



## Validation report form for post-registration changes for component project activities

(Version 02.0)


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

### BASIC INFORMATION

<b>Title and UNFCCC reference number of the component project activity (CPA)</b>	7997-P1-0041-CP1	CPA 041 – BioLite HomeStove in Kenya
	7997-P1-0042-CP1	CPA 042 – BioLite HomeStove in Kenya
	7997-P1-0043-CP1	CPA 043 – BioLite HomeStove in Kenya
	7997-P1-0044-CP1	CPA 044 – BioLite HomeStove in Kenya
	7997-P1-0045-CP1	CPA 045 – BioLite HomeStove in Kenya
	7997-P1-0046-CP1	CPA 046 – BioLite HomeStove in Kenya
	7997-P1-0047-CP1	CPA 047 – BioLite HomeStove in Kenya
	7997-P1-0048-CP1	CPA 048 – BioLite HomeStove in Kenya
	7997-P1-0049-CP1	CPA 049 – BioLite HomeStove in Kenya
	7997-P1-0050-CP1	CPA 050 – BioLite HomeStove in Kenya
	7997-P1-0051-CP1	CPA 051 – Charcoal Stoves in Kenya
	7997-P1-0052-CP1	CPA 052 – Charcoal Stoves in Kenya
	7997-P1-0053-CP1	CPA 053 – Charcoal Stoves in Kenya
	7997-P1-0054-CP1	CPA 054 – Charcoal Stoves in Kenya
	7997-P1-0055-CP1	CPA 055 – Charcoal Stoves in Kenya
	7997-P1-0056-CP1	CPA 056 – Charcoal Stoves in Kenya
	7997-P1-0057-CP1	CPA 057 – Charcoal Stoves in Kenya
	7997-P1-0058-CP1	CPA 058 – Charcoal Stoves in Kenya
	7997-P1-0059-CP1	CPA 059 – Charcoal Stoves in Kenya
	7997-P1-0060-CP1	CPA 060 – Charcoal Stoves in Kenya
	7997-P1-0061-CP1	CPA 061 – Charcoal Stoves in Kenya
	7997-P1-0062-CP1	CPA 062 – Charcoal Stoves in Kenya
	7997-P1-0063-CP1	CPA 063 – Charcoal Stoves in Kenya
	7997-P1-0064-CP1	CPA 064 – Charcoal Stoves in Kenya
	7997-P1-0065-CP1	CPA 065 – Charcoal Stoves in Kenya
	7997-P1-0066-CP1	CPA 066 – Charcoal Stoves in Kenya
	7997-P1-0067-CP1	CPA 067 – Charcoal Stoves in Kenya

	7997-P1-0068-CP1	CPA 068 – Charcoal Stoves in Kenya
	7997-P1-0069-CP1	CPA 069 – Charcoal Stoves in Kenya
	7997-P1-0070-CP1	CPA 070 – Charcoal Stoves in Kenya
	7997-P1-0071-CP1	CPA 071 – Charcoal Stoves in Kenya
	7997-P1-0072-CP1	CPA 072 – Charcoal Stoves in Kenya
	7997-P1-0073-CP1	CPA 073 – Charcoal Stoves in Kenya
	7997-P1-0074-CP1	CPA 074 – Charcoal Stoves in Kenya
	7997-P1-0075-CP1	CPA 075 – Charcoal Stoves in Kenya
	7997-P1-0076-CP1	CPA 076 – Charcoal Stoves in Kenya
	7997-P1-0077-CP1	CPA 077 – Charcoal Stoves in Kenya
	7997-P1-0078-CP1	CPA 078 – Charcoal Stoves in Kenya
	7997-P1-0079-CP1	CPA 079 – Charcoal Stoves in Kenya
	7997-P1-0080-CP1	CPA 080 – Charcoal Stoves in Kenya
<b>Version number of the validation report</b>	01	
<b>Completion date of the validation report</b>	28/09/2021	
<b>Version number of PoA-DD and CPA-DD applicable to this validation report</b>	POA-DD	Version 20
	7997-P1-0041-CP1	Version 04
	7997-P1-0042-CP1	Version 04
	7997-P1-0043-CP1	Version 04
	7997-P1-0044-CP1	Version 04
	7997-P1-0045-CP1	Version 04
	7997-P1-0046-CP1	Version 04
	7997-P1-0047-CP1	Version 04
	7997-P1-0048-CP1	Version 04
	7997-P1-0049-CP1	Version 04
	7997-P1-0050-CP1	Version 04
	7997-P1-0051-CP1	Version 04
	7997-P1-0052-CP1	Version 04
	7997-P1-0053-CP1	Version 04
	7997-P1-0054-CP1	Version 04
	7997-P1-0055-CP1	Version 04
	7997-P1-0056-CP1	Version 04
	7997-P1-0057-CP1	Version 04
	7997-P1-0058-CP1	Version 04
	7997-P1-0059-CP1	Version 04
	7997-P1-0060-CP1	Version 04
	7997-P1-0061-CP1	Version 04
	7997-P1-0062-CP1	Version 04
	7997-P1-0063-CP1	Version 04

	7997-P1-0064-CP1	Version 04
	7997-P1-0065-CP1	Version 04
	7997-P1-0066-CP1	Version 04
	7997-P1-0067-CP1	Version 04
	7997-P1-0068-CP1	Version 04
	7997-P1-0069-CP1	Version 04
	7997-P1-0070-CP1	Version 04
	7997-P1-0071-CP1	Version 04
	7997-P1-0072-CP1	Version 04
	7997-P1-0073-CP1	Version 04
	7997-P1-0074-CP1	Version 04
	7997-P1-0075-CP1	Version 04
	7997-P1-0076-CP1	Version 04
	7997-P1-0077-CP1	Version 04
	7997-P1-0078-CP1	Version 04
	7997-P1-0079-CP1	Version 04
	7997-P1-0080-CP1	Version 04
<b>Title and UNFCCC ref. no. of the registered PoA into which the CPA is included</b>	UNFCCC Ref number – 7997 BioLite Improved Cook stoves Programme	
<b>Type(s) of CPA PRCs</b>	<input type="checkbox"/> Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents <input checked="" type="checkbox"/> Corrections <input type="checkbox"/> Changes to the start date of the crediting period <input type="checkbox"/> Inclusion of monitoring plan <input type="checkbox"/> Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents <input type="checkbox"/> Changes to the project design <input type="checkbox"/> Changes specific to afforestation and reforestation activities	
<b>Coordinating/managing entity (CME)</b>	BioLite India Private Limited	
<b>Host Parties</b>	Kenya	
<b>Applied methodologies and standardized baselines</b>	AMS-II.G. “Energy Efficiency Measures in Thermal Applications of Non-Renewable Biomass” Version 03 Standardized baseline: ASB0035: Baseline woody biomass consumption for household cookstoves in Kenya (version 01.0)	
<b>Mandatory sectoral scopes</b>	Scope: 3 / Technical Area: 3.1	
<b>Conditional sectoral scopes, if applicable</b>	NA	
<b>Name and UNFCCC reference number of</b>	TÜV NORD CERT GmbH	

the DOE	E-0022
Name, position and signature of the approver of the validation report	Final Approver Kunal Rami 

