



**Validation report form for post-registration changes for
CDM programme of activities
(Version 02.0)**

Complete this form in accordance with the instructions attached at the end of this form.

BASIC INFORMATION

Title and UNFCCC reference number of the programme of activities (PoA)	Clean Energy Program Supported by Republic of Korea UNFCCC ref number: 10415
Process track	<input checked="" type="checkbox"/> Prior approval <input type="checkbox"/> Issuance <input type="checkbox"/> Renewal of PoA
Version number of the validation report on PoA PRCs	3.0
Completion date of the validation report on PoA PRCs	12/11/2018
Version number of PoA-DD applicable to this validation report	2.0
Type(s) of PoA PRCs	<input type="checkbox"/> Temporary deviations from the registered monitoring plan, applied methodologies or applied standardized baselines <input checked="" type="checkbox"/> Corrections <input type="checkbox"/> Inclusion of monitoring plan <input checked="" type="checkbox"/> Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from applied methodologies, standardized baselines, or other applied standards or tools <input type="checkbox"/> Changes to the programme design <input type="checkbox"/> Changes specific to afforestation and reforestation activities
Coordinating/managing entity	ECOEYE Co., LTD
Host Parties	The Republic of The Union of Myanmar
Applied methodologies and standardized baselines	AMS-II.G. Energy efficiency measures in thermal applications of non-renewable biomass, version 08 Standardized Baseline: NA
Mandatory sectoral scopes linked to the applied methodologies	Sectoral scope 3 (Energy Demand)
Conditional sectoral scopes linked to the applied methodologies, if applicable	NA
Name and UNFCCC reference number of the DOE	Earthood Services Private Limited 0066
Name, position and signature of the approver of the validation report on PoA PRCs	

	<p>Dr. Kaviraj Singh Managing director</p>
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SECTION A. Executive summary

The registered PoA involves distribution of improved cook stoves (ICS) in the regions of Myanmar. The region is highly dependent on fuelwood burning in three stone stoves, tripods and traditional stoves for the purpose of cooking. The purpose of this PoA is introduction of cleaner energy by replacing the traditional stoves, which cause GHG emissions and indoor air pollution (among other problems), with ICS.

Scope of validation:

Earthood Services Private Limited (Earthood) has been contracted to conduct the validation of post registration changes to the PoA "Clean Energy Program Supported by Republic of Korea".

The scope of validation is to assess the claims and assumptions made in the programme of activity design document (PoA-DD) against the UNFCCC criteria, including but not limited to, CDM PS for PoA, CDM VVS for PoA, applied methodology, stated criteria in registered PoA DD and other relevant rules and requirements established for CDM PoA.

The validation is not meant to provide any consultation to the project participants. However, stated requests for clarification and/or correction actions request may have provided inputs for improvement of the changes to project design.

Validation Process:

The validation process involves an agreement with project participant for validation scope in accordance with the valid CDM AS, CDM PS for PoA/5/ and CDM VVS for PoA /6/.

Earthood assessed and determined whether permanent changes done to the monitoring plan comply with the CDM criteria and relevant guidance provided by the Board. The desk review, onsite assessment, interview, reporting of findings, preparation of draft inclusion report followed by independent technical review (internal quality check) were performed as stated in the further sections of the report.

Conclusion:

Earthood Services Private Limited (hereinafter referred as Earthood) has performed the validation (Post-Registration Change) of the programme of activity "Clean Energy Program Supported by Republic of Korea". The validation was performed on the basis of rules and requirements defined by UNFCCC for the CDM PoA.

The review of the PoA-DD, supporting documentation and subsequent follow-up actions have provided Earthood with sufficient evidence to determine the fulfilment of stated criteria.

It is Earthood's opinion that the PoA "Clean Energy Program Supported by Republic of Korea" as described in the PoA-DD, Version 2.0 dated 25/09/2018 meets all relevant UNFCCC requirements for the CDM and correctly applies the baseline and monitoring methodology AMS-II.G version 08. Therefore, Earthood requests the post-registration changes to the PoA-DD of the PoA "Clean Energy Program Supported by Republic of Korea".

