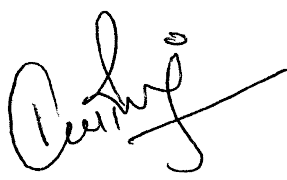




**Validation report form for  
CDM programme of activities  
(Version 02.0)**

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

**BASIC INFORMATION**

<b>Title of the programme of activities (PoA)</b>	Improved cookstove program in Bangladesh supported by the Republic of Korea
<b>Version number of the validation report</b>	2.0
<b>Completion date of the validation report</b>	22/06/2018
<b>Version number of PoA-DD to which this validation report applies</b>	Version 4.0, dated 21/06/2018
<b>Date when PoA-DD was uploaded for global stakeholder consultation</b>	15/02/2018
<b>Coordinating/managing entity (CME)</b>	Ecoeye Co., Ltd.
<b>Host Parties</b>	Republic of Bangladesh
<b>Applied methodologies and standardized baselines</b>	AMS II.G. - Small-scale methodology: Energy efficiency measures in thermal applications of non-renewable biomass, version 08.0
<b>Mandatory sectoral scopes linked to the applied methodologies</b>	3, Energy Demand
<b>Conditional sectoral scopes linked to the applied methodologies, if applicable</b>	Not Applicable
<b>Name and UNFCCC reference number of the DOE</b>	Earthood Services Private Limited E-0066
<b>Name, position and signature of the approver of the validation report</b>	 Dr. Kaviraj Singh (Managing Director)

## SECTION A. Executive summary

This PoA involves dissemination of improved cookstoves in Bangladesh, where the improved cookstove distributed, will consume less fuel, produce less smoke and replace the traditional biomass fired stoves in the households/SMEs. Thus, the PoA will reduce a significant amount of emissions that would have been generated in the baseline scenario to the PoA implementation, where the traditional cookstoves would have been used.

The CME of the PoA is Ecoeye Co., Ltd. (EECL). Bangladesh Bondhu Foundation is involved as the Project participant in the PoA. Both the entities have mutually agreed that the sole beneficiary of carbon credits from this PoA would be the CME, Ecoeye Co., Ltd. (EECL).

### Scope of Validation

The scope of the services provided by Earthood Services Private Limited for the project is to perform validation of Programme of Activity. The scope of validation is to assess the claims and assumptions made in the PoA DD against the UNFCCC criteria, including but not limited to, CDM PCP for PoA version 1.0, CDM PS for PoA version 1.0, CDM VVS for PoA version 1.0, applied methodology AMS-II.G. version 8.0 and other relevant rules and requirements established for CDM project activities.

### Validation Process

The validation process is undertaken by the validation team that involves the following:

1. the desk review of documents and evidences submitted by the project participant in context of the reference CDM rules and guidelines issued by CDM EB,
- 2.undertaking site visit, interview or interactions with the representative of the project participant, reporting audit findings with respect to clarifications and non-conformities and the closure of the findings, as appropriate and
- 3.preparing a draft validation report for renewable of crediting period complying with the CDM requirements
- 4.An independent Technical Review team review the validation report prepared by validation team. The final validation report that is accepted by Technical Reviewer is then approved on behalf of Earthood Services Private Limited and processed further as per CDM procedures.

### Conclusion

The review of the PoA DD, supporting documentation and subsequent follow-up actions (onsite visit and interviews) has provided Earthood with sufficient evidence to determine the fulfilment of stated criteria. Earthood is of the opinion that the PoA "Improved cookstove program in Bangladesh supported by the Republic of Korea" as described in the final PoA DD version 4.0, dated 21/06/2018 meets all relevant requirements of CDM, meets host country criteria and has correctly applied the methodology AMS II.G.- Small-scale methodology: Energy efficiency measures in thermal applications of non-renewable biomass, version 08.0. Therefore, the project is being recommended to CDM EB for request for registration.

## SECTION B. Validation team, technical reviewer and approver

### B.1. Validation team members

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			
						Desk/document review	On-site inspection	Interview(s)	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 (3.1)	IR	Mahala	Deepika	Central Office	Y	Y	Y	Y

4.	Methodology Expert(AMS-II.G.)	IR	Mahala	Deepika	Central Office	Y	Y	Y	Y
5.	Local Expert	EI	Biswas	Amaresh	Central Office	Y	N	N	Y
6.	Financial Expert*	-	N/A	N/A	-	-	-	-	-

\*Financial expert is not required since the PoA involves auto additional small-scale CPAs.

## B.2. Technical reviewer and approver of the validation report

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	Mandal	Amit	Central Office
2.	TE to TR(3.1)	IR	Mandal	Amit	Central Office
3.	Approver	IR	Singh	Kaviraj	Central Office

## SECTION C. Means of validation

### C.1. Desk/document review

The validation of the Programme of Activities is performed primarily as a document review of the PoA design document version 1.0 dated 15/01/2018 and the final version 4.0, dated 21/06/2018. The cross checks between information provided in the PoA DD and information from sources other than those used, if available, the validation team's sectoral or local expertise and, if necessary, independent background investigations.

The complete list of documents/evidences assessed by validation team is included under Appendix 3.

**C.2. On-site inspection**

Duration of on-site inspection: 11/03/2018-12/03/2018				
No.	Activity performed on-site	Site location	Date	Team member
1.	Opening Meeting: Introduction, scope and objective of work, roles and responsibilities of audit team, resources required, and timetable of the onsite audit including venue for closing meeting and any concerns from PP.	Dhaka, Bangladesh	11/03/2018	Deepika Mahala
2.	Approval of project activity from Host Party and approval of participation of Project Participant(s).	Dhaka, Bangladesh	11/03/2018	Deepika Mahala
3.	Project Activity (Technology, Location and Implementation)	Dhaka, Bangladesh	11/03/2018	Deepika Mahala
4.	Debundling/Bundling of the project activity	Dhaka, Bangladesh	11/03/2018	Deepika Mahala
5.	Public Funding of the project activity	Dhaka, Bangladesh	11/03/2018	Deepika Mahala
6.	Choice and applicability of baseline methodology(ies)	Dhaka, Bangladesh	11/03/2018	Deepika Mahala
7.	Project boundary and emission sources included in the project boundary.	Dhaka, Bangladesh	11/03/2018	Deepika Mahala
8.	Physical inspection of the site: Interviewing ICS users	Dhaka, Bangladesh	11/03/2018	Deepika Mahala
9.	Baseline identification	Dhaka, Bangladesh	11/03/2018	Deepika Mahala
10.	Additionality of the project activity (Baseline alternatives, CDM consideration, Investment analysis, identified barriers, Common Practice analysis)	Dhaka, Bangladesh	11/03/2018	Deepika Mahala
11.	Parameter fixed Ex-ante and Baseline emissions, Project emissions and Leakage calculation	Dhaka, Bangladesh	11/03/2018	Deepika Mahala
12.	Monitoring plan (feasibility of monitoring arrangements described in PDD, QA/QC procedures, responsibility of implementation of monitoring plan, data recording & storage procedures)	Dhaka, Bangladesh	12/03/2018	Deepika Mahala
13.	Operational lifetime of the generic project activity, Start date of the PoA, Crediting period	Dhaka, Bangladesh	12/03/2018	Deepika Mahala
14.	Environmental impacts and need of EIA	Dhaka, Bangladesh	12/03/2018	Deepika Mahala
15.	Local Stakeholder Consultation process, comments received in Global Stakeholder Consultation (if applicable).	Dhaka, Bangladesh	12/03/2018	Deepika Mahala
16.	Compilation of the findings by Auditor/s (CARs/CLs/FARs)	Dhaka, Bangladesh	12/03/2018	Deepika Mahala

**C.3. Interviews**

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			

1.	Mushfiq Mahbub	Shuvro	Administration manager(BBF)	11/03/2018-12/03/2018	Project Activity (Technology, Location and Implementation)	Deepika Mahala
2.	Lohia	Rohit	Principal Consultant (Climate-Secure Services)	11/03/2018-12/03/2018	Additionality, Baseline identification, ER calculations and Parameters	Deepika Mahala
3.	-	Nihar	Associate Consultant (Climate-Secure Services)	11/03/2018-12/03/2018	ER calculations and Parameters	Deepika Mahala
4.	Saha	Atanu Kumar	DGM-operations (BBF)	11/03/2018-12/03/2018	Documents maintained for each user	Deepika Mahala
5.	Zaman	Md. Khalequeez	Bangladesh Bondhu Foundation (BBF)	11/03/2018-12/03/2018	Management, roles and responsibilities, LSC, EIA, LoA	Deepika Mahala
6.	Jannat	Hura	Database department Manager (BBF)	11/03/2018-12/03/2018	Dissemination process	Deepika Mahala
7.	Hajang	Suchitra	Communication manager (BBF)	11/03/2018-12/03/2018	Database management	Deepika Mahala
8.	Hossain	Kamal	DGM(BBF)	11/03/2018-12/03/2018	Documents maintained for each user	Deepika Mahala
9.	Khandakar	Rabbani	ICS user	11/03/2018	Product operation, installation date, baseline stove	Deepika Mahala
10.	-	Rabiya	Partner (Maria Sanitary)	11/03/2018	Roles and responsibilities of Partner	Deepika Mahala
11.	-	Jahangir	Assistant District Manager (BBF)	11/03/2018	Dissemination process, data recording, installation process	Deepika Mahala
12.	Hajan	Milan	Assistant District Manager (BBF)	11/03/2018	Dissemination process, data recording, installation process	Deepika Mahala
13.	Islam	Jahidul	ICS user	11/03/2018	Product operation, installation date, baseline stove	Deepika Mahala
14.	Rahman	Anichur	ICS user	11/03/2018	Product operation, installation date, baseline stove	Deepika Mahala
15.	Mia	Mustafa	ICS user	11/03/2018	Product operation, installation date, baseline stove	Deepika Mahala

16.	-	Borhanuddin	ICS user	11/03/2018	Product operation, installation date, baseline stove	Deepika Mahala
17.		Zalaluddin	ICS user	11/03/2018	Product operation, installation date, baseline stove	Deepika Mahala
18.	Mulla	Kanan	ICS user	11/03/2018	Product operation, installation date, baseline stove	Deepika Mahala
19.	Ali	Ranjan	ICS user	11/03/2018	Product operation, installation date, baseline stove	Deepika Mahala
20.	-	Nur-e-Alam	ICS user	11/03/2018	Product operation, installation date, baseline stove	Deepika Mahala
21.	Islam	Nur	ICS user	11/03/2018	Product operation, installation date, baseline stove	Deepika Mahala

#### C.4. Sampling approach

##### CME's sampling approach:

The sampling approach undertaken by CME is duly explained under Section I.7.2 of PoA DD/1/, which has been assessed by the validation team and in line to the "Standard for sampling and surveys for CDM project activities and programme of activities" version 7.0/9/. The CME will conduct cross CPA sampling with a confidence precision of 95/10.

