



**Draft Validation report form for inclusion of component project activities**  
**(Version 02.0)**

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

**BASIC INFORMATION**

<b>Title and UNFCCC reference number of the programme of activities (PoA)</b>	BioLite Improved Cook stoves Programme UNFCCC Ref. No.: 7997	
<b>Version numbers of the PoA-DD to which this report applies</b>	Version: 20; Dated: 16/11/2017	
<b>Title and reference number of each CPAs to be included</b>	CPA Ref. no.	<b>Title</b>
	7977 -0008	CPA 008 – Charcoal Stoves in Kenya
	7977 -0009	CPA 009 – Charcoal Stoves in Kenya
<b>Sectoral scopes for each CPA</b>	CPA Ref. no.	<b>Sectoral scopes</b>
	7977 -0008	
	7977 -0009	Sectoral Scope 3: Energy demand
<b>Applied methodologies and standardized baselines for each CPA</b>	CPA Ref. no.	<b>Selected methodologies and standardized baselines</b>
	7977 -0008	AMS II G, Energy efficiency measures in thermal applications of non-renewable biomass, version 03;
	7977 -0009	ASB0035: Baseline woody biomass consumption for household cookstoves in Kenya (version 01.0)
<b>Version number of the validation report</b>	Version 01	
<b>Completion date of the validation report</b>	17/03/2018	
<b>Coordinating/managing entity (CME)</b>	BioLite India Private Limited	
<b>Host Party(ies)</b>	Kenya	
<b>Estimated amount of annual average greenhouse gas (GHG) emission reductions or GHG removals by sinks in the crediting period (tCO<sub>2</sub>e), per CPA</b>	CPA Ref. no.	<b>tCO<sub>2</sub>e</b>
	7977 -0008	48,387
	7977 -0009	48,387
<b>Name and UNFCCC reference number of the DOE</b>	Carbon Check (India) Private Ltd. UNFCCC Ref.No.: E-0052	
<b>Name, position and signature of the approver of the validation report</b>	TBD	

**SECTION A. Executive summary**

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BioLite India Private Limited (hereafter referred as “CME”) has contracted Carbon Check (India) Private Ltd. (CC IPL) to perform the validation of the three CPAs titled, “CPA 008 – Charcoal Stoves in Kenya”, “CPA 009 – Charcoal Stoves in Kenya” and “CPA 010 – Charcoal Stoves in Kenya” (hereafter called “the three CPAs”) for inclusion in the registered PoA titled “BioLite Improved Cook stoves Programme”. CC IPL was commissioned to assess the information in the CDM-CPA-DD-FORMs for the three CPAs against the requirements for including CPA to the registered PoA and further documentation requirements for including CPA to a PoA.

This report summarizes the findings of the validation of the small-scale Component Project Activity Design Document (CDM-CPA-DD-FORM), performed on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting and eligibility criteria for inclusion of the CPAs as established in the PoA-DD /B03/. The term “UNFCCC criteria” refers to Article 12 of the Kyoto Protocol, the CDM modalities and procedures and the simplified modalities and procedures for small scale CDM project and the subsequent decisions by the COP/MOP and CDM Executive Board. In addition to these criteria, host country criteria are also taken into account.

The assessment of a CPA requesting to be included in a PoA shall ensure that all the requirements (as defined in the form of eligibility criteria) determined in the PoA are met. The assessment was performed on the basis of the eligibility and additionality criteria established in the PoA and the UNFCCC criteria for including CPA to a Programme of Activities (PoA) under the Clean Development Mechanism (CDM), as well as criteria given to provide for consistent project operations, monitoring and reporting according to AMS-II.G, Version 03.0 /B05/.

The main objective of the PoA and the CPA(s) is promotion, distribution / installation of fuel-efficient improved cook stoves (ICS) in Kenya. The ICS disseminated through this programme will replace the prevailing inefficient three-stone fires or traditional stoves that combust charcoal more efficiently, thus saving fuel and lowering greenhouse gas emissions.

The validation scope is defined as an independent and objective review of the Component Project Activity Design Documents (CPA-DDs /01-(b)/). The CPA-DDs /01-(b)/ are reviewed against the relevant UNFCCC CDM criteria for validation and registration of PoA. The validation team has, based on the recommendations in the Validation and Verification Standard for Programmes of Activities (VVS for PoAs), version 01.0 /B01-1/, employed a rule-based approach, focusing on the identification of significant risks for project implementation and the generation of CERs.

The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

While carrying out the validation, CC IPL determines if the three CPAs comply with the requirements of UNFCCC, specifically the applicability conditions of the selected methodology and also assesses the claims and assumptions made in the CPA-DDs /01-(b)/ without limitation on the information provided by the project participants.

The report is based on the assessment of the CPA-DDs /01-(b)/ undertaken through consultations with CME, application of standard auditing techniques including but not limited to document reviews, and CME interviews, review of the applicable/applied methodology and its underlying formulae and calculations.

This report contains the findings and resolutions from the validation and a validation opinion on the proposed three CPAs thus confirming the project design as document is sound and reasonable and meets the stated requirements and identified criteria.

The above is subject to closure of all the CARs/CLs raised.

## 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			
						Desk/document review	On-site inspection	Interviews	Validation findings
1.	Team Leader / Validator / Technical Expert	IR	Agarwalla	Sanjay Kumar	CC IPL	X	X	X	X
2.	Local Expert	EI	Muriuki	Job N	CC IPL		X	X	

### 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	Singh	Vikash Kumar	CC IPL
2.	Approver	IR	TBD		CC IPL

## SECTION C. Means of validation

### C.1. Desk/document review

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The validation was performed primarily based on the review of the CPA-DDs /01-(b)/ and the supporting documentation. This process included review of data and information presented to verify their completeness and review of the monitoring plan and monitoring methodology. Documents reviewed or referenced during the verification are listed in Appendix 3 below.

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

Duration of on-site inspection: 14/03/2018 to 15/03/2018				
No.	Activity performed on-site	Site location	Date	Team member
1.	Discussion on the baseline scenario and additionality including methodology applicability	Nairobi, Kenya	14/03/2018 to 15/03/2018	Sanjay Kumar Agarwalla Job N Muriuki
2.	Discussion on sustainability aspects of the project activity and its impacts on the related stakeholders and local stakeholders meeting	Nairobi, Kenya	14/03/2018 to 15/03/2018	Sanjay Kumar Agarwalla Job N Muriuki
3.	Discussion on the technology involved in the CPA	Nairobi, Kenya	14/03/2018 to 15/03/2018	Sanjay Kumar Agarwalla Job N Muriuki
4.	Discussion on eligibility criteria and inclusion of the CPA in the PoA	Nairobi, Kenya	14/03/2018 to 15/03/2018	Sanjay Kumar Agarwalla Job N Muriuki
5.	Discussion on record keeping, monitoring plan and manual, including sampling plan (if any)	Nairobi, Kenya	14/03/2018 to 15/03/2018	Sanjay Kumar Agarwalla Job N Muriuki
6.	Discussion on the specific CPA-DD	Nairobi, Kenya	14/03/2018 to 15/03/2018	Sanjay Kumar Agarwalla Job N Muriuki

**C.3. Interviews**

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Wurster	Erik	BioLite India Private Limited	14-15/-03/2018	CME's roles and responsibilities, Sustainability development, Baseline scenario and additionality, methodology applicability, eligibility criteria for inclusion of CPAs in the PoA, Technology to be used in the CPAs; CPA implementation; ICS distribution procedure; Record keeping and monitoring plan and ER calculations	Sanjay Kumar Agarwalla Job N Muriuki

2.	Kay	Ethan	BioLite Holdings Kenya Limited	14-15/03/2018	CPA implementer's roles and responsibilities; contract in between the CME and the CPA implementer; Technology to be used in the CPA; CPA implementation; ICS distribution procedure; Record keeping and monitoring plan	Sanjay Kumar Agarwalla Job N Muriuki
3.	Nyangena	Hesbon	Ecozoom	14-15/03/2018	Technology to be used in the CPA; CPA implementation; ICS distribution procedure; Record keeping and monitoring plan	Sanjay Kumar Agarwalla Job N Muriuki
4.	Harten	Ronald	Ecozoom	14-15/03/2018	Technology to be used in the CPA; CPA implementation; ICS distribution procedure; Record keeping and monitoring plan	Sanjay Kumar Agarwalla Job N Muriuki
5.	Atcino	Samra	Ecozoom	14-15/03/2018	Technology to be used in the CPA; CPA implementation; ICS distribution procedure; Record keeping and monitoring plan	Sanjay Kumar Agarwalla Job N Muriuki
6.	Barasa	Wilberforce	Wells Fargo; ware house	15/03/2018	Record keeping at ware house	Sanjay Kumar Agarwalla Job N Muriuki

#### C.4. Sampling approaches

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Not Applicable

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

Areas of validation of compliance (SECTION D)	No. of CL	No. of CAR	No. of FAR
Titles of the CPAs and corresponding generic CPAs	-	-	-
Compliance with CPA-DD form	-	02	-
General description of the CPAs	01	-	-
Application of methodologies and standardized baselines	-	-	-

• Reference to methodologies and standardized baselines	-	-	-
• Project boundary, sources and GHGs	-	-	-
• Baseline scenario	-	01	-
Estimation of emission reductions	-	-	-
• Equations and parameters applied to calculate GHG emission reductions or net anthropogenic GHG removals	-	-	-
• Data and parameters fixed ex ante	03	-	-
• Ex ante calculation of GHG emission reductions or net anthropogenic GHG removals	-	-	-
• Summary of ex ante estimates of GHG emission reductions or net anthropogenic GHG removals	01	-	-
Monitoring plan	-	-	-
• Data and parameters to be monitored	-	-	-
• Description of the monitoring plan	-	-	-
Start date, crediting period type and duration	01	-	-
Environmental impacts	-	-	-
Local stakeholder consultation	01	-	-
Eligibility for inclusion	02	01	-
Others (Editorial findings)	-	-	-
<b>Total</b>	<b>09</b>	<b>04</b>	

## SECTION D. Validation findings

### D.1. Proposed CPAs and corresponding generic CPAs

Specific-case CPA title and reference number	Version number of the specific-case CPA-DD	Host Party	Generic CPA title, identification/reference number	Version number of the PoA-DD into which the CPA is included
<ul style="list-style-type: none"> <li>CPA 008 – Charcoal Stoves in Kenya (7997 - 0008)</li> </ul>	<ul style="list-style-type: none"> <li>Version 1, dated 28/02/2018</li> </ul>	Kenya	CPA XXX - BioLite Improved Cook stoves Programme	Version 20, dated 16/11/2018
<ul style="list-style-type: none"> <li>CPA 009 – Charcoal Stoves in Kenya (7997 – 0009)</li> </ul>	<ul style="list-style-type: none"> <li>Version 1, dated 28/02/2018</li> </ul>			
<ul style="list-style-type: none"> <li>CPA 010 – Charcoal Stoves in Kenya (7997 – 0010)</li> </ul>	<ul style="list-style-type: none"> <li>Version 1, dated 28/02/2018</li> </ul>			

### D.2. Compliance with CPA-DD form

<b>Means of validation</b>	DR, I
<b>Findings</b>	CAR 01 and CAR 02 have been raised. Refer to Appendix 4 for further details.
<b>Conclusion</b>	Through means of document review and interviews with CME, the validation team considers that the description of the CPAs in the CPA-DDs titled “CPA 008 – Charcoal Stoves in Kenya”, “CPA 009 – Charcoal Stoves in Kenya” and “CPA 010 – Charcoal Stoves in Kenya” as described in the CPA-DDs /01-(b)/ is accurate and complete; meets the requirements to be included in the PoA titled “BioLite Improved Cook stoves Programme” /B03/ and correctly apply the baseline and monitoring methodology AMS-II.G, Version 03 /B05/ and requirements of CDM VVS for PoAs (version 01.0) /B01-1/.

