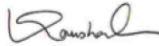




**Validation report form for renewal of CDM programme of activities period
(Version 02.0)**

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

BASIC INFORMATION

Title and UNFCCC reference number of the programme of activities (PoA)	PoA Title: Clean Cook Stoves in Sub-Saharan Africa by ClimateCare Limited UNFCCC Reference Number: 8438
Number and duration of the next period	Number: Second renewal period Duration: 30/11/2019 – 29/11/2026 (first and last days included)
Version number of the validation report	02
Completion date of the validation report	18/11/2019
Version number of PoA-DD to which this report applies	02
Coordinating/managing entity (CME)	ClimateCare Limited
Host Parties	Kenya, Ghana
Applied methodologies and standardized baselines	AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass - Version 10.0
Mandatory sectoral scopes	Sectoral Scope 3: Energy Demand
Conditional sectoral scopes, if applicable	N/A
Estimated amount of annual average GHG emission reductions or GHG removals by sinks in the next programme of activities period	Not Applicable ¹
Name and UNFCCC reference number of the DOE	Name: KBS Certification Services Pvt. Ltd. UNFCCC reference number: E-0051
Name, position and signature of the approver of the validation report	 Kaushal Goyal Managing Director KBS Certification Services Pvt. Ltd.

¹ This is not applicable since the estimated annual average of GHG emission reductions would be defined at specific CPA level.

SECTION A. Executive summary

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KBS Certification Services Pvt. Ltd. has been contracted by 'ClimateCare Limited' (CME) to perform a validation of the CDM registered programme of activity 'Clean Cook Stoves in Sub-Saharan Africa by ClimateCare Limited' (UNFCCC Ref #8438) for renewal of the PoA period.

Scope of the validation:

The scope of the validation is defined as an independent and objective review of the revised PoA-DD, the baseline, monitoring plan and other relevant documents. The information in these documents is reviewed against the CDM Validation and Verification Standard for PoA (version 02) /9/, Project Cycle Procedure for PoA (version 02) /11/ and Project Standard for PoA (version 02) /10/, Kyoto Protocol requirements and UNFCCC rules.

The report is based on the assessment of the PoA-DD, application of standard auditing techniques including but not limited to desk review, follow up actions (e.g., electronic (telephone or e-mail) interviews) and also the review of the applicable approved methodological and relevant tools, guidance and CDM decisions.

Purpose, general description and location:

The purpose of the PoA is to introduce wide-scale adoption of efficient charcoal cookstoves to kitchens in Ghana and Kenya through the design or adoption of a design, manufacture, distribution, sale and after-sale support of efficient charcoal stoves. This will constitute a market transformation, reducing both global greenhouse gas emissions and pressure on forests and woody biomass resources.

The CPA within the PoA will develop/adopt cookstove designs, which address the product-specific factors such as safety, indoor smoke, usage cost and stove prices, which have been largely disregarded but are significant, in determining the uptake of improved cook stoves at the household level together with a, significant public education component. Raising awareness through information provided with products, as well as targeted media campaigns will further promote the benefits of efficient charcoal stoves (ECS) in Sub-Saharan African countries. The messaging will promote behavioural change, encourage further energy savings while reducing deforestation and indoor air pollution.

The predominant cooking fuel for families in urban areas of Sub-Saharan Africa countries is charcoal made from predominantly non-renewable wood using inefficient production and usage methods. The green-house gas emissions associated with the production and combustion of the charcoal is significant, in areas where the wood source is non-renewing, which is commonly the case in Sub-Saharan African countries. This is not only the existing scenario but also the energy baseline scenario.

The purpose of this Programme of Activities (PoA) is to reduce the greenhouse gas emissions from cooking, by promoting the design, manufacture, distribution and use of efficient charcoal stoves (ECS) which provide the same service with significantly less fuel than traditional charcoal stoves in common use. The adoption and usage of the efficient cook-stoves by domestic users therefore constitute the project scenario.

The Programme promotes the design or adoption of a design, manufacture, promotion and awareness creation, distribution and use of various types of efficient charcoal stoves developed to match market interest in Sub-Saharan countries. The principal designs include features that improve charcoal stoves efficiency and market acceptance, such as a port skirt with a conical grate or a heat retention liner.