SECTION B. Validation team, technical reviewer and approver**B.1. Validation team member**

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Document review	On-site inspection	Interviews	Validation findings
1.	Team Leader	IR	Mahala	Deepika	Central Office	Y	Y	Y	Y
2.	Validator	IR	Mahala	Deepika	Central Office	Y	Y	Y	Y
3.	Technical Expert	IR	Mahala	Deepika	Central Office	Y	Y	Y	Y
4.	Methodology	IR	Mahala	Deepika	Central Office	Y	Y	Y	Y

	Expert								
5.	Local Expert	EI	Thura	Ye	Central Office	Y	Y	Y	Y
6.	Trainee Validator	IR	Guleria	Shifali	Central Office	Y	N	N	Y

B.2. Technical reviewer and approver of the validation report on PoA PRCs

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Garg	Shreya	Central office
2.	Expert to TR	IR	Garg	Shreya	Central office
3.	Approver	IR	Singh	Kaviraj	Central office

SECTION C. Means of validation

C.1. Document review

A desk review was conducted by the verification team that included

- A review of the data and information presented to verify its completeness;
- A review of the registered monitoring plan, the monitoring methodology including applicable tool(s) and, where applicable, the applied standardized baseline, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures;
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions;

A complete list of documents/evidences reviewed is included as Appendix 3.

C.2. On-site inspection

Duration of on-site inspection: NA				
No.	Activity performed on-site	Site location	Date	Team member
1.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

The team leader had conducted a site visit at the time of CPA-2 inclusion and the PRC was identified during the site visit. No separate site-visit was conducted for the scope of validation of PRCs. Complete team is indicated in section B of this report. The validation team did not undertake an on-site inspection and the same approach can be justified as per para 183 of VVS for PoA, version 1.0/6/.

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Rai	Rahul	ECOEYE (Program Manager)	13/09/2018, 14/09/2018, 17/09/2018	Evidences for proposed changes (via meeting, email and phone)	Deepika Mahala

C.4. Clarification requests, corrective action requests and forward action requests raised

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Compliance with PoA-DD form	-	-	-
Temporary deviations from the registered monitoring plan, applied methodologies or applied standardized baselines	-	-	-
Corrections	-	-	-
Inclusion of monitoring plan	-	-	-

Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from applied methodologies, standardized baselines, or other applied standards or tools	CL#01, CL#02	CAR#03	FAR#04, FAR#05
Changes to the programme design	-	-	-
Changes specific to afforestation and reforestation activities	-	-	-
Others (please specify)	-	-	-
Total	2	1	2

SECTION D. Validation findings

D.1. Compliance with the PoA-DD form

Means of validation	The validation team reviewed the revised PoA-DD/2/ that was provided by the CME as part of proposed PRC and compared it with the current valid form for PoA-DD/9/ as available on the UNFCCC website and found that these were consistent.
Findings	No findings
Conclusion	The validation team confirms that the proposed post-registration changes as included in the revised PoA-DD/2/ were presented by using the latest valid version of CDM-PoA-DD-FORM/9/ and were found in compliance with the template and instructions contained therein.

D.2. Temporary deviations from the registered monitoring plan, applied methodologies or applied standardized baselines

Means of validation	Not Applicable
Findings	Not Applicable
Conclusion	Not Applicable

D.3. Corrections

Means of validation	The PoA-DD has been revised using the latest template/9/. To meet the template guidelines, minor corrections have been made to the revised PoA-DD/2/, which do not affect the project description or design. The DOE confirms that the information transferred to the latest version of the form is materially the same as that in registered PoA-DD/1/, except the proposed changes mentioned in later sections.
Findings	No findings
Conclusion	The proposed changes in the revised PoA-DD/2/ make it a more accurate reflection of the actual situation. The changes made to PoA-DD/2/ are consistent with latest applicable form version/9/. The information reported is consistent and accurate.