	<p>The validation team confirms that the requirements of the CDM-CPA-DD-FORM filling guidelines /B07/ and section 8.1 of CDM VVS for PoA (version 01.0) /B01-1/ have been appropriately met.</p> <p><b>The above is subject to closure of all the CARs/CLs raised.</b></p>
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### D.3. General description of the CPAs

<b>Means of validation</b>	DR, I
<b>Findings</b>	CL 01 has been raised. Refer to Appendix 4 for further details.
<b>Conclusion</b>	<p>The following description of the proposed component project activities as per CPA-DDs /01-(b)/ is verified:</p> <p>The CPAs titled “CPA 008 – Charcoal Stoves in Kenya”, “CPA 009 – Charcoal Stoves in Kenya” and “CPA 010 – Charcoal Stoves in Kenya” are developed under the Small-Scale Programme of Activities (PoA) titled “BioLite Improved Cook stoves Programme” /B03/, which is coordinated and managed by BioLite India Private Limited. The CPAs of the PoA involve the promotion and installation of ICS in Kenya in the rural and urban households, as per the CPA-DDs /01-b/ and will involve approximately 13,400 domestic fuel-efficient improved cook stoves (ICS) for each of the three CPAs. The physical boundary of the three CPAs is geographical boundaries of Kenya. All the three CPAs are being implemented in a single host country, Kenya.</p> <p>The main objective of the three CPAs is ICS dissemination and will replace the prevailing inefficient three-stone fires or traditional stoves and hence saving fuel and lowering greenhouse gas emissions. The amount of woody biomass that would be saved due to the implementation of the CPAs shall directly translate into reduction of GHG emissions. The CPAs shall also lead to a reduced pressure on forests and woody biomass resources, reduced indoor air pollution associated with use of traditional stoves.</p> <p>The CPAs’ implementer is BioLite Holdings Kenya Limited, as confirmed by reviewing the CPA-DDs /01-(b)/, agreement in between the CME and the CPA implementer /13/ and interviews with the representative of the CME during the on-site visit. The CME shall be responsible to perform quality control activities for the proposed CPAs and the same has been checked and confirmed by reviewing the CPA-DDs /01-(b)/ and interviews with the representative of the CME.</p> <p>The CPAs will involve dissemination and implementation of Jiko Fresh, Jiko Bora and Jiko Bora Mama Yao models of cook stoves under the proposed three CPAs which have efficiencies of 36.21 %, 37.74 % and 40.4 % respectively /04/. The thermal efficiency of the stove was verified through review of Water Boiling Test (WBT) results of Cook Stoves as performed by third party /04/. The technical specifications of the three models of the cook stoves proposed to be distributed in the three CPAs was verified from the relevant documents provided by the stove manufacturer, Ecozoom /05/.</p> <p>Start date for the three CPAs is <b>13/04/2017</b> as stated in the CPA-DDs /01-(b)/. CME has considered the start date as the date on which purchase order was placed by Ecozoom East Africa Limited on Shengzhou Huimei International Trade Co. Ltd. for the first lot of stoves for the three CPAs /03/. The validation team confirms that the start date is after the start date of the PoA. This is in line with the approved revised PoA-DD /B03/ and requirements of §199 CDM VVS for PoAs, version 01 and hence deemed acceptable.</p> <p>The validation team based on the review of the CPA-DDs /01-b/ and declaration from the CME /08/ confirms that there is no double counting of emission reductions due to the implementation/inclusion of the CPAs, as the CPAs do not belong to or are included in any other PoA or stand-alone CDM project. The validation team has cross-checked this from the UNFCCC website and interviews with representatives of CME and confirms that there is no double counting. Further, the double-counting risk is prevented by the unique serial number being</p>

	<p>assigned to each of the stoves to be distributed under the CPAs /06/. Furthermore, the validation team based on the review of CPA-DDs /01-(b)/ and CME manual /17/ confirms that in order to avoid double counting, the CME has adopted a provision of a record keeping system. The record keeping system for the proposed CPAs under the PoA includes detailed sales information collected from end-user through registration process /11/.</p> <p>Duration of the crediting period for all the three CPAs was confirmed to be renewable at 7 years and is as per requirements of § 200 of CDM VVS for PoAs (version 01.0)/B01-1/.</p> <p>The CPA implementer intends to disseminate about 13,400 stoves and given that the CPAs would be implemented as described in the CPA-DDs /01-(b)/, it is likely that each of the three CPAs achieve an estimated amount of emission reductions of 338,712 /02/ tCO<sub>2</sub>e over the 7 years renewable crediting period, leading to an annual average of 48,387 /02/ tCO<sub>2</sub>e as indicated in the final CPA-PDDs /01-(b)/ and also in the ER calculation sheets /02/. In addition, the steps used for ER calculations were found to be in conformance with the requirements of the methodology AMS-II.G, Version 03 /B05/.</p> <p>Based on the information furnished by the CME, no ODA contributes to the financing of the three CPAs /10/.</p> <p>The validation team has checked that the CPA is not a de-bundled component of large scale project or PoA in line with the Guidelines on assessment of de-bundling for SSC project activities (version 03) /B08-5/ and the same has been described/demonstrated in the CPA-DDs /01-(b)/, checked and confirmed by the validation team.</p> <p>The description of the CPAs as provided in the CPA-DD /01-b/ is in accordance with the registered PoA-DD /B03/.</p> <p>The validation team confirms that the description of the proposed CPAs in the CPA-DDs is accurate, complete, and provides an understanding of the proposed CPAs.</p> <p>The validation team took cognizance of §184-190 of VVS for PoA (version 01.0) /B01-1/.</p> <p><b>The above is subject to closure of all the CARs/CLs raised.</b></p>
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**D.4. Application of methodologies and standardized baselines**

**D.4.1. Reference to methodologies and standardized baselines**

<b>Means of validation</b>	DR, I						
<b>Findings</b>	-						
<b>Conclusion</b>	<p>The validation team has reviewed the CPA-DD /01-(b)/ along with relevant supporting documentation provided by CME in regards to the applicability of the methodology AMS II.G, version 03 and the standardized baseline ASB0035, version 01. The assessment is provided below:</p> <table border="1" style="width: 100%;"> <tr> <th colspan="2">Applicability of selected methodology AMS II.G, version 03</th> </tr> <tr> <th style="width: 50%;">Applicability criterion</th> <th>DOE assessment</th> </tr> <tr> <td>This category comprises appliances involving the efficiency improvements in the thermal applications of nonrenewable biomass. Examples of these technologies and measures include the introduction of high efficiency biomass fired cook stoves or ovens or dryers and/or improvement of energy efficiency of</td> <td>The technology to be employed under the CPAs include high efficiency biomass fired cook stoves. The efficiency of improved stoves to be distributed in the CPAs is greater than 20% /04/ which is greater than the baseline stoves. Hence, the applicability criterion is met.</td> </tr> </table>	Applicability of selected methodology AMS II.G, version 03		Applicability criterion	DOE assessment	This category comprises appliances involving the efficiency improvements in the thermal applications of nonrenewable biomass. Examples of these technologies and measures include the introduction of high efficiency biomass fired cook stoves or ovens or dryers and/or improvement of energy efficiency of	The technology to be employed under the CPAs include high efficiency biomass fired cook stoves. The efficiency of improved stoves to be distributed in the CPAs is greater than 20% /04/ which is greater than the baseline stoves. Hence, the applicability criterion is met.
Applicability of selected methodology AMS II.G, version 03							
Applicability criterion	DOE assessment						
This category comprises appliances involving the efficiency improvements in the thermal applications of nonrenewable biomass. Examples of these technologies and measures include the introduction of high efficiency biomass fired cook stoves or ovens or dryers and/or improvement of energy efficiency of	The technology to be employed under the CPAs include high efficiency biomass fired cook stoves. The efficiency of improved stoves to be distributed in the CPAs is greater than 20% /04/ which is greater than the baseline stoves. Hence, the applicability criterion is met.						



Means of validation	DR, I	
	existing biomass fired cook stoves or ovens or dryers.	
	Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods or referring to published literature, official reports or statistics.	The UNESCO report "Fighting desertification in Kenya, one tree at a time, 2006" and FAO report "Global Forest Resources Assessment 2010, Country Report Kenya /B10/ was reviewed and observed to study the degradation in forest cover has increased since independence(1963). The FAO data also shows a decline in forest areas and growing stock in forest land which confirms that nonrenewable biomass is getting used since 31 December 1989. Hence, the applicability criterion is met.
	Applicability of selected standardized baseline ABS0035, version 01	
	Applicability criterion	DOE assessment
	The project activity is implemented in Kenya	The CPAs aim to disseminate the ICS in Kenya. Therefore, the project activity is implemented in Kenya. This is confirmed based on the review of the CPA-DDs /01-b/ and on-site visit interviews.
	The approved CDM methodology that is applied to the project activity is small-scale methodology AMS-II.G. "Energy efficiency measures in thermal applications of non-renewable biomass" and/or small-scale methodology AMS-I.E "Switch from non-renewable biomass for thermal applications by the user"	The CPA has applied small-scale methodology AMS-II.G. "Energy efficiency measures in thermal applications of non-renewable biomass" in line to the registered PoA DD. This is confirmed based on the review of the CPA-DDs /01-b/ and on-site visit interviews.
	The standardized values are applicable to households using only firewood and/or charcoal in the preproject scenario as a cooking fuel; households using LPG and/or kerosene in the pre-project scenario as a cooking fuel are not eligible to apply the standardized values in this document.	Before every product distribution, each household would be checked for the baseline fuel in use. Households using LPG and Kerosene will not be the receiver of the dissemination product. This is confirmed based on the review of the CPA-DDs /01-b/, template of warranty registration card /11/ and on-site visit interviews.
	The standardized values are not applicable to standalone renewable energy based water treatment technologies under AMS-I.E.	The CPAs do not involve standalone renewable energy based water treatment technologies. This is confirmed based on the review of the CPA-DDs /01-b/ and on-site visit interviews.
	Hence the validation team confirms the applicability of the applied methodology AMS II.G, version 03 and the Standardized baseline ASB0035, version 01 for the CPAs.	
	This is in conformance with the requirements of §192 of CDM VVS for PoA (version 01.0) /B01-1/.	
The above is subject to closure of all the CARs/CLs raised.		

**D.4.2. Project boundary, sources and GHGs**

<b>Means of validation</b>	DR, I
<b>Findings</b>	-
<b>Conclusion</b>	<p>As per the applied methodology AMS-II.G, Version 03 /B05/, “Energy efficiency measures in thermal applications of non-renewable biomass”, the boundary of a typical CPA under this PoA confines to ‘is the physical, geographical site of the efficient systems using biomass.’ (as per §3 of the applied methodology). The information has been also correctly given in section B.2 of the CPA-DDs /01-(b)/ and is consistent with the description of project boundary provided in the PoA-DD /B03/.</p> <p>The physical delineation of the CPA and the description of the emission sources and GHGs that are included in the CPA boundary are appropriate for the purpose of calculating project and baseline emissions for the CPAs.</p> <p>For the CPAs, a leakage factor of 0.95 has been considered to account for use/diversion of non-renewable woody biomass saved under the project activity by non-project households/users that previously used renewable energy sources. This value is the default value provided under §13(a) of the applied methodology AMS-II.G, Version 03 /B05/.</p> <p>The methodology indicates CO<sub>2</sub> as the only GHG from baseline as well as project activity sources to be included in the boundary. Validation team confirms that the justification provided by the CME is reasonable and evidenced. Besides, there are no other sources, which are impacted by the projects and not addressed by the applied methodology.</p> <p>This is in conformance with §3 of the applied methodology /B05/ and §193 of CDM VVS for PoAs (version 01.0) /B01-1/.</p> <p><b>The above is subject to closure of all the CARs/CLs raised.</b></p>

**D.4.3. Baseline scenario**

<b>Means of validation</b>	DR, I
<b>Findings</b>	CAR 03 has been raised. Refer to Appendix 4 for further details.
<b>Conclusion</b>	<p>For the CPAs, the baseline scenario has been identified in accordance with the §4 of the methodology AMS-II.G, Version 03 /B05/.</p> <p>As stated in the applied methodology AMS II.G, Version 03 /B05/ and the CPA-DDs /01-(b)/, the baseline scenario would be the use of fossil fuels for meeting similar thermal energy needs.</p> <p>Thus, the above baseline scenario is considered to be accurate and in conformance with the requirements of §4 of the applied methodology /B05/ and §194 of CDM VVS for PoAs (version 01.0) /B01-1/.</p> <p><b>The above is subject to closure of all the CARs/CLs raised.</b></p>

**D.5. Estimation of emission reductions****D.5.1. Equations and parameters applied to calculate GHG emission reductions or net anthropogenic GHG removals**

<b>Means of validation</b>	DR, I
<b>Findings</b>	-

<b>Conclusion</b>	<p>The equations and choices provided in the applied methodology /B05/ are correctly quoted in the CPA-DD /01-(b)/. The emission reductions of the CPAs of the PoA would be calculated using the formulae mentioned in the applied methodology AMS-II.G (Version 03.0) /B05/.</p> <p>The parameters and equations presented in the PoA-DD /B03/, CPA-DDs /01-(b)/ and ER spread-sheets /02/ have been compared with the information and requirements presented in the methodology /B05/. Validation team based on the review of CPA-DDs /01-(b)/ and the ER spread sheets /02/ and other supporting documents, confirms that the formula are correctly presented for the determination of emission reductions at CPA level and the values of the input parameters used are accurate, appropriate and consistent.</p> <p>Thus, the equations and parameters applied to calculate the emission reductions are considered to be accurate and in conformance with the requirements of §196(a) of CDM VVS for PoAs (version 01.0) /B01-1/.</p> <p><b>The above is subject to closure of all the CARs/CLs raised.</b></p>
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**D.5.2. Data and parameters fixed ex ante**