During the life of the SSC-PoA, the number of CPAs implemented will increase and be monitored according to the monitoring plan as described in the submitted PoA-DD. Different CPAs may be installed in the same areas but can always be distinguished through a sales record keeping system with a unique serial number for every ECS sold, which will ensure that each ECS can be traced to one specific CPA to avoid double counting.

The PoA and each CPA will be implemented and managed by the Coordinating/Managing Entity (CME), in collaboration with Programme Activity Implementers (PAIs).

Accordingly, the PAIs will use the CER proceeds to reduce costs of ECS to users, provide maintenance and to recoup associated costs for the dissemination of stoves, such as training of supply chain personnel, marketing activities and building new manufacturing units.

Measures for continual improvements of the PoA management have been established and are implemented with each CPA.

The host parties under the PoA are Ghana and Kenya.

Validation process:

KBS follows a rule based validation approach, wherein, as a first step, the contract review is undertaken as per latest version of CDM Accreditation Standard. Subsequently, after the contract is signed, a desk review of the programme of activity documentation is undertaken. The validation protocol is filled by the validation team that is based on standard auditing practices and version 02.0 of CDM VVS for PoA, to capture the assessment of applicable CDM requirements viz., version 02.0 of CDM Project Standard for PoA, applied methodology/ies, applied standardized baseline and/or tools and recent decisions. The validation protocol provides transparent means to record the observations and compliances by the validation team members and the nonconformities, if any. The validation protocol is an internal document, and is available on request.

Following are the major milestones for the Validation under consideration.

Validation contract	08/07/2019
Draft Validation Report	31/10/2019
Final Validation Report	18/11/2019

Conclusion:

The review of the PoA-DD and the subsequent follow-up interviews have provided KBS with sufficient evidence to determine the programme of activity fulfilment of all the stated criteria. In our opinion, the CDM programme of activity meets all applicable UNFCCC requirements for the CDM.

☒ The CDM programme of activity will be recommended to the CDM Executive Board with a request for renewal of the PoA period.

☐ The CDM programme of activity is not recommended for renewal of the PoA period

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	Interview(s)	Validation findings
1.	Team Leader / Technical Expert (TA 3.1)	IR	Badaya	Rohit	Central Office	✓		✓	✓
2.	Local Expert (Kenya)	EI	Okore	Martin Luther King	Central Office	✓			
3.	Local Expert (Ghana)	EI	Amponsem	Bright	Central Office	✓			

B.2. Technical reviewer and approver of the validation report for renewal of PoA period

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 (TA 3.1)	IR	Kandari	Sanjay	Central Office
2.	Manager -Technical & Certification	IR	Kandari	Sanjay	Central Office
3.	Authorizer	IR	Goyal	Kaushal	Central Office

SECTION C. Means of validation**C.1. Desk/document review**

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The validation is performed primarily as a document review of the available PoA-DD version 01 dated 13/08/2019 /1/ and the intermediate versions up to final version 02.0 dated 05/11/2019 /2/. The report is based on the assessment of the PoA-DD, application of standard auditing techniques including but not limited to desk review, follow up actions (e.g., electronic (telephone or e-mail) interviews) and also the review of the applicable approved methodological and relevant tools, guidance and CDM decisions.

The cross checks between information provided in the PoA-DD and information from sources other than those used, if available, the validation team's sectoral or local expertise and, if necessary, independent background investigations.

All the documents used for arriving at the validation conclusion are listed in Appendix 03 and referenced accordingly in validation report.

C.2. On-site inspection

A complete desk review of the submitted PoA-DD (version 01, dated 13/08/2019) /1/ and supportive evidence have been checked by the Validation team.

In addition, audit team has conducted calls/interviews (telephonic) with CME on different topics as mentioned under section C.3 of this report.

Based on the calls/interviews, PoA-DD review, as well as the review of UNFCCC procedures and guidelines, KBS Validation team has decided not to conduct the site visit. As per para 184 of CDM validation and verification standard for programmes of activities version 02 /9/, Validation team has used the following alternative means for its assessment and to justify that they are sufficient for the purpose of validation.