D.4. Inclusion of monitoring plan

Means of validation	Not Applicable
Findings	Not Applicable
Conclusion	Not Applicable

D.5. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from applied methodologies, standardized baselines, or other applied standards or tools

Means of validation	<p>Proposed Changes are as follow:</p> <p>1. Revision of the calculation method of f_{NRB}: As per the registered PoA DD/1/, the value of the parameter is to be determined at the time of inclusion by conducting local studies and applying the methodological tool: calculation of the fraction of non-renewable biomass version 1.0/10/. However, the CME wishes to calculate the parameter by applying equation 11 of the applied methodology AMS-II.G. Version 8.0. The Tool 30/10/ is not referred in the applied methodology and clarification SSC739/13/ also quotes that the tool is not referred in the applied methodology version 8.0. Since, the applied methodology/7/ does not mandate the application of tool 30/10/, the change was found to be acceptable.</p> <p>Accuracy of GHG Emissions Calculation: The proposed change will not result in reduction of accuracy of GHG emission reductions as data from only reliable nationally/internally approved sources will be used to ensure the accuracy of GHG emission calculation. Thus, the change is in line with para 267 of VVS for PoA/6/.</p> <p>Assessment of overestimation: The exact value of the parameter f_{NRB} shall be determined at the CPA level for each CPA to be included under the PoA. At PoA level only the approaches to determine the f_{NRB} have been validated. The approaches defined by the CME (as mentioned in the PoA DD) are in line with the applied methodology/7/, PS for PoA/5/, VVS for PoA/6/.</p> <p>The registered PoA DD(1)/revised PoA DD/2/, does not include any value of the parameter f_{NRB}. However, the approach defined is in accordance with the applied methodology/7/ thus would not lead to any over estimation. Additionally, FAR#4 has been raised to ensure appropriateness of the adopted value in future.</p> <p>FAR#5 the DoE involved in the first verification of CPA 01 shall assess the impact of the revision on CPA 01 and ensure conservativeness of ERs.</p> <p>Consequential change: Applicability condition (para 43 of the applied methodology will be demonstrated by determining the f_{NRB} through equation 11 of the applied methodology/7/.</p> <p>2. Addition in calculation method of $By,savings,i,j$ The PoA-DD has been revised to include Equation 6 from the methodology/7/ to calculate $By,savings,i,j$. The change has been made in order to provide an alternative way to determine $By,savings,i,j$. Considering political and geographical complexities of the project area, the expensive, complex and time-consuming process of conducting a survey is sought to be avoided by giving the second option.</p> <p>Compliance with Applied Methodology: Footnote 5/7/ of the applied methodology states that based on whether $\eta_{new,i,j}$ or $By=1,new,ij,survey$ is used for monitoring, either equation (6) or (7) may be used respectively. The addition of Equation-6 from the applied methodology as an option along with equation 7 for calculation of $By,savings,i,j$ is thus not limited by the methodology. The CME will choose one of the two equation at the time of CPA inclusion. Since the change in revised PoA-DD/2/ is in line with the applied methodology/7/, it has been accepted by the validation team.</p> <p>Accuracy of GHG Emissions Calculation: The equation applied is directly sourced from the applied methodology/7/. All the parameters added as consequence will be also be monitored, following all the monitoring requirements stated in the applied</p>
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methodology/7/. Thus, in line with para 267 of VVS for PoA /6/, the team can confirm that the alternative approach will not lead to reduction in the accuracy of GHG emission or impact the accuracy of the monitoring plan.

Assessment of Consequential Changes due to addition of 'Equation 6'

- a. **Addition of parameter " $B_{old,i,j}$ ":** This is calculated parameter was added to the list of fixed parameters. The parameter is proposed to be determined on the CPA level by dividing $B_{old,HH}$ by $N_{d,HH}$. The calculation method is in-line with the applied methodology/7/ which indicates accurate calculation of GHG emission reductions.
- b. **Addition of parameter " $B_{old,HH}$ ":** The parameter is proposed to be determined and fixed at the CPA level using historic data or survey conducted at CPA level. The method of determining the value of the parameter is in-line with the applied methodology/7/ which confirms accurate calculation of GHG emission reductions.
- c. **Addition of parameter " $N_{d,HH}$ ":** The monitoring plan/1/ has been updated to include this parameter. The parameter will be monitored through maintenance of internal records (i.e. project database) in-line with the applied methodology/7/. Thus, the DoE confirms that accuracy of GHG emission reductions will not be affected by this parameter.
- d. **Parameter " μ_y " added to list of monitored parameters:** According to the applied methodology/7/, parameter μ_y is a fixed parameter for equation 7 but needs to be monitored when equation 6 is used for the calculation of parameter $By,savings,i,j$. The monitoring plan has been updated accordingly. For cases when equation 7 will be applied, a default value of 1 will be used. And when equation 6 is used, the value of parameter will be determined through monitoring surveys. The sampling plan for monitoring survey, included in the PoA DD/1/, was checked and found to be in line with the Standard Sampling and surveys for CDM project activities and programmes of activities Version 07.0/11/ and the equations to calculate sample size added under the sampling plan were also checked and was found to be in line with Guideline: Sampling and surveys for CDM project activities and programmes of activities Version 04.0/12/. The CME will meet the requirement of 95/10 confidence/precision if the monitoring surveys are conducted biennially and 90/10 confidence/precision if the surveys are conducted annually. Thus, it can be concluded that the revision is in-line with the applied methodology/7/ and the accuracy in the calculation of GHG emission reductions will stay unaffected by the change.

