



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)

Date of SSC WG meeting:	09–12 May 2011, SSC WG 31
Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):	Revision of AMS-I.C to include additional baseline scenario for a new cogeneration project.
Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.	AMS-I.C “Thermal energy production with or without electricity”
Name of the authors of the query:	Kishor Rathod Institution: ecolutions Carbon India Pvt.Ltd. kishor.rathod@ecolutions.de , jayshri.jamliya@ecolutions.de

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:

This is in continuation with clarification we received from SSC WG in his 30th meeting (SSC-Submission numbe-SSC_512¹). We would like to ask for revision in AMS-I.C, Version 18, to include additional baseline scenario for a new cogeneration project activity with the following description.

Description of the project activity:

The project activity is installation of new renewable biomass based cogeneration project to meet additional power/steam requirement of manufacturing facility. Detail explanation of pre- & post-project activity scenario is as follows-

Pre - project scenario:

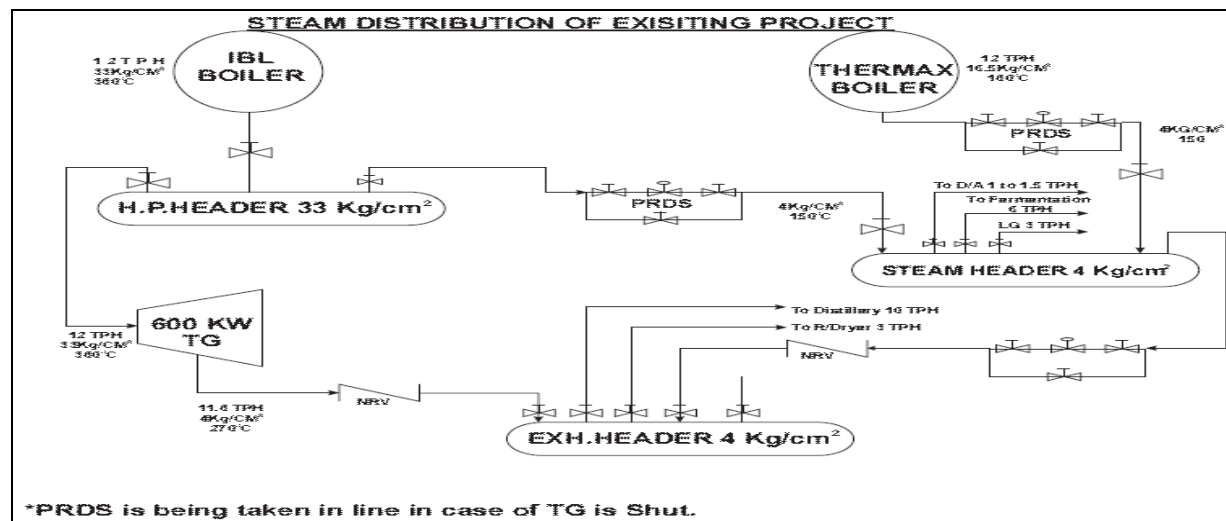
The manufacturing facility's thermal requirement is being met by biomass based boiler (2*12 TPH). The electricity demand is being met by the supply from the Grid & 600 KW biomass based captive cogeneration power plant or DG set (In case of PSEB power cuts).

Parameter	Source/Equipment	Operation / Specifications	Fuel	% Contribution in usage based on last 3 year data
Electricity	Grid	<u>(Continuous)</u>	Fossil fuel dominated	56%
	0.6 MW captive cogen. plant	1*0.60 MW <u>(Continuous)</u>	Biomass based	24%
	DG sets	4*0.320 MW <u>(Used during grid failure/power cuts)</u>	Diesel based	20%
Steam	Boilers	1*12 TPH	Biomass based	45%

¹<http://cdm.unfccc.int/filestorage/D/P/2/DP2Y5JHV4WLST8UCFK6R3GXBNIQ7M0/Final%20response.pdf?t=c0J8MTMwMjAwMjA4OC41Nw==wo7B8zOtUoHMQrw7iwdVH288qUE=>