##### DOE's sampling approach

Database of ICS was provided by the CME. As per para 26, Standard: Sampling and surveys for CDM project activities and programmes of activities version 7.0/9/, when the project participants or the coordinating/managing entity have not applied a sampling approach, the DOE may apply a sampling approach, choosing a different confidence/precision than the ones indicated, provided that samples are randomly selected and are representative of the population. Since, the PoA is located in a Least developed country (Bangladesh), the DOE has applied 90/30 confidence/precision and randomly selected 8 samples from database to check and study the design of the PoA. One extra sample was covered to address the non-availability/non-response of the household owner. Therefore, total 9 households were visited by the team leader.

All the household visited were found to be have an inefficient stove as baseline stove which were broken/abandoned and replaced by new stove. The ICSs disseminated had, unique serial number sticker, clearly visible, pasted on the door/kitchen wall of the houses and the end users confirmed that they have stopped using the old stove. Therefore, no inconsistencies were observed.

#### C.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Areas of validation of compliance	No. of CL	No. of CAR	No. of FAR
<b>Programme of activities</b>	-	-	-
Identification of the programme type	-	-	-

General description of the PoA	CL#03, CL#04, CL#08	-	-
Management system	CL#03 CL#04	-	-
Demonstration of additionality of the PoA	-	-	-
Start date and duration of the PoA	-	CAR#06	-
Environmental impacts	-	-	-
Socio-economic impacts	-	-	-
Local stakeholder consultation	-	-	-
Sustainable development co-benefits	-	-	-
Approval	CL#01	-	-
Authorization	CL#01	-	-
Modalities of communication	CL#01	-	-
Global stakeholder consultation	-	-	-
<b>Generic component project activities</b>	-	-	-
General description of generic CPA	CL#02 CL#03 CL#04, CL#08	-	-
Application and selection of methodologies and standardized baselines	-	-	-
• Application of methodologies and standardized baselines	CL#07	-	-
• Deviation from methodologies and/or methodological tools	-	-	-
• Clarification on applicability of methodology, tool and/or standardized baseline	-	-	-
• Project boundary, sources and GHGs	-	-	-
• Baseline scenario	CL#05	-	-
• Estimation of emission reductions or net anthropogenic removals	-	-	-
• Monitoring plan	-	-	-
Crediting period type and duration	-	-	-
Eligibility criteria for inclusion of CPAs	CL#08	-	-
Others (please specify)	-	-	-
<b>Total</b>	<b>7</b>	<b>1</b>	<b>0</b>

## SECTION D. Validation findings

### D.1. Programme of activities

#### D.1.1. Identification of the programme type

<b>Means of validation</b>	The coordinating/managing entity has determined the type of CDM PoA it intends to design as per the PS for PoA version 1.0, para 31/4/. The PoA will include only small-scale non-A/R CPAs.
<b>Findings</b>	No findings
<b>Conclusion</b>	Based on interview with the CME representatives the DoE confirms that the proposed PoA will include only small-scale non-A/R CPAs.

#### D.1.2. General description of the PoA

<b>Means of validation</b>	The PoA titled "Improved cookstove program in Bangladesh supported by the Republic of Korea" located in Bangladesh aims to disseminate improved cookstove
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that will replace the traditional stove and lead to reduction in GHG emissions. The CME of the PoA is Ecoeye Co. Ltd. (EECL). The title of the PoA and the name of the CME were checked and found to be exactly same as stated in the Letter of Approval obtained from the host country/51/. The CME has also submitted filled MOC/52/ form to inform who will be the focal point of CME to communicate with the UNFCCC regarding the project.

The improved cook stove has higher thermal efficiency, that is achieved through optimizing the dimensions of the ICS combustion chamber and effective air flow to aid complete combustion of biomass. The households from database visited during the site visit, technical drawings of the stoves/21/and thermal efficiency certificate/22,23/ of the stoves were all checked and found to meet the methodology requirements/2/. The geographical boundaries will cover entire country however, the location of the capital city visited during the site visit was checked through a mobile application get geo coordinates.

Several policies/10-16/ relevant to the proposed PoA were reviewed such as:

- Renewable Energy Policy 2008
- Bangladesh climate change strategy and action plan 2009
- National Energy policy 2004
- Energy efficiency action plan 2012
- Sustainable renewable energy development authority(SREDA) act 2012
- Energy efficiency and conservation master plan up to 2030(March 2015)
- Bangladesh National Women policy 2011

However, as per para 106 of PS for PoA version 1.0/4/, only E+ policies before 1997 and E- policies implemented since 2001 shall be considered. Since, no relevant policies from this period was identified, therefore, no policy could be taken into consideration as per para 40, VVS for PoA version 1.0/5/.

The CME contracts CPA implementers for managing PoA. The CPA implementers coordinate with the local partners to manufacture and install the ICS in households/SMEs. The ICS will be provided at subsidized cost to the end users. Contractual agreement/18/ signed between the CME and the CPA implementer was checked to confirm that the CME is the sole beneficiary of carbon credits generated from each CPA(to be included at the time of inclusion) under this PoA. "No ODA involved" declaration was submitted by Ecoeye Co.Ltd /20/ and BBF/19/.

The start date of the PoA is 15/02/2018 is the date of publication of PoA DD/6/, thus meets the requirement of para 41 of PS for PoA version 1.0/4/.

The DoE confirms that:

1. The proposed PoA is a voluntary action by the CME.
2. A generic CPA part of a PoA-DD/1/ (hereinafter referred to as generic CPA-DD) has been prepared for the only technology (ICS dissemination), with methodology AMS-II.G. version 8.0/2/ and thereof, the technology is stated in one generic CPA-DD/1/ in accordance with the relevant requirements in the "CDM project standard for programmes of activities"/4/. Detailed assessment of generic CPA DD is provided below under section D.2.1.
3. Since the improved cookstove consumes less fuel because of better thermal efficiency, it leads to saving money and time in collecting fuel, employs technician for ICS construction, provides access to new technology and produces less smoke (less indoor air pollution), and thus, the PoA has social, economic and environmental benefits and contributes to sustainable development of host country. The household owners and the local manufacturers interviewed during the site visited confirmed the same.

The description in the PoA DD/1/ includes all information required by PS for PoA version 1.0, para 32-35/4/ and the template guidelines/8/. All the information was confirmed through various means as stated above as well through on-site observations. Thus, it can be concluded that the description of the PoA in PoA-DD/1/ is accurate and complete.



<b>Findings</b>	CL#03, CL#04 and CL#08 were raised and resolved.
<b>Conclusion</b>	The DoE confirms that the description of PoA is accurate and complete and the process undertaken to validate the accuracy and completeness of the description is written above. Thus, the para 43, VVS of PoA version 1.0/5/ has been fulfilled.

### D.1.3. Management system

<b>Means of validation</b>	<p>The CME of the PoA is Ecoeye Co. Ltd. (EECL). The CME contracts CPA implementers for managing PoA. The CPA implementers/PP (Bangladesh Bondhu Foundation) coordinate with the local partners to manufacture and install the ICS in households. The ICS will be provided at subsidized cost to the end users.</p> <p>Contractual agreement signed between the CME and the CPA implementer/18/ was checked to confirm that the CME is the sole beneficiary of carbon credits generated from each CPA under this PoA.</p> <p>The ICS will be provided at subsidized cost to the end users.</p> <p>Roles and responsibilities as checked from the contractual agreement/18/ include following: CME's role is mainly to facilitate inclusion of CPA, identifying CPA implementer, manage database, execute carbon transfer agreement and ensuring that the capability of CPA implementer and competency of external consultant/partner contracted to conduct various tasks conducting trainings whenever required.</p> <p>CPA implementer's role is mainly to identify, manage and train the local partner involved in manufacturing stoves, execute carbon transfer agreement, stove inspection and collection of data, monitoring ex-post parameters. CME representatives, BBF representatives and local manufacturer representatives were interviewed during the site visit to corroborate these roles.</p> <p>Organogram of BBF/25/ has been provided to clear the designation of different personnel involved in the activity.</p> <p>ICS Database/27/ was reviewed to check that information such as listed below will be noted for each end user:</p> <ul style="list-style-type: none"> <li>• Name</li> <li>• Address</li> <li>• Unique ID (to avoid double counting)</li> <li>• Date of installation</li> <li>• Type and material of ICS</li> <li>• Baseline stove</li> <li>• Baseline fuel</li> <li>• Whether the baseline stove has been destroyed or not</li> <li>• If any other ICS is present in the house</li> </ul> <p>Photographs of training/28/ local partners involved in manufacturing of ICS and staff involved in inspection and awareness spreading about the ICS and noting the data, Training attendance sheet/29/ and training manual/30/ have been checked to confirm the execution of management plan that has started already.</p> <p>The end users will keep a copy of end user agreement/40/ which was also checked to check the installation date of ICSs/27/.</p> <p>Records and documentation of each CPA will be archived for two years after the end of the final crediting period or the last issuance of CERs, whichever occurs later.</p>
<b>Findings</b>	CL#03 and CL#04 were raised and resolved.
<b>Conclusion</b>	The DoE confirms that the management system described in the PoA DD/1/ is in accordance with the CDM PS for PoA version 1.0, para 36,37/4/.