3. Revision in calculation of thermal efficiency:

The PoA-DD/1/ has been revised to include two more options for determining the thermal efficiency of the project stove. These options are:

1. Manufacturer specifications on efficiency based on water boiling test (WBT) may be used
2. Conduct a WBT survey following WBT protocol

A change in addition of procedure were found to be in-line with the applied methodology/7/ thus accepted by the DoE.

Accuracy of GHG emission calculations:

Accuracy of GHG emission calculations remains unaffected as these other options are prescribed by the applied methodology. Thus, in line to para 267 of VVS for PoA/6/, DoE confirms that the proposed alternative monitoring is likely to lead to a reduction in the accuracy of calculation of GHG emission reductions or net anthropogenic GHG removals.

Accuracy of the Monitoring Plan:

The sampling plan for monitoring survey, included in the PoA DD/1/, was checked and found to be in line with the Standard Sampling and surveys for CDM project activities and programmes of activities Version 07.0/11/ and the equations to calculate sample size added under the sampling plan were also checked and was found to be in line with Guideline:

	Sampling and surveys for CDM project activities and programmes of activities Version 04.0/12/. As per the set plan, confidence/precision of 90/10 would be met to confirm the reliability of the monitoring results which is in-line with the applied methodology/7/. Therefore, the changes have been accepted by the validation team.
Findings	CL#01, CL#02, CAR#03 were raised and resolved. FAR#04 and FAR#5 have been raised, which need to be resolved at the time of inclusion.
Conclusion	The validation team confirms that the changes in the PoA-DD/2/ 1. Do not impact the applicability of the applied methodology 2. Do not reduce the accuracy of GHG emission reductions calculation 3. Do not impact the accuracy and completeness of monitoring plan. The DoE confirms that all changes are in line with the applied methodology/7/, PS for PoA version 1.0/5/ and VVS for PoA version 1.0/6/

D.6. Changes to the programme design

Means of validation	Not Applicable
Findings	Not Applicable
Conclusion	Not Applicable

D.7. Changes specific to afforestation and reforestation activities

Means of validation	Not Applicable
Findings	Not Applicable
Conclusion	Not Applicable

SECTION E. Internal quality control

A draft validation report prepared by validation team is reviewed by an independent technical review team (one or more members) to confirm whether all the internal procedures established and implemented by ESPL were duly complied with and such opinion/conclusion were reached in an objective manner that complies with the applicable CDM rules/requirements. The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity/ PoA relates to. All team members of technical review team are independent of the validation team.

During the technical review process additional findings may be identified or the closed-out findings may be opened, which needs to be satisfactorily resolved before the request for issuance is submitted to UNFCCC. The independent technical reviewer may either approve the report as such or reject/return the same in such case providing the comments/findings/issues that needs to be resolved by the verification team. The decision taken by the Technical Reviewer is final and is authorized by the Managing Director on behalf of Earthood Services Private Limited.

SECTION F. Validation opinion

Earthood has performed the validation of PRC titled "Clean Energy Program Supported by Republic of Korea" in Myanmar. The validation was performed on the basis of rules and requirements defined by UNFCCC for the CDM project activities.

The review of the PoA-DD, supporting documentation and subsequent follow-up actions (onsite visit and interviews) have provided Earthood sufficient evidence to determine the fulfilment of stated criteria. The proposed PRC is meeting all the requirements of the PS for PoA version 1.0, VVS for PoA version 1.0 and PCP for PoA version 1.0. The PRC meets the modalities set in PoA-DD of the registered PoA "Clean Energy Program Supported by Republic of Korea (CDM Ref: PoA10415)" and applicable host Party rules is Myanmar and will be managed by "ECOYE Co. Ltd" as the Coordinating Managing Entity. The project correctly applies the approved baseline and monitoring methodology AMS.II-G version 08.0.