**SECTION A. Executive summary**

BioLite India Private Limited has commissioned the TÜV NORD JI/CDM Certification Program to carry out the validation of the Post Registration Changes (corrections) for

- CPA0041-CPA 041 – BioLite HomeStove in Kenya-7997-P1-0041-CP1/CPA-DD/
- CPA0042-CPA 042 – BioLite HomeStove in Kenya-7997-P1-0042-CP1/CPA-DD/
- CPA0043-CPA 043 – BioLite HomeStove in Kenya-7997-P1-0043-CP1/CPA-DD/
- CPA0044-CPA 044 – BioLite HomeStove in Kenya-7997-P1-0044-CP1/CPA-DD/
- CPA0045-CPA 045 – BioLite HomeStove in Kenya-7997-P1-0045-CP1/CPA-DD/
- CPA0046-CPA 046 – BioLite HomeStove in Kenya-7997-P1-0046-CP1/CPA-DD/
- CPA0047-CPA 047 – BioLite HomeStove in Kenya-7997-P1-0047-CP1/CPA-DD/
- CPA0048-CPA 048 – BioLite HomeStove in Kenya-7997-P1-0048-CP1/CPA-DD/
- CPA0049-CPA 049 – BioLite HomeStove in Kenya-7997-P1-0049-CP1/CPA-DD/
- CPA0050-CPA 050 – BioLite HomeStove in Kenya-7997-P1-0050-CP1/CPA-DD/
- CPA0051-CPA 051 – Charcoal Stoves in Kenya-7997-P1-0051-CP1/CPA-DD/
- CPA0052-CPA 052 – Charcoal Stoves in Kenya-7997-P1-0052-CP1/CPA-DD/
- CPA0053-CPA 053 – Charcoal Stoves in Kenya-7997-P1-0053-CP1/CPA-DD/
- CPA0054-CPA 054 – Charcoal Stoves in Kenya-7997-P1-0054-CP1/CPA-DD/
- CPA0055-CPA 055 – Charcoal Stoves in Kenya-7997-P1-0055-CP1/CPA-DD/
- CPA0056-CPA 056 – Charcoal Stoves in Kenya-7997-P1-0056-CP1/CPA-DD/
- CPA0057-CPA 057 – Charcoal Stoves in Kenya-7997-P1-0057-CP1/CPA-DD/
- CPA0058-CPA 058 – Charcoal Stoves in Kenya-7997-P1-0058-CP1/CPA-DD/
- CPA0059-CPA 059 – Charcoal Stoves in Kenya-7997-P1-0059-CP1/CPA-DD/
- CPA0060-CPA 060 – Charcoal Stoves in Kenya-7997-P1-0060-CP1/CPA-DD/
- CPA0061-CPA 061 – Charcoal Stoves in Kenya-7997-P1-0061-CP1/CPA-DD/
- CPA0062-CPA 062 – Charcoal Stoves in Kenya-7997-P1-0062-CP1/CPA-DD/
- CPA0063-CPA 063 – Charcoal Stoves in Kenya-7997-P1-0063-CP1/CPA-DD/
- CPA0064-CPA 064 – Charcoal Stoves in Kenya-7997-P1-0064-CP1/CPA-DD/
- CPA0065-CPA 065 – Charcoal Stoves in Kenya-7997-P1-0065-CP1/CPA-DD/
- CPA0066-CPA 066 – Charcoal Stoves in Kenya-7997-P1-0066-CP1/CPA-DD/
- CPA0067-CPA 067 – Charcoal Stoves in Kenya-7997-P1-0067-CP1/CPA-DD/
- CPA0068-CPA 068 – Charcoal Stoves in Kenya-7997-P1-0068-CP1/CPA-DD/
- CPA0069-CPA 069 – Charcoal Stoves in Kenya-7997-P1-0069-CP1/CPA-DD/
- CPA0070-CPA 070 – Charcoal Stoves in Kenya-7997-P1-0070-CP1/CPA-DD/
- CPA0071-CPA 071 – Charcoal Stoves in Kenya-7997-P1-0071-CP1/CPA-DD/
- CPA0072-CPA 072 – Charcoal Stoves in Kenya-7997-P1-0072-CP1/CPA-DD/
- CPA0073-CPA 073 – Charcoal Stoves in Kenya-7997-P1-0073-CP1/CPA-DD/
- CPA0074-CPA 074 – Charcoal Stoves in Kenya-7997-P1-0074-CP1/CPA-DD/
- CPA0075-CPA 075 – Charcoal Stoves in Kenya-7997-P1-0075-CP1/CPA-DD/
- CPA0076-CPA 076 – Charcoal Stoves in Kenya-7997-P1-0076-CP1/CPA-DD/
- CPA0077-CPA 077 – Charcoal Stoves in Kenya-7997-P1-0077-CP1/CPA-DD/
- CPA0078-CPA 078 – Charcoal Stoves in Kenya-7997-P1-0078-CP1/CPA-DD/
- CPA0079-CPA 079 – Charcoal Stoves in Kenya-7997-P1-0079-CP1/CPA-DD/ and
- CPA0080-CPA 080 – Charcoal Stoves in Kenya-7997-P1-0080-CP1/CPA-DD/

The independent Validation by the DOE is required to confirm the post registration changes of the CPAs. This report summarises the post registration changes of the project with respect to requirements of CDM VVS for PoAs (version 02.0)<sup>VVS/</sup>. This report contains the findings and resolutions from the validation and a validation opinion.

As this assessment was carried out as part of the 3rd verification of the component project activities, please refer to chapter 2 of the related verification report.

### Summary of CPAs

The programme of activities reduces GHG emissions due to substitution of traditional and inefficient cook stoves with efficient biomass cook stoves (wood, charcoal) in rural and/or urban household in India, Kenya and Uganda. The CPAs under consideration (CPA0041- to -CPA 080) reduce GHG by disseminating fuel efficient Charcoal and woodstoves (ICS) in Kenya. HomeStove and Jiko Bora Mama Yao are the ICS models (charcoal fuel based) distributed to households in Kenya, in the CPAs covered under this validation. In the absence of the CPAs three stone fire cookstoves or other rudimentary technology without improved combustion would have been used in the baseline.

### Scope of the Validation

The scope of the PRC validation is defined as an independent and objective review of the revised CPA-DDs which represent the corrections inline with FAR raised during the MP2 and info and reporting check incomplete notification under MP#3, regarding PoA 7997 “BioLite Improved Cook stoves Programme” (UNFCCC Ref. no. 7997), received on 03/09/2021 (for the 3<sup>rd</sup> Monitoring Period 26/01/2020 - 31/12/2020) <sup>/FVR/</sup>. The reference of parameter “f<sub>NRB</sub>” under the CPA’s (as stated above) was validated during MP2 and revised value was applied for issuance. Subsequently a FAR was raised to revise CPA-DD to reflect the validated values (during the MP2<sup>/FVR/</sup>).