**D.1.4. Demonstration of additionality of the PoA**

<b>Means of validation</b>	Para 11(c.) of the tool 'Tool: Demonstration of additionality of small scale project activities, Version 11.0/41/ states that the documentation of barrier is not required for the positive list of technologies and project activity types that are defined as automatically additional for project activities solely composed of isolated units, where the users of the technology/measure are households or communities or Small and Medium Enterprises (SMEs) and where the size of each unit is no larger than 1% of the small-scale CDM thresholds. To prove auto-additionality the CPAs to be included under this PoA, it will be demonstrated at CPA level that only isolate units, no larger than 1% of the small-scale CDM thresholds will be disseminated.
<b>Findings</b>	No findings.
<b>Conclusion</b>	The DoE is in opinion that CPAs under the PoA demonstrating that isolate units no larger than 1% of the small-scale CDM thresholds have been disseminated and shall be deemed to be auto additional.

**D.1.5. Start date and duration of the PoA**

<b>Means of validation</b>	The CME has determined the start date of the PoA to be the publication date of the PoA-DD for global stakeholder consultation as per the CDM Glossary terms version 09.1, page 20/7/. The publication date was confirmed from the CDM UNFCCC website/6/ and found to be 15/02/2018. The same date has been set as the start date of the PoA/1/. The duration of the proposed CDM PoA is 28 years, 0 months.
<b>Findings</b>	CAR#06 was raised and resolved.
<b>Conclusion</b>	The DoE confirms that the start date and duration of the proposed CDM PoA comply with para 40-43 of PS for PoA/4/.

**D.1.6. Environmental impacts**

<b>Means of validation</b>	The Environmental Conservation Rules,1997/42/ prescribes Environmental Clearance Certificate (ECC), necessary for any project to be implemented in Bangladesh. However, dissemination of ICSs is not listed as any category (Green, Orange and Red) of project that requires EIA. CME has demonstrated at PoA level that the EIA is not needed for the PoA.
<b>Findings</b>	No findings.
<b>Conclusion</b>	The PoA does not fall under the purview of EIA and does not involve any activity that impacts the environment adversely.

**D.1.7. Socio-economic impacts**

<b>Means of validation</b>	Not Applicable
<b>Findings</b>	Not Applicable
<b>Conclusion</b>	Not Applicable

**D.1.8. Local stakeholder consultation**

<b>Means of validation</b>	<p>The CME has conducted the LSC on 12/01/2018 as checked from LSC report/32/. The LSC has been conducted at PoA level, which is clearly specified under section E.1. of the PoA DD/1/. The relevant stakeholders were invited through notice published in local newspaper/38/, public notice/37/, phone calls, letters and emails/34/.</p> <p>List of invitees/33/ and Attendance list/35/ were checked to ascertain that relevant stakeholder were part of the LSC:</p> <p>Photographs of the physical meeting/36/ has also been used as an evidence of information given in the LSC report.</p> <p>The LSC was conducted on 12/01/2018 before the date of submitting the PoA DD(19/01/2018) to the DoE/43/.</p> <p>No change has occurred to the PoA and no complaints have been received from any local stakeholder after the LSC.</p>
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	LSC report/32/, interviews with local stakeholder were used as the means to confirm that the LSC has been conducted adequately. Summary of queries raised/32/ has been submitted by the CME, which was reviewed to confirm that all the questions had been answered appropriately and no negative comments from local stakeholder had been received.
<b>Findings</b>	No findings.
<b>Conclusion</b>	The DoE confirms that the LSC was conducted in accordance with section 7.8 of the PS for PoA version 1.0/4/.

**D.1.9. Sustainable development co-benefits**

<b>Means of validation</b>	Not Applicable
<b>Findings</b>	Not Applicable
<b>Conclusion</b>	Not Applicable

**D.1.10. Approval**

<b>Means of validation</b>	Bangladesh has been indicated as the party involved in the PoA DD/1/. The CME has submitted the LoA/51/ received from the DNA of Bangladesh(Department of Environment, Ministry of Environment and Forests)/39/, The LoA/51/ confirms that: (a) The Party is a Party to the Kyoto Protocol; (b) The participation in the PoA is voluntary; (c) the PoA contributes to achieving the sustainable development of the country; (d) It refers to the precise title of the PoA in the PoA-DD being submitted for registration.  The LoA/51/ received is unconditional with respect to para 69a-d of PS for PoA version 1,0 and is valid for the proposed CDM PoA under validation.
<b>Findings</b>	CL#01 was raised and resolved.
<b>Conclusion</b>	The CME has received LoA/51/ from the DNA of the Host Country of the PoA. The LoA/51/ meets the requirements of section 7.11.1 of VVS for PoA/5/.

**D.1.11. Authorization**

<b>Means of validation</b>	The project participant(Bangladesh Bondhu Foundation) of the proposed PoA has been authorized by the party(Republic of Bangladesh) involved in the LoA/51/. The CME(Ecoeye Co. Ltd.) has also been authorized to coordinate the proposed CDM PoA by the host party(Republic of Bangladesh) as checked from the LoA/51/.  DOE confirms that <ul style="list-style-type: none"> <li>the coordinating/managing entity and the project participants of the proposed CDM PoA are listed in the PoA-DD/1/ and authorized by the DNA to implement the PoA. The information is consistent with the information provided in the Appendix 1 of the PoA DD/1/, that contains the contact information of the coordinating/managing entity.</li> <li>no entities other than those authorized as the coordinating/managing entity and the project participants of the proposed CDM PoA are included in the above referred section of the PoA-DD/1/.</li> <li>The participation of CME and PP has been authorized by a party to the Kyoto Protocol and the authorization has been issued from the relevant DNA/39/.</li> </ul>
<b>Findings</b>	CL#01 was raised and resolved.

<b>Conclusion</b>	The CME and the PP have received LoA/51/ from the DNA of the Host Country of the PoA. The LoA/51/ meets the requirements of section 7.11.2 of VVS for PoA/5/.
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#### D.1.12. Modalities of communication

<b>Means of validation</b>	<p>MOC statement has been correctly completed using the latest MOC FORM template/53/.</p> <p>The DOE has reviewed the MOC form/52/ and confirms that:</p> <p>(a) The valid version of the form “Modalities of Communication statement”(CDM-MOC-FORM) has been used;</p> <p>(b) The information required as per the CDM-MOC-FORM, including its annex 1, is correctly completed;</p> <p>(c) The project participants’ authorized signatories signing the CDM-MOC-FORM correspond to the project participants’ authorized signatories included in the CDM-MOC-FORM, annex 1.</p> <p>The CME has submitted a written confirmation/54/ that all corporate and personal details, including specimen signatures, are valid and accurate and thus, authorized by CME to be focal points.</p>
<b>Findings</b>	CL#01 was raised and resolved.
<b>Conclusion</b>	The DOE confirms that the MoC statement was completed and duly authorized in accordance with the valid version of the form and the information required therein.

#### D.1.13. Global stakeholder consultation

<b>Means of validation</b>	The PoA DD was made public for a period 15/02/2018-26/03/2018 on CDM UNFCCC website/6/. No comments have been received during the period.
<b>Findings</b>	No findings
<b>Conclusion</b>	The PoA DD has been made public by the validating DoE as per para 10 of PCP for PoA version 1.0/3/ for a period of 30 days. However, no comments have been received during the consultation period.

### D.2. Generic component project activities

#### D.2.1. General description of generic CPA

<b>Means of validation</b>	<p>The CPAs under the proposed PoA in Bangladesh aims to disseminate improved cookstove that will replace the traditional stove and lead to reduction in GHG emissions. The improved cook stove having higher thermal efficiency, achieved through optimizing the dimensions of the ICS combustion chamber and effective air flow to aid complete combustion of biomass.</p> <p>The geographical boundaries will cover entire country however, the location of the capital city visited during the site visit was checked through a mobile application get geo coordinates. In absence of the PoA, the end users would continue using traditional stove to generate the same amount of thermal energy.</p> <p>Technical description</p> <p>The CPAs under this PoA will disseminate ICSs with thermal efficiency greater than 20% and a grate/chimney for improved combustion. Each unit shall be a micro-scale unit as defined under D.1.4 of this report in order to demonstrate the CPA to be auto-additional. These conditions are also part of eligibility criteria to be met by each proposed CPA, listed under section K of the generic CPA DD /1/. The households visited during the site visit, technical drawings of stoves/21/ and thermal efficiency certificate/22,23/ were checked and found to meet the methodology requirements/2/. The CME can disseminate stove of different design and efficiency as long as the eligibility criteria are met by the CPAs to be included.</p> <p>The CPAs to be included under the PoA DD/1/ would be type II small scale project activities. However, The General Guidelines for SSC methodologies, version 22.1 dated 15 April 2016, paragraph 4.17/17/ states that the in the case of CPAs solely composed of “microscale CDM units”, the coordinating/managing entity is not required to demonstrate compliance with the small-scale CDM thresholds at the</p>
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	<p>aggregate level of the CPA. Thus, as included in the eligibility criterion, the CPAs will demonstrate that it is solely composed of “microscale CDM units”.</p> <p>The CME of the PoA is Ecoeye Co. Ltd. (EECL). The CME contracts CPA implementers for managing PoA. The CPA implementers coordinate with the local partners to manufacture and install the ICS in households/SME. The ICS will be provided at subsidized cost to the end users.</p> <p>Contractual agreement/18/ signed between the CME and the CPA implementer was checked to confirm the sole beneficiary of carbon credits generated from each CPA under this PoA. “No ODA involved” declaration was submitted by BBF/19/ and Ecoeye Co. Ltd/20/.</p> <p>Roles and responsibilities as checked from the contract agreement/18/ would include following:  CME’s role would mainly be to facilitate inclusion of CPA, identifying CPA implementer, manage database, execute carbon transfer agreement and ensuring that the capability of CPA implementer and competency of external consultant/partner contracted to conduct various tasks conducting trainings whenever required.</p> <p>CPA implementer’s role would mainly be to identify, manage and train the local partner involved in manufacturing stoves, execute carbon transfer agreement, stove inspection and collection of data, monitoring ex-post parameters.</p> <p>CME representatives, BBF representatives and local partner representatives were interviewed during the site visit to corroborate these roles.</p> <p>CPAs under the PoA will have a fixed crediting period of 10 years.</p>
<b>Findings</b>	CL#02, CL#03, CL#04 and CL#08 was raised and resolved.
<b>Conclusion</b>	The assessment team confirm that the description given in the generic CPA DD/1/ is accurate and complete inline to para183-191, VVS for PoA, version 1.0/5/.