Appendix 1. Abbreviations

Abbreviations	Full texts
AQL	Acceptable Quality Level
CAR	Corrective Action Request
CDM	Clean Development Mechanism ¹⁷ ,
CDM PCP	Clean Development Mechanism Project Cycle Procedure
CDM PS	Clean Development Mechanism Project Standard
CDM VVS	Clean Development Mechanism Validation and Verification Standard
CEP	Clean Energy Product
CER	Certified Emission Reduction
CL	Clarification Request
CME	Coordinating or Managing Entity
CP	Crediting period
CPA	Component Project Activity
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
EPTP	Stove Manufacturers Emissions and Performance Test Protocol
ESPL	Earthood Services Private Limited
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
ICS	Improved Cook Stove
IPCC	Intergovernmental Panel on Climate Change
PoA-DD	Programme of activities Design Document
PPT	PowerPoint Presentation
RMP	Registered monitoring plan
SQIL	Sonic Quality Inspectors Limited
TA	Technical Area (with in Sectoral Scope)
TR	Technical Reviewer
UNFCCC	United Nations Framework Convention on Climate Change
UQL	Unacceptable Quality Level
VVS	Validation and Verification Standard
WBTs	Water Boiling Tests

Appendix 2. Competence of team members and technical reviewers

Competence Statement	
Name	Deepika Mahala
Country	India
Education	M. Sc. (Environmental Mgmt), GGSIP University B.Sc. Honour (Chemistry), Sri Venkateshwar College, DU
Experience	3 Years +
Field	Climate Change
Approved Roles	
Team Leader	YES
Validator	YES
Verifier	YES

Methodology Expert	ACM0002, AMS.I.D., AMS.I.A, AMS.III.AV, AMS.II.G		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (TA 1.2 & TA 3.1)		
Reviewed by	Shreya Garg	Date	14/09//2018
Approved by	Anshika Gupta	Date	14/09/2018

Competence Statement			
Name	Shifali Guleria		
Education	M.Sc. (Environmental Studies and Resource Management), TERI University		
Experience	Few months		
Field	Climate Change		
Approved Roles			
Team Leader	NO		
Validator	NO		
Verifier	NO		
Methodology Expert	NO		
Local expert	NO		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert (X.X)	NO		
Trainee	Validator/ Verifier		
Reviewed by	Shreya Garg (Quality Manager)	Date	01/07/2018
Approved by	Anshika Gupta (Technical Manager)	Date	01/07/2018

Competence Statement			
Name	Ye Thura		
Country	Myanmar		
Education	Bachelor's in Environmental Science		
Experience	17+ years		
Field	Fertilizers Industry		
Approved Roles			
Team Leader	No		
Validator	No		
Verifier	No		
Methodology Expert	No		
Local expert	Yes (Myanmar)		
Financial Expert	No		
Technical Reviewer	No		
TA Expert	No		
Reviewed by	Shreya Garg	Date	07/08/2018
Approved by	Anshika Gupta	Date	07/08/2018

Competence Statement			
Name	Shreya Garg		
Country	India		
Education	M.Sc. (Climate Science & Policy), TERI University		
Experience	6 Years +		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS.I.A., AMS.I.C., AMS.I.D., AMS.I.F., AMS.II.D., AMS.II.G., AMS.II.J., AMS.III.AV., ACM0002, ACM0012		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (TA 1.2, TA 3.1)		
Reviewed by	Abhishek Mahawar	Date	01/03/2018
Approved by	Ashok Gautam	Date	01/03/2018