### Validation process and conclusion

The validation has been performed as described in the CDM VVS for PoAs and constitutes the following steps:

- Review of the revised CPA-DDs<sup>/CPA-DD/</sup> and ER calculation
- Desk review of relevant documents e.g Final Verification Report for 2<sup>nd</sup> Monitoring period (01/01/2019 - 25/01/2020)<sup>/FVR/</sup>;
- Interview with representatives of the CME<sup>/IM/</sup>

### Conclusion

This report is the assessment opinion of the proposed corrections under the CPA-DDs (as already documented above). The validation team confirms that the proposed changes to the included CPA-DDs are in compliance with the latest version of PoA-DD<sup>/PoA-DD/</sup> and applied methodology and, thus, do not require any changes to the registered PoA. In addition, the proposed changes meet all relevant requirements of UNFCCC. In line with paragraph 256 and 258 of CDM validation and verification standard for programmes of activities<sup>/VVS/</sup>, and para 249, 250 and 251 of CDM project standard for programmes of activities the proposed changes to the CPAs require prior approval. Thus, these changes are being notified to the UNFCCC secretariat as per paragraph 172 of the CDM PCP for PoAs (version 02.0). Additionally, the Validation Team is also reviewed the application of the recent version of the CPA-DD template (version 09) following the requirements of para 289 (b) of CDM validation and verification standard for programmes of activities, and confirms that the most recent applicable CPA-DD form and corresponding guidelines were applied.

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Document review	On-site inspection <sup>1</sup>	Interviews	Validation findings
1.	Team Leader+ Technical Expert	IR	Mishra	Prakash Kumar	TÜV NORD CERT	x	x	x	x

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer/Approver	IR	Stöhr	Christina	TÜV NORD CERT
2.	Technical reviewer	IR	Winter	Stefan	TÜV NORD CERT
3.	Approver	IR	Rami	Kunal	TÜV NORD CERT

**SECTION C. Means of validation****C.1. Document review**

The *assessment of post registration changes* consisted of the following steps:

- Appointment of team members and technical reviewers
- A desk review of the registered and revised CPA-DD<sup>PDD/</sup> submitted by the client and additional supporting documents
- Revised ER sheet<sup>/ER/</sup>
- Previously issued MRs<sup>/MR/</sup>
- Previous Verification reports<sup>/FVR/</sup>
- On-Site assessment (remote)
- Background investigation and follow-up interviews with personnel of the project developer and its contractors,
- Resolution of corrective actions (CARs / CLs)
- Final reporting
- Technical review
- Final approval.

In this case all activities were carried out as part of the 3<sup>rd</sup> verification of this component project activities.

The registered as well as the revised CPA-DDs and supporting background documents related to the project design and the post registration changes were reviewed.

As far as required the assessment team used additional documentation by third parties like host party legislation, technical reports referring to the project design or to the basic conditions and technical data.

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<sup>1</sup> Remote Assessment

A list all documents reviewed or referenced during this validation is presented in Appendix 3.

## C.2. On-site inspection

A remote audit was conducted for 3<sup>rd</sup> verification along with this notification of changes using other means of validation due to Pandemic of COVID-19 and related lockdown in the host country of Kenya. Please refer 3<sup>rd</sup> verification report for details

Duration of on-site inspection:				
No.	Activity performed on-site	Site location	Date	Team member
1.				
...				

## C.3. Interviews

A remote audit was conducted for 3<sup>rd</sup> verification along with this notification of changes. Please refer 3<sup>rd</sup> verification report for details

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.						
...						

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

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Compliance with CPA-DD form	-	-	-
Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents	-	-	-
Corrections	-	-	-
Changes to the start date of the crediting period	-	-	-
Inclusion of monitoring plan	-	-	-
Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents	-	-	-
Changes to the project design	-	-	-
Changes specific to afforestation and reforestation activities	-	-	-
Others (please specify)	-	-	-
<b>Total</b>	-	-	-

## SECTION D. Validation findings

### D.1. Compliance with CPA-DD form

<b>Means of validation</b>	<p>CPA-DDs (As listed above) were submitted (both in tracked-change and clean versions) to the validation team by the CME.</p> <p>By means of the UNFCCC website it has been checked whether the latest applicable CPA-DD template CDM-CPA-DD-FORM (version 09) has been used.</p> <p>Further it has been checked whether the latest instructions for filling out the CPA-DD template have been followed. Every section has been checked against the respective guidance.</p> <p>The following sources of information have been used in this context:</p>
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	<ul style="list-style-type: none"> <li>• /CPA-DD/</li> <li>• /VVS/</li> <li>• /PS/</li> <li>• /unfccc/</li> </ul>
<b>Findings</b>	NA
<b>Conclusion</b>	The submitted CPA-DDs (As listed above) have been filled appropriately. While adopting the newer form (CDM-CPA-DD-FORM, Version 09) <sup>FORM</sup> , no material changes except as deemed required for the corrections were made.