- By review of PoA-DD;
- By taking follow up actions by conducted interview with CME, to gather information about knowledge of project design, current situation via telephonic call and e-mail communication. Cross-checked evaluation under the scope of all information and references provided in PoA-DD. Details of interviewees, topics covered and additional information presented in the below section “C.3 - Interviews”.

Validation team has also checked the site visit requirements mentioned in the VVS for PoA Version 02 /9/ and concluded that no-site visit is required. The justification for the site visit requirements of VVS PoA Version 02 /9/ have been mentioned below.

VVS PoA Version 02 Requirements	Validation team Justification
Para 29 (b) (b) Follow-up actions (e.g. on-site inspection and telephone or e-mail interviews), including: (i) Interviews with relevant stakeholders in the host country, such as personnel with knowledge of the PoA design and implementation; (ii) Cross checks between the information provided by interviewed personnel (i.e. by checking sources or other interviews) to ensure that no relevant information has been omitted;	Validation team has done the follow-up actions by: 1. telephonic call and e-mail conversations of CME. 2. Cross checks between information provided by interviewed personnel (i.e. by checking sources or other interviews) to ensure that no relevant information has been omitted.
Para 183 It is mandatory for the DOE to conduct an on-site inspection at validation for the proposed CPA if: (a) Its estimated annual average of GHG emission reductions or net anthropogenic GHG removals is more than 100,000 t CO ₂ eq; or (b) There is pre-project information that is relevant to the requirements for inclusion of the CPA and may not be traceable after the inclusion.	The validation team has not considered the site visit as mandatory due to the following reasons which are in line with the VVS PoA Version 02 /9/ requirements For the PoA to be renewed, this is not applicable as the estimated annual average of GHG emission reductions would be defined at specific CPA level. Also there is no pre-project information that is relevant to the requirements for renewal of the PoA and may not be traceable after the renewal. Hence for the proposed PoA, it is not mandatory to conduct the site visit.

Duration of on-site inspection: DD/MM/YYYY to DD/MM/YYYY				
No.	Activity performed on-site	Site location	Date	Team member
1.				
...				

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Obare	Joash	Project Manager, ClimateCare	11/09/2019 12/09/2019 09/10/2019 07/11/2019	1. Eligibility criteria for inclusion of CPAs in the PoA 2. Baseline 3. Estimated emission reductions 4. Monitoring plan 5. Methodology requirements 6. Issues in the PoA-DD 7. Roles and responsibilities 8. Monitoring requirements 9. Monitoring procedure 10. Data collection	Rohit Badaya (Team Leader / Technical Expert (TA 3.1)) (Telephonic and Email interviews)
...						

C.4. Sampling approach

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No Sampling approach was used by the validation team.

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

Area of validation findings	No. of CL	No. of CAR	No. of FAR
Programme of activities			
Compliance with PoA-DD form	-	03	-
Programme of activities period	-	-	-
Coordinating/managing entity and the project participants	02	-	-
Post-registration changes	01	-	-
Generic component project activities			
Application and selection of methodologies and standardized baselines	-	-	-
Validity of original baseline or its update	-	02	-
Estimated emission reductions or net anthropogenic removals	-	-	-
Validity of monitoring plan	-	01	-
Eligibility criteria for inclusion of CPAs	03	-	-
Others (Additionality justification)	01	-	-
Total	07	06	00

SECTION D. Validation findings**D.1. Programme of activities****D.1.1. Compliance with PoA-DD form**

Means of validation	Validation team checked the updated PoA-DD with latest version of PoA-DD template available on the UNFCCC website (i.e., version 09) /5/ and “Instructions for completing this form” mentioned as attachment to PoA-DD form (version 09) /5/. All the sections of the PoA-DD are checked for the compliance with the “Instructions for completing this form” mentioned as attachment to the PoA-DD form.
Findings	CAR 01, CAR 04 & CAR 06 was raised during the validation process which was successfully closed. For more information, please refer Appendix-4 of this report.
Conclusion	Validation team confirm: 1. The updated PoA-DD /02/ is completed using the valid version of the applicable PoA-DD form /5/ in compliance with para 390 (a) (i) of VVS for PoA Version 02. 2. All the information has been correctly transferred from registered PoA-DD (Version 10, dated 01/11/2018) /12/13/ to the current PoA-DD (Version 02, dated 05/11/2019) /02/ which is filled in the latest PoA-DD form available in UNFCCC website. Validation team confirms that the transfer of information from the old form to the new form is correct and materially the same as the information in the registered PoA-DD in compliance with para 390 (a) (ii) of VVS for PoA Version 02. 3. PoA-DD is in compliance with the instruction provided in the template.