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	CME	Registered PoA-DD	Version 1.9 dated 26/06/2018	Other
2	CME	Revised PoA-DD	Version 2.0 dated 25/09/2018	CME
3	CME	Validation Report	Version 1.6 Dated 27/06/2018	Other
4	UNFCCC	PCP for PoA	Version 1.0	Other
5	UNFCCC	PS for PoA	Version 1.0	Other
6	UNFCCC	VVS for PoA	Version 1.0	Other
7	UNFCCC	Methodology AMS.II.G. Energy efficiency measures in thermal applications of non-renewable biomass	Version 8.0	Other
8	UNFCCC	Implementation plan for new CDM regulations https://cdm.unfccc.int/filestorage/e/x/t/extfile-20170227104247325-Info_note71.pdf/Info_note71.pdf?t=Nmh8cGZlbGR4fDCvW67K4yyRGYjVdKFtLMnI	Version 1.0	Other
9	UNFCCC	CDM-PoA-DD-FORM	Version 08.1	Other
10	UNFCCC	Tool-30: methodological tool: calculation of the fraction of non-renewable biomass	version 1.0	Other
11	UNFCCC	Standard Sampling and surveys for CDM project activities and programmes of activities	Version 7.0	Other
12	UNFCCC	Guideline: Sampling and surveys	Version 04.0	Other

		for CDM project activities and programmes of activities		
13	UNFCCC	SSC 739: https://cdm.unfccc.int/filestorage/9/1/U/91UMQ7FP8TJRNYA5KO03LVXCE6ZDSH/Final%20response.pdf?t=R1R8cGZlbDRqfDBf6A-zrWZcgOZsG7RmzF1_	-	Other

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. CLs from this validation

CL ID	01	Section no.	D.5.	Date : 12/09/2018
Description of CL				
<p>If there is any actual or proposed change to the implementation, operation or monitoring of the registered CDM PoA or an included CPA, the coordinating/managing entity shall prepare a revised PoA-DD or CPA-DD (in both track-change and clean versions) that reflects the actual or proposed changes, using the valid version of the applicable PoA-DD or CPA-DD form. The coordinating/managing entity shall provide a summary of the changes, including the reasons for the changes and any additional information relating to the changes to the PoA-DD or CPA-DD.</p> <p>CME shall justify in detail the reason for changes related to:</p> <ol style="list-style-type: none"> 1. nold – added value of 0.2 2. Bold– added parameter and equation 6 of the applied methodology 3. fNRB- different method of calculating has been applied instead of Methodological too to calculate fNRB version 1.0 4. uy – changed from ex-ante to ex-post 5. nnew.i,j – new method of calculating the value 5. additional information added under demonstration of baseline scenario section 6. additional information added under applicability of methodology criterion 7. including baseline stove and fuel information in database 				
Project participant response				Date : 12/09/2018

Please find below justification for the changes:

1. nold – added value of 0.2;
The change has been removed.
2. Bold– added parameter and equation 6 of the applied methodology;
The PoA can be expanded to other countries therefore Equation 6 of the AMS-II.G ver 8.0 has been included along with Equation 7 to determine $B_{y,savings,i,j}$.
3. fNRB- different method of calculating has been applied instead of Methodological too to calculate fNRB version 1.0;
At the time of registration, fNRB value for Myanmar was not available therefore Tool 30 and default value of 0.30 was used. CDM meth panel in its clarification SSC_739 made it clear that Tool 30 is not applicable to projects using AMS-II.G ver 8.0. Accordingly, new value for fNRB has been calculated as per the equation 11 of the AMS-II.G ver 8.0.
4. u_y – changed from ex-ante to ex-post;
 μ_y is 1 as per the meth when equation 7 is used. μ_y is variable when equation 6 is used. u_y is fixed when equation 7 is used. Now equation 6 and equation 7 are used therefore u_y parameter has been removed from the list of parameters fixed ex ante.
5. nnew.i,j – new method of calculating the value;
At the time of registration, to determine thermal efficiency of the project device option 1 mentioned in the Data / Parameter table 11 was used. Option 1 requires certification by a national standards body or an appropriate certifying agent which is time consuming and costly. Therefore option 2 and 3 along with 1 has been included in the PoA DD.
6. additional information added under demonstration of baseline scenario section
The change has been removed.
7. additional information added under applicability of methodology criterion
The change has been removed.
8. including baseline stove and fuel information in database
The change has been removed.

Documentation provided by project participant

Revised PoA DD

DOE assessment

Date: 14/09/2018

1,6,7,8 Changes have been removed. (Closed)

2. PP shall explain how geographical expansion allows addition of new equation to the PoA. Also, please clarify if expansion of geographical area is anticipated?

3. CME shall explain what type of permanent change it is, in line with PS for PoA and how it meets the requirements of that type of change.

