



CDM: Recommendation Form for Small Scale Methodologies (version 01)

(To be used for presenting questions/proposals/amendments to the simplified methodologies for small-scale CDM project activity categories)

<i>Date of SSC WG meeting:</i>	10–12 November 2008, SSC WG 18
<i>Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):</i>	Request for Revision for Greenfield avoided methane release from charcoal production
<i>Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.</i>	AMS-III.K version 03
<i>Name of the authors of the query:</i>	Anamélia Medeiros Santos, EcoSecurities plc. Institution: EcoSecurities plc. anamelia.medeiros@ecosecurities.com, Jessica.wade@ecosecurities.com

Summary of the query:

Please use the space below to summarize the query related to SSC methodologies/categories SSC Modalities and Procedures provide recommendation/analysis of the SSC WG.

Original text from PP:

The motivation for this request for revision is a greenfield project to avoid methane emissions from charcoalization, where the project participant (PP) has never produced charcoal and but instead buys charcoal on the market prior to the project. The PP will build new kilns under the project that result in fewer methane emissions than those of common practice charcoal production in Brazil. According to the results of EB35, Type III methodologies can be applied to Greenfield projects provided those can apply the steps 1 to 3 of the latest version of “Combined tool to identify the baseline scenario and demonstrate additionality” to identify the baseline scenario. However, when this is undertaken, the methodology AMS-III.K poses a challenge to application to Greenfield projects, because it requires the baseline emission factor to be found from experiments using relevant statistical methods on the existing kilns. Of course for the Greenfield projects, there are no existing kilns.

Therefore, this request proposes to permit projects under AMS-III.K to derive a methane emission factor for the baseline from experiments performed for registered CDM projects, namely those registered under AM0041 or AMS-III.K. Although the concern of the PP in this case is a Greenfield project, the requests proposes to permit any project (existing or Greenfield) to use this strategy. This is proposed because in most cases, small scale methodologies allow project participants to refer to IPCC default emission factors in calculating emission reductions. This facilitates the development of small scale projects under the CDM, since it decreases the costs associated with validating, registering, monitoring and verifying a project. However, no default emission factor is available for the case of AMS-III.K because the IPCC 2006 Guidelines for National Greenhouse Gas Inventories do not include methane emission factors from charcoal production. The development of AMS-III.K category projects would be facilitated by providing an alternative to using the lengthy and expensive testing methods that are now required to define the baseline emission factor.

The problems with defining the baseline emission factor in this way result from the potential differences between the baseline of the registered project and that of the existing units (for existing kilns), or that of the theoretical baseline units (for Greenfield projects). From the CDM perspective, in the absence of a

proper default factor, it is reasonable to use a baseline EF from a registered project, provided one has certainty that the EF is equal to or lower than the true baseline EF from the project at hand. Therefore, revision proposes to add an annex with requirements to help ensure that when using a baseline EF from a registered project, this will always be the case.

According to the Annexes of AM0041 and a carbonization expert, the most important factors in methane production during the carbonization process are:

For the raw materials: Wood moisture (1) and diameter of wood logs (2);

For the kiln operation: carbonization temperature (3), heating rate (4), and operation of air inlets (5).

Also, in accordance with the consulted carbonization expert, environmental factors, such as temperature and humidity have a minor influence on the carbonization process.

Therefore, if these factors are compared between the proposed project baseline and the registered project baseline, as long as the proposed project baseline is similar to or tends toward higher methane intensity than the registered project baseline, the baseline EF from the registered project will either correctly estimate or under-estimate the baseline emissions.

The following list is proposed for using to check if the baseline is appropriate. The factors noted above are matched to the point that controls for them in the list. For Greenfield projects, only the requirements labelled “(g)” must be demonstrated, because the other two requirements related to baseline charcoaling practice are difficult or impossible to reliably establish on a theoretical basis.

- 1) The baseline kiln technology is the same as that of the registered project, as demonstrated by Technology type according to
 - a. Kiln design factors: geometry, dimensions, batch vs. continuous design, presence of chimneys (g) (3,4),
 - b. Operation of air inlets (g) (5),
 - c. Alternatively, if the baseline kiln technology is different, it is still possible to use the established relationships and regression equation, by demonstrating that the baseline kiln of the proposed project is of a type known to routinely have a higher emission factor than the baseline kiln of the registered project, as demonstrated by literature, studies, or national or sector statistics.
- 2) The baseline charcoaling practice is similar or more methane intensive, as demonstrated by
 - a. Maximum temperature is similar ($\pm 10\%$) or higher (3)
 - b. Temperature profile as a function of time is similar or tends less toward a plateau (4)
- 3) The raw material used for charcoal production is comparable to the raw material of the registered project, as demonstrated by
 - a. Similar Genus (g) (1) (2); or, in case of different Genus, PP shall demonstrate similar characteristics (e.g. carbon content ($\pm 10\%$), lignine content ($\pm 10\%$), cellulose content ($\pm 10\%$)). (g)
 - b. Type of source (e.g. plantation vs. native forest, coconut processor, etc.) (g) (2)
 - c. Moisture content ($\pm 10\%$), minimum 60 days after harvesting (g) (1)
 - d. Dimensions of raw materials used for charcoaling process (\pm standard deviation) (g) (2)

Recommendation by the SSC WG:

Please use the space below to provide amendments/change (in your expert view, if necessary).

Please refer to paragraph 6 of the meeting report of the SSC WG 18
(http://cdm.unfccc.int/Panels/ssc_wg).

Answer to authors of query by the SSC WG:

Please use the space below to provide answer to the authors of the above query

The small-scale working group of the CDM Executive Board would like to thank the author for the submission.

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.

The SSC WG further agreed that establishing conservative default values is also nevertheless an acceptable approach in SSC CDM. The Project Proponent may analyse the data from registered PDDs and validation/verification reports, together with technical literature, in order to propose **conservative** default values for some of the baseline technologies that can be identified. If these values can be established, a revision of AMS-III.K may be proposed to introduce these into the methodology rather than direct use in a PDD.



Signature of SSC WG Chair

(Ulrika Raab)

Date: 12/11/2008



Signature of SSC WG Vice-Chair

(Kamel Djemouai)

Date: 12/11/2008

Information to be completed by the secretariat

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