## D.2.2. Application and selection of methodologies and standardized baselines

### D.2.2.1. Application of methodologies and standardized baselines

Means of validation	Applicability criteria		DoE assessment	
	This methodology comprises efficiency improvements in thermal applications of non-renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency biomass fired project devices (cook stoves or ovens or dryers) to replace the existing devices and/or energy efficiency improvements in existing biomass fired cook stoves or ovens or dryers.		The PoA aims to disseminate ICS with higher efficiency as checked through visual observation of installed stoves in sampled households, during the site visit. This will be checked at CPA level as it has also been added as an eligibility criterion under section K of generic CPA DD/1/.	
	In the case of cook stoves, the methodology is applicable to introduction of single pot or multi pot portable or in-situ cook stoves with rated efficiency of at least 20 per cent.		The CPAs to be included under this PoA will disseminate only ICSSs with thermal efficiency higher than 20%. This will be checked at CPA level as it has also been added as an eligibility criterion under section K of generic CPA DD/1/.	
	The aggregate energy savings of a single project activity shall not exceed the equivalent of 60 GWh per year or 180 GWhth per year in fuel input		Since all the ICSSs disseminated under this PoA will demonstrate that the ICS unit disseminated under the CPA are micro-scale units at the time of inclusion, the CPAs under this PoA are not required to demonstrate the SSC	

		threshold limit as per para 120(m) of Standard: CDM project standard for programmes of activities, version 1.0/4/.
	Non-renewable biomass has been used in the project region since 31 December 1989, using survey methods or referring to published literature, official reports or statistics	<p>The Statistical Year Book Bangladesh 2015, published in September 2016, Chapter 10: Prices and Wages Section 10.09/44/ was reviewed to confirm that there has been increase in trends in fuel wood prices indicating a scarcity of fuel-wood over the last decade.</p> <p>Hassan et al. in Springer 'Energy, Sustainability and Society 2013/45/ have said that the rural households have started using inferior type of biomass due to scarce supply of biomass instead of the most preferred biomass-wood. This confirms para 29(d) of the applied methodology/2/.</p> <p>Further, review of non-renewable usage of biomass is given for 1990 and 2010 levels in Global FRA report/49/ was done by the assessment team.</p> <p>The CME has correctly applied the tool to calculate fraction of non-renewable biomass/55/ and transparently presented that the fraction of non-renewable biomass has decreased from 1990 to 2015. The calculation in fNRB calculation sheet/56/ is in line to the tool/55/ and the values used for the calculation are sourced from Global FRA report/49/.</p> <p>Thus, the DoE confirms that Non-renewable biomass has been in use in the project region since 31/12/1989.</p>
	For cases where the biomass is sourced from renewable sources, the project participants should use a corresponding Type I methodology	The PoA does not involve use of renewable biomass. As demonstrated above that the fuel used in the project stove is non-renewable. Thus, type II methodology has been applied.
<b>Findings</b>	CL#07 was raised and resolved.	
<b>Conclusion</b>	DOE confirms that the generic CPA meets all the applicability conditions of the applied methodology AMS-II.G. version 8.0/2/.	

#### D.2.2.2. Deviation from methodologies and/or methodological tools

<b>Means of validation</b>	Not Applicable
<b>Findings</b>	Not Applicable
<b>Conclusion</b>	Not Applicable

**D.2.2.3. Clarification on applicability of methodology, tool and/or standardized baseline**

<b>Means of validation</b>	Not Applicable
<b>Findings</b>	Not Applicable
<b>Conclusion</b>	Not Applicable

**D.2.2.4. Project boundary, sources and GHGs**

<b>Means of validation</b>	<p>As per para 13 of the applied methodology AMS-II.G. version 8.0/2/, the generic CPA project boundary is the physical, geographical site of the efficient devices that utilize biomass.</p> <p>The physical boundary will include various regions of Bangladesh, where the stove will be disseminated. The project boundary was checked during the on-site visit to the project location to confirm that CME will disseminate the stoves only within the project boundary. The boundary has been defined in accordance with the selected methodology/2/.</p> <p>The sources of the GHG in the baseline scenario are inefficient traditional cook stove using the fuelwood. The sources of the GHG in the project activity are use of efficient cook stove for combustion of same fuel to generate energy. The sources for cooking activity considered CO<sub>2</sub> as major gas emitted from the process in both the scenarios.</p> <p>The validation team did not identify any emission sources that will be affected by the implementation of the CPAs to be included and which are expected to contribute more than 1% of the overall expected average annual emission reductions, that are not addressed by the selected approved methodology/2/.</p>
<b>Findings</b>	No findings
<b>Conclusion</b>	The spatial extent of the generic CPA boundary, which is the geographical boundary of Bangladesh, is clearly defined in the generic CPA-DD/1/ and is in line with AMS-II.G. Version 08/2/. The greenhouse gases and emission source included in the generic CPA boundary both in the baseline & project scenario, is CO <sub>2</sub> .

**D.2.2.5. Baseline scenario**

<b>Means of validation</b>	<p>Para 14, of the applied methodology AMS-II.G., version 8.0/2/ states that the baseline scenario would be the use of fossil fuels for meeting similar thermal energy needs in the absence of the project activity. In absence of the PA, the households will use non-renewable biomass in traditional stove.</p> <p>Country Action Plan for Clean Cookstoves, November 2013, Power Division, Ministry of Power, Government of the People's Republic of Bangladesh, page 39/46/ was reviewed. The document revealed that the more than 90% households still use traditional stoves for cooking. Another paper published in PNAS, July 3, 2012, vol. 109, no. 27, 10815–10820, "Low demand for non-traditional cookstove technologies" by Mobarak et al/47/ was referred to confirm that 98–99% of Bangladesh rural population burns biomass fuels by using traditional cookstoves for cooking and heating and they construct these traditional cookstoves themselves with local materials available. The impact of cooking in traditional stove has also been reported in Special Report on Restoring Balance: Bangladesh's Rural Energy Realities, Executive Summary, page xx/48/.</p> <p>Several policies/10-16/ relevant to the proposed PoA were reviewed such as:</p> <ul style="list-style-type: none"> <li>• Renewable Energy Policy 2008</li> <li>• Bangladesh climate change strategy and action plan 2009</li> <li>• National Energy policy 2004</li> <li>• Energy efficiency action plan 2012</li> <li>• Sustainable renewable energy development authority(SREDA) act 2012</li> <li>• Energy efficiency and conservation master plan up to 2030(March 2015)</li> <li>• Bangladesh National Women policy 2011</li> </ul>
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	<p>However, as per para 106 of PS for PoA version 1.0, only E+ policies before 1997 and E- policies implemented since 2001 shall be considered. No relevant policies from this period was identified.</p> <p>Thus, it can be concluded that the baseline scenario defined in the generic CPA DD/1/ in line to the applied methodology/2/.</p>
<b>Findings</b>	CL#05 was raised and resolved.
<b>Conclusion</b>	<p>The DOE confirms:</p> <p>(a) All the assumptions and data used by the coordinating/managing entity are listed in the generic CPA-DD/1/, including their references and sources;</p> <p>(b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the generic CPA-DD/1/;</p> <p>(c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;</p> <p>(d) Relevant national and/or sectoral policies, regulations and circumstances are considered and listed in the generic CPA-DD/1/;</p> <p>(e) The methodology/2/ have been correctly applied to describe identification of the most plausible baseline scenario and the description reasonably represents what would occur in the absence of corresponding CPAs(to be included).</p>

#### D.2.2.6. Estimation of emission reductions or net anthropogenic removals

<b>Means of validation</b>	<p>The validation team has checked the modalities for ex-ante calculation stated under section I.6.3. of the generic CPA DD/1/. The assessment team is of an opinion that the all the equations listed in the generic CPA DD/1/ have been sourced directly from the applied methodology/2/ and thus, are in compliance with it. The equation being used are as follows:</p> <p><math>ER_y = \sum_i \sum_j ER_{y,i,j} - LE_y</math></p> <table border="1"> <tr> <td><math>ER_y</math></td><td>Emission reductions during year y in t CO<sub>2</sub>e</td></tr> <tr> <td><math>ER_{y,i,j}</math></td><td>Emission reductions by project device of type i and batch j during year y in t CO<sub>2</sub>e</td></tr> <tr> <td><math>LE_y</math></td><td>Leakage emissions in the year y</td></tr> <tr> <td>I</td><td>Indices for the situation where more than one type of project device is introduced to replace the pre-project devices</td></tr> <tr> <td>J</td><td>Indices for the situation where there is more than one batch of project device</td></tr> </table> <p><math>ER_y = B_{y,savings,i,j} * N_{y,i,j} * \mu_y * f_{NRB,y} * NCV_{biomass} * EF_{projected\_fossilfuel}</math></p> <table border="1"> <tr> <td><math>B_{y,savings,i,j}</math></td><td>Quantity of woody biomass that is saved in tonnes per cook stove device of type i and batch j during year y</td></tr> <tr> <td><math>N_{y,i,j}</math></td><td>Number of project devices of type i and batch j operating during year y</td></tr> <tr> <td><math>\mu_y</math></td><td>Adjustment to account for any continued use of pre-project devices during the year y when applying equations 6 (fraction).</td></tr> <tr> <td><math>f_{NRB,y}</math></td><td>Fraction of woody biomass that can be established as non-renewable biomass using survey methods or government data or default country specific fraction of non-renewable woody biomass (<math>f_{NRB}</math>) values available on the CDM website</td></tr> <tr> <td><math>NCV_{biomass}</math></td><td>Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.015 TJ/tonne, based on the gross weight of the wood that is 'air-dried')</td></tr> </table>	$ER_y$	Emission reductions during year y in t CO <sub>2</sub> e	$ER_{y,i,j}$	Emission reductions by project device of type i and batch j during year y in t CO <sub>2</sub> e	$LE_y$	Leakage emissions in the year y	I	Indices for the situation where more than one type of project device is introduced to replace the pre-project devices	J	Indices for the situation where there is more than one batch of project device	$B_{y,savings,i,j}$	Quantity of woody biomass that is saved in tonnes per cook stove device of type i and batch j during year y	$N_{y,i,j}$	Number of project devices of type i and batch j operating during year y	$\mu_y$	Adjustment to account for any continued use of pre-project devices during the year y when applying equations 6 (fraction).	$f_{NRB,y}$	Fraction of woody biomass that can be established as non-renewable biomass using survey methods or government data or default country specific fraction of non-renewable woody biomass ( $f_{NRB}$ ) values available on the CDM website	$NCV_{biomass}$	Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.015 TJ/tonne, based on the gross weight of the wood that is 'air-dried')
$ER_y$	Emission reductions during year y in t CO <sub>2</sub> e																				
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EF <sub>projected_fossilfuel</sub>	Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers. Use a value of 81.6 t CO <sub>2</sub> /TJ
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$$B_{y,savings,i,j} = B_{old,i,j} * (1 - \eta_{old,i,j} / \eta_{new,i,j})$$