<b>Means of validation</b>	DR, I																						
<b>Findings</b>	CL 01, CL 02 and CL 03 have been raised. Refer to Appendix 4 for further details.																						
<b>Conclusion</b>	<p>Ex-ante parameters provided under section B.4.2 of the CPA-DDs /01-(b)/ are found to be appropriate and in line with the applied methodology AMS-II.G (version 03.0) /B05/. Ex-ante parameters of the proposed CPA is as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #e0e0e0;">Parameter</th> <th style="background-color: #e0e0e0;">Description</th> <th style="background-color: #e0e0e0;">Verified Value</th> <th style="background-color: #e0e0e0;">Verified Source</th> </tr> </thead> <tbody> <tr> <td><math>\eta_{old}</math></td> <td>Efficiency of the baseline cook stove</td> <td>0.1 (if the replaced system is the three stone fire or a conventional system without a grate as well as a chimney)  0.2 (where the baseline stove has a grate or a chimney).</td> <td>Default value as per AMS-II.G. Vesion 03.0) /B05/. The validation team deemed the value to be appropriate and correct.</td> </tr> <tr> <td><math>NCV_{biomass}</math></td> <td>Net Calorific value of non renewable woody biomass that is consumed in the baseline and project scenarios.</td> <td>0.015 TJ/tonne</td> <td>Default value as per AMS-II.G. (Version 03.0) /B05/. The validation team deemed the value to be appropriate and correct.</td> </tr> <tr> <td><math>EF_{projected\_fossilfuel}</math></td> <td>Emission factor for the substitution of non-renewable biomass by similar consumers</td> <td>81.6 tCO<sub>2</sub>/TJ</td> <td>Default value as per AMS-II.G. (Version 03.0) /B05/. The validation team deemed the value to be appropriate and correct.</td> </tr> <tr> <td><math>L_y</math></td> <td>Leakage Correction Factor</td> <td>0.95</td> <td>Default value as per AMS-II.G. (Version 03.0) /B05/. The validation team deemed the value to be appropriate and correct.</td> </tr> </tbody> </table>			Parameter	Description	Verified Value	Verified Source	$\eta_{old}$	Efficiency of the baseline cook stove	0.1 (if the replaced system is the three stone fire or a conventional system without a grate as well as a chimney)  0.2 (where the baseline stove has a grate or a chimney).	Default value as per AMS-II.G. Vesion 03.0) /B05/. The validation team deemed the value to be appropriate and correct.	$NCV_{biomass}$	Net Calorific value of non renewable woody biomass that is consumed in the baseline and project scenarios.	0.015 TJ/tonne	Default value as per AMS-II.G. (Version 03.0) /B05/. The validation team deemed the value to be appropriate and correct.	$EF_{projected\_fossilfuel}$	Emission factor for the substitution of non-renewable biomass by similar consumers	81.6 tCO <sub>2</sub> /TJ	Default value as per AMS-II.G. (Version 03.0) /B05/. The validation team deemed the value to be appropriate and correct.	$L_y$	Leakage Correction Factor	0.95	Default value as per AMS-II.G. (Version 03.0) /B05/. The validation team deemed the value to be appropriate and correct.
Parameter	Description	Verified Value	Verified Source																				
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$L_y$	Leakage Correction Factor	0.95	Default value as per AMS-II.G. (Version 03.0) /B05/. The validation team deemed the value to be appropriate and correct.																				

	<b>B<sub>old</sub></b>	Quantity of woody biomass used in the absence of the project activity in tonnes	0.76 kg/cap/y rural, 0.83 kg/cap/y urban	The values were sourced from the Standardized Baseline ASB0035, version 01 /B06/. The validation team deemed the value to be appropriate and correct.
	<b>f<sub>NRB,y</sub></b>	Fraction of woody biomass saved by the project activity in period y that can be established as non-renewable biomass	0.92	The value was sourced from the UNFCCC published default value for Kenya /B11/. This default value has expired. As no updated value is currently available, CME has used this value for ex-ante emission reductions only. When the available, a new value will be applied, or a locally appropriate value will be calculated as per the methodology. The validation team deemed this to be appropriate and acceptable.
<p>Thus, the data and parameters fixed ex-ante are considered to be accurate and in conformance with the requirements of §196(b) of CDM VVS for PoA (version 01.0) /B01-1/.</p> <p>The above is subject to closure of all the CARs/CLs raised.</p>				

**D.5.3. Ex ante calculation of GHG emission reductions or net anthropogenic GHG removals**

<b>Means of validation</b>	DR, I
<b>Findings</b>	-
<b>Conclusion</b>	<p>The equations and choices provided in the applied methodology /B05/ are correctly quoted in the CPA-DDs /01-(b)/. The emission reductions due to the CPA has been calculated using the formulae mentioned in the applied methodology AMS-II.G (Version 03.0) /B05/ and the registered PoA-DD /B03/. The total ex ante emission reductions resulting from each of the three CPAs for the entire first renewable crediting period of seven years is estimated to be 338,712 /02/ tCO<sub>2e</sub>, leading to an annual average of 48,387 tCO<sub>2e</sub>. The validation team reviewed the ER spread-sheets calculations /02/ and confirms the same to be correct.</p> <p>The validation team conducted assessment of emission reductions calculation. The parameters and equations presented in the CPA-DDs /01-(b)/, as well as other applicable documents, have been compared with the information stipulated in the methodology /B05/. The assumptions and data (both ex-ante and ex-post) used to determine the emission reductions are described in the CPA-DDs /01-(b)/ and all the sources have been checked and confirmed by validation team. Based on the reviewed information, it can be confirmed that the sources used are correctly quoted and interpreted in the CPA-DDs /01-(b)/. The values in the CPA-DDs /01-(b)/ are considered to be reasonable based on the documentation and references reviewed, as well as, the result of the interviews. The baseline methodology has been correctly applied according to the requirements.</p>

	The above is subject to closure of all the CARs/CLs raised.
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**D.5.4. Summary of ex ante estimates of GHG emission reductions or net anthropogenic GHG removals**

<b>Means of validation</b>	DR, I
<b>Findings</b>	CL 09 has been raised. Refer to Appendix 4 for further details.
<b>Conclusion</b>	<p>The estimation of ER values is carried out based on equations given in the applied methodology AMS-II.G (Version 03.0) /B05/ and conforms to the requirements of section 8.3.4 (titled 'Estimation of emission reductions') of CDM VVS for PoA (version 01.0) /B01-1/.</p> <p>The total ex ante emission reductions resulting from the CPA for the entire first renewable crediting period of seven years is estimated to be 265,860 /02/ tCO<sub>2e</sub>, leading to an annual average of 37,980 tCO<sub>2e</sub>. The validation team reviewed the ER spread-sheets calculations /02/ and confirms the same to be correct.</p> <p>The above is subject to closure of all the CARs/CLs raised.</p>

**D.6. Monitoring plan**

**D.6.1. Data and parameters to be monitored**

<b>Means of validation</b>	DR, I																				
<b>Findings</b>	-																				
<b>Conclusion</b>	<p>The monitoring plan presented in the CPA-DDs /01-(b)/ complies with the requirements of the PoA-DD /B03/ and the applied monitoring methodology /B05/. The validation team has verified all parameters in the monitoring plan against the requirements of the methodology and no deviations have been found.</p> <p>The validation team through a document review and interviews with the relevant stakeholders has reviewed the procedures. The information provided has allowed the validation team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the CME.</p> <p>The parameters that are to be monitored ex-post are:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Parameter</th> <th>Data unit</th> <th>Description</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td><math>N_y</math></td> <td>Number</td> <td>Number of cook stoves in operation or replaced</td> <td>Annually</td> </tr> <tr> <td><math>\eta_{new}</math></td> <td>Fraction</td> <td>Efficiency of the system being deployed as part of the project activity</td> <td>Annually or Biennially</td> </tr> <tr> <td>Continuous use of baseline stoves</td> <td>percentage</td> <td>Number of households continuously using baseline stoves</td> <td>Annually</td> </tr> <tr> <td><math>B_{y\ savings}</math></td> <td>Tonnes/year</td> <td>Quantity of woody biomass that is saved in tonnes</td> <td>Per the underlying variables</td> </tr> </tbody> </table> <p>In summary, the parameter(s) to be monitored have been presented correctly according to requirements and are considered in accordance with the applied methodology /B05/ and revised PoA-DD /B03/. This is in conformance with the requirements of §197(a) of CDM VVS for PoA (version 01.0) /B01-1/.</p> <p>The above is subject to closure of all the CARs/CLs raised.</p>	Parameter	Data unit	Description	Frequency	$N_y$	Number	Number of cook stoves in operation or replaced	Annually	$\eta_{new}$	Fraction	Efficiency of the system being deployed as part of the project activity	Annually or Biennially	Continuous use of baseline stoves	percentage	Number of households continuously using baseline stoves	Annually	$B_{y\ savings}$	Tonnes/year	Quantity of woody biomass that is saved in tonnes	Per the underlying variables
Parameter	Data unit	Description	Frequency																		
$N_y$	Number	Number of cook stoves in operation or replaced	Annually																		
$\eta_{new}$	Fraction	Efficiency of the system being deployed as part of the project activity	Annually or Biennially																		
Continuous use of baseline stoves	percentage	Number of households continuously using baseline stoves	Annually																		
$B_{y\ savings}$	Tonnes/year	Quantity of woody biomass that is saved in tonnes	Per the underlying variables																		

**D.6.2. Description of the monitoring plan**

<b>Means of validation</b>	DR, I
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<b>Findings</b>	-
<b>Conclusion</b>	<p>The monitoring plan presented in the CPA-DDs /01-(b)/ comply with the requirements of the revised PoA-DD /B03/ and the applied monitoring methodology /B05/. The validation team of CCIPL has verified all parameters in the monitoring plan against the requirements of the methodology and no deviations have been found.</p> <p>The validation team through a document review and interviews with the relevant stakeholders has reviewed the procedures. The information provided has allowed the validation team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the CME.</p> <p>The responsibilities and institutional arrangements for data collection and archiving have been clearly provided. The information provided in the CPA-DDs /01-(b)/ could be confirmed based on the interviews and also through the submitted documentary evidence namely CME management manual /17/ covering all requirements as stated in section B.5.1 and B.5.2 of CPA-DDs /01-(b)/. Based on the same, it can be confirmed that the CME and the CPA implementer will be able to implement the monitoring plan and the achieved emission reductions can be reported ex-post and verified.</p> <p><b>The above is subject to closure of all the CARs/CLs raised.</b></p>

#### D.7. Start date, crediting period type and duration

<b>Means of validation</b>	DR, I
<b>Findings</b>	CL 05 has been raised in this regard. Refer to Appendix-4 for further details.
<b>Conclusion</b>	<p>Start date for the three CPAs is <b>13/04/2017</b> as stated in the CPA-DDs /01-(b)/. CME has considered the start date as the date on which purchase order was placed by Ecozoom East Africa Limited on Shengzhou Huimei International Trade Co. Ltd. for the first lot of stoves for the three CPAs /03/. The validation team confirms that the start date is after the start date of the PoA. This is in line with the approved revised PoA-DD /B03/ and requirements of §199 CDM VVS for PoAs, version 01 and hence deemed acceptable.</p> <p>In addition, the duration of the crediting period for the CPA was confirmed to be renewable at 7 years and is as per requirements of §189 of CDM PS for PoA (version 01.0) /B01-2/ and §200 of CDM VVS for PoA (version 01.0) /B01-1/.</p> <p><b>The above is subject to closure of all the CARs/CLs raised.</b></p>

#### D.8. Environmental impacts

<b>Means of validation</b>	DR, I
<b>Findings</b>	-
<b>Conclusion</b>	<p>As mentioned in the PoA-DD /B03/, the environmental impact analysis is carried out at PoA level. The validation team further confirms that the project activity does not require an Environmental Impact Assessment (EIA) according to Kenya law.</p> <p>This is in conformance with the requirements of §209 and §210 of CDM VVS for PoA (version 01.0) /B01-1/ and deemed appropriate to the validation team.</p>

#### D.9. Local stakeholder consultation

<b>Means of validation</b>	DR, I
<b>Findings</b>	CL 06 has been raised in this regard. Refer to Appendix-4 for further details.
<b>Conclusion</b>	<p>It has been indicated in the PoA-DD /B03/ that LSC is carried out at PoA level. Hence further validation is not required.</p> <p><b>The above is subject to closure of all the CARs/CLs raised.</b></p>

**D.10. Eligibility for inclusion**

<b>Means of validation</b>	DR, I
<b>Findings</b>	CAR 04, CL 07 and CL 08 have been raised in this regard. Refer to Appendix-4 for further details.
<b>Conclusion</b>	All the eligibility criteria required for the inclusion of the CPAs under the PoA have been addressed in the CPA-DDs /01-(b)/. The stated confirmation against each eligibility criteria has been checked / assessed and found acceptable by the validation team and complete assessment is provided in Appendix 5.  <b>The above is subject to closure of all the CARs/CLs raised.</b>

**SECTION E. Internal quality control**

&gt;&gt;

The final validation report has passed a technical review before being submitted to the project participant(s) and UNFCCC Executive Board. The technical review was performed by a technical reviewer qualified in accordance with CCIPL's qualification scheme for CDM validation and verification.

**SECTION F. Validation opinion**

&gt;&gt;

Under the validation (by means of document review and interviews with stakeholders), the validation team considers that the description of CPAs titled "CPA 008 – Charcoal Stoves in Kenya", "CPA 009 – Charcoal Stoves in Kenya" and "CPA 010 – Charcoal Stoves in Kenya" as described in the CPA-DDs /01-(b)/ is accurate and complete; meets the requirements to be included in the PoA titled "BioLite Improved Cook stoves Programme" /B03/ and correctly applies the baseline and monitoring methodology AMS-II.G, Version 03.0 /B05/.

Standard auditing techniques have been used for the validation of the project. An analysis, as provided by the applied methodology, demonstrates that the proposed CPAs are not a likely baseline scenario. Emission reductions attributable to the CPAs are additional to any that would occur in the absence of the project activity. Given that the CPAs are implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the CPA-DDs /01-(b)/.