D.1.2. Programme of activities period

Means of validation	As verified from the PoA-DD and UNFCCC website, the start date of 2 nd PoA period proposed for this PoA is 30/11/2019 with the length of 7 years i.e. from 30/11/2019 to 29/11/2026.
Findings	No findings
Conclusion	The start date of 2 nd PoA period is next date of the end date of 1 st crediting period and hence in compliance with para 390 (a) (v) of VVS for PoA Version 02.

D.1.3. Coordinating/managing entity and the project participants

Means of validation	Validation team has checked the names of the coordinating/managing entity and the project participants in the updated PoA-DD with the registered PoA-DD and latest version of the MoC statement available on the UNFCCC webpage of PoA.		
	As per the updated PoA-DD/02/, the coordinating/managing entity, project participants and parties involved in the programme of activity are:		
	Parties involved	Project participants	Indicate if the Party involved wishes to be considered as project participant (Yes/No)
	Ghana (host)	ClimateCare Limited (CME) (Private)	No
	Kenya (host)	ClimateCare Limited (CME) (Private)	No
	Sweden	Swedish Energy Agency	No
Findings	CL 01 & CL 02 was raised during the validation process which was successfully closed. For more information, please refer Appendix-4 of this report		
Conclusion	The validation team confirm the following: The names of the coordinating/managing entity and the project participants in the updated PoA-DD are consistent with the names of the coordinating/managing entity and the project participants in the latest version of the MoC statement available on the webpage of the PoA on UN website in compliance with para 390 (a) (vi) of VVS for PoA Version 02		

D.1.4. Post-registration changes

Type of post-registration changes (PRCs)	Confirmation (Y/N)	Validation report for PRCs	
		Version	Completion date
Corrections	Y	02	18/11/2019
Inclusion of monitoring plan	N	N/A	N/A
Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents	Y	N/A	N/A
Changes to the programme design	Y	02	18/11/2019
Addition of CPA inclusion template	N	N/A	N/A
Changes specific to afforestation and reforestation activities	N	N/A	N/A
Change of coordinating/managing entity	N	N/A	N/A

D.2. Generic component project activities**D.2.1. Application and selection of methodologies and standardized baselines**

Means of validation	<p>At the time of registration, the CME applied the methodology – “AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass - Version 10.0”</p> <p>In the revised PoA-DD, valid version of the of this methodology has been applied - AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass - Version 10.0.</p> <p>Validity: Valid from 31 Aug 18 onwards</p> <p>The latest version 10 of the applied methodology also refers to the latest version of the following tools</p> <ol style="list-style-type: none"> 1. Methodological Tool 19: Demonstration of additionality of microscale project activities (Version 09). 2. Methodological Tool 21: Demonstration of additionality of small-scale project activities (Version 12.0) <p>The updated version of the above Tool has been used in the updated PoA-DD. The applicability of the methodology for is assessed below for the generic CPA of PoA-DD:</p>		
	S. N o.	AMS-II.G Version 10 requirements	CME Justification
	1	This category comprises efficiency improvements in thermal applications of non-renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency biomass fired project devices (cookstoves or ovens or dryers) to replace the existing devices and/or energy efficiency improvements in existing biomass fired cookstoves or ovens or dryers	<p>Each CPA will involve the distribution of energy efficient charcoal cook stoves</p> <p>The justification provided by the CME is acceptable.</p> <p>Further there is no significant change in the applicability criteria as compared to the registered PoA-DD (Version 10, dated</p>

