



**Approved baseline and monitoring methodology /
methodological tool clarification response form
(Version 02.0)**

INFORMATION TO BE COMPLETED BY THE SECRETARIAT OR PANEL / WG

Date and number of Panel / WG meeting:	22–25 June 2015 / SSC WG 48
Title/Subject of the request for clarification:	Clarification on the definition of LED based lighting system under AMS-III.AR
Reference number of the request for clarification:	SSC_719
Exact reference (number, title and version) of the methodology or methodological tool to which the request for clarification applies:	AMS-III.AR “Substituting fossil fuel based lighting with LED/CFL lighting systems --- Version 5.0”
Fast track or Regular track:	<input type="checkbox"/> Fast track <input checked="" type="checkbox"/> Regular track

Summary of the request for clarification

Original text from PP/CME:

Context

In the Lighting methodology, AMS III-AR, there are a number of very useful default factors used in the calculation of the emissions reductions. A “project lamp” is defined and mentioned a number of times in the Methodology, specifically:

- Para 15a and Footnote 1: “(An) LED based lighting system is defined as one or more individual LEDs . . . for the purpose of the methodology, a single LED based lighting system is referred to as the ‘project lamp.’”
- In Equation 2 (paragraph 20) the parameter “n” is: “the number of fossil fuel based lamps replaced per project lamp” which has a default factor of 1.
- Parameter N in equation 5 also refers to total number of project lamps.

Clarification Request

Many of the systems that we will be using in our proposed CDM Programme of Activities in East Africa have 3 to 4 LED lamps connected to a single battery with a single solar charger.

It is unclear if each 3 to 4 light system should be taken to replace:

- a single baseline kerosene lantern or
- 3 or 4 baseline kerosene lanterns.

We presume latter interpretation is correct as clearly a 4 light system replaces more than 1 kerosene lamp.

Such an interpretation based number of installed LED/CFL lights rather than systems seems to be consistent with the requirements for level of service (i.e. light output in this case) indicated in paragraph 7 (a) which we presume is for individual lights i.e. Project lamp shall meet or exceed the minimum performance characteristics in terms of luminous flux specified.

Kindly clarify.

Clarification by the secretariat or Panel / WG

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

The SSC WG agreed to clarify that in the context of the methodology referred when the LED/CFL lighting system has more than one LED/ CFL lamp connected to a single rechargeable battery system, every LED/CFL lamp should be considered as one project lamp. The requirements for the light output (e.g. paragraph 7 (a) of version 5.0) shall apply to each lamp, while rest of the requirements on performance (e.g. paragraph 7 (b) of version 5.0) shall apply to the lighting system. In Equation 5, for the parameter $N_{i,j}$ (number of lamps), each LED/CFL lamp will move the counter by 1 (e.g. if there are 1,000 solar lighting systems each including 3 lamps, then 3,000 will be the input number).

The SSC WG noted that the methodology has addressed the suppressed demand issues to some extent in standardizing the default fuel use rate (FUR) of 0.03 litres/hour in Equation 2.

There has been a wide range of fuel-based lighting sources and limited testing conducted. Rates range from 0.01 to 0.10 litres per hour, with most products operating in the 0.02 to 0.04 range (i.e. the small/medium wick lamps and the kerosene lanterns).

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Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
02.0	18 July 2013	Revised to remove the row "Date and signature of the chair and vice chair of Panel/WG (in case of clarification by Panel/WG)"
01.0	4 July 2013	Initial publication. This document supersedes and replaces the following documents: <ul style="list-style-type: none"> • Recommendation Form for Small Scale Methodologies (F-CDM-SSCwg) (Version 01.1) • Recommendation Form for Small Scale A/R Methodologies and Procedures (F-CDM-SSC-AR) (Version 01.1)
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