The validation is based on the information made available to CCIPL, as well as the engagement conditions detailed in this report. The validation has been performed following the CDM VVS for PoAs requirements /B01-1/.

The validation was executed in the following steps so far:

- Receipt of CPA-DDs /01-(b)/
- Desk review of revised CPA-DDs
- Issue of checklist with corrective action requests (CARs) and clarification requests (CLs) and the draft validation report
- Interview with the CME
- Follow up actions (interviews) for cross checking data
- Review of responses for CARs/CLs
- Issue of the final validation report

The CPAs correctly apply the baseline and monitoring methodology of the PoA namely AMS-II.G, Version 03, "Energy efficiency measures in thermal applications of non-renewable biomass" /B05/ and the Standardized Baseline ASB0035, version 01 /B06/.

The validation did not reveal any information that indicates that the CPAs can be seen as a diversion of ODA funding.

The CPA-DDs contain monitoring plan for the monitoring of the emission reductions from the project. The monitoring arrangements described in the monitoring plan are feasible within the project design and it is CCIPL's opinion that the project participants are able to implement the monitoring plan.

By the implementation of improved cooking stoves replacing the traditional cookstoves, the project activity will result in reductions of greenhouse gas (GHG) emissions that are real, measurable and provide long-term benefits to the mitigation of climate change.

During the course of validation a total of 04 (four) Corrective Action Requests (CARs) and 09 (nine) Clarification Requests (CLs), for the CPAs, were identified on the initially submitted CPA-DDs /01-(b)/. Upon evaluation of responses provided by the CME, all the identified issues need to be closed.

The single purpose of this report is its use during the inclusion process (of the specific CPAs). The review of the CPA-DDs /01-(b)/, subsequent follow-up interviews and further verification of references have provided CCIPL, with sufficient evidence to determine the fulfilment of stated criteria in the PoA-DD /B03/ and the CPA-DDs /01-(b)/. In the opinion of CCIPL, the CPAs meet all relevant UNFCCC requirements for the CDM if the underlying assumptions do not change. CCIPL recommends the three CPAs for inclusion in the registered PoA.

The above is subject to closure of all the CARs/CLs raised.



## Appendix 1. Abbreviations

Abbreviations	Full Texts
BE	Baseline Emission
CAR	Corrective Action Request
CC IPL	Carbon Check (India) Private Ltd.
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CER	Certified Emission Reduction
CPA	Component Project Activity
CPA-DD	Component Project Activity Design Document
CL	Clarification Request
CME	Co-ordinating or Managing Entity
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
COP/MOP	Conference of Parties/ Meeting of Parties
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EB	Executive Board
EIA	Environmental Impact Assessment
ER	Emission Reduction
FAO	Food and Agricultural Organization
FAR	Forward Action Request
GHG	Greenhouse Gas
GWh	Giga Watt Hours
I	Interview
ICS	Improved cook stoves
IPCC	Intergovernmental Panel on Climate Change
kW	Kilo Watt
kWh	Kilo Watt Hours
L	Leakage
LSC	Local Stakeholder Consultation
MoV	Means of Verification
MoC	Modalities of Communications
MW	Mega Watt
MWh	Mega Watt Hours
NCV	Net Calorific Value
NRB	Non-renewable Biomass
ODA	Official Development Assistance
OSV	On Site Visit
PE	Project Emission
PoA	Programme of Activities
PoA-DD	Programme of Activities design document
PP	Project Participant
PS	Project Standard
SD	Sustainable Development
t	Tonne
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

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

To be provided with FVR

### Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
/01/	BioLite	a) Initial CPA-DDs: i. CPA 008 ii. CPA 009 iii. CPA 010	Version 1, dated 28/02/2018	CME
		b) Final CPA-DDs: i. CPA 008 ii. CPA 009 iii. CPA 010	Version xx, dated xxxxx	
/02/	BioLite	Emission reduction calculation spread-sheets for: i. CPA 008 ii. CPA 009 iii. CPA 010	--	CME
/03/	Ecozoom	Evidence for the start date of the three CPAs (purchase order for the stoves)		CME
/04/	University of Nairobi KIRDI	WBT Reports of independent stove efficiency tests performed by: - University of Nairobi for Jiko Fresh and Jiko Bora models - KENYA INDUSTRIAL RESEARCH AND DEVELOPMENT INSTITUTE (KIRDI) for Jiko Bora Mama Yao model	--	CME
/05/	Ecozoom	Evidence for the technical specifications of the three models of Ecozoom stoves (Jiko Fresh, Jiko Bora and Jiko Mama Yao) to be distributed in the three CPAs including the project lifetime	-	CME
/06/	Ecozoom	Evidence of a sample ICS with unique serial number	--	CME
/07/	BioLite	A self-declaration letter from CME stating the three CPAs will be located in Kenya	Letter dated xxx	CME
/08/	BioLite	A self-declaration from CME stating that the three CPAs are not registered as any other individual CDM projects and are not CPAs in any other PoA	Letter dated xxx	CME
/09/	BioLite	A self-declaration from CME stating that the the target group in the proposed three CPAs are the rural and urban households currently using inefficient biomass based traditional cook stoves in biomass deficient regions of Kenya	Letter dated xxx	CME
/10/	BioLite	A self-declaration from the CME confirming that the three CPAs do not use any investment which leads to diversion of ODA funds	Letter dated xxx	CME
/11/	BioLite	Template of Warranty Registration Card containing provision for demonstrating of the following: <ul style="list-style-type: none"> <li>• Recording of ICS end user contact information</li> <li>• Confirmation that ICS end user is a household in rural or urabn area or Kenya</li> <li>• Confirmation that the end user previously used three-stone fire and whether the baseline stove used grate / chimney</li> <li>• Confirmation that the end user previously did not use LPG or kerosene</li> </ul>	--	CME
/12/	Xxx	Certificate of Incorporation for: <ul style="list-style-type: none"> <li>- CME (BioLite India Private Limited)</li> <li>- The three CPAs' implementer (BioLite Holdings Kenya Limited)</li> <li>- Stove manufacturer (EcoZoom)</li> </ul>	-	CME
/13/	BioLite	Agreement copy in between CME and CPAs' implementer		CME
/14/	BioLite	Agreement copy in between CME / CPA implementer and the stove manufacturer		CME

/15/	BioLite	Organizations chart for the PoA / CPA implementation and monitoring		CME
/16/	BioLite	Training manual, plans and records		CME
/17/	BioLite	CME manual		CME
/18/	BioLite	Implementation schedule for the three CPAs	--	CME
/19/	BioLite	Sample template to be used during monitoring survey		CME
/20/	BioLite	Records of the stoves distributed till date in the CPAs		CME
/B01/	UNFCCC	1. CDM Validation and Verification Standard for Programme of Activities (Version 01.0). 2. CDM Project Standard for Programme of Activities (Version 01.0) 3. CDM Project Cycle Procedure for Programme of Activities (Version 01.0)	<a href="http://cdm.unfccc.int/">http://cdm.unfccc.int/</a>	UNFCCC
/B02/	UNFCCC	UNFCCC project page weblink: 1. For the PoA: <a href="https://cdm.unfccc.int/ProgrammeOfActivities/poa_db/YNXCPIJ5ZO7DTRGMV0F2A/KEU486LQS/view">https://cdm.unfccc.int/ProgrammeOfActivities/poa_db/YNXCPIJ5ZO7DTRGMV0F2A/KEU486LQS/view</a> 2. For PRC approved on 05/01/2018: <a href="https://cdm.unfccc.int/PRCContainer/DB/prcp33380243/view">https://cdm.unfccc.int/PRCContainer/DB/prcp33380243/view</a>	<a href="http://cdm.unfccc.int/">http://cdm.unfccc.int/</a>	UNFCCC
/B03/	BioLite	Approved Revised PoA-DD version 20, dated 16/11/2017 (PoA reference number 7997)	<a href="http://cdm.unfccc.int/">http://cdm.unfccc.int/</a>	UNFCCC
/B04/	Earthood	PRC Validation Report for the PoA-DD, version 6.0 dated 21/11/2017		
/B05/	UNFCCC	AMS-II.G. Energy efficiency measures in thermal applications of non-renewable biomass (version 03.0)	<a href="http://cdm.unfccc.int/">http://cdm.unfccc.int/</a>	UNFCCC
/B06/	UNFCCC	Standardized Baseline ASB 0035: Baseline woody biomass consumption for household cookstoves in Kenya (version 01.0)	<a href="http://cdm.unfccc.int/">http://cdm.unfccc.int/</a>	UNFCCC
/B07/	UNFCCC	1. Component project activity design document form for CDM component project activities (CDM-CPA-DD-FORM), (Version 08.1) 2. Instructions for filling out the component project design document form for CDM component project activities (Version 08.1)	<a href="http://cdm.unfccc.int/">http://cdm.unfccc.int/</a>	UNFCCC
/B08/	UNFCCC	PoA Specific guidelines / standards / Forms published by UNFCCC: 1. Standard for the demonstration of additionality, development of eligibility criteria and application of multiple methodologies for Programme of Activities (Version 01) 2. Guidelines for sampling and surveys for CDM project activities and programme of activities (Version 02.0) 3. Standard for Sampling and Surveys for CDM Project Activities and Programme of Activities (Version 03.0) 4. Guidelines on the demonstration of additionality of small-scale project activities (Version 09) 5. Guidelines on assessment of debundling for SSC project activities (Version 03)	<a href="http://cdm.unfccc.int/">http://cdm.unfccc.int/</a>	UNFCCC
/B09/	UNFCCC	Glossary of CDM terms (version 09.1)	<a href="http://cdm.unfccc.int/">http://cdm.unfccc.int/</a>	UNFCCC
/B10/	FAO ( food and Agriculture Organization of United Nations)	FAO (2010): Global Forest Resources Assessment 2010, Country Report Kenya, p.9 and p.25, <a href="http://www.fao.org/docrep/013/al543E/al5_43E.pdf">http://www.fao.org/docrep/013/al543E/al5_43E.pdf</a>	2010	Others
/B11/	UNFCCC	Default Values of Fraction of Non-Renewable Biomass For Least Developed Countries and Small Island Developing States (Version 01.0)- EB67 Annex 22	<a href="http://cdm.unfccc.int/">http://cdm.unfccc.int/</a>	UNFCCC

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

Table 1. CLs from this validation

<b>CL ID</b>	01	<b>Section no.</b>	D.3	<b>Date:</b> 17/03/2018
<b>Description of CL</b>				
In section A.3 of version 1 of the CPA-DDs, CME has stated the stove models to be distributed are Jiko Fresh, Jiko Bora and Jiko Bora+. But during the on-site visit interviews it was confirmed that the 3 <sup>rd</sup> model is Jiko Bora Mama Yao and not Jiko Bora+. Clarification is requested.				
<b>CME response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

<b>CL ID</b>	02	<b>Section no.</b>	D.5.2	<b>Date:</b> 17/03/2018
<b>Description of CL</b>				
In section B.4.2 of the CPA-DDs, CME has used the UNFCCC published default value of $f_{NRB}$ for Kenya as 0.92. CME needs to justify the usage of this value considering that the published value has expired on 19/09/2017. Also CME needs to confirm appendix 3 mentioned in the table for this parameter (which could not be found in the CPA-DDs).				
<b>CME response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

<b>CL ID</b>	03	<b>Section no.</b>	D.5.2	<b>Date:</b> 17/03/2018
<b>Description of CL</b>				
For the ex-ante parameter "Efficiency of the baseline cook stove", it has been stated in the CPA-DDs " <i>According to the methodology, 0.10 default value may be optionally used if the replaced system is the three stone fire or a conventional system lacking improved combustion air supply mechanism and flue gas ventilation system i.e., without a grate as well as a chimney.</i> <i>The replaced systems in the project area are lacking improved combustion air supply mechanism and flue gas ventilation system. In instances where a three stone fire is not the baseline stove, or where the baseline stove has a grate or a chimney, 0.20 will be used.</i> "				
During the on-site visit it was revealed that the households for distribution of ICSs involve mix of the above two types. Clarification is requested how will the final value calculated and used for the calculation of emission reductions.				
<b>CME response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

<b>CL ID</b>	04	<b>Section no.</b>	D.5.2	<b>Date:</b> 17/03/2018
<b>Description of CL</b>				

For the ex-ante parameter “B <sub>old</sub> ”, the values used for rural and urban areas are two different values (0.76 kg/cap/y rural, 0.83 kg/cap/y urban). During the on-site visit it was revealed that the households for distribution of ICSs involve mix of rural and urban areas. Clarification is requested how will the final value calculated and used for the calculation of emission reductions.	
<b>CME response</b>	<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>	
<b>DOE assessment</b>	<b>Date:</b> DD/MM/YYYY

<b>CL ID</b>	05	<b>Section no.</b>	D.7	<b>Date:</b> 17/03/2018
<b>Description of CL</b>				
Start date for the CPAs is stated as 13/04/2017 which is the invoice / shipment date of the cookstoves. As per the eligibility criterion 4, the start is supposed to be the purchase order date. Clarification is requested.				
<b>CME response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

<b>CL ID</b>	06	<b>Section no.</b>	D.9	<b>Date:</b> 17/03/2018
<b>Description of CL</b>				
As per the PoA-DD, the local stakeholders meeting is to be conducted at PoA level. It is noted that four CPAs were already included in Kenya on 18/01/2018 for which local stakeholders meeting was conducted at PoA level. CME needs to clarify the reason for providing the local stakeholders meeting details in the CPA now.				
<b>CME response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

