REPORT OF THE THIRTY-SIXTH MEETING OF THE SMALL-SCALE WORKING GROUP

Langer Eugen, Bonn, Germany 20–23 March 2012

Version 01.1*

RECOMMENDATIONS BY THE SSC WG TO THE CDM EXECUTIVE BOARD

A. Opening of the meeting and adoption of the agenda

1. The new Chair of the Small-Scale Working Group (SSC WG), Mr. Peer Stiansen, elected by the Executive Board of the clean development mechanism (hereinafter referred to as the Board) at its sixty-sixth meeting, opened the meeting. The members of the SSC WG expressed deep appreciation to the outgoing Chair Ms. Fatou Gaye and Vice-Chair Mr. Peer Stiansen for the excellent contributions to the work of the group. The SSC WG members welcomed the Chair Mr. Peer Stiansen and the Vice-Chair Ms. Fatou Gaye.

B. Proposed new methodologies

2. The SSC WG considered submissions requesting the 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>.

Request for new methodologies				
Submission number	Title	Recommendation		
SSC-NM072-rev	Recovery and recycling of materials from E-waste	A (See paragraph 3)		
SSC-NM073-rev2	Electrification of rural communities using renewable energy	A (See paragraph 4)		
SSC-NM074-rev	Emission reductions through improved efficiency of vehicle fleets	Preliminary recommendation (See paragraph 5)		
SSC-NM075	Supply of steam to the recipient facility through steam optimization at the other facility	C (See paragraph 6)		
SSC-NM076	Use of Low-GHG cement substitutes to displace traditional cement production	C (See paragraph 7)		
SSC-NM078	GHG emission reduction due to supply of molten metal instead of ingots for aluminium castings	Preliminary recommendation (See paragraph 8)		
SSC-NM080	Installation of grid connected energy efficient pump-set for agriculture use	Preliminary recommendation (See paragraph 9)		

3. In response to the proposed new methodology SSC-NM072-rev, the SSC WG agreed to recommend a new methodology entitled SSC-III.BA "Recovery and recycling of materials from E-waste", as contained in annex 1 of this report. The new methodology concerns collection and recycling of waste from discarded electrical and electronic equipment (e-waste) with the aim of recovering valuable materials such as ferrous metals, non-ferrous metals and plastics. The energy and

^{*} This version was issued to correct typographical errors in the table below paragraph 10 in respect to the submission SSC_608.

GHG emissions avoided by displacing the production of an equivalent amount of virgin material in non-Annex I countries constitute the emissions reduction attributable to the recycling activity.

4. In response to the submission SSC-NM073-rev2, the SSC WG agreed to recommend a new methodology entitled SSC-III.BB "Electrification of communities through grid extension or construction of new mini-grids", as contained in annex 2. The proposed new methodology is applicable to projects for extension of existing grids or construction of new mini-grids for electrification of communities. It takes into account the suppressed demand for electricity supply in off-grid locations in defining the emission factors for electricity supply (See annex 5 of the thirty-fifth meeting report of the SSC WG for the derivation of emission factors).

5. In response to the proposed new methodology SSC-NM074-rev, the SSC WG agreed to continue considering the proposed new methodology seeking further inputs on reliable approaches for estimating the emission reductions, for example through the creation of a control group for establishing the baseline fuel consumption and different means to ensure that issues associated with signal-to-noise ratio are addressed.

6. In response to the proposed new methodology SSC-NM075, the SSC WG agreed not to recommend the proposed new methodology. The submitted draft methodology has several shortcomings. Among other issues, the methodology lacks a procedure to demonstrate that the estimated energy savings will arise solely from the energy efficiency measures covered by the methodology which will lead to uncertainties in estimated emission reductions (e.g. those associated with the signal-to-noise ratio). The SSC WG is also of the opinion that it will be challenging to accommodate the described complex processes under the simplified framework of a small-scale methodology.

7. In response to submission SSC-NM076, the SSC WG agreed not to recommend the proposed new methodology. The submitted draft methodology is unclear with regard to the identification of the precise service that is to be displaced by the project activity. The SSC WG noted that the Board had provided guidance in the context of a large-scale methodology submission, NM0331, entitled "Displacement of Traditional Cement Production with the Use of Low-GHG Cement Substitutes" indicating the requirement of clear identification of the service displaced.

