



CDM: Recommendation form for Small Scale Methodologies (Version 01.1)

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

Date of SSC WG meeting:	09–12 October 2012, SSC WG 39
Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):	Clarification on how to deal with differences in efficiency test under AMS-II.G
Indicative methodology to which your submission relates <i>(refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable:</i>	AMS-II.G “Energy efficiency measures in thermal applications of non-renewable biomass”
Name of the authors of the query:	Richard Iliffe Institution: co2balance richard.iliffe@co2balance.com , matt.thomas@co2balance.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:

Query relates to monitoring Improved cookstove technology. Part of this query was addressed during an earlier CR, but the changes were not implemented in AMS ii.G version 4 so clarification is still sought.

Meth para 15 states that “ $B_{y,savings}$ are monitored by checking a representative sample biennially to ensure they are operating at N_{new} , or replaced by an equivalent in service appliance.”

WBT is conducted in a laboratory in time for validation following PCIA guidance (no statistically relevant sampling size is given) then during monitoring PP is required to measure efficiency in the field using a representative sample size. Differences in N_{new} could be attributed to differences in the testing regimes (field vs lab) and sampling strategy, without actually implying that the monitored stoves are operating at a different efficiency because of wear and tear and therefore requiring replacement.

What provision (or sensitivity range) does the methodology have for appliances that have fallen below the laboratory derived efficiency test (WBT) as a result of the above points?

Moreover, would it be legitimate to claim emissions reductions based on the statistically relevant sample if found to be different (lower or higher) than N_{new} should the stove deemed to be operating without fault and therefore not requiring replacement?

Additional information from PPs

Please see attached for actual data from a different stoves project we have. This shows highly variable data with the sample chosen, which I attribute to variations in fire starting - naturally a random process. In the field, we also have other variability in pot shape, material and size between households that you do not get from a lab test. Admittedly, we could use a standard pot for the field test to remove one variable - but this would not be the same pot as the lab. The attached sample meets 90/30 (as was designed in sample plan for GS project), but does not meet 90/10 precision which presumably would be required for CDM EB.

This high level of variability suggests that we cannot be confident in lab testing where the sample size is not as large - indeed the PCIA/Shell WBT guidance does not state how many tests need to be done to establish a rigorous result. Variables such as pot shape material etc are admittedly removed in the lab, but

we have still noted a high level of variability between test efficiencies. I could ask PCIA if they also note this phenomenon?

Bearing in mind the high variability in our field data set - e.g. high value for combined efficiency is 32%, lowest is 11%, perhaps a value that is within +/- 5% absolute terms of η_{new} (provided stove can be shown to be in good repair) would account for natural differences between lab and field and the variability of starting fires.

Recommendation by the SSC WG:

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

Please refer to paragraph 34 of the meeting report of the SSC WG 39
<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 agreed to recommend a revision of "AMS-II.G: Energy efficiency measures in thermal applications of non-renewable biomass", as contained in annex 6 of the SSC WG 39 meeting report.

The SSC WG agreed to clarify, taking into account practical aspects of project implementation, that:

- It is acceptable to use the ex post efficiency determined through a statistically relevant sample, even if it is not exactly equivalent to the efficiency determined ex ante. In other words, the condition to ensure that devices are still operating at the specified efficiency or replaced by an equivalent in service appliance is not mandatory and the ex post monitored value of the efficiency of the operating devices ($\eta_{new,y}$) may be used for the purpose of calculating emissions reductions.

The above clarification is applicable from version 1 to version 4 of AMS-II.G.

Signature of SSC WG Chair: Mr. Peer Stiansen

Date: 12/10/2012

Signature of SSC WG Vice-Chair: Ms. Fatou Gaye

Date: 12/10/2012

SECTION TO BE FILLED IN BY THE UNFCCC SECRETARIAT

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History of the document

Version	Date	Nature of revision(s)
01.1	12 April 2012	Editorial changes to include new logo and other improvements.
01.0	2005	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Methodology		