<b>CL ID</b>	07	<b>Section no.</b>	D.10	<b>Date:</b> 17/03/2018
<b>Description of CL</b>				
CME is requested to clarify the calculation of energy savings per stove using the simple average of the stove efficiencies in section A.8 of the CPA-DDs to prove debundling.				
<b>CME response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

<b>CL ID</b>	08	<b>Section no.</b>	D.10	<b>Date:</b> 17/03/2018
<b>Description of CL</b>				
For the eligibility criterion 10, CME has stated “ <i>The sampling and survey was conducted to determine the baseline cooking pattern.....</i> ”. Clarification is requested considering that during the on-site visit it was confirmed that no such survey was conducted to determine the baseline for the proposed three CPAs to be included.				
<b>CME response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

<b>CL ID</b>	09	<b>Section no.</b>	D.5.4	<b>Date:</b> 17/03/2018
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<b>Description of CL</b>	
The annual average ERs have been calculated as 48,387 tCO <sub>2</sub> and the total ERs for the 7 years crediting period has been shown as 338,712 tCO <sub>2</sub> . CME needs to clarify the inconsistency.	
<b>CME response</b>	<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>	
<b>DOE assessment</b>	<b>Date:</b> DD/MM/YYYY

Table 2. CARs from this validation

<b>CAR ID</b>	01	<b>Section No.</b>	D.2	<b>Date:</b> 17/03/2018
<b>Description of CAR</b>				
In section A.3 of the CPA-DDs, paragraphs 3 (a) and 4 of the CPA-DD completing guidelines have not been fulfilled.				
<b>CME response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

<b>CAR ID</b>	02	<b>Section No.</b>	D.2	<b>Date:</b> 17/03/2018
<b>Description of CAR</b>				
The table formats in section B.4.2 and B.5.1 of the CPA-DDs are not as per the CPA-DD template.				
<b>CME response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

<b>CAR ID</b>	03	<b>Section No.</b>	D.4.3	<b>Date:</b> 17/03/2018
<b>Description of CAR</b>				
In section B.3 of the CPA-DDs, the description of the baseline scenario is not in line with instructions in paragraph 1 of the CPA-DD template and also the generic CPA-DD in the registered PoA-DD.				
<b>CME response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

<b>CAR ID</b>	04	<b>Section no.</b>	D.10	<b>Date:</b> 17/03/2018
<b>Description of CL</b>				
For the eligibility criterion 5 ((e) in part I of the PoA-DD), CME has not demonstrated the applicability of the applied standardized baseline ASB0035, version 01. Also in section B.5.3 of the CPA-DDs it is stated " <i>As per the requirements of standardized baseline ASB0035, fuel use at the time of distribution of the project stove will be noted, and if any <u>LPG or kerosene</u> are found in the pre-project scenario, the standardized baseline will not be applied to those specific households.</i> " But during the on-site visit review of the Warranty Registration card template it was found that only LPG usage was mentioned in the card and kerosene was missing. In this context, CME also needs to clarify how the underlined conditions of the applicability criterion number 9 (The target group of each CPA will be rural and/or urban <u>households currently using inefficient biomass based traditional cook stoves</u> in biomass deficient regions) will be met and recorded – how will the households already having ICS be dealt with?				

<b>CME response</b>	<b>Date: DD/MM/YYYY</b>
<b>Documentation provided by CME</b>	
<b>DOE assessment</b>	<b>Date: DD/MM/YYYY</b>

**Table 3. FARs from this validation**

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



## Appendix 5. Assessment of the response to the requirements of the eligibility criteria for inclusion of CPA into the PoA

No.	Eligibility criterion - Category	Eligibility criterion - Required condition	Supporting evidence for inclusion	Description of this CPA in relation to the criterion and supporting evidence	DOE Assessment
1.	Geographical boundaries	Each CPA will be located within the geographical boundary of India, Kenya or Uganda.	CPA-DD section A.2.	The proposed CPA is located in Kenya.	Based on the review of the CPA-DDs /01-b/, a self declaration letter from the CME /07/ and on-site visit interviews, the validation team is able to confirm that the three CPAs are located in Kenya.  <b>Conclusion:</b> Based on the above assessment, validation team concludes that the subject CPAs comply with this eligibility criterion of the PoA.
2.	Avoiding double counting	For each CPA, CME will check for double counting. Tracking of cook stoves will be done based on unique identification such as: a) Acronym of programme b) Acronym of CME & CPA implementer c) Location of CPA d) end number of cook stoves Monitoring the database (UNFCCC and other GHG ER standards) to check project	Evidence of appropriate systems in place.	The cook stove in the proposed CPA will be provided with unique identification number (Appliance ID or serial number) to ensure that each stove is only counted once.  The CME has monitored the requisite databases and confirmed that the proposed SSC-CPA is not registered as any other individual CDM project and is not a CPA in any other PoA. Hence it is	The validation team based on the review of the CPA-DDs /01-b/ and declaration from the CME /08/ confirms that there is no double counting of emission reductions due to the implementation/inclusion of the CPAs, as the CPAs do not belong to or are included in any other PoA or stand-alone CDM project. The validation team has cross-checked this from the UNFCCC website and interviews with

		activity does not generate offsets more than once simultaneously.		confirmed that the project activity does not generate offsets more than once simultaneously.	<p>representatives of CME and confirms that there is no double counting. Further, the double-counting risk is prevented by the unique serial number being assigned to each of the stoves to be distributed under the CPAs /06/. Furthermore, the validation team based on the review of CPA-DDs /01-(b)/ and CME manual /17/ confirms that in order to avoid double counting, the CME has adopted a provision of a record keeping system. The record keeping system for the proposed CPAs under the PoA includes detailed sales information collected from end-user through registration process /11/.</p> <p><b>Conclusion:</b> Based on the above assessment, validation team concludes that the subject CPAs comply with this eligibility criterion of the PoA.</p>
3.	Specification of technology / measure	Each CPA will deploy rocket, efficient charcoal and/or gasifier technology/measures with following specifications duly certified by National Accreditation Board for Testing and Calibration Laboratories (NABL) <sup>1</sup>	Test results	<p>The three cookstoves, Jiko Fresh - 36.21%, Jiko Bora - 37.74% and Jiko Bora Mama Yao - 40.40%, each fulfil the inclusion criterion.</p> <p>The other criteria were not addressed in this case</p>	Based on review of CPA-DDs /01-(b)/, it is confirmed that the CPAs involve promotion and installation of ICS in residential households of rural / urban areas of Kenya and will utilise charcoal. The Ecozoom stoves to be

<sup>1</sup> <http://www.nabl-india.org/>

		<p>accredited / or a reputed laboratory:</p> <p>a. Thermal efficiency of improved cook stove will be greater than or equal to 25% (IS Standard 13152 (Part I):1991 by the Bureau of Indian Standard)</p> <p>b. CO/CO<sub>2</sub> ratio will be less than 0.04<sup>2</sup></p> <p>c. Total Solid particulate will be less than 2mg/m<sup>3</sup></p> <p>d. Surface temperature not exceeding 60°C</p> <p>e. Temperature of synthetic rubber/plastic components if used shall not exceed 60°C.</p> <p>In addition to IS 13152 (Part I):1991 Portable/fixed &amp; stable energy efficient stove Biomass savings of more than 50 %<sup>3</sup></p>		<p>because each of the other criteria apply to implementation in India, whereas this is being implemented in Kenya.</p>	<p>implemented under the three CPAs are Jiko Fresh, Jiko Bora and Jiko Bora Mama Yao models which have efficiencies of 36.21 %, 37.74 % and 40.4 % respectively /04/., in accordance with manufacturer's specifications and evidenced by a WBT conducted by an independent third party /03/.</p> <p>The other requirements are applicable to India only.</p> <p><b>Conclusion:</b> Based on the above assessment, validation team concludes that the subject CPAs comply with this eligibility criterion of the PoA.</p>
4.	Start date	<p>For each CPA</p> <p>The start date will be earliest date of</p> <ul style="list-style-type: none"> <li>• Purchase order for the cook stoves</li> <li>• Start date is after the</li> </ul>	<p>Purchase order or record of validation commencement</p>	<p>A purchase order for cook stoves has been presented as evidence of start date.</p>	<p>Start date for the threes CPAs is 13/04/2017 as stated in the CPA-DDs /01-(b)/. CME has considered the start date as the date on which purchase order was placed by Ecozoom East Africa Limited on Shengzhou Huimei International Trade Co. Ltd. for</p>

<sup>2</sup> Except in the case of charcoal stoves, where the ratio should be less than 0.08

<sup>3</sup> [http://www.mepred.eu/docs/Improved\\_stoves-V2.5.1.26.pdf](http://www.mepred.eu/docs/Improved_stoves-V2.5.1.26.pdf), section 1.2

		commencement of validation of PoA			<p>the first lot of stoves for the three CPAs /03/. The validation team confirms that the start date is after the start date of the PoA.</p> <p><b>Conclusion:</b> Based on the above assessment, validation team concludes that the subject CPAs comply with this eligibility criterion of the PoA..</p>
5.	Applicability of applied methodology	<p>Each CPA will satisfy the following applicability criteria described in approved methodology AMS II.G <i>Energy efficiency measures in thermal applications of non-renewable biomass.</i></p> <p>a. This category comprises appliances involving the efficiency improvements in the thermal applications of non renewable biomass. Examples of these technologies and measures include the introduction of high efficiency<sup>4</sup> biomass fired cook stoves<sup>5</sup> or ovens or</p>	a. Evidence of qualifying technology and non-renewable biomass consumption since 31 December 1989.	<p>The proposed CPA satisfies the applicability condition described in version 3, of approved methodology AMS II.G <i>Energy efficiency measures in thermal applications of non-renewable biomass</i></p> <p>b. The efficiency of the cook stove technology to be deployed in the proposed CPA is &gt; 20%<sup>6</sup>.</p> <p>Many examples from published literature show how cutting and usage of non-renewable biomass have been a critical issue on the Kenyan territory in the last decades. In</p>	<p>The complete assessment of methodological applicability of the proposed CPAs is provided in section D.4.1 above.</p> <p><b>Conclusion:</b> Based on the above assessment (provided in Appendix-5), validation team concludes that the subject CPAs comply with this eligibility criterion of the PoA.</p>

<sup>4</sup> The efficiency of the project systems as certified by a national standards body or an appropriate certifying agent recognized by it. Alternatively manufacturers' specifications may be used.

<sup>5</sup> Single pot or multi pot portable or in-situ cook stoves with specified efficiency of at least 20%.

<sup>6</sup> University of Nairobi, 2015; and KENYA INDUSTRIAL RESEARCH AND DEVELOPMENT INSTITUTE (KIRDI), Nairobi, Kenya, December, 2017

		<p>dryers and/or improvement of energy efficiency of existing biomass fired cook stoves or ovens or dryers.</p> <p>b. Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods or referring to published literature, official reports or statistics.</p>		<p>particular, UNESCO<sup>7</sup> reported in 2006. how "Since independence in 1963, Kenya's forest cover has shrunk from 10% of its 582,650 km<sup>2</sup> territory to a mere 1.7%". Likewise, FAO data show a decline in forest areas and growing stock in forest land. In the last 20 years, the forested area in Kenya reduced by 0.35% per year between 1990 and 2000, by 0.34% per year between 2000 and 2005 and by 0.31% per year between 2005 and 2010<sup>8</sup>. Since Kenyan forests have been declining since at least 31 December, 1989, this means that biomass has been consumed at an unsustainable rate (ie non-renewable biomass has been consumed).</p>	
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<sup>7</sup> UNESCO (2006). Fighting desertification in Kenya, one tree at a time. Courier, 3, p.7,

<http://unesdoc.unesco.org/images/0019/001915/191578e.pdf#193846>

<sup>8</sup> Source: FAO (2010): Global Forest Resources Assessment 2010, Country Report Kenya, p.9 and p.25,