				<p>01/11/2018) /13/.</p> <p>Hence the updated generic CPA part of the PoA-DD is in compliance with valid version of the applied methodology i.e. AMS-II.G.: Version 10.0 /4/</p>
	2	Single pot or multi pot portable or in-situ cook stoves with specified efficiency of at least 20%.	<p>Only charcoal stoves with efficiency levels of at least 20% will be included in the CPAs as per the technical specification/test results from independent testers either through Thermal Energy Output (TEO), Kitchen Performance Test (KPT), Water Boiling Test (WBT) or Controlled Cooking Test (CCT) at least biennially. The efficiency tests shall be carried out by either the national standards body, other appropriate national body or an agent recognised by it, or manufacturer specifications.</p>	<p>The justification provided by the CME is acceptable.</p> <p>Further there is no significant change in the applicability criteria as compared to the registered PoA-DD (Version 10, dated 01/11/2018) /13/.</p> <p>The only change observed is that there is no specific criteria defined in the revised criteria for determining the efficiency of the stoves.</p> <p>Hence the updated generic CPA part of the PoA-DD is in compliance with valid version of the applied methodology i.e. AMS-</p>

				II.G.: Version 10.0 /4/.
	3	Non-renewable biomass has been used in the project region since 31 December 1989, using survey methods or referring to published literature, official reports or statistics.	Each CPA will be able to show that non-renewable biomass has been used since 31 December 1989, using published literature, official reports or statistics. Compliance with this applicability condition is part of the CPA eligibility criteria and it will be shown in the CPA-DD.	<p>The justification provided by the CME is acceptable.</p> <p>Further there is no significant change in the applicability criteria as compared to the registered PoA-DD (Version 10, dated 01/11/2018) /13/.</p> <p>Hence the updated generic CPA part of the PoA-DD is in compliance with valid version of the applied methodology i.e. AMS-II.G.: Version 10.0 /4/.</p>
	4	Each of the efficient cook stove units under the CPAs to be included in the PoA shall achieve energy savings at a scale of no more than 20 GWh per year, which is within the threshold for “microscale CDM units”.	For each CPA, it will be demonstrated that each stove unit saves not more than 20 GWh per year.	<p>The justification provided by the CME is acceptable.</p> <p>Hence the updated generic CPA part of the PoA-DD is in compliance with valid version of the applied methodology i.e. AMS-II.G.: Version 10.0 /4/.</p>
	5	The use of this methodology in a project activity under a programme of activities is legitimate if the leakages are estimated and accounted for	The CPA shall follow paragraph 34 of the methodology and apply net to gross adjustment factor of 0.95 to account for leakages in the PoA without monitoring it.	<p>The justification provided by the CME is acceptable.</p> <p>The</p>

				<p>leakages shall be estimated and accounted through gross adjustment factor of 0.95 inline with the paragraph 34 of the applied methodology , and hence acceptable.</p> <p>Hence the updated generic CPA part of the PoA-DD is in compliance with valid version of the applied methodology i.e. AMS-II.G.: Version 10.0</p>
Findings	CL 03 was raised during the validation process which was successfully closed. For more information, please refer Appendix-4 of this report.			
Conclusion	<p>The PoA/Generic CPA part of the PoA-DD, fulfills all relevant criteria of the applied methodology “AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass - Version 10.0” /4/. CME has used the valid version of the applied methodology i.e. “AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass - Version 10.0”. However, since this is an international PoA the applicability criteria are better demonstrated at the CPA level where the actual project implementation or the distribution of cookstove takes place. Hence the selected version of the applied methodology is appropriate for this PoA/Generic CPA part of the PoA-DD.</p>			

D.2.2. Validity of original baseline or its update

Means of validation	<p>In according to para 382 of VVS for PoA version 02.0, the assessment team reviewed the updated PoA-DD version 02 and evaluated whether CME assess and incorporate the impact of new national and/or sectoral policies and circumstances existing at the time of requesting renewal of PoA period on the modalities to estimate baseline GHG emissions for the subsequent crediting period of each corresponding CPA, without reassessing the baseline scenario.</p> <p>Whether data and parameters used for determining the original baseline, that were determined ex ante and not monitored during the PoA period, are still valid, the assessment team identified whether coordinating/managing entity updated such data and parameters in accordance with the “Methodological tool: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period” version 03.0.1 /15/.</p> <p>The steps from the Methodological Tool “Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period” Version 03.0.1 /15/ as per CDM VVS for PoA version 02.0 were applied to</p>
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assess the continued validity of the baseline and/or to update the baseline at the renewal of a crediting period:

Step 1: Assess the validity of the current baseline for the next crediting period

The CDM Project Standard for PoA, version 2.0 requires assessing the impact of new relevant national and/or sectoral policies and circumstances on the baseline. The validity of the current baseline is assessed in the following sub-steps:

Step 1.1: Assess compliance of the current baseline with relevant mandatory national and/or sectoral policies

The boundary of the PoA covers Sub-Saharan African countries and the PoA currently has CPAs in Kenya and Ghana. In the two countries, energy master plans² have been drafted which aim to increase adopt of use of efficient cook stoves. The plan aims at encouraging their adoption but they don't make their use mandatory.