Furthermore, there is considerable uncertainty associated with the baseline determination method, i.e. no evidence is required to prove that one tonne of alternative cement replaces one tonne of Portland cement and no monitoring of the end-use of the alternative materials is required. Thus the methodology is not in compliance with the provisions adopted by the Board at its thirty-sixth meeting (annex 16 of the report thereof) that require inclusion of the end-users in the project boundary and monitoring of the quantity of product used.

8. In response to the proposed new methodology SSC-NM078, the SSC WG agreed to continue considering the proposed new methodology and to seek further inputs from the project proponent on issues such as the baseline emission factors for primary aluminium production and hot metal transport.

9. In response to the proposed new methodology SSC-NM080, the SSC WG agreed to continue considering the proposed new methodology and to seek further input from the project proponent, with the aim of finalizing the draft methodology at the thirty-seventh meeting of the SSC WG. Open issues include how to address the efficiency drop of the project pumps over time, and how to address the energy saving attributable to the downsizing of the project pumps instead of energy efficiency improvement.

C. Revisions of approved methodologies and tools

10. The SSC WG considered submissions requesting revisions to approved SSC methodologies. The detailed responses provided by the SSC WG are made publicly available at: <<u>http://cdm.unfccc.int/methodologies/SSCmethodologies/clarifications</u>>.

Requests for revisions				
Submission	Title	Paragraph		
SSC_605	Revision of AMS-I.A to cover partial displacement of fossil fuel	To revise		
	consumption	(See paragraph 11)		
SSC_608	Revision of AMS-II.K to include the use of chillers with GWP	To revise		
	refrigerants	(See paragraph 12)		
SSC_614	Revision of AMS-III.F for consideration of suppressed demand	To revise		
		(See paragraph 13)		
SSC_618	Revision of AMS-III.Z to expand its applicability for complete	To revise		
	switch from fossil fuel to renewable biomass	(See paragraph 14)		
SSC 620	Revision of AMS-III.AR taking into account the guidelines on	Not to revise		
_	the consideration of suppressed demand	(See paragraph 15)		
SSC 622	Revision of AMS-I.A/AMS-I.D/AMS-I.F to cover Road Power	Not to revise		
	Generation systems	(See paragraph 16)		

11. **Revision of AMS-I.A "Electricity generation by the user":** in response to the submission SSC_605 requesting revision of AMS-I.A to cover partial displacement of fossil fuel consumption, the SSC WG agreed to clarify that in cases where existing fossil fuel captive electricity generation is displaced by the project activity, the emission factor of the captive electricity generation shall be determined using Scenario B of the "Tool to calculate baseline, project and/or leakage emissions from electricity consumption". A provision for this approach along with further editorial changes has been included in the revised version of the methodology, as contained in annex 3 of this report.

12. **Revision of AMS-II.K "Installation of co-generation or tri-generation systems supplying energy to commercial buildings"**: in response to the submission SSC_608 requesting revision of AMS-II.K to include the use of chillers with refrigerants having GWP, the SSC WG agreed to recommend the suggested revision of the methodology, i.e. to cover the installation of cooling equipment that uses refrigerants that do not have ozone depletion potential (ODP), but do have a global warming potential (GWP) under the methodology. The proposed revision provides provisions for calculating project emissions due to physical leakage of refrigerants during the crediting period. The recommended draft revised methodology AMS-II.K is contained in annex 4 of this report.

13. **Revision of AMS-III.F "Avoidance of methane emissions through composting":** in response to the submission SSC_614 requesting revision of AMS-III.F for consideration of suppressed demand, the SSC WG agreed to recommend the suggested revision of the methodology, as contained in annex 5 of this report. The proposed revision takes into account the issue related to suppressed demand as specified in the "Guidelines on the consideration of suppressed demand in CDM methodologies". In addition, the method to account for the methane oxidation effect in the upper layer of the landfill as indicated in the latest version of the tool "Emissions from solid waste disposal sites" is now included. The revision further includes clarification provided to the submission SSC_604 with regard to the application of the latest tool "Project and leakage emissions from composting" (see paragraph 34 below).