<http://www.fao.org/docrep/013/al543E/al543E.pdf>

6.	Additionality	<p>Each CPA will demonstrate the additionality by establishing that in the absence of CDM PoA, the CPA would not occur. This will be done using paragraph 9 of “Standard for the demonstration of additionality, development of eligibility criteria and application of multiple methodologies for Programme of Activities” EB 65 Annex 3,- PoAs that consist of one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of Guidelines on the demonstration of additionality of small-scale project activities, version 09, Annex 27, EB 68 of the simplified modalities and procedures for small-scale CDM project activities.</p>	<p>Evidence as per “Guidelines on the demonstration of additionality of small scale project activities of the Simplified modalities and procedures for small scale CDM project activities”</p>	<p>As per Methodological tool Demonstration of additionality of small-scale project activities Version 11.0, para 11 (c), the CPA is automatically additional because each unit is no larger than 1 per cent of the CDM small scale threshold. As calculated in section A.8. on debundling, each unit saves less than 1.8GWh per year per appliance, thus the criterion is satisfied and the CPA is automatically additional.</p>	<p>Based on the review of the CPA-DDs /1-b/, ER spread sheets /02/, ICS specifications including their efficiencies /04/ /05/, the validation team is able to confirm that the energy savings per stove is well below the prescribed limit 5% of the small scale limit by the Guidelines on the demonstration of additionality of small-scale project activities, version 09 /B08-4/.</p> <p><b>Conclusion:</b> Based on the above assessment, validation team concludes that the subject CPAs comply with this eligibility criterion of the PoA.</p>
7.	Stakeholder consultation and environmental impact assessment	<p>Each CPA will undertake local stakeholder consultations following :</p> <ol style="list-style-type: none"> <li>a. Identification of local stakeholders</li> <li>b. Invitation to local stakeholder consultation or meets</li> <li>c. Demonstrating the CPA project activity</li> <li>d. Inviting comments from stakeholders</li> <li>e. Minutes of the comments Environment Impact Analysis:</li> </ol>	<p>Evidence of stakeholder consultation and EIA or exemption.</p>	<p>Stakeholder consultation was held on 5 August, 2016 at 8:00 a.m. at Anniversary Towers, Nairobi, Kenya. An invitation was circulated among a large number of stakeholders and the event was announced in a national newspaper. It was a productive and thoughtful discussion among a group of approximately 25 participants made up of representatives from policy, business and government. A full report detailing the meeting and minutes is available.</p>	<p>Valiation team confirms that the Stakeholders consultation and the EIA are to be carried out at PoA level. Hence further validation not required at CPA level.</p> <p><b>Conclusion:</b> Based on the above assessment, validation team concludes that the subject CPAs comply with this eligibility criterion of the PoA.</p>

		An EIA is not required for this project activity in Kenya <sup>9</sup> . Hence, it is not required for this programme.		An EIA is not required for this project activity in Kenya.	
8.	No ODA diversion	Each CPA will demonstrate that no Official Development Assistance (ODA) is being used.	This may be evidenced through any of the following: a. Undertaking by CPA implementer to the coordinating /managing entity b. Certificate by CPA implementers Chartered Accountant provided after procurement of the equipment	The proposed CPA does not use any Official Development Assistance (ODA) from other countries. The document submitted are Undertaking from CPA Implementer to the coordinating/managing entity.	Based on the review of the CPA-DDs /01-b/, on-site visit interviews and a self declaration letter from the CME /10/, validation team is able to confirm non involvement of any ODA funds in the CPAs..  <b>Conclusion:</b> Based on the above assessment, validation team concludes that the subject CPAs comply with this eligibility criterion of the PoA.
9.	Target group	The target group of each CPA will be rural and/or urban households currently using inefficient biomass based traditional cook stoves in biomass deficient regions. Each CPA implementer will market and sell cook stoves to target customers.	Described in CPA-DD	The target group in the proposed CPA are the rural and urban households currently using inefficient biomass based traditional cook stoves in biomass deficient regions of Kenya.  The CPA implementer will market and sell cook stoves to target customers. The cook stoves will be distributed / installed through CPA implementer's or partner's own / third party networks.	Based on the review of the CPA-DDs /01-b/, on-site visit interviews, declaration letters from the CME /09/ and also the template of warrant registration card /11/, validation team is able to confirm that the target group for the distribution of ICS under the three CPAs are the rural and urban households currently using inefficient biomass based traditional cook stoves in biomass deficient regions of Kenya.  <b>Conclusion:</b>

<sup>9</sup> <http://www.kenyalawresourcecenter.org/2011/07/environmental-impact-assessment.html>

					Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
10.	Sampling	<p>Each CPA will conduct sampling and surveying for baseline<sup>10</sup> and monitoring of fuel usage and efficiency as appropriate or applicable based on requirements of</p> <p>a. Sampling &amp; survey methods described in the approved methodology AMS II.G, version 03, <i>Energy efficiency measures in thermal applications of non-renewable biomass</i></p> <p>b. General guidelines for sampling and surveys for small-scale CDM project activities, EB 50, Annex 30 , “Standard for sampling and surveys for CDM project activities and programme of activities”,version 03.0, Annex 4,EB 69 and “Guidelines for sampling and surveys for CDM project activities and programme of activities”, version 02.0, Annex 5, EB</p>	Described in CPA-DD	<p>The sampling and survey was conducted to determine the baseline cooking pattern based on</p> <p>a) 90/10 precision as described in Representative sampling method <sup>11</sup> of approved methodology AMS II.G <i>Energy efficiency measures in thermal applications of non renewable biomass.</i></p> <p>b) Stratified random sampling method was used to determine the sample size as per the “General guidelines for sampling and surveys for small-scale CDM project activities”. EB 50 Annex 30</p> <p>Monitoring will be based on “Standard for sampling and surveys for CDM project activities and programme of activities”, version 03.0, Annex 4,EB 69 and “Guidelines for sampling and</p>	<p>Based on the review of the CPA-DDs /01-b/ and on-site visit interviews, the validation team is able to confirm that no sampling survey was done for baseline for the three CPAs. However, sampling and survey methods will be applied for monitoring as per the approved methodology AMS II.G, version 03, General guidelines for sampling and surveys for small-scale CDM project activities, EB 50, Annex 30 and Standard for sampling and surveys for CDM project activities and programme of activities, version 03.0, Annex 4,EB 69 and Guidelines for sampling and surveys for CDM project activities and programme of activities, version 02.0, Annex 5, EB 69.</p> <p><b>Conclusion:</b> Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.</p>

<sup>10</sup>Baseline survey to establish fuel consumption patterns, prevalent technologies. Where appropriate, sampling across multiple CPAs is allowed.

<sup>11</sup> Baseline survey by a third party



		69.		surveys for CDM project activities and programme of activities”, version 02.0, Annex 5, EB 69.	
11.	Small-scale threshold	<p>Each CPA will meet the following small-scale threshold criteria</p> <p>a. Each CPA will have efficiency improvements not exceeding the equivalent of 180 gigawatt hours (GWh) per year every year throughout the crediting period.</p>	Confirmation by applying the equations outlined in the CPA-DD	<p>The cook stoves to be deployed in the proposed CPA will have the efficiency improvement of 179.04 GWh/year, which is less than the equivalent of 180 GWh<sub>thermal</sub> per year. This check will be conducted each year, every year throughout the crediting period.</p>	<p>Based on the review of the ER calculation excel spreadsheets /02/, technical specifications of the ICS to be distributed under the three CPAs, the validation team is able to confirm that the maximum energy savings per CPA is not beyond the threshold limit of 180 GWhth/year. Validation team based on assessment of the formulae and calculations confirms that the CPAs will not pass the threshold of 180 GWhth/year.</p> <p><b>Conclusion:</b> Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.</p>
12.	Debundling	<p>Each CPA will not undergo debundling check as per EB 54 Annex 13, “Guidelines on assessment of debundling for SSC project activities” para 10</p> <p>a. If each of the independent subsystems/measures (e.g., biogas digester, solar home system) included in the CPA of a PoA is no larger than 1% of the small-scale</p>	Confirmation by calculating thermal output of one independent subsystem/measure.	<p>The thermal energy savings of the proposed CPA is 0.0134 GWh/appliance (calculation is demonstrated in section A.8. which is less than the threshold of 1.8 GWh/y/appliance. Hence this CPA will not undergo debundling check.</p>	<p>Based on the review of the CPA-DDs /1-b/, ER spread sheets /02/, ICS specifications including their efficiencies /04/ /05/, the validation team is able to confirm that the energy savings per stove is well below the prescribed limit 1% of the small scale limit. Hence in accordance with the Guidelines on assessment of debundling for SSC project activities (Version 03) /B08-5/, debundling check is further not</p>

		<p>thresholds defined by the methodology applied, then that CPA of PoA is exempted from performing de-bundling check i.e., considering as not being a de-bundled component of a large scale activity.</p> <p>The threshold to prove the activity is not a debundled action is deducted from the small scale threshold for each SSC-CPA, which corresponds to 180GWh<sup>12</sup> thermal energy per year as follows: 1% of 180GWh = 1.8GWh. This will be demonstrated in section A.8. of each SSC-CPA DD.</p>			<p>required.</p> <p><b>Conclusion:</b> Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.</p>
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<sup>12</sup> As clarified in SSC\_223, The SSC WG agreed to clarify therefore AMS-II.G is applicable to project activities with maximum thermal energy savings of 180 GWh per year.

## Appendix 6. Validation Protocol for proposed CPA Inclusion into the PoA

### Conformity of Component Project Activities

#### CDM-CPA-DD Requirements Checklist

CPA 008 – Charcoal Stoves in Kenya  
CPA 009 – Charcoal Stoves in Kenya  
CPA 010 – Charcoal Stoves in Kenya  
**in Kenya**

**Table 1: CDM-CPA-DD / CDM-SSC-CPA-DD Requirements Checklist ((based on § 37 of the CDM Modalities and Procedures and on VVS , Project Standard and Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities,))**

Checklist	Comment	Ref.	Draft Concl.	Final Conc.
<i>Specific requirements of CPA</i>				
<i>SECTION A. General description of CPA</i>				
<i>A.1. Title of the proposed or registered PoA</i>				
A.1.1. Is the reference and title of the PoA to which this CPA is included provided?	Yes, the reference number of the PoA has been provided in this section.	/01-(a)/	OK	OK
<i>A.2. Title of the CPA</i>				
A.2.1. Is the title of the CPA and the unique identification of the CPA Indicated?	Yes, the title of the CPA and the unique identification of the CPA has been appropriately indicated.	/01-(a)/	OK	OK
A.2.2. Is the current version number of the CPA-DD Indicated?	Yes, the current version number of CPA-DD has been provided in this section. However, CAR 01 and CAR 02 are raised.	/01-(a)/	CAR 01 CAR 02	
A.2.3. Is the date the CPA-DD was completed (DD/MM/YYYY) Indicated?	Yes, the date of completion of CPA-DD has been provided in this section.	/01-(a)/	OK	OK
<i>A.3. Description of the CPA</i>				
A.3.1 Is the description of the technology(ies) and/or measures used by the CPA is in accordance with the proposed or registered PoA, and in accordance with the applicable provisions in the Project standard?	Yes, the description of the technology and/or measure used by the CPA is in accordance with the proposed or registered PoA, and the applicable provisions in the Project standard. However, CL 01 is raised.	/01-(a)/	CL 01	
<i>A.4 Entity/individual responsible for CPA</i>				
A.4.1.1 Is the information on the CPA implementer(s) provided? (CPA implementers can be project participants of the PoA, under which the CPA is submitted, provided)	Yes, appropriate information on the CPA implementer has been provided.	/01-(a)/	OK	OK
A.4.1.2 Is the name of CPA implementers included in the CPA is consistent with the proposed/ registered PoA?	Yes, the name of CPA implementer included in the CPA is consistent with the registered PoA.	/01-(a)/	OK	OK
<i>A.5 Technical description of the CPA</i>				

<p>A.5.1. Is the description the technologies and/or measures to be employed and/or implemented by the CPA including a list of the facilities, systems and equipment that will be installed and/or modified by the CPA provided?</p>	<p>Yes, the description of the technologies and/or measures to be employed and/or implemented by the CPA including a list of the facilities, systems and equipment that will be installed and/or modified by the CPA has been appropriately provided.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>
<p>A.5.2 Does the description includes;</p>				
<p>A.5.2.1 A list and the arrangement of the main manufacturing/production technologies, systems and equipment involved provided?</p>	<p>Not Applicable</p>	<p>/01-(a)/, /B05/</p>	<p>OK</p>	<p>OK</p>
<p>A.5.2.2 information about the age and average lifetime of the equipment based on manufacturer's specifications and industry standards, and existing and forecast installed capacities, load factors and efficiencies?</p>	<p>Yes, information about the age and average lifetime of the equipment is based on manufacturer's specifications.</p>	<p>/01-(a)/</p>	<p>OK</p>	<p>OK</p>
<p>A.5.2.3 The monitoring equipment detail and their location in the systems. Does the monitoring detail provided are complete to measure all data and parameters such that Emission reduction can be measured or calculated?</p>	<p>Not Applicable</p>	<p>/01-(a)/, /B05/</p>	<p>OK</p>	<p>OK</p>
<p>A.5.2.4 Energy and mass flows and balances of the systems and equipment included in the CPA?</p>	<p>Not Applicable</p>	<p>/01-(a)/, /B05/</p>	<p>OK</p>	<p>OK</p>
<p>A.5.2.5 The types and levels of services (normally in terms of mass or energy flows) provided by the systems and equipment that are being modified and/or installed under the CPA and their relation, if any, to other manufacturing/production equipment and systems outside the project boundary?</p>	<p>Not Applicable</p>	<p>/01-(a)/, /B05/</p>	<p>OK</p>	<p>OK</p>
<p>A.5.2.6 if the types and levels of services provided by those manufacturing/production systems and equipment outside the project boundary also constitute important parameters of the description.  Does the description clearly explain how the same types and levels of services provided by the CPA would have been provided in the baseline scenario?</p>	<p>Not Applicable</p>	<p>/01-(a)/, /B05/</p>	<p>OK</p>	<p>OK</p>
<p>A.5.3 Does the description contains a list of:-</p>				
<p>A.5.3.1 Facilities, systems and equipment in operation under the existing scenario prior to the implementation of the CPA?</p>	<p>Yes, this section contains description of systems/equipment in operation under the existing scenario prior to the implementation of the CPA.</p>	<p>/01-(a)/, /B05/</p>	<p>OK</p>	<p>OK</p>