		@ 33 -kg/cm ²		
		1*12 TPH	Biomass based	55%
		@ 17 -kg/cm ²		

Diagrammatic representation of pre-project scenario-

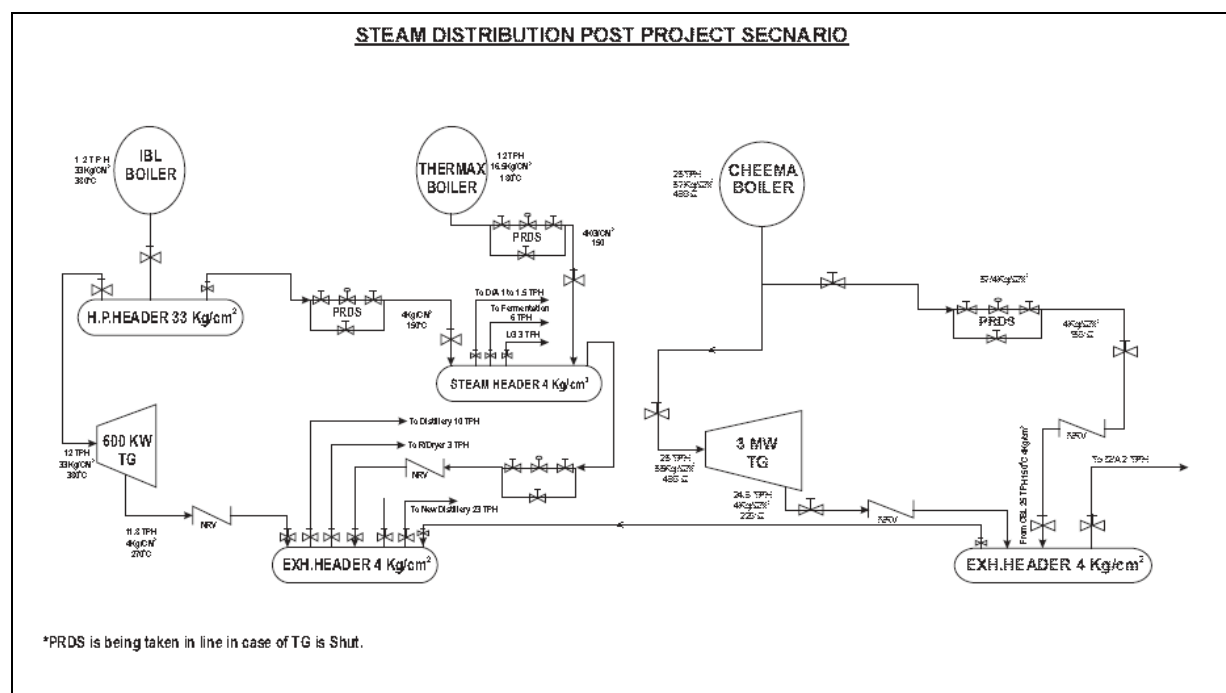


Post - project scenario:

PP has expanded their manufacturing capacity, to meet additional power requirement PP has installed 3 MW biomass based cogeneration project which will meet additional power requirement of facility as well as replace existing grid usage (> 56 % total power usage). Detail post-project scenario is as follows-

Parameter	Source/Equipment	Operation / Specifications	Fuel	% Contribution in usage post project.
Electricity	Grid	<u>(Used on emergency/Stand by)</u>	Fossil fuel dominated	Negligible
	0.6 MW captive cogen. plant	1*0.60 MW <u>(Continuous)</u>	Biomass based	10-20 %
	DG sets	4*0.320 MW <u>(For emergency use)</u>	Diesel based	5-10%
	3.00 MW captive cogen. plant	<u>(Continuous)</u> 1*3.00 MW	Biomass based	70-85 %
Steam	Boilers	1*12 TPH @ 33 -kg/cm ²	Biomass based	25%
		1*12 TPH @ 17 -kg/cm ²	Biomass based	25%
		1*25 TPH @ 67 -kg/cm ²	Biomass based	50%

² Grid import is more than captive electricity generation using biomass.

Diagrammatic representation of post-project scenario-

Electricity generated by the project activity will substitute/reduce the amount of electricity imported from the grid as compared to the baseline. Based on pre- & post project scenario project proponent wish to claim emission reduction only for electricity generation & no emission reduction will be claimed for thermal/steam energy utilisation.

