



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>	30 January–02 February 2012, SSC WG 35
<i>Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):</i>	Revision of AMS-I.A to simplify baseline emission calculation for off-grid CFL/LED lighting projects
<i>Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.</i>	AMS-I.A “Electricity generation by the user”
<i>Name of the authors of the query:</i>	Vikas Menghwani Institution: Emergent Ventures India Pvt. Ltd. vikas.menghwani@emergent-ventures.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 Stakeholder:

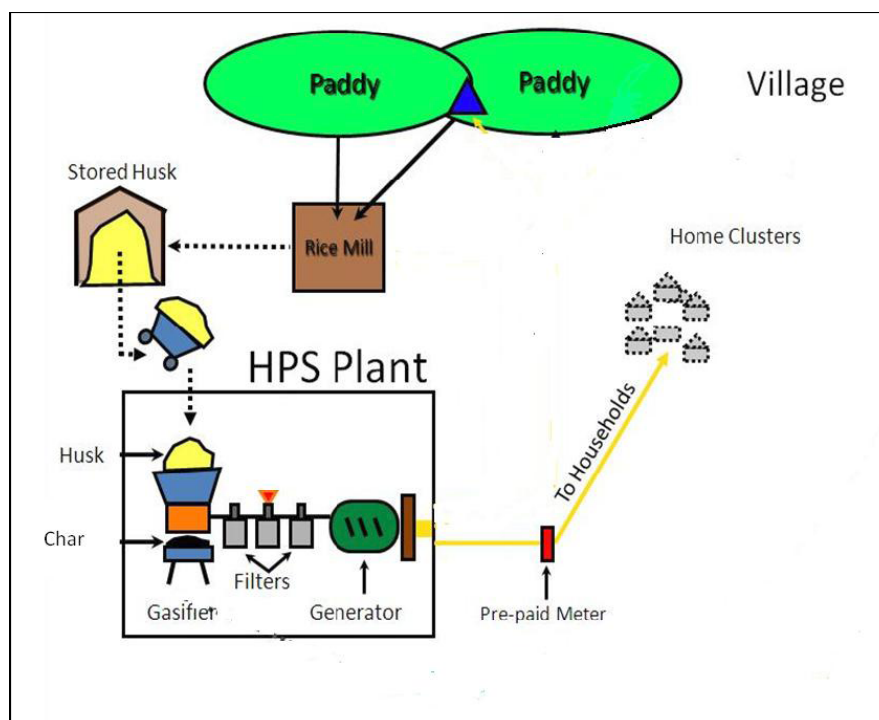
Request for Clarification

The recent revision in the SSC methodology AMS III.AR has an extended scope of covering the installation of **battery charged CFLs**, which replace fossil fuel based lighting systems. A clarification is being sought with respect to this specific scope by presenting a real case here.

A description of the specific project under consideration is provided here:

Project activity

Husk power systems (the PP), a private owned enterprise in the eastern state of Bihar in India, has initiated a unique system of power generation and distribution. The PP installs a 30 kW micro scale rice husk based power generation facility in the off-grid villages and also develops the distribution infrastructure, to transfer the power directly to the rural households. The electricity thus delivered is used for the CFL lamps, which are distributed by the PP themselves. The utilization of power for the CFL is controlled by the operations of the plants run by the PP and the lamps are lit for as long as the power is produced in a day. The CFLs are AC based non-rechargeable type, using direct power for lighting. The following diagram shows the model of operation for the project activity.



A monthly fixed rental is charged to the households for the usage of electricity for running the CFL lamps. The PP plans to upgrade the distribution system with smart monitoring and pre-paid meters. All the households are given only a fixed amount of electricity so that no illicit usage, other than for lighting using CFLs, takes place. Each household has a fuse, stopping any excess usage of power other than allotted load. This distribution is the first successful example of decentralized energy generation and distribution in India.

Considering the small capacity of one generation unit, the project is being developed as a PoA, covering all the states of India.

Baseline

As the project is being developed in the off-grid regions, for providing lighting to the rural households, the baseline is the kerosene based lamps, used by the households in the absence of the project activity. Thus, the emission reductions arise due to the replacement of the lighting service earlier being catered by kerosene based lamps with CFLs (running on direct power).