A.5.3.2 Facilities, systems and equipment in the baseline scenario?	Yes, this section contains description of systems/equipment in operation existing in the baseline scenario. However, CAR 03 is raised.	/01-(a)/ /B05/	CAR 03	
A.5.3.3 In case the baseline scenario is a continuation of current practice. Is it stated that both the scenarios are same?	Yes, the baseline scenario is a continuation of current practice.	/01-(a)/ /B05/	OK	OK
A.5.3.4 Does the information provides the purpose of the CPA and how it reduces GHG emissions?	Yes, information provided describes the purpose of the CPA and how it reduces GHG emissions.	/01-(a)/ /B05/	OK	OK
A.6. Party(ies)				
A.6.1 Does the Party (ies) and CPA implementer(s) involved in the CPA provided in tabular format and in Appendix 1 Consistent and the contact information complete?	Yes, the Party and CPA implementer involved in the CPA has been provided in tabular format and is further consistent with the information contained in Appendix 1 and is complete.	/01-(a)/	OK	OK
A.7. Geographic reference or other means of identification				
A.7.1 Is the geographic reference or other means of identification that allows for the unique identification of the CPA provided? (maximum in one page)?	Yes, appropriate geographic reference has been provided which allows for the unique identification of the CPA provided.	/01-(a)/	OK	OK
A.8. Duration of the CPA				
A.8.1 Start date of the CPA				
A.8.1 Is the start date provided in (DD/MM/YYYY) format?	Yes, the start date has been provided in the DD/MM/YYYY format.	/01-(a)/	OK	OK
A.8.1 Does the description, of how the start date was determined and is in line with the definition of start date in "Glossary of CDM terms" and provided in POA-DD?	Yes, the description of how the start date was determined has been provided and is further in line with the definition of start date in "Glossary of CDM terms". However, CL 05 has been raised.	/01-(a)/	CL 05	
A.8.2 Expected operational lifetime of the CPA				
A.8.2.1 Is the expected operational lifetime of the CPA stated in years and months?	Yes, the expected operational lifetime of the CPA stated in years.	/01-(a)/	OK	OK
A.9. Choice of the crediting period and related information				

Does the type of crediting period renewable or Fixed chosen and clearly stated?	The type of crediting period chosen is renewable and is clearly stated.	/01-(a)/	OK	OK
A.9.1 Choice of the crediting period and related information				
Is the expected start date of the crediting period of the CPA indicated in (DD/MM/YYYY) format, and line with PoA?	Yes, the expected start date of the crediting period of the CPA has been indicated in (DD/MM/YYYY) format and is line with PoA.	/01-(a)/	OK	OK
A.9.2 Length of the crediting period				
A.9.2.1 Is the length of the crediting period chosen clearly indicated?	Yes, the length of the crediting period chosen is 7 years (twice renewable) and has been clearly indicated.	/01-(a)/	OK	OK
A.9.2.1.1 In case a renewable crediting period is chosen, does the length of the first crediting period and the number of renewal periods provided?	Yes, renewable crediting period is chosen and the length of the first crediting period and the number of renewal periods has been appropriately provided.	/01-(a)/	OK	OK
A.9.2.1.2 Does the total renewal periods comply and do not exceed the PoA validity period?	Yes, the total renewal periods comply and do not exceed the PoA validity period.	/01-(a)/	OK	OK
A.10 Estimated amount of GHG emission reductions				
Does the estimated annual GHG emission reductions for each year of the crediting period and, the annual average and the total GHG emission reductions over the chosen crediting period (or the first crediting period) provided in the table?	Yes, the estimated annual GHG emission reductions for each year of the crediting period and, the annual average and the total GHG emission reductions over the chosen crediting period (or the first crediting period) have been provided in the table.  However, CL 09 has been raised.	/01-(a)/	CL 09	
A.11. Public funding of the CPA				
A.11.1 Does the PoA receives public funding from Parties included in Annex I?	No, the PoA does not receive public funding from Parties included in Annex I.	/01-(a)/	OK	OK
A.11.2 if the PoA receives public funding from Parties included in Annex I, is the information on Parties providing public funding Provided in Appendix 2 and the affirmation obtained from such Parties is in accordance with applicable provisions related to official development assistance in the Project standard?	Not Applicable	/01-(a)/	OK	OK
A.12. Confirmation for CPA				

A.12. Does the description include and confirm that the CPA is neither registered as an individual CDM project activity nor is part of another registered PoA?	Yes, the description includes and further confirms that the CPA is neither registered as an individual CDM project activity nor is part of another registered PoA.	/01-(a)/	OK	OK
<b>SECTION B. Environmental analysis</b>				
<b>B.1. Analysis of the environmental impacts</b>				
B.1.1 Is the analysis of the environmental impacts required and is undertaken,	No, analysis of the environmental impacts is not mandatory as per host party regulations.	/01-(a)/	OK	OK
B.1.2 Does the description and the analysis of environmental impacts undertaken is as per the PoA.	Not Applicable	/01-(a)/	OK	OK
<b>B.2. Environmental impact assessment</b>				
B.2.1. Is an environmental impact assessment required?	No, EIA is not mandatory as per host party regulations.	/01-(a)/	OK	OK
B.2.1.1 Does the assessment of the requirement of Environmental impact assessment and the conclusion & related references to all documentation provided?	Not Applicable	/01-(a)/	OK	OK
B.2.2 In case the section B1and B.2 is kept blank. Is it indicated and confirmed that the environmental analysis is provided at the PoA level.	Not Applicable	/01-(a)/	OK	OK
<b>SECTION C. Local stakeholder comments</b>				
<b>C.1. Solicitation of comments from local stakeholders</b>				
C.1 Is the detail of process by which comments from local stakeholders have been invited for the CPA described?	Local Stakeholder Consultation was conducted at PoA level. Thus, this section is Not Applicable. However, CL 06 has been raised.	/01-(a)/, /B03/	CL 06	
<b>C.2. Summary of comments received</b>				
C.2 Are all stakeholders that have made comments Identified and Is the summary of these comments provided?	Not Applicable	/01-(a)/, /B03/	OK	OK
<b>C.3. Report on consideration of comments received</b>				
C.3.1 Does the information provided demonstrate that all comments received have been considered?	Not Applicable	/01-(a)/, /B03/	OK	OK
C.3.2. In case the section C1 and C.2 is kept blank. Is it indicated and confirmed that the stakeholder consultation information is provided at the PoA level?	Not Applicable	/01-(a)/, /B03/	OK	OK
<b>SECTION D. Eligibility of CPA and estimation of emissions reductions</b>				



D.1. Title and reference of the approved baseline and monitoring methodology(ies) selected.				
D.1. Is the exact methodology(ies) Identified and reference & title of the approved methodology provided?	Yes, CME has provided the UNFCCC reference of the applied methodology.	/01-(a)/	OK	OK
D.2. Application of methodology(ies)				
D.2.1 Is it demonstrated how the applicability conditions of the approved methodology(ies) and the PoA are met?	Yes the CME has demonstrated the applicability conditions of the methodology.	/01-(a)/	OK	OK
D.2.2 Has the documentation that has been used provided and explained? Is the reference of documentation included in Appendix 3?	Yes, appropriate documentation has been provided and explained. The references have been included in Appendix-3 of this report.	/01-(a)/	OK	OK
D.3. Sources and GHGs				
D.3.1 Does all the sources and GHGs included in the CPA boundary Described in accordance with the PoA?	The description of project boundary provided is complete and as per the narrative provided in the applied methodology.	/01-(a)/	OK	OK
D.3.2 Does the proof which shows that the CPA is located within the geographical boundary of the proposed or registered PoA Provide?	Yes, the proof which shows that the CPA is located within the geographical boundary of the proposed or registered PoA has been mentioned and provided.	/01-(a)/	OK	OK
D.3.3. Does all emission sources and GHGs included in the CPA boundary described, explained and justified using the table provided?	Yes, all emission sources and GHGs included in the CPA boundary described are explained and justified using the table provided.	/01-(a)/	OK	OK
D.3.4 Does the section Include a flow diagram of equipment, energy and mass flows based on the description provided in section A.5. of CPA-DD?	Yes, this section includes a flow diagram of equipment, energy and mass flows based on the description provided in section B.2. of CPA-DD. The section numbering has changed from A.5 to B.2 as the CPA-DD form has been revised.	/01-(a)/	OK	OK
D.4. Description of the baseline scenario				
D.4 Is the description of the baseline scenario and its identification for the CPA is in accordance with the PoA?	Yes, the description of the baseline scenario and its identification for the CPA is in accordance with the PoA.	/01-(a)/, /B03/	OK	OK
D.5. Demonstration of eligibility for a CPA				

<p>D.5.1 Does CPA meets each of the eligibility criteria of the PoA including confirmation of additionality of the CPA for its inclusion into the PoA? Please provide assessment for each of the eligibility criteria as per the proposed or registered PoA DD, the eligibility criteria shall cover (unless differently mentioned in the registered PoA DD, if the registered PoA DD provides different set of eligibility criteria, consider those in the below row) a minimum the following :</p>	<p>Yes, the CPA meets each of the eligibility criteria of the PoA including confirmation of additionality of the CPA for its inclusion into the PoA.  However, CAR 04, CL 07 and CL 08 are raised.</p>	<p>/01-(a)/, /B03/</p>	<p>CAR 04 CL 07 CL 08</p>	
<p>(a) The geographical boundary of the CPA including any time-induced boundary # consistent with the geographical boundary set in the PoA # For example, an emission factor for electricity generation is dependent on the boundaries of regional or state or sub-regional grids.</p>	<p>The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-5 for further details.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>
<p>(b) Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);</p>	<p>The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-5 for further details.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>
<p>(c) The specifications of technology/measure # including the level * and type of service, performance specifications including compliance with testing/certifications;  # 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 makes the project cook stoves efficient, would be appropriate; however, only indicating that all cook stoves will have an efficiency X% would not be sufficient.  * The level of service shall be defined in comparison with the baseline system being replaced.</p>	<p>The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-5 for further details.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>

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<p>(d) Conditions to check the start date of the CPA through documentary evidence;</p>	<p>The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-5 for further details.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>
<p>(e) Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs;</p>	<p>The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-5 for further details.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>
<p>(f) The conditions that ensure that the CPA meets the requirements pertaining to the demonstration of additionality as assessed in section B.1 above;</p>	<p>The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-5 for further details.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>
<p>(g) The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis;# # See also relevant paragraphs of "CDM project cycle procedure".</p>	<p>The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-5 for further details.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>
<p>(h) Conditions to provide an affirmation that funding from Annex I Parties, if any, does not result in a diversion of official development assistance;</p>	<p>The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-5 for further details.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>
<p>(i) Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation) \$; \$ This is to re-test the validity of assumptions made at the PoA level. For example, in a lighting efficiency application, lighting usage hours of 3.5 hours per day would be valid if the target group is residences/households. Usage hours would be different in commercial applications and vice versa.</p>	<p>The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-5 for further details.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>

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<p>(j) Where applicable, the conditions related to sampling requirements for the PoA in accordance with the “Standard for sampling and surveys for CDM project activities and programme of activities”;</p>	<p>The demonstration of the CPA’s compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-5 for further details.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>
<p>(k) Where applicable, the conditions that ensure that every CPA meets the small- scale or microscale threshold # and remains within those thresholds throughout the crediting period of the CPA. However, for a CPA that consists of only units that qualify as ‘microscale CDM units’ as defined in the methodological tool “Demonstration of additionality of microscale project activities”, this condition is not required; # Please refer to the latest approved version of the methodological tool “Demonstrating additionality of microscale project activities” and the latest approved version of the “General Guidelines to SSC CDM methodologies”.</p>	<p>The demonstration of the CPA’s compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-5 for further details.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>
<p>(l) Where applicable, the requirements for the debundling check, in case the CPA belongs to small-scale or microscale project categories #. However, if a CPA solely consists of ‘microscale CDM units’, the requirement regarding debundling is not applicable. # Please refer to the latest approved version of the methodological tool “Assessment of debundling for small-scale project activities”.</p>	<p>The demonstration of the CPA’s compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-5 for further details.</p>	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>

D.6. Estimation of emission reductions				
D.6.1.Explanation of methodological choices				
D.6.1.1 Is Explanation and justification for the methods and/or methodological steps, based on the applied methodology, for calculating baseline emissions applied to the CPA provided?	Yes, explanation and justification for the methods and/or methodological steps for calculating baseline emissions applied to the CPA have been provided in accordance with the applied methodology.	/01-(a)/, /B03/	OK	OK
D.6.1.2 Is Explanation and justification for the methods and/or methodological steps, based on the applied methodology, for calculating, project emissions, are applied to the CPA provided?	Not Applicable	/01-(a)/, /B03/	OK	OK
D.6.1.3 Is Explanation and justification for the methods and/or methodological steps, based on the applied methodology, for calculating, leakage emissions and emission reductions applied to the CPA provided?	Not Applicable	/01-(a)/, /B03/	OK	OK
D.6.1.4 Is Explanation and justification for the methods and/or methodological steps, based on the applied methodology, for calculating, emission reductions applied to the CPA provided?	Yes, explanation and justification for the methods and/or methodological steps, based on the applied methodology, for calculating, emission reductions applied to the CPA have been provided.	/01-(a)/, /B03/	OK	OK
D.6.1.5 Is the equation for calculating the emission reductions for CPA is in line with the methodology and the PoA?	Yes, the equation for calculating the emission reductions for CPA is in line with the methodology and the PoA.	/01-(a)/, /B03/	OK	OK
D.6.2. Data and parameters that are to be reported ex-ante				
D.6.2.1 Does the compilation of information on the data and parameters that are not monitored during the crediting period but are determined before the registration and remain fixed throughout the crediting period described and provided?	Yes, the compilation of information on the data and parameters that are not monitored during the crediting period but are determined before the registration and remain fixed throughout the crediting period has been described and provided.  However, CL 02, CL 03 and CL 04 have been raised.	/01-(a)/, /B03/	CL 02 CL 03 CL 04	
D.6.2.2. Is the compilation of information for data that are measured or sampled, and data that are collected from other sources (e.g. official statistics, expert judgment, proprietary data, IPCC, commercial and scientific literature, etc.) are complete and as per the methodology and applicable conditions?	Yes, the compilation of information for data that are measured or sampled, and data that are collected from other sources are complete and as per the methodology and applicable conditions	/01-(a)/, /B03/	OK	OK