B <sub>old,i,j</sub>	Annual quantity of woody biomass that would have been used in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project device type <i>i</i> and batch <i>j</i>
η <sub>old,i,j</sub>	Efficiency of the device of each type <i>i</i> and batch <i>j</i> implemented as part of the project activity
η <sub>new,i,j</sub>	Efficiency of pre - project device, which is a three-stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney;

Default values sourced from methodology/9/ have been used for the parameter, NCV<sub>biomass</sub>, EF<sub>projected\_fossilfuel</sub> and B<sub>old,p</sub>. B<sub>y,saving</sub> is calculated as an adjustment to B<sub>old</sub> for the decrease in efficiency over the period of time.

$$\text{Where } B_{old,i,j} = B_{old,H,H} = B_{old,p} * N_{p,HH} * LAF_y$$

B <sub>old,H,H</sub>	Annual quantity of woody biomass that would have been used in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices
B <sub>old,p</sub>	Annual quantity of woody biomass that would have been used per person in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices
N <sub>p,HH</sub>	Average number of persons served per household prior to the project implementation
LAF <sub>y</sub>	Leakage account factor

Default values sourced from methodology/2/ have been used for the parameter, NCV<sub>biomass</sub>, EF<sub>projected\_fossilfuel</sub> and B<sub>old,p</sub>. B<sub>y,saving,i,j</sub> is calculated as an adjustment to B<sub>old</sub> for the decrease in efficiency over the period of time.

#### Ex-ante parameter:

Parameter	Means of validation
B <sub>old,p</sub> (tonnes/person/year) Annual quantity of woody biomass that would have been used per person in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices	The value of the parameter is 0.50, is sourced from the applied methodology, page 11/2/.
N <sub>p,HH</sub> (Number), Average number of persons served per household prior to the project implementation,	The value of the parameter will be sourced from Ex-ante baseline survey records of households or published information / literature defining the average household size in the project region for the initial CPAs. The same value can be used by the subsequent CPAs, instead of fresh assessments in absence of new data. The approach was found to be in line with the applied methodology para 11/2/.
B <sub>old,HH</sub> (tonnes/household/year),	The value of the parameter is either calculated through multiplication of

	Annual quantity of woody biomass that would have been used in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices	Bold,p and Np,HH or determined by conducting Ex-ante baseline surveys. The approach was found to be in line with the applied methodology para 11-12/2/. Although, the CME aims to disseminate one stove in each house, however if during the stove installation, the presence of existing project ICS is found, it will be monitored and the subsequent (second) ICS will not be included in the CPA.
	fNRB, (Fraction), Fraction of woody biomass saved by the project activity during year y that can be established as non-renewable biomass	The parameter can be calculated through one of the following ways/55,57,58/: 1. Country specific default values suggested by the CDM EB / DNA; or 2. Default Values of Fraction of Non-Renewable Biomass for Least Developed Countries and Small Island Developing States, Information Note – SSC WG 35 meeting report Annex 20 (approved in EB 67, Annex 22) 3. Calculated as per Tool: Calculation of the fraction of non-renewable biomass, EB 97, Annex 9 The approach was found to be in line with the applied methodology para5/2/.
	EFproject_fossil fuel (tCO <sub>2</sub> e/TJ), Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers	The value of the parameter is 81.6, is sourced from the applied methodology, page 5/2/.
	LAFy, (Fraction), Leakage adjustment factor	The value of the parameter is 0.95, is sourced from the applied methodology, page 5/2/.
	NCV biomass (TJ/tonne), Net calorific value of the non-renewable woody biomass, briquettes or charcoal used in project devices	The value of the parameter is 0.015, is sourced from the applied methodology, page 17/2/.
	$\eta_{old,i,j}$ (Fraction), Efficiency of pre - project device, which is a three-stone fire using fuelwood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation	The value of the parameter will 0.11 which was determined by taking weighted average of defaults of 0.1 for any traditional stove or 0.2 for stove with grate or chimney as the baseline stove and penetration rate of improved stove. The approach was found to be in line with the applied methodology para19/2/.
The ex-post parameters used in the equation above have been assessed profoundly under section below.		
Sampled calculation has been presented in the generic CPA-DD/1/ under section I.6.3. by applying assumed values for single stove, clearly explains the equations.		
<b>Findings</b>	No findings.	

<b>Conclusion</b>	It has been confirmed that the modalities for ex-ante calculation of emission reductions has been found to be satisfactory demonstrated in the generic CPA DD/1/and confirms that the formulas stated above are in line the applied methodology/2/
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## D.2.2.7. Monitoring plan

<b>Means of validation</b>	<p><u>Monitoring plan:</u> All the parameters required by the applied methodology/2/ were identified and listed below:</p> <p>Ex-post parameters:</p>	
	Parameter	Means of validation
	N <sub>y,i,j</sub> (Number), Number of project devices of type i and batch j operating during year y	<p>The value of the parameter will be as follows:  <math display="block">N_{y,i,j} = (n_{i,j,operational} / n_{i,j,total}) * N_{y,i,j,installed}</math>           Where:            N = number of stoves            n = number of samples            number of stove will be determined through sales database and number of samples operational and total will be determined through survey. The parameter shall be monitored at least once in two years following the sampling requirements set as per the "Standard: Sampling and surveys for CDM project activities and programme of activities" version 7.0/9/.</p>
	μ <sub>y</sub> (Fraction), Adjustment to account for any continued use of pre-project devices during the year y	<p>The parameter shall be measured as per option 2 of the applied methodology/2/, i.e. monitoring survey. For the samples where the baseline stove would be found to be still in use, a ratio of frequency of usage (i.e. number of meals cooked on ICS Vs Total number of meals cooked on ICS and baseline stove) would be used as the fraction. Otherwise, for rest of the cases the value would be 1.            If no information is available on relative usage levels of baseline stove and ICS, a default adjustment fraction of 50:50 shall be applied to those samples.            The parameter shall be monitored, at least once in two years, following the sampling requirements set as per the "Standard: Sampling and surveys for CDM project activities and programme of activities" version 7.0/9/.</p>
	η <sub>new,i,j</sub> (Fraction), Efficiency of the project device of each type i and batch j	<p>CPAs to be included will choose any of the three ways listed to determine the efficiency:</p> <ul style="list-style-type: none"> <li>• based on certification by a national standards body or an appropriate certifying agent recognized by that body</li> <li>• manufacturer specifications on efficiency based on water boiling test (WBT) may be used following a 95/10 precision in accordance with the "Standard</li> </ul>

	<p>for sampling and surveys for CDM project activities and programme of activities</p> <ul style="list-style-type: none"> <li>Conduct a sample test on three cook stoves with three tests conducted for each stove</li> </ul> <p>The parameter will be recorded at the time of commissioning/distribution and adjusted for loss in efficiency as per para 25(c) and (d) of the applied methodology/2/.</p>
Date of commissioning of project device i	The PP will record each sale in sales database along with the name of recipient, contact details, location of household (village, district etc) at the time of installation to monitor this parameter.

By reviewing and comparing the monitoring details of each parameter it was confirmed that the monitoring plan contains all necessary parameters and the means of monitoring described in the plan comply with the requirements of the applied methodologies.

The team leader has conducted the site visit to the project location to confirm that:

(i) The monitoring arrangements described in the monitoring plan are feasible within the project design;

(ii) The means of implementation of the monitoring plan, including the data management and quality assurance and quality control procedures, are sufficient to ensure that GHG emission reductions achieved by/resulting from corresponding CPAs to be included can be reported ex post and verified.

Sampling plan:

The CME will apply cross CPA sampling following the requirements of Standard: Sampling and surveys for CDM project activities and programmes of activities, version 7.0/9/.

The confidence/precision shall be met by the CME. In case, the desired precision is not met, the CME shall either use the lower bound value of the corresponding confidence or repeat/expand the survey.

Sampling methodology:

Stratified sampling will be carried out over the sampling frames of the target population (total population served under the PoA) to deduce the value of monitoring parameters.

Formulas stated in Guideline for Sampling and Surveys for CDM Project Activities and Programme of Activities/50/ and sampling approaches Standard: Sampling and surveys for CDM project activities and programmes of activities, version 7.0/9/ will be followed to determine the sample size. The formulas stated in the generic CPA DD/1/ are in line with the above stated guideline/50/.

Thus, it can be confirmed that the sampling plan provides the parameter value estimates in an unbiased and reliable manner, where the coordinating/managing entity has applied a sampling approach to determine data and parameters in accordance with the "Standard: Sampling and surveys for CDM project activities and programme of activities version 7.0/9/.