14. **Revision of AMS-III.Z "Fuel Switch, process improvement and energy efficiency in brick manufacture"**: in response to the submission SSC_618 requesting revision of AMS-III.Z to expand its applicability for a complete switch from fossil fuel to renewable biomass, the SSC WG

agreed to recommend the suggested revision of the methodology, as contained in annex 6 of this report.

15. **Revision of AMS-III.AR "Substituting fossil fuel based lighting with LED/CFL lighting systems":** in response to the submission SSC_620 requesting revision of AMS-III.AR to address suppressed demand issues in the methodology, the SSC WG agreed not to recommend the suggested revision of the methodology at this meeting. The SSC WG agreed to continue to work on recommending changes to AMS-III.AR to account for suppressed demand in a manner consistent with the calculation approaches included in the methodology, taking into account useful inputs/suggestions received through the submission authors. The SSC WG aims to finalize the recommendation at its thirty-seventh meeting.

16. **Revision of AMS-I.A/AMS-I.D/AMS-I.F to cover Road Power Generation systems:** in response to the submission SSC_622, the SSC WG agreed not to recommend the suggested revisions to the methodologies. The SSC WG acknowledged that the described technology/measure can be a promising alternative energy technology, but cannot be classified as a "renewable energy source" and that a new methodology under Type III would be required to cover this type of project activity.

17. **Revision of AMS-III.Q "Waste Energy Recovery (gas/heat/pressure) project"**: the SSC WG continued its work on the revision of the methodology to take into account the requirements contained in the latest version of ACM0012 "Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects" and the clarification provided by the Board at its sixty-first meeting (annex 20 of the report thereof) to cover project activities that recover a small amount of waste energy in the baseline besides considering requests for clarifications such as SSC_531 and 579. The SSC WG agreed to recommend the Board to launch a call for public inputs on the draft revised methodology, as contained in annex 7 of this report. Questions to specific issues of the revised version of the methodology are contained in annex 8 of this report.

D. Clarifications to approved methodologies and tools

18. The SSC WG considered submissions requesting clarifications to approved SSC methodologies. The detailed responses provided by the SSC WG are made publicly available at: <<u>http://cdm.unfccc.int/methodologies/SSCmethodologies/clarifications</u>>.

Requests for clarifications			
Submission	Title	Paragraph	
SSC_604	Clarification on the use of latest tool of "project and leakage emissions from composting" in AMS-III.F	(See paragraph 19)	
SSC_606	Applicability of AMS-III.Q for waste heat recovery from reclaimed water for space heating application	(See paragraph 20)	
SSC_607	Clarification on applicability of AMS.III.Z distinguishing between technology change and process change	(See paragraph 21)	
SSC_609	Clarification regarding the use of sampling to estimate the date of distribution of project lamps under AMS-III.AR	(See paragraph 22)	
SSC_610	Clarification on project emissions in fuel switch projects applying AMS-I.C when project and baseline set-up is the same	(See paragraph 23)	
SSC_611	Clarification on the eligible technology under AMS-II.M	(See paragraph 24)	
SSC_612	Clarification on the applicability of AMS-I.D for a project activity involving capacity addition and retrofit	(See paragraph 25)	
SSC_613	Applicability of AMS-III.Q when generator and the recipient of energy is included as a project participant	(See paragraph 26)	
SSC_615	Clarification on the estimation of project emissions under AMS-III.AN	(See paragraph 27)	

Requests for clarifications			
Submission	Title	Paragraph	
SSC_616	Applicability of AMS-I.A for off-grid project activity involving end-users connected to a grid with frequent blackouts/brownouts	(See paragraph 28)	
SSC_617	Clarification on the combination of AMS-III.AO and AMS-I.E for PoAs	(See paragraph 29)	
SSC_619	Clarification on AMS-III.AH for element process whose energy output can not be measured directly	(See paragraph 30)	
SSC_621	Clarification on the combination of multiple methodologies and technologies for PoAs	(See paragraph 31)	

19. In response to the submission SSC_604, requesting clarification on the application of the tool "Project and leakage emissions from composting" in conjunction with the methodology AMS-III.F, the SSC WG agreed to clarify that this methodological tool is applicable to AMS-III.F to calculate project and leakage emissions from composting. The SSC WG agreed to include the reference to this tool in the draft revision of AMS-III.F, as contained in annex 5 (see paragraph 13) of this report.