## D.2. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents

<b>Means of validation</b>	NA
<b>Findings</b>	-
<b>Conclusion</b>	-

## D.3. Corrections

<b>Means of validation</b>	<table border="1"> <tr> <td><b>Start Date:</b> Please provide the start date of the change</td> <td>26/01/2020</td> <td><b>End Date:</b> Please provide the end date of the change, if applicable</td> <td>-</td> </tr> </table>				<b>Start Date:</b> Please provide the start date of the change	26/01/2020	<b>End Date:</b> Please provide the end date of the change, if applicable	-																													
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	<table border="1"> <tr> <td><b>Description:</b> Please give a detailed description of the change(s)</td> <td colspan="3"> <p>These corrections account to CPAs 7997-P1-0041-CP1, 7997-P1-0042-CP1, 7997-P1-0043-CP1, 7997-P1-0044-CP1, 7997-P1-0045-CP1, 7997-P1-0046-CP1, 7997-P1-0047-CP1, 7997-P1-0048-CP1, 7997-P1-0049-CP1, 7997-P1-0050-CP1, 7997-P1-0051-CP1, 7997-P1-0052-CP1, 7997-P1-0053-CP1, 7997-P1-0054-CP1, 7997-P1-0055-CP1, 7997-P1-0056-CP1, 7997-P1-0057-CP1, 7997-P1-0058-CP1, 7997-P1-0059-CP1, 7997-P1-0060-CP1, 7997-P1-0061-CP1, 7997-P1-0062-CP1, 7997-P1-0063-CP1, 7997-P1-0064-CP1, 7997-P1-0065-CP1, 7997-P1-0066-CP1, 7997-P1-0067-CP1, 7997-P1-0068-CP1, 7997-P1-0069-CP1, 7997-P1-0070-CP1, 7997-P1-0071-CP1, 7997-P1-0072-CP1, 7997-P1-0073-CP1, 7997-P1-0074-CP1, 7997-P1-0075-CP1, 7997-P1-0076-CP1, 7997-P1-0077-CP1, 7997-P1-0078-CP1, 7997-P1-0079-CP1, 7997-P1-0080-CP1.</p> <p>Parameter fNRB is a default value originally sourced from the Non-Renewable Biomass Study for PoA 7997 in Kenya BioLite, June, 2019 (based on publicly available data). The parameter is now updated by applying TOOL30 to reflect that 76% of the Kenyan population use woodfuel instead of 100%. Additionally the source and value of non-domestic fuel consumption was corrected. (This is a result from a Request for review raised during the second monitoring period.)</p> </td> </tr> </table>				<b>Description:</b> Please give a detailed description of the change(s)	<p>These corrections account to CPAs 7997-P1-0041-CP1, 7997-P1-0042-CP1, 7997-P1-0043-CP1, 7997-P1-0044-CP1, 7997-P1-0045-CP1, 7997-P1-0046-CP1, 7997-P1-0047-CP1, 7997-P1-0048-CP1, 7997-P1-0049-CP1, 7997-P1-0050-CP1, 7997-P1-0051-CP1, 7997-P1-0052-CP1, 7997-P1-0053-CP1, 7997-P1-0054-CP1, 7997-P1-0055-CP1, 7997-P1-0056-CP1, 7997-P1-0057-CP1, 7997-P1-0058-CP1, 7997-P1-0059-CP1, 7997-P1-0060-CP1, 7997-P1-0061-CP1, 7997-P1-0062-CP1, 7997-P1-0063-CP1, 7997-P1-0064-CP1, 7997-P1-0065-CP1, 7997-P1-0066-CP1, 7997-P1-0067-CP1, 7997-P1-0068-CP1, 7997-P1-0069-CP1, 7997-P1-0070-CP1, 7997-P1-0071-CP1, 7997-P1-0072-CP1, 7997-P1-0073-CP1, 7997-P1-0074-CP1, 7997-P1-0075-CP1, 7997-P1-0076-CP1, 7997-P1-0077-CP1, 7997-P1-0078-CP1, 7997-P1-0079-CP1, 7997-P1-0080-CP1.</p> <p>Parameter fNRB is a default value originally sourced from the Non-Renewable Biomass Study for PoA 7997 in Kenya BioLite, June, 2019 (based on publicly available data). The parameter is now updated by applying TOOL30 to reflect that 76% of the Kenyan population use woodfuel instead of 100%. Additionally the source and value of non-domestic fuel consumption was corrected. (This is a result from a Request for review raised during the second monitoring period.)</p>																															
	<b>Description:</b> Please give a detailed description of the change(s)	<p>These corrections account to CPAs 7997-P1-0041-CP1, 7997-P1-0042-CP1, 7997-P1-0043-CP1, 7997-P1-0044-CP1, 7997-P1-0045-CP1, 7997-P1-0046-CP1, 7997-P1-0047-CP1, 7997-P1-0048-CP1, 7997-P1-0049-CP1, 7997-P1-0050-CP1, 7997-P1-0051-CP1, 7997-P1-0052-CP1, 7997-P1-0053-CP1, 7997-P1-0054-CP1, 7997-P1-0055-CP1, 7997-P1-0056-CP1, 7997-P1-0057-CP1, 7997-P1-0058-CP1, 7997-P1-0059-CP1, 7997-P1-0060-CP1, 7997-P1-0061-CP1, 7997-P1-0062-CP1, 7997-P1-0063-CP1, 7997-P1-0064-CP1, 7997-P1-0065-CP1, 7997-P1-0066-CP1, 7997-P1-0067-CP1, 7997-P1-0068-CP1, 7997-P1-0069-CP1, 7997-P1-0070-CP1, 7997-P1-0071-CP1, 7997-P1-0072-CP1, 7997-P1-0073-CP1, 7997-P1-0074-CP1, 7997-P1-0075-CP1, 7997-P1-0076-CP1, 7997-P1-0077-CP1, 7997-P1-0078-CP1, 7997-P1-0079-CP1, 7997-P1-0080-CP1.</p> <p>Parameter fNRB is a default value originally sourced from the Non-Renewable Biomass Study for PoA 7997 in Kenya BioLite, June, 2019 (based on publicly available data). The parameter is now updated by applying TOOL30 to reflect that 76% of the Kenyan population use woodfuel instead of 100%. Additionally the source and value of non-domestic fuel consumption was corrected. (This is a result from a Request for review raised during the second monitoring period.)</p>																																			
	<b>Assessment of post registration change – Corrections</b>																																				
<table border="1"> <tr> <td rowspan="10"><b>Accuracy:</b> Please give a detailed assessment whether the correction is likely to lead to a reduction in the accuracy of the ER calculation.</td> <td colspan="3">The applied values fNRB are:</td> </tr> <tr> <td>CPA</td> <td>fNRB</td> <td>fNRB (former value from NRB Study 2019)</td> </tr> <tr> <td>CPA0041</td> <td>0.9217</td> <td>0.9272</td> </tr> <tr> <td>CPA0042</td> <td>0.9217</td> <td>0.9272</td> </tr> <tr> <td>CPA0043</td> <td>0.9217</td> <td>0.9272</td> </tr> <tr> <td>CPA0044</td> <td>0.9217</td> <td>0.9272</td> </tr> <tr> <td>CPA0045</td> <td>0.9217</td> <td>0.9272</td> </tr> <tr> <td>CPA0046</td> <td>0.9217</td> <td>0.9272</td> </tr> <tr> <td>CPA0047</td> <td>0.9217</td> <td>0.9272</td> </tr> <tr> <td>CPA0048</td> <td>0.9217</td> <td>0.9272</td> </tr> <tr> <td>CPA0049</td> <td>0.9217</td> <td>0.9272</td> </tr> </table>				<b>Accuracy:</b> Please give a detailed assessment whether the correction is likely to lead to a reduction in the accuracy of the ER calculation.	The applied values fNRB are:			CPA	fNRB	fNRB (former value from NRB Study 2019)	CPA0041	0.9217	0.9272	CPA0042	0.9217	0.9272	CPA0043	0.9217	0.9272	CPA0044	0.9217	0.9272	CPA0045	0.9217	0.9272	CPA0046	0.9217	0.9272	CPA0047	0.9217	0.9272	CPA0048	0.9217	0.9272	CPA0049	0.9217	0.9272
<b>Accuracy:</b> Please give a detailed assessment whether the correction is likely to lead to a reduction in the accuracy of the ER calculation.	The applied values fNRB are:																																				
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	CPA0043	0.9217	0.9272																																		
	CPA0044	0.9217	0.9272																																		
	CPA0045	0.9217	0.9272																																		
	CPA0046	0.9217	0.9272																																		
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	CPA0048	0.9217	0.9272																																		
CPA0049	0.9217	0.9272																																			