Other elements of the added monitoring plan:

- Specific sales database for each CPA to be included
- Single sample set will be drawn and required precision would be met
- Design of survey questionnaire will include only non-intrusive and easy to comprehend questions.

	<ul style="list-style-type: none"> <li>All the monitoring staff will be trained to perform their allotted task appropriately.</li> <li>The CME may select sub-sample within the common survey sample (as per stratification requirements) for determining the thermal efficiency in line with para 41 of the methodology/2/</li> <li>Third party will be checked for skills and experience.</li> </ul> <p>The elements outlined above comply with the applied methodology/2/ and PS for PoA version 1.0/4/</p>
<b>Findings</b>	No findings.
<b>Conclusion</b>	<p>The DoE confirms that:</p> <ul style="list-style-type: none"> <li>(a) The compliance of the description of the monitoring plan stated in the generic CPA DD/1/ with the requirements of the applied methodologies AMS-II.G. version 8.0/2/ including applicable tools, and, the “Standard: Sampling and surveys for CDM project activities and programme of activities” version 7.0/9/;</li> <li>(b) The monitoring arrangements described in the monitoring plan are feasible within the project design</li> <li>(c) The coordinating/managing entity has ability to implement the monitoring plan.</li> </ul>

### D.2.3. Crediting period type and duration

<b>Means of validation</b>	CME has selected fixed type (i.e. 10 years, 0 months) of crediting period. It would be ensured at the time of inclusion of CPAs that the CPAs do not exceed the end of the duration of the PoA.
<b>Findings</b>	No findings.
<b>Conclusion</b>	The CME has decided the crediting period and type as per para 118 of PS for PoA version 1.0/4/.

### D.2.4. Eligibility criteria for inclusion of CPAs

No.	Eligibility criterion - Category/Required condition	Means of validation	Findings	Conclusion
1.	<p><u>Geographic Boundary</u></p> <p>The ICS under the CPA must operate within the geographical boundary of the PoA i.e. Republic of Bangladesh</p>	Sales database listing all the installed ICSs will be checked by the validation/verification team to confirm that the ICS are installed in Bangladesh.	No findings	<p>The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(a)/4/.</p> <p>The criterion is verifiable as well as sufficiently objective and comprehensive to permit the assessment of the inclusion of corresponding CPAs in the PoA</p>
2.	<p><u>Double Counting</u></p> <p>Carbon emission reductions claimed by the CPA should be unique and not counted more than once</p>	Each ICS has a unique ID number which avoids double counting of the same ICSs. The unique id shall be checked by the team involved in inclusion of CPA.	No findings	<p>The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(b)/4/.</p> <p>The criterion is verifiable as well as sufficiently objective</p>

No.	Eligibility criterion - Category/Required condition	Means of validation	Findings	Conclusion
				and comprehensive to permit the assessment of the inclusion of corresponding CPAs in the PoA
3.	<u>Exclusiveness of CPA</u>  The CPA shall not be previously: registered as a CDM project activity, included as a CPA in any other registered PoA, or deregistered as a CPA of a PoA	CME will check and confirm if the CPA is not a CPA in any other registered PoA or deregistered as a CPA of a PoA or already registered as a CDM project activity.	No findings	The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(c)/4/.
4.	<u>Specifications of Technology/Measure</u>  The program will promote dissemination of wood-fuel ICS in Bangladesh. The stoves shall have a fuel grate and/or a chimney The rated efficiency of technologies included under the program will be at least 20 per cent.	Technical description of the ICS shall be shared with the DoE involved in inclusion to confirm that the stove with grate/chimney and efficiency higher than 20% has been disseminated in Bangladesh.	CL#08 was raised and resolved.	The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(d)/4/.
5.	<u>Start date</u>  Date on which first ICS was installed under the CPA. The start date of any proposed CDM CPA will be on or after the start date of the proposed CDM PoA	End user agreement / voucher / installation report will be checked as an evidence to validate the start date of the first ICS at the time of inclusion of CPA.	No findings	The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(e)/4/.
6.	<u>Applicability of the methodologies</u>  CPA must follow AMS.II-G ver 08.0.  The applicability of methodology at CPA level has already been demonstrated in section I.2 above. Technology related requirements have been specified in criteria #3 above.	The generic CPA meets all the applicability criteria. The detailed assessment of which has been given under section D.2.2.1 of this report. The CPA to be included will also be checked for the same.	No findings	The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(f)/4/.
7.	<u>Additionality</u>  ICS shall be installed at households or SMEs  The rated annual thermal energy savings of ICS included under the CPAs	The CPA to be included will demonstrate that the units disseminated have annual thermal energy saving of less than 1.8GWhth in	No findings	The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(g)/4/.

No.	Eligibility criterion - Category/Required condition	Means of validation	Findings	Conclusion
	shall not be more than 1.8GWhth	order to be auto-additional.		
8.	<u>LSC and EIA</u>  The local stakeholder consultation is conducted at the PoA level (Section F of the PoA-DD).  An environmental impact analysis is not required (section E of the PoA-DD)	LSC and EIA have been Conducted at PoA level. Please refer to section D.1.6 and D.1.8 of this report for detailed assessment of LSC and EIA.	No findings	The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(i)/4/.
9.	<u>Public Funding</u>  Affirmation that funding from Annex I Parties, if any, does not result in a diversion of official development assistance	CME will provide a declaration to confirm that the CPA receive no ODA.	No findings	The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(j)/4/.
10.	<u>Target Group and Distribution Mechanism</u>  Target Group: Households / SMEs Distribution Mechanism: Via local partners	It was confirmed through interview of the BBF representatives and some households that the target group is households and SMEs and distribution is done by local partners. The same will be followed by each CPA to be included under this PoA.	No findings	The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(k)/4/.
11.	<u>Sampling</u>  CPAs under the program will adhere to all requirements as mentioned in Standard: Sampling and surveys for CDM project activities and programme of activities	Sampling will be conducting by following the Standard: Sampling and surveys for CDM project activities and programme of activities version/9/. The detailed assessment of sampling plan is given above under section D.2.2.7 of this report.	No findings	The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(l)/4/.
12.	<u>SSC Threshold</u>  Not applicable	Not applicable	No findings	The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(m)/4/ and meets condition.

No.	Eligibility criterion - Category/Required condition	Means of validation	Findings	Conclusion
13.	<u>Debundling Check</u> Not applicable	Not Applicable	No findings	The eligibility criterion for inclusion of corresponding CPAs in the proposed CDM PoA are defined in accordance with the project standard for PoA, para 120(n)/4/.

## 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 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 validation 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 the PoA titled “Improved cookstove program in Bangladesh supported by the Republic of Korea” in Bangladesh. 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 fulfillment of stated criteria. The proposed PoA 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 host Party is Bangladesh, which fulfills the participation criteria and has approved the PoA “Improved cookstove program in Bangladesh supported by the Republic of Korea” and authorized Ecoeye Co., Ltd. as the Coordinating Managing Entity. The project correctly applies the approved baseline and monitoring methodology AMS.II-G version 8.0.

The PoA involves the installation of improved cook stoves by Ecoeye Co., Ltd with the help of project participant, Bangladesh Bondhu foundation(BBF) in Bangladesh. The current cooking practice in Bangladesh is the use of the traditional cooking stove. By installing improved cook stove, the project results in reductions of CO<sub>2e</sub> emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the baseline scenario is equal to current practice and the emission reductions attributable to the project are, hence, additional to any that would occur in the absence of the proposed CDM PoA.



## Appendix 1. Abbreviations

Abbreviations	Full Texts
BBF	Bangladesh Bondhu Foundation
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CME	Coordinating / Managing Entity
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
CPA	Component Project Activity
CPA DD	Component Project Activity Design Document
DNA	Designated National Authority
DO	Distribution Organisation
DOE	Designated Operational Entities
DRB	Demonstrably renewable woody biomass
EB	CDM Executive Board
EIA	Environmental Impact Assessment
EECL	Ecoeye Co. Ltd.
FAO	Food and Agriculture organization
FAR	Forward Action Request
GHG	Greenhouse gas(es)
ICS	Improved Cook Stoves
IPCC	Intergovernmental Panel on Climate Change
LAF	Leakage Adjustment Factor
LSC	Local Stakeholder Consultation
NRB	Non-Renewable Biomass
PA	Project Activity
PoA	Programme of Activities
PoA DD	CDM Programme of Activities Design Document
UID	Unique Identification number

## Appendix 2. Competence of team member and technical reviewers

Competence Statement	
<b>Name</b>	Deepika Mahala
<b>Country</b>	India
<b>Education</b>	M. Sc. (Environmental Mgmt), GGSIP University B.Sc. Honour (Chemistry), Sri Venkateshwar College, DU
<b>Experience</b>	2 Years +
<b>Field</b>	Climate Change
Approved Roles	
<b>Team Leader</b>	YES
<b>Validator</b>	YES
<b>Verifier</b>	YES
<b>Methodology Expert</b>	ACM0002, AMS.I.D., AMS.I.A, AMS.III.AV, AMS.II.G
<b>Local expert</b>	YES (India)

<b>Financial Expert</b>	NO		
<b>Technical Reviewer</b>	NO		
<b>TA Expert</b>	YES (TA 1.2 & TA 3.1)		
<b>Reviewed by</b>	Abhishek Mahawar	<b>Date</b>	01/03/2018
<b>Approved by</b>	Ashok Kumar Gautam	<b>Date</b>	01/03/2018

Competence Statement			
<b>Name</b>	Amresh Chandra Biswas		
<b>Country</b>	Bangladesh		
<b>Education</b>	Bachelor of Science, Satpar Govt. Nazrul College Gopalgoanj		
<b>Experience</b>	6 years		
<b>Field</b>	Environment		
Approved Roles			
<b>Team Leader</b>	No		
<b>Validator</b>	No		
<b>Verifier</b>	No		
<b>Methodology Expert</b>	No		
<b>Local expert</b>	Bangladesh		
<b>Financial Expert</b>	No		
<b>Technical Reviewer</b>	No		
<b>TA Expert</b>	No		
<b>Reviewed by</b>	Abhishek Mahawar	<b>Date</b>	01/03/2018
<b>Approved by</b>	Ashok Kumar Gautam	<b>Date</b>	01/03/2018