4. It is unclear, whether the parameter will be fixed or monitored, if equation 7 is applied.

5. CME shall explain, how the alternative method added for calculation is more accurate and conservative in nature.

Thus, the CL stands open.

Project participant response

Date : 17/09/2018

<p>2. PP has included the Equation 6 as per paragraph 16 and footnote 5 of the applied methodology which allows to have more than one option in the PoA DD.</p> <ul style="list-style-type: none"> Paragraph 16 “By, savings, i, j due to implementation of efficient thermal devices is estimated as per the following options.” Footnote 5 “Based on whether $n_{new, i, j}$ or $B_{(y=1, new, i, j, survey)}$ is used for monitoring, either equation (6) or (7) may be used respectively.” Equation 6 and Equation 7 are part of option number 3.; Considering political and geographical complexities of the project area i.e. Myanmar, conducting survey to determine $B_{(y=1, new, i, j, survey)}$ is a complex, expensive and time consuming process. Therefore, CME wants to keep flexibility, which is allowed in the applied methodology, so that Equation 6 or Equation 7 can be used as per the situation; <p>3. Change has been made as per paragraph 230 of the PS for PoA. CME has clarified the type of permanent change and how it meets the requirements in Appendix 7 of the PoA DD.</p> <p>4. As explained earlier if equation 7 is used parameter will be fixed and if equation 6 is used parameter will be monitored. Page number 14, AMS-II.G ver 08 “When applying equations 6 and 8, it is a fraction based on monitoring results. In other cases (i.e. applying equations 3, 5 and 7), use 1.0.”</p> <p>5. All options to calculate thermal efficiency of the project device are suggested by the applied methodology and based on Water Boiling Test (WBT) protocol. Therefore, all options are equally accurate and conservative, however option 2 and 3 are more practical and economical to implement. Therefore option 2 and 3 along with 1 has been included in the PoA DD.</p>
Documentation provided by project participant
DOE assessment
Date: 21/09/2018
<p>2. The clarification given by PP is found to be acceptable. Since conducting surveys in the Host country can be expensive and time consuming, introducing Equation 6 can provide another option, which is in-line with the applied methodology. Therefore, finding is closed.</p> <p>3. CME has explained the type of change as “<i>Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other applied standards or tools</i>”. The explanation is found satisfactory since the method of calculation of fNRB has been revised, which will lie in the aforementioned type of change. Closed.</p> <p>4. As verified from the applied methodology, application of equation 6 will require monitoring of the parameter while application of equation 7 will fix the parameter. The explanation given by the CME was found satisfactory. The monitoring plan has been updated in line with the applied methodology. Closed.</p> <p>5. Since all the options added in the revised PoA-DD are mentioned in the applied methodology as an option to calculate thermal efficiency of the stoves, all can be considered equally conservative and accurate. Therefore, explanation given by the CME was found satisfactory. Closed.</p> <p>Thus, the CL stands closed.</p>

CL ID	02	Section no.	D.5.	Date : 12/09/2018
Description of CL				
The coordinating/managing entity shall determine whether the actual or proposed changes are temporary deviations referred to in section 9.2 of PS for PoA, or permanent changes referred to in section 9.3 of PS for PoA version 1.0, and whether they require approval by the Board. Unless otherwise stated in the respective provisions in sections 9.2 and 9.3, post-registration changes to a registered CDM PoA require approval by the Board				
Project participant response				Date : 12/09/2018
The changes are permanent in nature				
Documentation provided by project participant				

DOE assessment	Date: 12/09/2018
<p>The CME shall explain in detail under appendix 7 of the PoA DD, the type of permanent change (as per section 9.3 of PS for PoA), reason for change and how they meet the requirements of those particular type of changes.</p> <p>CL stands open.</p>	
Project participant response	Date : 17/09/2018
<p>CME has explained the type of permanent change (as per section 9.3 of PS for PoA), reason for change and how they meet the requirements of those particular type of changes in appendix 7 of the PoA DD.</p>	
Documentation provided by project participant	
DOE assessment	Date: 19/09/2018
<p>The changes in PoA-DD mentioned as "Updated section I.6.1: Equation 6 of the AMS-II.G ver 08 and related parameters were added" and "Updated section I.7.1: Additional methods to calculate thermal efficiency of the project device are added" have been categorized as corrections in appendix 7 of revised PoA-DD. But the changes in question were found to impact the monitoring plan. Open</p>	
Project participant response	Date : 20/09/2018
<p><i>Type of Changes have been revised.</i></p>	
Documentation provided by project participant	
DOE assessment	Date: 21/09/2018
<p>The type of changes listed under appendix 7 are in line with the PS for PoA version 1.0. The detailed assessment of each change has been given in the former sections of this report.</p> <p>Thus, the CL stands closed.</p>	