There are no mandatory laws requiring households to switch to use efficient stoves and the household makes the switch voluntarily based on the information they receive from the promotional and marketing initiatives regarding the benefits of the stove. The project therefore is being implemented as a voluntary action.

The households in rural areas of Kenya mainly use the traditional inefficient stoves. Even though there are other improved cook stove players in the market, the penetration of ECS and access to these stoves remains low. The stoves used by households in rural areas of Kenya primarily use the traditional/conventional stoves. Hence the penetration rate of traditional/conventional stoves systems is highest and the same has been checked through publicly available sources based on the publicly available source (Surveys/studies: 2015/16 Kenya Integrated Household Budget Survey³ /19/ and Practical Action, Gender and Equity in Bioenergy Access and Delivery in Kenya) /20/, Updated Least Cost Power Development Plan, Study Period: 2011-2031 /17/, Household population and housing characteristics /18/ and found appropriate.

The traditional stoves are mostly used for cooking since people find them cheap and readily available. Due to their low cost, most households continue to use the baseline stove which they are used to and it becomes hard for them to switch with proper information about the benefits of the ECS.

Similarly the existing baseline is still valid for the country of Ghana, which has been confirmed through various publicly available sources (Ghana Cookstove Sector Mapping Report⁴, National cooking energy strategies – lessons from Ghana by Ministry of Energy, Ghana⁵, Strategic National Energy Plan 2006-2020 by Energy Commission, Ghana⁶).

Hence, the baseline remains the same as that in the registered PoA-DD and in compliance with the relevant mandatory national and/or sectoral policies. The same has further been confirmed based on the local expertise of the validation team. Hence the same baseline as identified in the previous crediting period is still valid for the PoA. There are no new relevant national and/or sectoral policies and circumstances since the PoA was registered that have an impact on the baseline. Thus, the baseline identified during the validation is still in compliance with the relevant mandatory national and/or sectoral policies. Hence, there is no need to

² https://www.undp.org/content/dam/ghana/docs/Reports/UNDP_GH_SUS_DEV_REN_MASTER_PLAN_2019.pdf and https://kplc.co.ke/img/full/BL4PdOgKtxFT_National%20Energy%20Policy%20October%20%202018.pdf

³ Basic Report Based on 2015/16 Kenya Integrated Household Budget Survey, Table 3.18

⁴ Nationwide Mapping of Stakeholders in the Clean Cook Stove Value Chain in Ghana, https://www.undp.org/content/dam/ghana/docs/Doc/Susdev/UNDP_GH_SUSDEV_SE4ALL_Nationwide%20Mapping%20of%20Stakeholders%20in%20the%20Clean%20Cook%20Stove%20Value%20Chain%20in%20Ghana.pdf

⁵ http://www.ecreee.org/sites/default/files/event-att/ghana_national_strategies_for_cooking_fuels._burkina_2013_1.pdf

⁶ <http://energycom.gov.gh/files/snep/WOOD%20FUEL%20final%20PD.pdf>

update the current baseline for the next crediting period.

Step 1.2: Assess the impact of circumstances

There are no new national/sectoral policies or circumstances that could affect the baseline scenario during the PoA renewal period. The validation team confirmed that the current baseline identified in the registered PoA-DD is still valid for the second PoA renewal period.

The baseline for each generic CPA remains the same as that in the registered PoA-DD and inline with the relevant mandatory national and/or sectoral policies. The information presented in the generic part of CPA of PoA-DD has been validated by an initial document review and further confirmation has been made based on the interview.