Competence Statement			
<b>Name</b>	Amit Ranjan Mandal		
<b>Country</b>	India		
<b>Education</b>	Master of Science (Energy Management)		
<b>Experience</b>	9.5 yrs		
<b>Field</b>	Environmental, Energy, CDM		
Approved Roles			
<b>Team Leader</b>	YES		
<b>Validator</b>	YES		
<b>Verifier</b>	YES		
<b>Methodology Expert</b>	ACM0002, AMS.I.D		
<b>Local expert</b>	YES (India)		
<b>Financial Expert</b>	YES		
<b>Technical Reviewer</b>	YES		
<b>TA Expert</b>	YES (TA 1.2, TA 3.1)		
<b>Reviewed by</b>	Abhishek Mahawar	<b>Date</b>	01/03/2018
<b>Approved by</b>	Ashok Kumar Gautam	<b>Date</b>	01/03/2018

### Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	CME	PoA DD Generic CPA DD	Version 4.0 Dated 21/06/2018	CME
2	UNFCCC	Applied methodology: AMS-II.G.	Version 8.0	Other
3	UNFCCC	PCP for PoA	Version 1.0	Other
4	UNFCCC	PS for PoA	Version 1.0	Other
5	UNFCCC	VVS for PoA	Version 1.0	Other
6	UNFCCC	<a href="http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/0CQ93VYA03J9GMXFUTLWFTBNSBAIWO/view.html">http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/0CQ93VYA03J9GMXFUTLWFTBNSBAIWO/view.html</a>	Last accessed on 03/05/2018	Other
7	UNFCCC	CDM Glossary terms	Version 09.1, page 20	Other
8	UNFCCC	CDM-PoA-DD-FORM	Version 8.1	Other
9	UNFCCC	Standard: Sampling and surveys for CDM project activities and programmes of activities	version 7.0	Other
10	Ministry of Power, Energy and Mineral resources, Government of people's republic of Bangladesh	Renewable Energy policy	2008	CME
11	Government of people's republic of Bangladesh	Bangladesh climate change strategy and action plan	2009	CME
12	Ministry of Power, Energy and Mineral resources, Government of people's republic of Bangladesh	National Energy policy	2004	CME
13	Ministry of Power, Energy and Mineral resources, Government of people's republic of Bangladesh	Energy efficiency action plan	2012	CME
14	Government of people's republic of Bangladesh, Ministry of Law, Justice and Parliamentary affairs	Sustainable renewable energy development authority(SREDA) act	2012	CME
15	Ministry of Power, Energy and Mineral resources, Government of people's republic of Bangladesh and Sustainable renewable energy development authority(SREDA)	Energy efficiency and conservation master plan up to 2030	2015	CME
16	Government of people's republic of Bangladesh	Bangladesh National Women policy	2011	CME
17	UNFCCC	The General Guidelines for SSC methodologies	version 22.1 dated 15 April 2016, paragraph 4.17	Other

18	Ecoeye Pvt Ltd and Bangladesh Bondhuchula Foundation	Joint agreement for ICS dissemination & GHG mitigation CDM project in Bangladesh Contractual agreement between Ecoeye Pvt Ltd and Bangladesh Bondhuchula Foundation	20/11/2017	CME
19	BBF	No ODA declaration by BBF	16/03/2018	CME
20	Ecoeye.Pvt. Ltd.	No ODA declaration by Ecoeye Pvt. Ltd.	-	CME
21	BBF	Technical drawings of one-pot and two-pot bondhuchula(stove)	-	CME
22	Institute of fuel research and development(IFRD)	One-pot bondhuchula (stove) efficiency certificate	19/03/2018	CME
23	Institute of Energy	Two-pot bondhuchula (stove) efficiency certificate	17/11/2016	CME
24	Kazi Zahir Khan and Co. Chartered accountants	Bangladesh Bondhu Foundation Financial audit report	30/06/2016	CME
25	BBF	Bangladesh Bondhu Foundation organogram	23/11/2015	CME
26	BBF	Operation lifetime of Bondhuchula modes	16/03/2018	CME
27	BBF	Bondhuchula sales database	Feb 2018	CME
28	BBF	Photographs of training local partners involved in manufacturing of ICS and staff involved in inspection	-	CME
29	BBF	Training attendance	18/02/2018	CME
30	BBF	Training Manual	March 2015	CME
31	CME	Evaluation/feedback form	12/01/2018	CME
32	CME	LSC report with summary of questions asked	12/01/2018	CME
33	CME	LSC invitee list.	-	CME
34	CME	LSC meeting Invitation mail Reply to feedback	04/01/2018-08/01/2018	CME
35	CME	LSC meeting attendance list.	12/01/2018	CME
36	CME	Photographs of LSC meeting	12/01/2018	CME
37	CME	Photograph of public notice for LSC meeting	-	CME
38	Grameen darpan	Published advertisement in newspaper for LSC meeting	08/01/2018	CME
39	UNFCCC	List of DNAs <a href="https://cdm.unfccc.int/DNA/bak/index.html">https://cdm.unfccc.int/DNA/bak/index.html</a>	-	
40	BBF	End user agreement for first ICSs	15/02/2018	CME
41	UNFCCC	Tool: Demonstration of additionality of small scale project activities,	Version 11.0	Other
42	Government of the People's Republic of Bangladesh Ministry of Environment and Forest	Environmental Conservation Rules, 1997 <a href="https://www.elaw.org/system/files/Bangladesh+-+Environmental+Conservation+Rules,+1997.pdf">https://www.elaw.org/system/files/Bangladesh+-+Environmental+Conservation+Rules,+1997.pdf</a>	1997	Other

43	Earthood	Contract signed between the DoE and the CME	19/01/2018	Other
44	Government of people's republic of Bangladesh	The Statistical Year Book Bangladesh 2015, Chapter 10: Prices and Wages Section 10.09	published in September 2016	Other
45	Hassan et al	Hassan et al. in Springer 'Energy, Sustainability and Society 2013	2013	Other
46	Power Division, Ministry of Power, Government of the People's Republic of Bangladesh	Country Action Plan for Clean Cookstoves,	November 2013, page 39	Other
47	Mobarak et al	"Low demand for non-traditional cookstove technologies"; Paper on "" published in PNAS, vol. 109, no. 27, 10815–10820	03/07/2012	Other
48	Energy Sector Management Assistance program (M.Asaduzzaman, Douglas F. Barnes)	Special Report: Energy and Poverty - Restoring Balance: Bangladesh's Rural Energy Realities, Executive Summary, page xx	03/2009	CME
49	Forest Department, Dhaka, Bangladesh  Ad Development Planning Unit, Banbhaban, Bangladesh	Global Forest Resource Assessment report 2015 Country Report	2014	Other
50	UNFCCC	Guideline: Sampling and Surveys for CDM Project Activities and Programme of Activities	Version 4.0	Other
51	Department of Environment, Ministry of Environment and Forests	Letter of Approval	21/06/2018	CME
52	CME	Filled MOC FORM	21/06/2018	CME
53	UNFCCC	CDM-MOC-FORM	Version 3.0	Other
54	CME	Written confirmation from CME as MOC supportive	21/06/2018	CME
55	UNFCCC	Tool: Calculation of the fraction of non-renewable biomass, EB 97, Annex 9	Version 1.0	Other
56	CME	fNRB calculation sheet	-	CME
57	UNFCCC	Default Values of Fraction of Non-Renewable Biomass for Least Developed Countries and Small Island Developing States, Information Note – SSC WG 35 meeting report Annex 20	approved in EB 67, Annex 22	Other
58	UNFCCC	Country specific default values suggested by the CDM EB / DNA	-	Other

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

Table 1. CL from this validation

CL ID	01	Section no.	D.1.10, D.1.11, D.1.12	Date : 07/03/2018
Description of CL				

1. As per para 69 of the PS for PoA version 1.0, The coordinating/managing entity shall obtain a letter of approval from the DNA of each Party involved in the proposed CDM PoA.	
2. As per para 31 of PCP for PoA version 1.0, The coordinating/managing entity shall submit to the DOE at the time of validation of the proposed CDM PoA an MoC statement using the valid version of the "Modalities of communication statement form" (CDM-MOC-FORM), including its annex 1.	
<b>CME response</b>	<b>Date : 21/06/2018</b>
1. Ecoeye Co., Ltd (EECL), Republic of Korea is the Coordinating and Managing Entity (CME) in the PoA and Bangladesh Bondhu Foundation is the host country project participant. LoA from Republic of Bangladesh confirming BBF as project participant and EECL as CME is being submitted. LoA from Republic of Korea is not required being a non-Annex 1 Country.	
2. MoC statement duly authorized by concerned signatories (EECL as CME and project participant and BBF as project participant) is being submitted.	
<b>Documentation provided by CME</b>	
LoA from republic of Bangladesh	
MoC Statement	
<b>DOE assessment</b>	<b>Date: 22/06/2018</b>
1. LoA received from the CME was checked and found to meet the requirements of section 7.11 of VVS for PoA version 1.0. Closed.	
2. MOC prepared on valid version of template has been submitted by the CME. It was checked and found to be in line to para 7.12 of VVS for PoA version 1.0.	
Thus, the CL stands closed.	

<b>CL ID</b>	02	<b>Section no.</b>	D.2.1	<b>Date : 07/03/2018</b>
<b>Description of CL</b>				
CME shall indicate the small-scale project type (Type I, Type II and/or Type III) applicable to the generic CPA in accordance with the project standard, under section H.3. and I.2 of the generic CPA DD.				
<b>CME response</b>				<b>Date : 24/04/2018</b>
The Generic CPA-DD has been revised to mention the SSC type applicable to the CPA.				
<b>Documentation provided by CME</b>				
EECL BBF ICS PoA-DD version 2.0 18 Apr 2018				
<b>DOE assessment</b>				<b>Date: 26/04/2018</b>
Generic CPA DD is a SSC type II project activity. The CME has indicated this under section H.3. and I.2. of the generic CPA DD.				
Thus, The CL stands closed.				