We request the revision of the approved small scale methodology I.C, version 18 to broaden its applicability to project activity explained above. Therefore, we request SSS WG to include additional baseline scenarios in Para 15 of AMS I.C version 18 –i.e. (i)

(i) Combination of (e) and (g)

Electricity is imported from the grid² and/ or produced in a biomass fired cogeneration unit (without a possibility of export of electricity either to the grid or to other facilities); steam/heat is produced from biomass fired cogeneration unit or biomass fired boiler (without a possibility of export of thermal energy to other facilities).

For case 15 (i), baseline emissions from the production of electricity shall be calculated as per paragraph 21. Emission reductions from heat generation are not eligible.

Para 21 of AMS I.C version 18 says-For project activities that do not displace captive electricity generated by existing plant but displace grid electricity import and/or supply electricity to grid, the emission factor of the grid shall be calculated as per the procedures detailed in AMS-I.D

Additional clarifications from PP submitted 15 Apr 2011

1. How it will be ensured that all the services provided in the baseline, i.e. energy supply (heat/electricity) are maintained at the same level or improved during the crediting period, and emission reductions are attributed to the incremental production of energy in the project as compared to the baseline (see for example footnote 7 of paragraph 15 (g)).

The level of services provided in the baseline, i.e. energy supply (heat/electricity) will be insured/benchmarked from last three year data.

For example Energy generated from baseline scenario-from activity-

a) Grid –Last three year average data-(X)

b) 0.6 MW captive cogen. Plant –Last three year average data-(Y)

So From last three year data average services provided in the baseline, i.e. energy supply (heat/electricity) is benchmarked as, X & Y.

The level of services provided in the baseline, i.e. energy supply (heat/electricity) maintained at the same level or improved during the crediting period, will be determined by comparing with established benchmark i.e. X & Y.

So incremental generation from project activity for emission reductions determination will be determined by using equation below

Total Energy generated post project activity=Z

Incremental generation from project activity for emission reductions determination $I=Z-X-Y$

2. Please provide a procedure to establish the condition proposed in footnote 8 "Grid import is more than captive electricity generation using biomass". For example, is this based on three years historical data (consistent with paragraph 19)?

-Yes this is based on recent three years historical data (consistent with paragraph 19)

3. It is understood that in the pre-project situation 56% of total electricity supply in the facility comes from grid import, 24% from captive biomass cogeneration unit and 20% from captive DG sets. For the baseline calculation, the proposal however refers to paragraph 21 assuming that the additional electricity would have been supplied from the grid. How would it be established that the baseline for project electricity is only the grid and not the combination pre-project energy sources and that paragraph 20 does not apply? Paragraph 20 states "For project activities that displace on-site captive electricity and/or displace grid electricity import and/or supply electricity to grid, the emission factor for the electricity should reflect the emissions intensity of the captive power plant and the grid of the baseline scenario....". Please substantiate.

-In pre-project situation 56% of total electricity supply in the facility comes from grid import, 24% from captive biomass cogeneration unit and 20% from captive back up DG sets. For the baseline calculation, the proposal however refers to paragraph 21 because project activity is neither displacing 24% from captive biomass cogeneration unit & nor fully displacing captive back up DG sets that can be cross verified during validation/verification of project activity based on recent last three year data. Project activity is majorly displacing Grid import & hence para-21 is closely applicable.

Paragraph 20 is not applicable because project activities does not displace on-site captive electricity generation & does not supply electricity to grid, so Para 20 is not closely applicable & same has been clarified in the clarification we seek from SSWG submission number (SSC_512).

Recommendation by the SSC WG:

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

Please refer to paragraph 13 of the meeting report of the SSC WG 31 (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-I.C as contained in annex 5 of the SSC WG 31 meeting report. It includes an expansion of a baseline scenario for cogeneration project activities.

Signed by the Chair, Ms. Fatou Gaye

Date: 12/05/2011

Signed by the Vice-Chair, Mr. Peer Stiansen

Date: 12/05/2011

Information to be completed by the secretariat

SSC-Submission number	SSC_532
Date when the form was received at UNFCCC secretariat	12 May 2011
Date of transmission to the EB	12 May 2011
Date of posting in the UNFCCC CDM web site	12 May 2011