CPA0050	0.9217	0.9272
CPA0051	0.9217	0.9272
CPA0052	0.9217	0.9272
CPA0053	0.9217	0.9272
CPA0054	0.9217	0.9272
CPA0055	0.9217	0.9272
CPA0056	0.9217	0.9272
CPA0057	0.9217	0.9272
CPA0058	0.9217	0.9272
CPA0059	0.9217	0.9272
CPA0060	0.9217	0.9272
CPA0061	0.9217	0.9272
CPA0062	0.9217	0.9272
CPA0063	0.9217	0.9272
CPA0064	0.9217	0.9272
CPA0065	0.9217	0.9272
CPA0066	0.9217	0.9272
CPA0067	0.9217	0.9272
CPA0068	0.9217	0.9272
CPA0069	0.9217	0.9272
CPA0070	0.9217	0.9272
CPA0071	0.9217	0.9272
CPA0072	0.9217	0.9272
CPA0073	0.9217	0.9272
CPA0074	0.9217	0.9272
CPA0075	0.9217	0.9272
CPA0076	0.9217	0.9272
CPA0077	0.9217	0.9272
CPA0078	0.9217	0.9272
CPA0079	0.9217	0.9272
CPA0080	0.9217	0.9272

The calculation follows the TOOL30, "Calculation of the fraction of non-renewable biomass"

$$f_{NRB} = NRB / (NRB + RB)$$

$$NRB = H - RB$$

Where

fNRB	Fraction of non-renewable biomass in the applicable area
NRB	quantity of non-renewable biomass consumed in the applicable area
H	total consumption of woody biomass in the applicable area
RB	quantity of renewable biomass that can be sustainably harvested in the applicable area

CME updated the ER worksheet, tab: "fNRB Calculation", to present the calculation in coherence with TOOL30 and ASB0035 applying the stepwise approach in a transparent manner. The VT assessed to calculation to be in line with the applied tool. The validation team is the same as the verification team for the 1<sup>st</sup> and 2<sup>nd</sup> verification. During the 2<sup>nd</sup> Verification it was clearly demonstrated and assessed how values for  $f_{NRB,y}$  were appropriately determined.

TOOL30 "Calculation of the fraction of non-renewable biomass" in its most recent version has been applied. All input values were verified to be appropriate <sup>/VER/</sup>

It is noteworthy that the determined value of 0.9217 compared to the originally applied value of 0.9272 is more conservative.

	<p>In sum the calculation of <math>f_{NRB}</math> is transparent and leads to the most conservative value, for each CPA included in this PRC. The applied values do not negatively affect the ER calculations. There is no over estimation of ERs.</p> <p>The CPA-DDs and the ER spreadsheets of CPA0041 - CPA0080 have been updated and do transparently show the evaluations of <math>f_{NRB}</math>. The VT checked the CPA-DDs and the ER spreadsheets of CPA0041 - CPA0080 and confirms that the applied values are reasonable, correct and conservative.</p> <p>It is observed that CME now applies 76% of total population of Kenya for the determination of <math>f_{NRB}</math> instead of assuming that 100% use woody biomass. The same can be found in the submitted excel worksheet calculations. The validation team could validate the referenced sources (Stockholm Environment Institute and World Bank) used for percent of population using woodfuel and the total population of Kenya in year 2018 to be correct. The values are consistently used in the ER-files and revised CPA-DDs.</p> <p>TOOL 30 and ASB0035 have been correctly applied. This approach is conservative as other sources yield the value higher, for example World Bank indicates 88%<sup>2</sup> of population (72% wood and 16% charcoal) use wood-fuel in Kenya. The World Bank Group Report "Clean and Improved Cooking in Sub-Saharan Africa" - November 2014, page 136 under Appendix- 5 SSA FUEL MIX, has been verified.</p> <p>The referenced publications by the Stockholm Environment Institute and World Bank have been checked, they are reliable and independent. The applied value of 76% of the Kenyan population using woodfuel is conservative and reasonable.</p> <p>The updated ER calculations are provided and reflect the described changes, presented in the tab <math>f_{NRB}</math> calculation, resulting in a Total population using woodfuel of 39,058,688 people</p> <p>Further the appropriateness of the total baseline firewood and charcoal consumption was compared with calculating the values for HWregion using UN data, presented in ER spreadsheets (refer tab <math>f_{NRB}</math> H(UN)). Using these data, it was found that the value applied by CME is <math>H = 51,488,355</math> t/year compared to the original value of <math>H = 63,542,169</math> t/year. Moreover, revised calculations with input values are also found to be appropriately referenced and fully traceable.</p> <p>Both calculations using UN data and current approach (as conservative) are assessed to be appropriately presented in the revised ER spreadsheet and thus deemed acceptable.</p> <p>The updated ER calculations submitted by Biolite reflect the described changes in the "<math>f_{NRB}</math> calculation tab". Instead of using FAO data from table 25 CME now adopts "UN Data" for non-domestic consumption for host country of Kenya which is more accurate to separate non-domestic woody biomass consumption. Non-domestic consumption of woody biomass in Kenya has been revised to 3,62,67,000 m<sup>3</sup>, by applying UN data, which is checked by the validation team. It is also confirmed that CME has only utilized one value of non-domestic biomass consumption i.e. "fuelwood Transformation in charcoal plant". However, the category "Fuelwood - Consumption not elsewhere specified (other)" has been found omitted in the UN data due to which non-domestic</p>
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<sup>2</sup> <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/164241468178757464/clean-and-improved-cooking-in-sub-saharan-africa-a-landscape-report>