<b>CL ID</b>	03	<b>Section no.</b>	D.2.1, D.1.3.	<b>Date : 07/03/2018</b>
<b>Description of CL</b>				
CME shall explain the flow of information from the end user level to the database maintained. Records and documentation control process for each CPA (to be included at the time of inclusion) under the PoA.				
<b>CME response</b>				<b>Date : 24/04/2018</b>
The information flow, records and document control have been defined in revised PoA-DD.				
<b>Documentation provided by CME</b>				
EECL BBF ICS PoA-DD version 2.0 18 Apr 2018				
<b>DOE assessment</b>				<b>Date: 26/04/2018</b>
The flow of information from the end user level to the database maintained along with the role and responsibilities of personnel involved have been explained in detail under section D of the PoA DD. The plan was checked and found to meet the requirements of PS for PoA version 1.0				
Thus, the CL stands closed.				

<b>CL ID</b>	04	<b>Section no.</b>	D.2.1, D.1.3.	<b>Date : 07/03/2018</b>
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<b>Description of CL</b>	
The CME shall explain the detail management system as per para 36 of the PS for PoA version 1.0.	
<b>CME response</b>	<b>Date : 24/04/2018</b>
The detailed management system has been explained in the revised PoA-DD	
<b>Documentation provided by CME</b>	
EECL BBF ICS PoA-DD version 2.0 18 Apr 2018	
<b>DOE assessment</b>	<b>Date: 26/04/2018</b>
<p>The management plan has been explained in detail under section D of the PoA DD. The plan was checked and found to meet the requirements of PS for PoA version 1.0, para 36.</p> <p>Thus, the CL stands closed.</p>	

<b>CL ID</b>	05	<b>Section no.</b>	D.2.2.5.	<b>Date : 07/03/2018</b>
<b>Description of CL</b>				
<p>As per the para 102 of PS for PoA, the coordinating/managing entity shall describe how to establish the baseline scenario for each of the corresponding CPAs(to be included at the time of inclusion) in accordance with the applied methodologies and, where applicable, the applied standardized baselines, and the provisions in PS.</p> <p>As per para 105, PS for PoA, when establishing the baseline scenario, the coordinating/managing entity shall take into account the two types(E+ and E-) of national and/or sectoral policies or regulations</p>				
<b>CME response</b>				<b>Date : 24/04/2018</b>
<p>The applied methodology para 14, used to establish the baseline, mentions the following:  <i>"It is assumed that in the absence of the project activity, the baseline scenario would be the projected use of fossil fuels to meet similar thermal energy needs as those provided by the project devices."</i></p> <p>The baseline scenario has therefore been established (technology and thermal energy need) using published literatures substantiating that in absence of project activity, similar thermal energy needs would have been met through traditional in-efficient biomass cookstoves.</p> <p>Also, there are no E+/E- policies implemented before 1997 and 2001 respectively that affect the baseline determined above. For detail refer section I.5 of PoA-DD.</p>				
<b>Documentation provided by CME</b>				
EECL BBF ICS PoA-DD version 2.0 18 Apr 2018				
<b>DOE assessment</b>				<b>Date: 26/04/2018</b>
<p>Baseline scenario has been established in line with the applied methodology AMS-II.G. version 8.0, para 14. The scenario was also confirmed during the on-site visit to the project location, where the households reported to be using traditional cookstove before the project stove.</p> <p>Also, as per para 106 of PS for PoA version 1.0, E+ policies before 1997 and E- policies implemented since 2001 shall be considered. No relevant policies from this period was identified.</p> <p>Thus, the CL stands closed.</p>				

<b>CL ID</b>	07	<b>Section no.</b>	D.2.2.1.	<b>Date : 08/06/2018</b>
<b>Description of CL</b>				
CME shall add applicability criterion 6 of methodology to the generic CPA DD.				
<b>CME response</b>				<b>Date : 21/06/2018</b>
The generic CPA DD has been revised accordingly.				
<b>Documentation provided by CME</b>				
EECL BBF ICS PoA-DD version 3.0 17 May 2018				
<b>DOE assessment</b>				<b>Date:22/06/2018</b>

Applicability criterion 6 has been added to the generic CPA DD.

Thus, the CL stands closed.

<b>CL ID</b>	08	<b>Section no.</b>	D.1.2., D.2.1., D.2.4.	<b>Date :</b> 08/06/2018
<b>Description of CL</b>				
<p>Para 33(e) of PS for PoA version 1.0, requires the technologies/measures to be employed and/or implemented to be added under general description of PoA.</p> <p>Para 76 (a) and (b) PS for PoA version 1.0, states that CME shall describe the technologies/measures to be employed and/or implemented by the corresponding CPAs, including a description of their common features and define the conditions and circumstances under which technologies/measures may be included as CPAs in the PoA, by establishing eligibility criteria for inclusion of CPAs in the PoA;</p> <p>Also, Footnote 23 to eligibility criteria (Specification of the technology/measure,), page 26, PS for PoA version 1.0, states Specifications of the technology/measure shall include the type, capacity and other key features of the design of the systems. For example, indicating the installed capacity (in kW), size or dimensions, fixed/portable operation, and other key design features that make the project cook stoves efficient, would be appropriate; however, only indicating that all cook stoves will have an efficiency X% would not be sufficient.</p> <p>CME shall update the PoA DD description, generic CPA DD description and eligibility criterion accordingly.</p>				
<b>CME response</b>				<b>Date :</b> 21/06/2018
<p>As per Para 33 (e) PS for PoA version 1.0, the technology/measure in the PoA is high efficiency wood-fuel ICS. The same has now been specified in section A.1 &amp; A.3 of the PoA-DD.</p> <p>As per Para 76 (a) PS for PoA version 1.0, section H.1 and H.4 of the generic CPA-DD define the technology/measures and common features that meet to be substantiated in each CPA. As per Para 76 (b) PS for PoA version 1.0, the relevant eligibility criteria wrt to technology/measure have been developed and specified in section K of PoA DD.</p> <p>As per footnote 23, para 120 (d) of PS for PoA version 1.0, eligibility criteria for inclusion of CPA has been revised to include criteria related to specification of technology measure in section K of PoA DD.</p>				
<b>Documentation provided by CME</b>				
EECL BBF ICS PoA-DD version 3.0 17 May 2018				
<b>DOE assessment</b>				<b>Date:</b> 22/06/2018
<p>The description of PoA DD and generic CPA DD and eligibility criteria have been updated inline to the PS for PoA version 1.0.</p> <p>Thus, the CAR stands closed.</p>				

**Table 2. CAR from this validation**

<b>CAR ID</b>	06	<b>Section no.</b>	D.1.5.	<b>Date :</b> 07/03/2018
<b>Description of CAR</b>				



As per the glossary terms version 9.1, the start date for a CDM PoA is the date on which the CME officially notifies the secretariat and the DNA(s) of the host Party(ies) of its intention to seek the CDM status, or the date of publication of the PoA-DD for global stakeholder consultation, whichever is earlier.  
[http://cdm.unfccc.int/Reference/Guidclarif/glos\\_CDM.pdf](http://cdm.unfccc.int/Reference/Guidclarif/glos_CDM.pdf)

As per para 41, PS for PoA, the coordinating/managing entity shall determine the start date of the proposed CDM PoA and provide a description of how the start date has been determined in accordance with the definition of the start date in the "Glossary: CDM terms".

As per para 42 of PS for PoA, the coordinating/managing entity shall state the start date of the proposed CDM PoA in the format dd/mm/yyyy and shall not attach any qualifications to the start date, such as "expected".

<b>CME response</b>	<b>Date : 24/04/2018</b>
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The PoA DD was published on 15/02/2018 on UNFCCC CDM website for global stakeholder consultation as substantiated below:

<https://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/0CQ93VYA03J9GMXFUTLWFTBNSBAIWO/view.html>

The notification to DNA and secretariat was submitted on 09 March 2018  
(<https://cdm.unfccc.int/Projects/PriorCDM/notifications/index.html>)

The start date of the PoA has therefore been revised accordingly to 15/02/2018.

#### Documentation provided by CME

EECL BBF ICS PoA-DD version 2.0 18 Apr 2018

<b>DOE assessment</b>	<b>Date: 26/04/2018</b>
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The Po A DD was published on 15/02/2018 on and the notification to DNA and CDM secretariat was submitted on 09/03/2018 as checked from the UNFCCC website.

The CME has taken the earliest of these date, i.e. 15/02/2018 as the start date of the PoA.

The start date has been determined considering the guideline given on page 20 of the CDM glossary terms version 09.1 and thus, it is in line with para 41 of PS for PoA version 1.0.

The format of the start date has been stated in dd/mm/yyyy form under section D.1. of the PoA DD, which complies with the template guidelines.

However, the information shall be added under the relevant section to meet the template guideline.

Thus, the CAR stands open >

<b>CME response</b>	<b>Date: 30/04/2018</b>
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PoA DD has been revised and submitted to the DoE.

#### Documentation provided by CME

PoA DD V2.1

<b>DOE assessment</b>	<b>Date: 03/04/2018</b>
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The information has been added under section of the PoA DD v2.1.

Thus, the CAR stands closed.

**Table 3. FAR from this validation**

FAR ID	NA	Section No.	Date : DD/MM/YYYY
<b>Description of FAR</b>			
NA			
<b>CME response</b>			<b>Date : DD/MM/YYYY</b>
NA			
<b>Documentation provided by CME</b>			
NA			
<b>DOE assessment</b>			<b>Date: DD/MM/YYYY</b>
NA			

e.g., there is no FAR from this validation

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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	4 May 2015	Initial publication.
Decision Class: Regulatory		
Document Type: Form		
Business Function: Registration		
Keywords: programme of activities, validation report		