Since, there are no new national/sectoral policies or circumstances that could affect the baseline scenario, hence there is no impact on the current baseline emissions. Hence, no need to update the current baseline for the next renewal period.

Step 1.3: Assess whether the continuation of the use of current baseline equipment(s) or an investment is the most likely scenario for the crediting period for which renewal is requested

The baseline for each generic CPA remains the same as that in the registered PoA-DD and is in line with the relevant mandatory national and/or sectoral policies. The information presented in the generic CPA part of the PoA-DD has been validated by an initial document review and further confirmation has been made based on the interview.

Hence, there is no need to update the current baseline for the next renewal period.

Step 1.4: Assessment of the validity of the data and parameters

During the 1st PoA period, PoA was registered applying small scale methodology 'AMS-II.G. ver. 04'. During 2nd Renewal period, PoA has applied valid version i.e. 10.0 of the same methodology AMS-II.G.

Validation team confirms that data and parameters that were only determined at the start of the crediting period and not monitored during the crediting period are still valid except the ex-ante parameter $EF_{\text{projected_fossilfuel},i}$ which is updated in accordance with applied methodology i.e. AMS-II.G Version 10.0.

Ex-ante parameter	During the 1 st PoA period	During the 2 nd PoA period
$EF_{\text{projected_fossilfuel},i}$ (Unit: tCO ₂ /TJ, Description: Emission factor of the fuel(s) type i substituted)	81.6 tCO ₂ /TJ	63.7 tCO ₂ /TJ

Since the value of the ex-ante parameter has been reduced, hence the same is accepted to the validation team.

Step 2: Update the current baseline and the data and parameters

Step 1.4 shows that ex-ante parameter needs to be updated.

Step 2.1: Update the current baseline

The baseline remains unchanged as discussed above.

Step 2.2: Update the data and parameters

	The ex-ante parameter $EF_{\text{projected_fossilfuel},i}$ is updated in accordance with applied methodology i.e. AMS-II.G Version 10.0.		
	Ex-ante parameter	During the 1st PoA period	During the 2nd PoA period
	$EF_{\text{projected_fossilfuel},i}$ (Unit: tCO ₂ /TJ, Description: Emission factor of the fuel(s) type i substituted)	81.6 tCO ₂ /TJ	63.7 tCO ₂ /TJ
	Since the value of the Ex-ante parameter has been reduced, the same is accepted to the validation team. The value is correctly applied for the emission reduction calculation.		
Findings	CAR 02 & CAR 03 were raised during the validation process which was successfully closed. For more information, please refer Appendix-4 of this report		
Conclusion	Validity of the baseline has been correctly assessed and the parameters are updated as per the Methodological Tool "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period" Version 03.0.1 in the PoA-DD submitted for the renewal of PoA period.		

D.2.3. Estimated emission reductions or net anthropogenic removals

Means of validation	<p>The validation team has checked modalities for estimating GHG emission reductions or net anthropogenic GHG removals in the updated generic CPA part of the PoA-DD in accordance with the applied version of the methodology i.e. AMS-II.G Version 10.0.</p> <p>All the ex-ante parameters and their values provided in the generic CPA-DD are updated inline with the latest version of the applied methodology (AMS-II.G Version 10.0) and found correctly used in the emission reduction calculations. The calculations are done as per applied methodology AMS-II.G. version 10 and found correct. Validation team has assessed the calculations of project emissions, baseline emissions, leakage, and emission reductions. The parameters and equations presented in the PoA-DD and CPA-DD as well as in other applicable documents have been compared with the information and requirements presented in the methodology and other applicable tools.</p>
Findings	Nil
Conclusion	<p>The assessment team confirms that</p> <ul style="list-style-type: none"> All assumptions and data used by the CME are listed in the generic CPA part of the PoA-DD, including their references and sources; All documentation used by CME as the basis for assumptions and source of data is correctly quoted and interpreted in the PoA-DD; All values used in the PoA-DD are considered reasonable in the context of the proposed PoA; The baseline methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions; All estimates of the baseline emissions can be replicated using the data and parameter values provided in the PoA-DD.