20. In response to the submission SSC_606 requesting clarification on the applicability of AMS-III.Q for waste heat recovery from reclaimed water for space heating application in residential/commercial buildings, the SSC WG agreed to clarify that the methodology in its current form does not cover the underlying project activity.

21. In response to the submission SSC_607 requesting clarification on the applicability of AMS-III.Z for a technology and process change, the SSC WG agreed to clarify that the project activity is eligible under AMS-III.Z, however, the most plausible baseline scenario shall be identified following the relevant procedure in the "General Guidelines for SSC CDM methodologies". It was also pointed out that in project activities that use industrial products with commercial value as raw materials or additives, incremental emissions due to the project implementation shall be accounted for (e.g. emissions associated with the production and potential competing use of the raw materials/additives).

22. In response to the submission SSC_609 requesting clarification regarding the use of sampling to estimate the date of distribution of project lamps under AMS-III.AR, the SSC WG agreed to clarify that in the case of project activities which do not involve direct distribution of project lamps to end-users, but instead involve distribution of project lamps through intermediaries, the average number of days between the date on which project lamps are delivered to intermediaries and the date on which the project lamps are distributed from the intermediaries to end-users, can be determined using either survey methods or by using a default value of 120 days.

23. In response to the submission SSC_610 requesting clarification on project emissions for fuel switch projects applying AMS-I.C, the SSC WG agreed to clarify that for project activities involving a switch from fossil fuel to biomass in existing energy generation equipment, project emissions associated with the auxiliary electricity consumption shall be accounted for, where it is identified that due to the project implementation the auxiliary electricity consumption has increased over the level of baseline auxiliary consumption. The SSC WG agreed to include the clarification in the next revision of AMS-I.C.

24. In response to the submission SSC_611 requesting clarification on eligible technologies under AMS-II.M, the SSC WG agreed to clarify that the methodology covers the installation of a faucet regulator which contains integral, non-removal flow restrictions, however, the eligibility of the project technology should be further assessed by a designated operational entity during the validation.

25. In response to the submission SSC_612 requesting clarification on the applicability of AMS-I.D for a project activity involving capacity addition and retrofit, the SSC WG agreed to clarify that according to paragraph 8 of AMS-I.D, the total output of the retrofitted unit shall be considered, i.e. 9 MW in this case, when determining the compliance with capacity thresholds. Since the project

activity also involves an additional 10 MW unit, the total output of the project activity is 19 MW and the project activity does not qualify under the small-scale capacity limits of 15 MW.

26. In response to the submission SSC_613 requesting clarification on the applicability of AMS-III.Q when the generator and the recipient of energy are both included as project participants, the SSC WG agreed to clarify that the project activity may use AMS-III.Q even if both the generator of waste energy and the recipient plant are project proponents and intend to share the emission reduction benefits, provided that an official agreement exists between the two parties regarding sharing of the benefits, and that this agreement will ensure that double-counting is avoided. The SSC WG agreed that this clarification will be made explicit in the next revision of the methodology.

27. In response to the submission SSC_615 requesting clarification on the estimation of project emissions under AMS-III.AN where electricity is used for operating the same auxiliary equipment prior to the fuel switch and after the project implementation, the SSC WG agreed to clarify that project emissions due to auxiliary electricity consumption shall be accounted for in cases where it is identified that the auxiliary electricity consumption due to the implementation of the project activity has increased over the baseline level. The SSC WG agreed to include the clarification in the next revision of AMS-III.AN.

28. In response to the submission SSC_616 requesting clarification on the applicability of AMS-I.A for off-grid project activities involving end-users connected to a grid with frequent blackouts/brownouts, the SSC WG agreed to clarify that the methodology is applicable if the connected households and end-users under the project activity receive power from the grid for less than 36 hours (approximately 5 per cent of the time) in any given calendar month based on actual monitoring. The specific months in which the households and users receive power from the grid for less than 36 hours can be included in the calculation of emission reductions. A provision for this approach has been included in the revised version of the methodology, as contained in annex 3 of this report.

