”; SSC_517 “Clarification on the requirements of AMS-I.C/AMS-I.D for a co-fired project producing electricity”; SSC_524 “Baseline determination for a cogen project activity implemented in an existing facility with no three years historical data available” and SSC_532 “Revision of AMS-I.C to include additional baseline scenario for a new cogeneration project”.

15. **Revision of AMS-I.D “Grid connected renewable electricity generation” and AMS-I.F “Renewable electricity generation for captive use and mini-grid”**: the SSC WG agreed to recommend a revision of AMS-I.D and AMS-I.F, as contained in annexes 6 and annex 7. The revisions further clarify the applicability of AMS-I.D and AMS-I.F. The monitoring requirements for the quantity of biomass used, its NCV and moisture content, the procedure to cross-check the measurements (e.g. biomass consumption and energy output) have been simplified. The group thanked the stakeholders and project proponents (e.g. SSC_466, SSC_521 and SSC_517⁶) for their inputs on the revised drafts during the consultation process.

16. **Revision of AMS-III.AJ “Recovery and recycling of materials from solid wastes”**: the group agreed to continue working on the methodology to allow for a simplification for the informal waste collection sector and to cover avoidance of methane emissions in the case of paper and cardboard, with the aim of finalizing the revision at SSC WG 32. Also, the SSC WG agreed to continue to work on expanding the methodology to include other recyclable materials taking into account the public inputs received
<http://cdm.unfccc.int/public_inputs/2011/recycling_solid_wastes/index.html>.

17. **Revision of AMS-II.C “Demand-side energy efficiency activities for specific technologies”**: per SSC WG CDM MAP objective/deliverable 3(a), simplified methodologies serving agreed sectors, the SSC WG continued to work on revising existing SSC methodologies and developing new SSC methodologies.. This includes efforts to cover energy efficiency project activities involving control/optimization activities (e.g. optimization of a pump scheduling system, intuitive energy saving devices in households, lighting controls and/or energy management systems in buildings) and retrofits of large, variable output chillers either on a one-to-one basis or for replacement of multiple chillers with a centralized chiller plant.

18. **Revision of AMS-III.C “Emission reductions by electric and hybrid vehicles”**: the SSC WG agreed to recommend a revision of AMS-III.C, as contained in annex 8. Taking into account inputs from the “Practitioner Workshop on the Improvement of CDM Methodologies for Transportation”< <https://cdm.unfccc.int/methodologies/Workshops/transportation/index.html>>, the revision includes specific guidance for demonstrating additionality for project activities introducing electric and hybrid vehicles, provides procedures for calculating baseline and project emissions based on the distance travelled by the project vehicles and average emissions per vehicle type per km.

E. Clarifications to approved methodologies and tools

19. The SSC WG considered submissions requesting clarifications to approved SSC methodologies. The detailed responses provided by the SSC WG are made publicly available at: <<http://cdm.unfccc.int/methodologies/SSCmethodologies/clarifications>>. They can also be accessed by clicking the hyperlinked submission numbers in the table below.

⁶ SSC_466 “Applicability of AMS-I.D/AMS-I.F for wind power projects feeding power to manufacturing unit of the wind project developer”, SSC_517 “Clarification on the requirements of AMS-I.C/AMS-I.D for a co-fired project producing electricity” and SSC_521 “Applicability of AMS-I.D versus AMS-I.F to a project activity supplying electricity to an isolated system”

Requests for clarifications		
SSC_524	Baseline determination for a cogen project activity implemented in an existing facility with no three years historical data available	(See paragraph 20)
SSC_526	Clarification on the use of AMS-III.D for a project involving solid separation	(See paragraph 21)
SSC_527	Clarification on the use of lower/upper bound of confidence interval under sampling guideline	(See paragraph 22)
SSC_528	Clarification on the combination of multiple methodologies for PoA	(See paragraph 23)
SSC_530	Clarification on the maximum output capacity for a project activity applying AMS-I.D	(See paragraph 24)
SSC_533	Request for approval of combination of AMS-I.C and AMS-I.F for PoA	(See paragraph 25)

20. In response to SSC_524, requesting clarification on determining the baseline scenario for a cogeneration project activity implemented in an existing facility lacking three years of historical data, the SSC WG agreed to clarify that a performance test/measurement campaign can be performed prior to the implementation of the project activity. Such a procedure has now been included in the proposed revised version of AMS-I.C, as contained in annex 5.

21. In response to SSC_526 requesting clarification on the applicability of AMS-III.D, the SSC WG agreed to clarify that the potential methane emissions, due to the accumulation of waste stream in animal barn chutes as described in the submission, shall be accounted for as project emissions. The SSC WG also agreed to clarify that the maximum storage time of five days indicated in version 16 of AMS-III.D is an editorial error, which shall be read as 45 days.

22. In response to the submission SSC_527, requesting clarification on the use of the lower/upper bound of confidence interval around the mean, the SSC WG agreed to clarify that when sampling is undertaken in small-scale projects, unless differently specified in the methodology applied, the sample mean value can be used for the emission reductions calculation, not necessarily the lower or upper bound of the confidence interval around the mean.

23. In response to the submission SSC_528 requesting clarification on the combination of multiple methodologies for application in a PoA, the SSC WG agreed to clarify that the proposed combination i.e. AMS-III.D, AMS-I.C, and AMS-I.F is not permissible under the current PoA guidelines. However, the SSC WG agreed to recommend the proposed combination for approval as there are no interactive or cross effects between the measures applied in the respective component methodologies. In addition, the SSC WG agreed to clarify that the varying combinations of methodologies under the same PoA are not allowed under the current PoA guidelines which envisaged consistent application of combination of methodologies.