		<p>consumption of woody biomass yields low result and thus, deemed conservative, and yields lower fNRB. The updated ER calculation is cross checked and found to reflect the correct value and sourced appropriately in the carbon calculator excel file for all the CPA's. Thus, applying the lower value of non-domestic consumption compared to the applying both categories (Fuel wood-Transformation in charcoal plant + Fuelwood - Consumption not elsewhere specified) results in a lower value of fNRB. This approach is conservative and reasonable.</p> <p>Based on the corrections/revision made by CME, fNRB reduces to 0.9217, from the original value of 0.9272. Further, PRC validation team validated the calculation and all data used to determine fNRB with alternative data i.e. UN data for calculation of H (which take into account the two issues raised during the MP#2 review and found this approach as comparable and conservative. The alternative method has been presented in the "fNRB H(UN)" tab, which exclusively utilizes UN data adopting different method of calculating fNRB (without using ASB0035) and sufficiently pull into the "fNRB calculation" tab to compare the results and impacts. The results of using UN data on fNRB calculation have been calculated and presented in blue cells next to the applied values in the "fNRB calculation" tab by CME</p> <p>The CPA-DDs and the ER spreadsheets of CPAs 7997-P1-0041-CP1, 7997-P1-0042-CP1, 7997-P1-0043-CP1, 7997-P1-0044-CP1, 7997-P1-0045-CP1, 7997-P1-0046-CP1, 7997-P1-0047-CP1, 7997-P1-0048-CP1, 7997-P1-0049-CP1, 7997-P1-0050-CP1, 7997-P1-0051-CP1, 7997-P1-0052-CP1, 7997-P1-0053-CP1, 7997-P1-0054-CP1, 7997-P1-0055-CP1, 7997-P1-0056-CP1, 7997-P1-0057-CP1, 7997-P1-0058-CP1, 7997-P1-0059-CP1, 7997-P1-0060-CP1, 7997-P1-0061-CP1, 7997-P1-0062-CP1, 7997-P1-0063-CP1, 7997-P1-0064-CP1, 7997-P1-0065-CP1, 7997-P1-0066-CP1, 7997-P1-0067-CP1, 7997-P1-0068-CP1, 7997-P1-0069-CP1, 7997-P1-0070-CP1, 7997-P1-0071-CP1, 7997-P1-0072-CP1, 7997-P1-0073-CP1, 7997-P1-0074-CP1, 7997-P1-0075-CP1, 7997-P1-0076-CP1, 7997-P1-0077-CP1, 7997-P1-0078-CP1, 7997-P1-0079-CP1, 7997-P1-0080-CP1 have been updated and do transparently show the evaluation/determination of fNRB in accordance with FAR01 raised during the 2<sup>nd</sup> monitoring period.</p>
	<p><b>Conservative-ness:</b> Please give a detailed assessment whether conservative assumptions or discount factors have been applied to ensure that ER will not be overestimated.</p>	<p>The CME has derived this parameter in a conservative and traceable manner. The CPA-DDs and ER worksheets have been checked against the applied methodology and the applied tool during PRC Validation.</p> <p>The VT checked that the CME applied reasonable data in a transparent way. The VT assessed and confirms that the CME has selected the appropriate fNRB value for each CPA. (please see also the assessment of accuracy above) A lower fNRB value ensures lower emission reductions. Conservative assumptions have been applied to ensure that there is no over estimation of ER's.</p> <p>The CPA-DDs and the ER spreadsheets of CPAs 7997-P1-0041-CP1, 7997-P1-0042-CP1, 7997-P1-0043-CP1, 7997-P1-0044-CP1, 7997-P1-0045-CP1, 7997-P1-0046-CP1, 7997-P1-0047-CP1, 7997-P1-0048-CP1, 7997-P1-0049-CP1, 7997-P1-0050-CP1, 7997-P1-0051-CP1, 7997-P1-0052-CP1, 7997-P1-0053-CP1, 7997-P1-0054-CP1, 7997-P1-0055-CP1, 7997-P1-0056-CP1, 7997-P1-0057-CP1, 7997-P1-0058-CP1, 7997-P1-</p>

		0059-CP1, 7997-P1-0060-CP1, 7997-P1-0061-CP1, 7997-P1-0062-CP1, 7997-P1-0063-CP1, 7997-P1-0064-CP1, 7997-P1-0065-CP1, 7997-P1-0066-CP1, 7997-P1-0067-CP1, 7997-P1-0068-CP1, 7997-P1-0069-CP1, 7997-P1-0070-CP1, 7997-P1-0071-CP1, 7997-P1-0072-CP1, 7997-P1-0073-CP1, 7997-P1-0074-CP1, 7997-P1-0075-CP1, 7997-P1-0076-CP1, 7997-P1-0077-CP1, 7997-P1-0078-CP1, 7997-P1-0079-CP1, 7997-P1-0080-CP1 have been updated and do transparently show the evaluation of $f_{NRB}$ . The VT checked the CPA-DDs and the ER spreadsheets and confirms that the applied value is conservative.							
	<b>Appendix 2 PoA-PS:</b> Check if the changes fall under one of the scenarios of appendix 2 of the PoA-PS.	In accordance with PoA-PS §227, post-registration changes to an included CPA do not require approval by the Board. However the changes shall be notified to the secretariat in line with § 250.							
<b>Findings</b>	-								
<b>Conclusion</b>	The corrections are undertaken appropriately in line with applied methodology, the standardized baseline and the applied tool.  Based on the above stated the corrections to the registered CPA-DDs are in accordance with applicable validation requirements (applied methodology requirement and other applicable requirement as assessed above) related to the corrections in the VVS.								
	<b>Revised CPA-DD</b> <table border="1"> <tr> <td rowspan="3"> <b>Rev. of CPA-DD:</b>            Check whether the changes have been fully addressed in a revised CPA-DD.         </td><td><input checked="" type="checkbox"/></td><td>The changes have correctly been reflected in the revised CPA-DD.</td></tr> <tr> <td><input type="checkbox"/></td><td>A revision of the CPA-DD is not required (in case of temp. changes).</td></tr> <tr> <td><input checked="" type="checkbox"/></td><td>The revised CPA-DD has been forwarded in (i) track-change and (ii) clean version.</td></tr> </table>		<b>Rev. of CPA-DD:</b> Check whether the changes have been fully addressed in a revised CPA-DD.	<input checked="" type="checkbox"/>	The changes have correctly been reflected in the revised CPA-DD.	<input type="checkbox"/>	A revision of the CPA-DD is not required (in case of temp. changes).	<input checked="" type="checkbox"/>	The revised CPA-DD has been forwarded in (i) track-change and (ii) clean version.
<b>Rev. of CPA-DD:</b> Check whether the changes have been fully addressed in a revised CPA-DD.	<input checked="" type="checkbox"/>	The changes have correctly been reflected in the revised CPA-DD.							
	<input type="checkbox"/>	A revision of the CPA-DD is not required (in case of temp. changes).							
	<input checked="" type="checkbox"/>	The revised CPA-DD has been forwarded in (i) track-change and (ii) clean version.							
	<b>Prior Approval</b> <table border="1"> <tr> <td> <b>Prior approval:</b>            Assess whether the change requires prior approval of the board         </td><td><input type="checkbox"/></td><td>In accordance with PoA-PS §227 post-registration changes to an included CPA <b>do not</b> require approval by the Board, but such changes shall be notified to the secretariat as referred to in paragraph 250.</td></tr> </table>		<b>Prior approval:</b> Assess whether the change requires prior approval of the board	<input type="checkbox"/>	In accordance with PoA-PS §227 post-registration changes to an included CPA <b>do not</b> require approval by the Board, but such changes shall be notified to the secretariat as referred to in paragraph 250.				
<b>Prior approval:</b> Assess whether the change requires prior approval of the board	<input type="checkbox"/>	In accordance with PoA-PS §227 post-registration changes to an included CPA <b>do not</b> require approval by the Board, but such changes shall be notified to the secretariat as referred to in paragraph 250.							