Table 2. CARs from this validation

CAR ID	03	Section no.	D.5.	Date : 25/09/2018
Description of CAR				
<p>1) $N_{d,HH}$ is a monitored parameter; however, a resultant parameter($B_{old,l,j}$) is fixed. Please justify.</p> <p>2) Which parameters are mean parameters and which ones are proportional: Please clearly state under section of the PoA DD.</p> <p>3) page36 of the PoA DD states that the end users of the PoA constitute the target population. However, it is not clear whether the sampling will be applied across the PoA or CPA wise.</p> <p>4) It is not clear how sampling strata are defined.</p> <p>5)for the all the changes to the monitoring plan: As per para 237 of PS for PoA 'The coordinating/managing entity shall apply conservative assumptions or discount factors to the calculations in the proposed alternative monitoring to the extent required to ensure that GHG emission reductions or net anthropogenic GHG removals will not be over-estimated as a result of the permanent change or deviation'. Kindly justify the revised approach against the above requirement.</p>				
Project participant response				Date : 25/09/2018

1) CME plans distribution of only one improved stove per household. Therefore $N_{d,HH}$ is equal to 1 and $B_{old,i,j}$ equals $B_{old,HH}$;
2) Parameters are clarified as mean and proportional parameters in section I.7.2;
3) Sampling will be applied across the PoA;
4) Strata is defined on page number 36 of the POA DD: <i>"The number of project devices operating and continued-use rate of displaced traditional cookstoves will vary with ICS type, age group and province where they are located and therefore ICS will be sub-grouped into strata based on type, age group and province where they are located";</i>
5) Justification: The proposed change does not result in overestimation of GHG emission reductions as they are in line with applied methodology.
Documentation provided by project participant
Revised PoA DD
DOE assessment Date: 26/09/2018
<ol style="list-style-type: none"> 1. Since the CME plans on only distributing one improved stove per household- which has also been stated in the PoA-DD (in additional comments for parameter $N_{d,HH}$)- the justification was found satisfactory. Therefore, closed. 2. The revised PoA-DD clearly marks the parameters as mean or proportional parameter in section I.7.2. Therefore, the finding is closed. 3. PoA-DD was found to be edited to state that sampling will be applied across PoA. Since this is in line with the methodology, the finding is closed. 4. The definition was found appropriate by the validation team and therefore, the finding is closed. 5. The exact value of the parameter f_{NRB} will be determined at the CPA level for each CPA to be included under the PoA. At PoA level only the methods to determine the f_{NRB} have been validated which are in line with the applied methodology/7/. Due to absence of any value at PoA level, FAR#4 has been raised which shall be addressed by the DoE including CPA to ensure overestimation has been avoided. The finding is open.

Table 3. FARs from this validation

FAR ID	04	Section No.	D.5.	Date : 26/09/2018
Description of FAR				
The validating DOE responsible for inclusion of CPA must ensure that the calculated value of f_{NRB} will not lead to overestimation and data from only reliable nationally/internally approved sources have been used for calculation of f_{NRB} .				
Project participant response				Date : DD/MM/YYYY
-				
Documentation provided by project participant				
-				
DOE assessment				Date: DD/MM/YYYY
-				

FAR ID	05	Section No.	D.5.	Date : 12/11/2018
Description of FAR				
The DoE involved in the first verification of CPA 01, shall assess the impact of the revision on CPA 01 and ensure conservativeness of ERs.				
Project participant response				Date : DD/MM/YYYY
-				
Documentation provided by project participant				
-				
DOE assessment				Date: DD/MM/YYYY
-				

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Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
02.0	29 December 2017	Revision to align with the requirements of the “CDM validation and verification standard for programme of activities” (version 01.0).
01.0	5 June 2015	Initial publication.

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