29. In response to the submission SSC_617 requesting clarification on the combination of AMS-III.AO and AMS-I.E for programmes of activities (PoAs), the SSC WG agreed to clarify that the combination of AMS-III.AO and AMS-I.E is eligible for use directly in each and every component project activity (CPA) of the underlying PoA, since no cross effects are envisaged under this combination. In addition, the SSC WG would like to draw the project participants' attention to paragraph 29 of the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities", according to which the combination under discussion is eligible for PoAs.

30. In response to the submission SSC_619 requesting clarification on the applicability of AMS-III.AH for an element process whose energy output cannot be measured directly, the SSC WG agreed to clarify that the proposed approach for determining the baseline energy consumption based on fuel input is not acceptable under AMS-III.AH. The methodology is only applicable to project activities where it is possible to directly measure and record the energy use and consumption within the project boundary and only to element processes generating a single output.

31. In response to the submission SSC_621 requesting clarification on the combination of multiple methodologies and technologies for PoAs, the SSC WG agreed to clarify that all the combinations of the methodologies AMS-I.A, AMS-I.D, AMS-I.F and technologies listed in the query are permitted in accordance with the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies are met and are encompassed in the PoA eligibility criteria.

E. Other issues

Small-scale/microscale additionality

32. The SSC WG provided feedback to the secretariat on concepts to broaden the applicability of small-scale and microscale additionality guidelines, in particular on:

- (a) Thresholds in microscale additionality guidelines, i.e. appropriateness of the thresholds for Type I, II and III activities under the "Guidelines for demonstrating additionality of microscale project activities";
- (b) Expansion of the positive list of attachment A to appendix B for household energy supply and manure management technologies.

Top-down development of standardized baselines

33. In line with the priorities of the work of the Board on methodological issues, the SSC WG continued its work on top-down development of standardized baselines:

- (a) Taking into account expert inputs, the SSC WG continued its consideration of the top-down development of standardized approaches for agricultural sector activities in particular for "Methane emission in rice fields". The SSC WG considered an information note prepared by the secretariat, as contained in annex 9 of this report, and agreed to recommend the Board to open a call for public inputs on the issue;
- (b) Taking into account expert inputs, the SSC WG continued its consideration of the top-down development of standardized approaches for rural energy supply activities such as "Household biogas". The SSC WG considered an information note prepared by the secretariat, as contained in annex 10 of this report, and agreed to recommend the Board to launch a call for public inputs.

Simplification and improvements of waste and manure management methodologies

34. In its ongoing work on improvements and simplification of small-scale methodologies, as included in the workplan of the SSC WG for 2012, the SSC WG took into account useful comments and proposals from the public on revisions of manure management methodologies and accordingly prepared draft revisions of the methodologies AMS-III.D "Methane recovery in animal manure management systems", AMS-III.R "Methane recovery in agricultural activities at household/small farm level", and AMS-III.G "Landfill methane recovery", as contained in the annexes 11, 12 and 13 of this report:

- (a) The draft revision of AMS-III.D includes simplified requirements for project activities that utilize recovered methane for power generation, in which case the amount of methane captured may be calculated, based on the amount of electricity generation;
- (b) The draft revision of AMS-III.R now incorporates the Tier 1 approach (instead of the Tier 2 approach);
- (c) The draft revision of AMS-III.G includes its alignment with the large-scale methodology ACM0001 "Flaring or use of landfill gas" by introducing the oxidation factor and a landfill gas collection efficiency factor.

The SSC WG agreed to recommend that the Board launch a call for public inputs on the revised versions of the methodologies AMS-III.R, AMS-III.D and AMS-III.G. Questions to specific issues of the revised versions of the methodologies are contained in annex 14 of this report.

Furthermore, the SSC WG continued its work on the revision of AMS-III.F "Avoidance of methane emissions through composting" with the aim of ensuring consistency with the tool "Project and leakage emissions from composting". Changes were made in accordance with the clarification provided on submission SSC_604 (see paragraph 19) and are included in the revision of the methodology as recommended under paragraph 13 and contained in annex 5 of this report.