#### D.4. Changes to the start date of the crediting period

Means of validation	NA
Findings	-
Conclusion	-

#### D.5. Inclusion of monitoring plan

Means of validation	NA
Findings	-
Conclusion	-

#### D.6. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents

Means of validation	NA
Findings	-
Conclusion	-

**D.7. Changes to the project design**

<b>Means of validation</b>	NA
<b>Findings</b>	-
<b>Conclusion</b>	-

**D.8. Changes specific to afforestation and reforestation activities**

<b>Means of validation</b>	NA
<b>Findings</b>	-
<b>Conclusion</b>	-

**SECTION E. Internal quality control**

Before the submission of the final valid report a technical review of the whole validation procedure was carried out. The technical reviewers are competent GHG auditors where at least one is being appointed for the scope this project falls under. The technical reviewers are not considered to be part of the validation team and thus not involved in the decision-making process up to the technical review.

As a result of the technical review process the validation opinion and the topic specific assessments as prepared by the validation team leader may have been confirmed or revised. Furthermore, reporting improvements might have been achieved.

After the successful technical review an overall (esp. procedural) assessment of the complete validation has been carried out by a senior assessor located in the accredited premises of TÜV NORD.

After this step the submission for requesting post registration changes is conducted.

**SECTION F. Validation opinion**

The below listed changes have occurred after the inclusion of the CPAs

<i>Type of Change occurred</i>	<i>Total No. of changes</i>	<i>No. of changes which require prior approval</i>
<input type="checkbox"/> Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents	-	-
<input checked="" type="checkbox"/> Corrections	1	-
<input type="checkbox"/> Changes to the start date of the crediting period	-	-
<input type="checkbox"/> Inclusion of monitoring plan	-	-
<input type="checkbox"/> Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents	-	-
<input type="checkbox"/> Changes to the project design	-	-
<input type="checkbox"/> Changes specific to afforestation and reforestation activities	-	-

The above listed post registration changes do not require prior approval of the Board.

New Delhi, 28/09/2021


Prakash Kumar Mishra  
Team Leader  
TÜV NORD JI/CDM Certification Program

## Appendix 1. Abbreviations

Abbreviations	Full texts
CAR	Corrective Action Request
CAF	Customer Agreement Forms
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CIRCODU	Centre for Integrated Research and Community Development
CL	Clarification Request
CME	Coordinating/Managing Entity
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> eq	Carbon dioxide equivalent
CPA-DD	Component Project Activities Design Document
CRF	Customer Registration Form
DOE	Designated Operational Entity
DVR	Draft Validation Report
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse gas(es)
ICS	Improved Cookstove
IM	Interview Memo
MP	Monitoring Plan
MR	Monitoring Report
MS	Mild Steel
OSVEJ	On-site Visit Exemption Justification
PA	Project Activity
POA-DD	Project of Activities Design Document
PP	Project Participant
QA/QC	Quality Assurance / Quality Control
RC	Reliability check work sheets for WBT and field monitoring test
SD	Standard deviation
UNFCCC	United Nations Framework Convention on Climate Change
VT	Validation Team
VVS	Validation and Verification Standard
WBT(P)	Water Boiling Test(Protocol)
XLS	Emission Reduction Calculation Spread Sheet



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



**Statement of Competence**  
Appointment and authorization according to the procedures  
of the TUV NORD JRCM Certification Program

**Mr. Prakash Kumar Mishra**


SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification)	2023-12-18
VCS / ISO 14064-2	Senior Assessor	2023-12-18

Authorization status for technical areas within technical scopes:

CODE	TECHNICAL AREA
1.2	Renewables
3.1	Energy demand

140 - Rev. 7, Date: 2020-12-17

02-140-PRCV-2020-12-17



**Statement of Competence**  
Appointment and authorization according to the procedures  
of the TUV NORD JRCM Certification Program

**Ms. Christina Stöhr**


SCHEME	STATUS	VALID UNTIL
CDM	Lead Assessor (Validation, Verification) Technical Reviewer	2023-05-05
VCS / ISO 14064-2	Lead Assessor/ Technical Reviewer	2023-05-05

Authorization status for technical areas within technical scopes:

CODE	TECHNICAL AREA
1.1	Thermal energy generation
1.2	Renewables
13.1	Solid waste and wastewater

200 - Rev. 7 Date: 2020-10-07

02\_200-PRCV-2020-10-07



**Statement of Competence**  
Appointment and authorization according to the procedures  
of the TUV NORD JRCM Certification Program

**Mr. Stefan Winter**

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2023-07-27
VCS / ISO 14064-2	Senior Assessor (Validation, Verification) Technical Reviewer	2023-07-27

Authorization status for technical areas within technical scopes:

CODE	TECHNICAL AREA
1.1	Thermal energy generation
1.2	Renewables
2.1	Energy distribution
3.1	Energy demand
4.1	Cement and lime production
4.2	Paper
5.2	Caprolactam, nitro and adipic acid
6.1	Aluminium and magnesium production
9.2	Iron, steel and Ferro-alloy production
10.1	Fugitive emissions from oil and gas
13.1	Solid waste and wastewater
13.2	Mining

193 - Rev. 7, Date: 2020-07-22

02\_193-PRCV-2020-07-22

### Appendix 3. Documents reviewed or referenced

No.	Author	Reference	Title	References to the document	Provider
1.	UNFCCC	/AMSII-G/	<ul style="list-style-type: none"> <li>AMS-II.G: Energy efficiency measures in thermal applications of non-renewable biomass", version 03.0</li> </ul>		Other
2.	UNFCCC	/ASB0035/	<ul style="list-style-type: none"> <li>ASB0035: Baseline woody biomass consumption for household cookstoves in Kenya (version 01.0)</li> </ul>		Other
3.	UNFCCC	/TOOL/	<ul style="list-style-type: none"> <li>Calculation of the fraction of non-renewable biomass, version 03</li> </ul>		Other
4.	PP	/CPA-DD/	<ul style="list-style-type: none"> <li>CPA-DD-CPA 041 – BioLite HomeStove in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 042 – BioLite HomeStove in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 043 – BioLite HomeStove in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 044 – BioLite HomeStove in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 045 – BioLite HomeStove in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 046 – BioLite HomeStove in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 047 – BioLite HomeStove in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 048 – BioLite HomeStove in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 049 – BioLite HomeStove in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 050 – BioLite HomeStove in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 051 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 052 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 053 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 054 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>CPA-DD-CPA 055 – Charcoal</li> </ul>		Other

No.	Author	Reference	Title	References to the document	Provider
			<p>Stoves in Kenya version 04, dated 15/09/2021</p> <ul style="list-style-type: none"> <li>• CPA-DD-CPA 056 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 057 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 058 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 059 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 060 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 061 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 062 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 063 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 064 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 065 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 066 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 067 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 068 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 069 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 070 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 071 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 072 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 073 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 074 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 075 – Charcoal</li> </ul>		