<p>D.6.2.3. Are all data or parameter, complete with respect to the: “Value(s) of data applied, Choice of data, Purpose of data, Measurement methods and procedures to enable Calculation of baseline emissions; Project Emission, Leakage Emission, Emission Reduction? Pleas list all ex-ante parameters (as below) along with their values and provide an assessment on its appropriateness.</p>	<p>Yes, all data or parameters are complete with respect to the: “Value(s) of data applied, Choice of data, Purpose of data, Measurement methods and procedures to enable calculation of baseline emissions; project emissions, and emission reductions.</p>	/01-(a)/	OK	OK
<p>Parameter: <math>\eta_{old}</math> Value: 0.1 (if the replaced system is the three stone fire or a conventional system without a grate as well as a chimney) 0.2 (where the baseline stove has a grate or a chimney) Source of value: Default value as per AMS-II.G. Vesion 03.0)</p>	<p>The validation team reviewed the reference source and deems the value to be appropriate. Refer to section D.5.2 for detailed assessment.</p>	/01-(a)/	OK	OK
<p>Parameter: <math>NCV_{biomass}</math> Value: 0.015 TJ/tonne Source of value: default value of applied methodology AMS-II.G (version 03)</p>	<p>The validation team reviewed the reference source and deems the value to be appropriate. Refer to section D.5.2 for detailed assessment.</p>	/01-(a)/	OK	OK
<p>Parameter: <math>EF_{projected\_fossilfuel}</math> Value: 81.6 tCO<sub>2</sub>/TJ Source of value: default value of applied methodology AMS-II.G (version 03)</p>	<p>The validation team reviewed the reference source and deems the value to be appropriate. Refer to section D.5.2 for detailed assessment.</p>	/01-(a)/	OK	OK
<p>Parameter: <math>L_y</math> Value: 0.95 Source of value: default value of applied methodology AMS-II.G (version 043)</p>	<p>The validation team reviewed the reference source and deems the value to be appropriate. Refer to section D.5.2 for detailed assessment.</p>	/01-(a)/	OK	OK
<p>Parameter: <math>B_{old}</math> Value: 0.76 kg/cap/y rural, 0.83 kg/cap/y urban Source of value: Standsardized Baseline ASB0035, version 01</p>	<p>The validation team reviewed the reference source and deems the value to be appropriate. Refer to section D.5.2 for detailed assessment.</p>	/01-(a)/	OK	OK

Parameter: $f_{NRB,y}$ Value: 0.92 Source of value: UNFCCC published default value for Kenya	The validation team reviewed the reference source and deems the value to be appropriate.  Refer to section D.5.2 for detailed assessment.	/01-(a)/	OK	OK
<b>D.6.3. Ex-ante calculation of emission reductions</b>				
D.6.3.1. Is ex ante calculation of project emissions, baseline emissions, Leakage emissions and /or Emission reduction expected during the crediting period, Provided in a transparent manner based on data or parameters (in the table in section D.6.2 above) applying all relevant equations provided in the selected methodology?	Yes, the ex-ante calculation of baseline emissions and Emission reduction expected during the crediting period are provided in a transparent manner based on data or parameters (in the table in section D.6.2 above) applying all relevant equations provided in the selected methodology.	/01-(a)/	OK	OK
D.6.3.2 If any of these estimates has been determined by a sampling approach, then are the descriptions of the sampling efforts undertaken (in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities") Provided?	Yes, in cases where estimates have been determined by a sampling approach the descriptions of the sampling efforts undertaken have been provided.	/01-(a)/	OK	OK
D.6.3.3. Are the documentation of each equation applied, represented in a manner that enables the reader to reproduce the calculation?	Yes, the documentation of each equation applied is represented in a manner that enables the reader to reproduce the calculation.	/01-(a)/	OK	OK
D.6.3.4. Are the relevant, additional background information and/or data (including relevant electronic) spreadsheet provided in Appendix 4?	Not Applicable	/01-(a)/	OK	OK
D.6.3.5 Is a sample calculation for each equation used, substituting the values used in the equations Provided?	Yes, a sample calculation for each equation used, substituting the values used in the equations has been provided.	/01-(a)/	OK	OK
<b>D.6.4. Summary of the ex-ante estimates of emission reductions</b>				
Is the summary of all ex-ante estimation of Baseline Emission, Project Emission, Leakage Emission and Emission Reduction provided in accordance with given table?	Yes, the summary of all ex-ante estimation of Baseline Emission and Emission Reduction is provided in accordance with given table.	/01-(a)/	OK	OK
<b>D.7. Application of the monitoring methodology and description of the monitoring plan</b>				
<b>D.7.1. Data and parameters to be monitored</b>				

<p>D.7.1.1. Is the specific information related to procedures for measurement, monitoring, recording, collected, archiving of data and parameters that is required for estimation and calculation of Emission Reduction provided?</p>	<p>Yes, the specific information related to procedures for measurement, monitoring, recording, collected, archiving of data and parameters that is required for estimation and calculation of Emission Reduction have been provided.</p>	<p>/01-(a)/</p>	<p>OK</p>	<p>OK</p>																		
<p>D.7.1.2 Are all data or parameter, complete with respect to the: "Value(s) of data applied, Choice of data, Purpose of data, Measurement methods and procedures, QA/QC procedures to enable Calculation of baseline emissions; Project Emission, Leakage Emission, Emission Reduction ?</p>	<p>Yes, all data or parameter are complete with respect to the: "Value(s) of data applied, Choice of data, Purpose of data, Measurement methods and procedures, QA/QC procedures to enable Calculation of baseline emissions; Project Emission, and Emission Reduction.</p>	<p>/01-(a)/</p>	<p>OK</p>	<p>OK</p>																		
<p>D.7.1.3 Are the relevant, additional background information on data and parameters to be monitored is provided in Appendix 5?</p>	<p>Not Applicable.</p>	<p>/01-(a)/</p>	<p>OK</p>	<p>OK</p>																		
<p>D.7.1.4 Is the list of parameters presented in section B.7.1 (Part II of PoA-DD) considered to be complete with regards to the requirements of the applied methodology?</p>																						
<p>Parameter: N<sub>y</sub></p>	<table border="1"> <thead> <tr> <th data-bbox="1041 761 1346 791">Monitoring Checklist</th> <th data-bbox="1346 761 1590 791">Yes / No / NA</th> </tr> </thead> <tbody> <tr> <td data-bbox="1041 791 1346 882">Title and description in line with methodology?</td> <td data-bbox="1346 791 1590 882">Yes</td> </tr> <tr> <td data-bbox="1041 882 1346 946">Data unit correctly stated?</td> <td data-bbox="1346 882 1590 946">Yes</td> </tr> <tr> <td data-bbox="1041 946 1346 1010">Source clearly referenced?</td> <td data-bbox="1346 946 1590 1010">Yes</td> </tr> <tr> <td data-bbox="1041 1010 1346 1074">Correct value provided for estimation?</td> <td data-bbox="1346 1010 1590 1074">Yes</td> </tr> <tr> <td data-bbox="1041 1074 1346 1137">Has this value been verified?</td> <td data-bbox="1346 1074 1590 1137">Yes</td> </tr> <tr> <td data-bbox="1041 1137 1346 1228">Measurement method and procedure correctly described?</td> <td data-bbox="1346 1137 1590 1228">Yes</td> </tr> <tr> <td data-bbox="1041 1228 1346 1292">Purpose of data correctly described</td> <td data-bbox="1346 1228 1590 1292">Yes</td> </tr> <tr> <td data-bbox="1041 1292 1346 1351">Additional comments (if any)</td> <td data-bbox="1346 1292 1590 1351">NA</td> </tr> </tbody> </table>	Monitoring Checklist	Yes / No / NA	Title and description in line with methodology?	Yes	Data unit correctly stated?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	Yes	Has this value been verified?	Yes	Measurement method and procedure correctly described?	Yes	Purpose of data correctly described	Yes	Additional comments (if any)	NA	<p>/01-(a)/, /B03/</p>	<p>OK</p>	<p>OK</p>
Monitoring Checklist	Yes / No / NA																					
Title and description in line with methodology?	Yes																					
Data unit correctly stated?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided for estimation?	Yes																					
Has this value been verified?	Yes																					
Measurement method and procedure correctly described?	Yes																					
Purpose of data correctly described	Yes																					
Additional comments (if any)	NA																					



Parameter: $\eta_{new}$	<b>Monitoring Checklist</b>	<b>Yes / No / NA</b>	/01-(a)/, /B03/	OK	OK
	Title and description in line with methodology?	Yes			
	Data unit correctly stated?	Yes			
	Source clearly referenced?	Yes			
	Correct value provided for estimation?	Yes			
	Has this value been verified?	Yes			
	Measurement method and procedure correctly described?	Yes			
	Purpose of data correctly described	Yes			
	Additional comments (if any)	NA			
	Parameter: $\eta_{new,i}$	<b>Monitoring Checklist</b>			
Title and description in line with methodology?		Yes			
Data unit correctly stated?		Yes			
Source clearly referenced?		Yes			
Correct value provided for estimation?		Yes			
Has this value been verified?		Yes			
Measurement method and procedure correctly described?		Yes			
Purpose of data correctly described		Yes			
Additional comments (if any)		NA			

Parameter: Continuous use of baseline stoves	<b>Monitoring Checklist</b>	<b>Yes / No / NA</b>	/01-(a)/, /B03/	OK	OK
	Title and description in line with methodology?	Yes			
	Data unit correctly stated?	Yes			
	Source clearly referenced?	Yes			
	Correct value provided for estimation?	Yes			
	Has this value been verified?	Yes			
	Measurement method and procedure correctly described?	Yes			
	Purpose of data correctly described	Yes			
	Additional comments (if any)	NA			
	Parameter: By savings	<b>Monitoring Checklist</b>			
Title and description in line with methodology?		Yes			
Data unit correctly stated?		Yes			
Source clearly referenced?		Yes			
Correct value provided for estimation?		Yes			
Has this value been verified?		Yes			
Measurement method and procedure correctly described?		Yes			
Purpose of data correctly described		Yes			
Additional comments (if any)		NA			

D.7.2. Description of the monitoring plan				
D.7.2.1 Is the description of the monitoring plan for the CPA provided in accordance with the approved monitoring methodology (ies) and PoA?	Yes, the description of the monitoring plan for the CPA is provided in accordance with the approved monitoring methodology and PoA.	/01-(a)/, /B03/	OK	OK
D.7.2.2 In case the data and parameters to be monitored determined by sampling approach, are the description of sampling plan provided in accordance with the recommended outline for a sampling plan in the “Standard for sampling and surveys for CDM project activities and programme of activities”?	Yes, for the data and parameters to be monitored determined by sampling approach, the description of sampling plan is provided in accordance with the recommended outline for a sampling plan in the “Standard for sampling and surveys for CDM project activities and programme of activities.	/01-(a)/	OK	OK
D.7.3 Consistency check and font size	Yes all the information is consistent and font size is accurate.	/01-(a)/	OK	OK
D.7.3.1 Does the following key terms and their description is consistent within the various sections of the PoA-DD?  P.S.: Additional rows may be added if required.				
D.7.3.1.1. CME and Participants of PoA	Yes, the description of CME and Participants of PoA is consistent within the various sections of the PoA-DD.	/01-(a)/	OK	OK
D.7.3.1.2. Description/ Technology or measures to be employed by the CPA	Yes, the description of Technology or measures to be employed by the CPA is consistent within the various sections of the PoA-DD.	/01-(a)/	OK	OK
D.7.3.1.3. Target group (end users type)	Yes, the Target group (end user type) listed are consistent within the various sections of the PoA-DD.	/01-(a)/	OK	OK
D.7.3.1.4. Eligibility criteria for inclusion of a CPA	Yes, the Eligibility criteria for inclusion of a CPA is consistent within the various sections of the PoA-DD.	/01-(a)/	OK	OK
D.7.3.2. Is the font size in all the respective documents as per the requirements of Instructions for filling out the programme design document form for small-scale/large scale CDM programmes of activities?	Yes, the font size in all the respective documents is as per the requirements of Instructions for filling out the programme design document form for small-scale/large scale CDM programmes of activities	/01-(a)/	OK	OK

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**Document information**

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<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.

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