Implementation of the suppressed demand guidelines

35. In line with the objectives of the workplan for 2012, the SSC WG initiated work on the topdown revisions of selected methodologies to account for suppressed demand in accordance with the suppressed demand guidelines. The SSC WG agreed to continue to work on the revisions of the methodologies AMS-I.A "Electricity generation by the user" and AMS-III.AR "Substituting fossil fuel based lighting with LED/CFL lighting systems".

Public inputs on scrap tyre methodologies

36. In its ongoing work on the development of methodologies mandated by the Board, the SSC WG took into account comments and a proposal submitted via the commenting system in the preparation of a draft concept for project activities involving scrap tyres. The SSC WG agreed to continue its work on the methodology at the thirty-seventh meeting of the SSC WG.

DNA submission on microscale renewable energy technologies for automatic additionality

37. The SSC WG undertook a technical assessment of the submission received from the designated national authority (DNA) of Chile following the "Procedure for submission and consideration of microscale renewable energy technologies for automatic additionality" (EB 65, annex 33). The SSC WG agreed to recommend that the Board approve the proposed specific renewable technologies/measures as conferring additionality on microscale CDM project activities implemented in the host country for which the DNA submitted the proposal.

With respect to the paragraph 2(d)(i) of the guidelines for the demonstration of additionality of microscale project activities, the SSC WG agreed to clarify that in the case of wind energy technology, all the wind installations in the country shall be considered for the analysis, irrespective of the size of the wind farm, in order to derive the percentage share of wind technologies in the total installed capacity of grid connected electricity generation technologies. This is because the wind energy technology, unlike technologies such as hydro power, is modular in nature i.e. cost per MW installed capacity do not vary significantly except for the transmission network cost. Moreover, commercially available capacity of the wind electricity generator (WEG) is generally below 5 MW in non-Annex I countries.

F. Schedule of meetings and rounds of submissions

38. The SSC WG agreed to schedule its thirty-seventh meeting for 5–8 June 2012 taking into account the schedule of the Board. The deadline for new methodology submissions to this meeting is 10 April 2012 and the deadline for submitting requests for clarifications/revisions for the thirty-seventh meeting of the SSC WG is 8 May 2012.

G. Desk reviews

39. The SSC WG noted the satisfactory completion of the desk reviews SSC-NM078 and SSC-NM080 undertaken for the proposed new SSC methodologies considered at the meeting and also for the desk reviews undertaken for SSC-NM079 and SSC-NM081.

External annexes to the report of the thirty-sixth meeting of the SSC WG

Annex 1 - SSC-III.BA "Recovery and recycling of materials from E-waste"

Annex 2 - SSC-III.BB "Electrification of communities through grid extension or construction of new mini-grids"

Annex 3 - Draft revision of AMS-I.A "Electricity generation by the user"

Annex 4 - Draft revision of AMS-II.K "Installation of co-generation or tri-generation systems supplying energy to commercial buildings"

Annex 5 - Draft revision of AMS-III.F "Avoidance of methane emissions through composting"

Annex 6 - Draft revision of AMS-III.Z "Fuel Switch, process improvement and energy efficiency in brick manufacture"

Annex 7 - Draft revision of AMS-III.Q "Waste Energy Recovery (gas/heat/pressure) project"

Annex 8 - Questions for the call for public input on the draft revision of AMS-III.Q "Waste energy recovery (gas/heat/pressure) projects -Version 4.0"

Annex 9 - Information note on the top-down development of standardized approaches for determining methane emissions in rice field under AMS-III.AU

Annex 10 - Information note on the top-down development of standardized approaches for rural energy supply (biogas)

Annex 11 - Draft revision of AMS-III.D "Methane recovery in animal manure management systems"

Annex 12 - Draft revision of AMS-III.R "Methane recovery in agricultural activities at household/small farm level"

Annex 13 - Draft revision of AMS-III.G "Landfill methane recovery"

Annex 14 - Questions for the call for public input on the draft revisions of AMS-III.D, AMS-III.R and AMS-III.G