No.	Author	Reference	Title	References to the document	Provider
			<p>Stoves in Kenya version 04, dated 15/09/2021</p> <ul style="list-style-type: none"> <li>• CPA-DD-CPA 076 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 077 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 078 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 079 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> <li>• CPA-DD-CPA 080 – Charcoal Stoves in Kenya version 04, dated 15/09/2021</li> </ul>		
5.	DOE	<b>/CPM/</b>	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)		Other
6.	IPCC	<b>/IPCC/</b>	<ul style="list-style-type: none"> <li>• 1996 IPCC Guidelines for National Greenhouse Gas Inventories: workbook</li> <li>• 2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book</li> </ul>	<a href="http://www.ipcc-nggip.iges.or.jp">www.ipcc-nggip.iges.or.jp</a>	Other
7.	UNFCCC	<b>/KP/</b>	Kyoto Protocol (1997)	<a href="http://unfccc.int/kyoto_protocol/items/2830.php">http://unfccc.int/kyoto_protocol/items/2830.php</a>	Other
8.	UNFCCC	<b>/MA/</b>	Decision 3/CMP. 1 (Marrakesh – Accords)	<a href="http://cdm.unfccc.int/Reference/COPMOP/index.html">http://cdm.unfccc.int/Reference/COPMOP/index.html</a>	Other
9.	UNFCCC	<b>/FORM/</b>	CPA-DD filling Form and guidelines Version 09	<a href="https://cdm.unfccc.int/Reference/PDDs_Forms/index.html">https://cdm.unfccc.int/Reference/PDDs_Forms/index.html</a>	Other
10.	UNFCCC	<b>/PoA-DD/</b>	<p>Project Design Document for CDM PoA project: “<i>BioLite Improved Cook stoves Programme</i>” version 5, dated 26/12/2012</p> <p>Project Design Document for CDM PoA project: “<i>BioLite Improved Cook stoves Programme</i>” version 20.0, dated 16/11/2017</p>	<a href="https://cdm.unfccc.int/ProgrammeOfActivities/poa_db/YNXCPIJ5ZO7DTRGMV0F2AKEU486LQS">https://cdm.unfccc.int/ProgrammeOfActivities/poa_db/YNXCPIJ5ZO7DTRGMV0F2AKEU486LQS</a>	Other
11.	PP	<b>/PRC/</b>	PRC-7997-002, Improved Cookstoves Programme-India, , 05/01/2018	-	Other
12.	UNFCCC	<b>/PS/</b>	CDM Project Standard for Programme of activities (Version 2.0)	<a href="http://cdm.unfccc.int/Reference/Standards/index.html">http://cdm.unfccc.int/Reference/Standards/index.html</a>	Other
13.	PP	<b>/VAL/</b>	<ul style="list-style-type: none"> <li>• Validation Report for CPA-DD titled CPA 041 – BioLite HomeStove in Kenya to CPA 050 – BioLite HomeStove in Kenya, version 02, dated 03/12/2019</li> <li>• Validation Report for CPA 051 – Charcoal Stoves in Kenya to CPA 080 – Charcoal Stoves in Kenya, version 02, dated 03/12/2019</li> </ul>		Other
14.	PP	<b>/VER/</b>	<ul style="list-style-type: none"> <li>• 1st Verification Report for CPA 00 – CPA 0041 to 0080, Version 2.0, dated 18/11/2020</li> </ul>	<a href="https://cdm.unfccc.int/UserManagement/FileStorage/84PG">https://cdm.unfccc.int/UserManagement/FileStorage/84PG</a>	

No.	Author	Reference	Title	References to the document	Provider
				<a href="#">YCT01NVO6BUI9FJ5SWMHZ3X7EL</a>	
15.	UNFCCC	<b>/VVS/</b>	CDM validation and verification standard for programmes of activities (Version 2.0)	<a href="http://cdm.unfccc.int/Reference/Standards/index.html">http://cdm.unfccc.int/Reference/Standards/index.html</a>	Other
16.	UNFCCC	<b>/GOT/</b>	<ul style="list-style-type: none"> <li>Glossary “CDM terms” (version 10.0)</li> </ul>	<a href="https://cdm.unfccc.int/filestorage/e/x/t/etxtfile-20150226124447549-glos_CDM.pdf/glos_CDM.pdf?t=UmZ8bnFjODI3fDCW9A3vJwR03kQQh4sbLiYu">https://cdm.unfccc.int/filestorage/e/x/t/etxtfile-20150226124447549-glos_CDM.pdf/glos_CDM.pdf?t=UmZ8bnFjODI3fDCW9A3vJwR03kQQh4sbLiYu</a>	Other
17.	PP	<b>/XLS/</b>	<ul style="list-style-type: none"> <li>Ex-ante worksheets for all CPS's submitted along with the revised CPA-DD's as stated under <b>/CPA-DD/</b></li> </ul>	-	PP
18.	UNFCCC	<b>/unfccc/</b>	UNFCCC	<a href="http://cdm.unfccc.int">http://cdm.unfccc.int</a>	Other
19.	IPCC	<b>/ipcc/</b>	IPCC publications	<a href="http://www.ipcc-nggip.iges.or.jp">www.ipcc-nggip.iges.or.jp</a>	Other
20.	DoE	<b>/IM01/ /IM02/ IM/03/</b>	<ul style="list-style-type: none"> <li>PP's/CME's representative</li> <li>Consultant management representative</li> <li>Stakeholders</li> </ul> <p>Interviewed at time of Periodic Verification</p>	-	Other

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

Table 1. CLs from this validation

CL ID	-	Section no.	-	Date: DD/MM/YYYY
Description of CL				
N/A				
CME's response				Date: DD/MM/YYYY
Documentation provided by CME				
DOE assessment				
				Date: DD/MM/YYYY

Table 2. CARs from this validation

CAR ID	-	Section no.	-	Date: DD/MM/YYYY
Description of CAR				
N/A				
CME's response				Date: DD/MM/YYYY
Documentation provided by CME				
DOE assessment				
				Date: DD/MM/YYYY

Table 3. FARs from this validation

FAR ID	xx	Section no.		Date: DD/MM/YYYY
Description of FAR				
N/A				
CME's response				Date: DD/MM/YYYY
Documentation provided by CME				
DOE assessment				
				Date: DD/MM/YYYY

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**Document information**

<i>Version</i>	<i>Date</i>	<i>Description</i>
02.0	31 May 2019	Revision to: <ul style="list-style-type: none"><li>• Ensure consistency with version 02.0 of the “CDM validation and verification standard for programmes of activities” (CDM-EB93-A08-STAN);</li><li>• Make editorial improvements.</li></ul>
01.0	29 December 2017	Initial publication.

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Decision Class: Regulatory  
Document Type: Form  
Business Function: Registration  
Keywords: post-registration change, component project activity, validation report

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