The project considered is that of Biomass based decentralized energy generation and distribution in the off-grid regions. The electricity generated is being specifically distributed for lighting purpose by the distribution of CFL lamps, thus replacing the earlier consumption of kerosene lamps in the baseline. The CFLs use the direct generated electricity rather than batteries.

The following tabulated information presents the above discussion with more clarity:

Criteria Project under consideration

Baseline Fossil fuel based lamps. Off-grid region.

Project case Decentralized micro-scale generation (based on Biomass) and distribution of power in off-grid region, specifically for lighting purpose. Installation of distribution network and distribution of CFLs (using direct power supply) covered under the project.

AMS III.AR

Fossil fuel based lamps.

Rechargeable LEDs or rechargeable CFLs

In the light of above discussion, clarification is being sought from the SSC WG if the methodology AMS III.AR remains applicable for the cases similar to the project considered above. If applicability of the methodology to the considered project is not found appropriate, EB may like to consider the discussion provided below, with respect to the methodology AMS I.A.

Request for Revision

The following proposal to suggest an amendment in the SSC methodology AMS I.A: *Electricity generation by the user, Version 14.0* comes in the wake of a new methodology AMS III.AR (also discussed above) which was developed after the last version of the AMS I.A. Though the methodology aims to replace certain amount of energy being produced by the fossil fuel based sources in the baseline, it also allows for replacement of lighting if the baseline is the lighting service using fossil fuel. However, for the replacement of lighting service, the calculation of baseline emissions relies upon the trend-adjusted projection of historic fossil fuel consumption for lighting purpose. One relevant case of fossil fuel based lighting service is that of the kerosene lamps.

This fact now draws our attention to the new methodology mentioned above i.e. AMS III.AR: *Substituting fossil fuel based lighting with LED/CFL lighting systems*, which was developed after significant inputs from public and experts (http://cdm.unfccc.int/public_inputs/2010/fuel_LED_repl/index.html). The methodology approached the baseline emissions in a much simplified way, at the same time, opening doors for the viability for possible CDM projects or PoAs in LDCs or SIDs (http://cdm.unfccc.int/Panels/ssc_wg/meetings/028/ssc_028_meetrep.pdf). The methodology suggests default factors (with precise and credible assumptions) which makes possible the calculation of baseline assumptions for any geography or project scenario possible.

In light of these scenarios, the earlier said methodology, which also allows for the projects replacing fossil fuel based lighting systems, can be appropriately revised to make the baseline emissions formulations consistent for a similar kind of measure in both the methodologies.

Thus, for a consistent, usable and established baseline formulation procedure, EB may like to consider either of the following two options (based on the discussion above): -

- Making the methodology AMS III.AR applicable for non-rechargeable CFLs also
- Making the baseline formulations of AMS III.AR applicable for AMS I.A also (for the case of lighting)

Recommendation by the SSC WG:

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

Please refer to paragraph 25 of the meeting report of the SSC WG 35
<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 is of the opinion that the project activity type as described (replacement of kerosene lighting with efficient CFL lighting) in the submission is covered under AMS-I.A provided that proper measures (such as the installation of fuses proposed in the submission) are adopted in order to ensure that the electricity supplied will be used for lighting purposes.

The current procedure provided in AMS-III.AR is quite specific to battery-charged stand-alone lighting system. The SSC WG is of the opinion that expanding AMS-III.AR to cover non-chargeable lighting systems will complicate a rather simple methodology.

The group is of the opinion that the procedure provided in AMS-III.AR can not be used for project activity using AMS-I.A.

However, as indicated in the work program on suppressed demand (EB 63, Annex 30 - Work programme on suppressed demand (version 01.0) <https://cdm.unfccc.int/EB/archives/meetings_10.html#63> some of the SSC methodologies will be revised to account for the situation of suppressed demand taking into account the guidelines on the consideration of suppressed demand. AMS-I.A will most likely be one of

those methodologies. As an alternate option, submission author may wish to follow the progress on the revision of AMS-I.A.

The author of the submission may also refer to the response provided by the SSC WG to SSC_581 “Clarification regarding baseline identification for renewable energy lighting applications using AMS-I.A” on the discussion about features of AMS-I.A and AMS-III.AR.

Signed by the Chair, Ms. Fatou Gaye

Date: 02/02/2012

Signed by the Vice-Chair, Mr. Peer Stiansen

Date: 02/02/2012

Information to be completed by the secretariat

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