24. In response to SSC_530, requesting a clarification on the determination of the capacity limits for a biomass based turbine-generator system with a derated turbine capacity transferred from another site, the SSC WG agreed to clarify that the rated capacity of a turbine-generator system shall be based on the installed/rated capacity of the generator.

25. In response to the submission SSC_533, requesting approval of the combination of AMS-I.C and AMS-I.F for a PoA, the SSC WG agreed to recommend the proposed combination as

there are no interactive or cross effects between the measures applied in the respective component methodologies.

F. General guidance and cross-cutting issues

26. The SSC WG received queries on the potential restriction of the applicability of the revised AMS-III.Q, version 4 approved at EB 60 for waste heat recovery project activities. The SSC WG noted that most CDM projects in the pipeline involving cement plants (e.g. clinker production) based on AMS-III.Q, indicate use of small amounts of waste energy (e.g. via recirculation of waste heat to preheat raw materials). The group agreed to clarify that the restriction in the applicability to such low quality waste heat utilization (not for energy production) as the continuation of the current practice or as part of integral process design in the cement plant was not the target of the revision of AMS-III.Q undertaken at EB 60, which rather aimed to address enhanced waste heat recovery project (e.g. a portion of waste heat was already recovered in the baseline, and in the project case additional waste is recovered from the same source by introducing new and/or efficient waste heat recovery system). The SSC WG agreed to clarify that project activities that recover a small amount of waste energy in the baseline may apply AMS-III.Q provided that the current practice continues during the project (e.g. recirculation of waste heat to preheat raw materials and hot gases from clinker cooler) and that there is no diversion of the baseline waste energy use (i.e. only energy that was otherwise wasted through venting to atmosphere is utilized by the project activity).

27. In the context of SSC_454⁷ the SSC WG took note of the input provided by the A/R WG (as contained in annex 6 of the A/R WG 31 meeting report). The SSC WG agreed to continue working on the revision of AMS-I.D, once the author of SSC_454 submits a proposal that addresses the underlying issues.

28. Use of methodologies for PoA: the SSC WG agreed to recommend to the Board to consider the following while developing new standards or revising the existing procedures:

- The Board may wish to consider revising footnote 1 of the “Registration of a programme of activities as a single CDM project activity and issuance of CERs for a PoA” (version 04.1. EB 55, annex 38) to provide more clarifications and explicitly allowing the use of different combination of SSC methodologies and project/baseline technologies among CPAs of PoA covering the following situations:
 - When a single methodology is consistently applied to all CPAs, but with different baseline and project technologies, (e.g. different waste water treatment technologies can be applied for one PoA, using AMS-III.H);
 - When multiple methodologies are applied in a PoA with a principal technology/measure consistently used across all the CPAs, however with different combination of the methodologies. For example, waste water treatment projects with different ways of utilization of recovered methane (AMS-I.C for heat, AMS-I.D and AMS-I.F for electricity, or both), biomass/biogas projects with different fuel displacement (AMS-I.C and AMS-I.I for fossil fuel, AMS-I.E for non-renewable biomass, or both);
- Allow the combination of SSC methodologies in the context of PoAs without pre-approval of combinations as long as the project proponent is able to demonstrate that there are no interactive or cross effects between the measures applied in

⁷ SSC_454 “Revision to include cover crops of short-cycle cellulosic biomass from non-dedicated plantations”

respective component methodologies or that if there are such cross effects they are conservatively accounted for in the calculation of CERs in the PoA-DD;

- Amend the “Procedures for approval of the application of multiple methodologies to a programme of activities (version 01.0, EB47, annex 31)”, considering the above;
- In general if a coordinating/managing entity aims to include different types of project/baseline technologies in a PoA and/or propose different combinations of methodologies, the PoA-DD (and generic CPA-DD) shall list all the technologies/measures and methodology combinations that will be covered by the PoA. Furthermore, the eligibility criteria of CPA inclusion shall clarify applicability of the respective combinations.

G. Schedule of meetings and rounds of submissions

29. The SSC WG agreed to schedule its thirty-second meeting from 21-24 June 2011 taking into account the schedule of the Board. The deadline for new methodology submissions to this meeting was 26 April 2011 and the deadline for submitting requests for clarifications/revisions for the SSC WG 32 meeting is 24 May 2011.

External annexes to the thirty-first meeting of the SSC WG

Annex 1 - SSC-II.M “Demand-side energy efficiency activities for installation of low-flow showerhead hot water savings devices”

Annex 2 - Questions for public inputs in relation to SSC-II.M “Demand-side energy efficiency activities for installation of low-flow showerhead hot water savings devices”

Annex 3 - Questions for public inputs in relation to the development of a solar cooker methodology

Annex 4 - Revision of AMS-I.I “Biogas/biomass thermal applications for households/small users”

Annex 5 - Revision of AMS-I.C “Thermal energy production with or without electricity”

Annex 6 - Revision of AMS-I.D “Grid connected renewable electricity generation”

Annex 7 - Revision of AMS-I.F “Renewable electricity generation for captive use and mini-grid”

Annex 8 - Revision of AMS-III.C “Emission reductions by electric and hybrid vehicles”