D.2.4. Validity of monitoring plan

Means of validation	<p>The monitoring plan (in the generic CPA part of the PoA) is in compliance with the applied methodology AMS-I.I.G., version 10.0 /4/. The project was originally registered applying small scale methodology AMS-II.G, version 04. For the 2nd crediting period, valid version i.e. version 10.0 of the same methodology AMS-II.G. has been applied and the monitoring plan of the same has been adopted. As per the methodology, the following parameter will be monitored:</p>		
	Sl.	Parameters	Monitoring procedure

	No.	
	1. $N_{y,ij}$ (Unit: Numbers Description: Number of project devices of type i and batch j operating during year y)	<p>Source of data: Monitoring</p> <p>Measurement procedures (if any): Measured directly or based on a representative sample. Sampling standard shall be used for determining the sample size to achieve 90/10 confidence precision. A discount shall be applied based on the percentage of devices operational as determined by the sample survey, e.g. if survey shows that 10% of the devices is non-operating, an adjustment factor of 0.9 shall be applied to number of project devices commissioned in a particular batch. Separate samples shall be taken for each batch</p> <p>Monitoring frequency: At least once every two years (biennial)</p> <p>Justification for the compliance: Validation team has checked the monitoring parameter and found that the monitoring parameter is complying with the applied methodology i.e. AMS-II.G. version 10.0 and CME/CPA Implementer is able to implement the monitoring plan.</p>
	2. μ_y (Unit: Fraction Description: Adjustment to account for any continued use of pre-project devices during the year y)	<p>Source of data: When applying equations 6 and 8, it is a fraction based on monitoring results. In other cases (i.e. applying equations 3, 5 and 7), use 1.0</p> <p>Measurement procedures (if any): This parameter should be monitored using one of the following methods:</p> <ol style="list-style-type: none"> 1. If the pre-project devices are decommissioned and no longer used, as determined by the monitoring survey its value is 1.0. If both the project devices and pre-project devices are used together, measurement campaigns shall be undertaken using data loggers such as stove utilization monitors (SUMs) which can log the operation of all devices (recording the situation of the device being used or not during any day 'd' of the measurement campaign) in order to determine the average device utilization intensity (to establish the relative share of the usage of the devices). The measurement campaign shall be conducted in at least 10 randomly selected participant households of the project activity or the component project activity (CPA) for at least 90 days during the year y. If seasonal variation is observed, the average value determined through the campaign shall be annualised taking into account seasonal variation of device utilization. 2. Alternatively, surveys may be

			<p>conducted if the use of data loggers to record the continued operation of baseline devices is demonstrated to be not practical, for example when the baseline device is the three-stone fire. The surveys should be designed to capture the cooking habits and stove usage of households in the region, including quantification of use of baseline devices, by formulating questions and/or collecting evidences to determine the frequency of usage of both the project devices and baseline devices. For example, if there were 3 pre-project devices per household and it was determined during the survey that use of one of them continues during the crediting period then a conservative adjustment factor of 0.66 is applied for the relevant monitoring period. Another example would be the case where there was only one pre-project device per household and its use during the project period continues along with the project stove to meet 25% of the cooking needs of the household in which case the adjustment factor will be 0.75. Where a more precise data is available i.e. the thermal capacity of the project and pre-project devices and respective utilization hours, a weighted average adjustment factor may be used</p> <p>Monitoring frequency: At least once every two years (biennial)</p> <p>Justification for the compliance: Validation team has checked the monitoring parameter and found that the monitoring parameter is complying with the applied methodology i.e. AMS-II.G. version 10.0 and CME/CPA Implementer is able to implement the monitoring plan.</p>
	3.	$\eta_{new,i,j}$ (Unit: Numbers Description: Efficiency of the device of each type <i>i</i> and batch <i>j</i> implemented as part of the project activity)	<p>Source of data: The data shall be obtained based on the following measurement procedures</p> <p>Measurement procedures (if any): Efficiency shall be measured/estimated as per the following:</p> <ol style="list-style-type: none"> 1. The efficiency of the project devices shall be based on certification by a national standards body or an appropriate certifying agent recognized by that body. 2. Alternatively, manufacturer specifications on efficiency based on water boiling test (WBT) may be used. The WBT shall be carried out in accordance with national standards (if available) or international standards or guidelines (e.g. the WBT procedures specified by the partnership for clean indoor air (PCIA):

			<p><http://www.pciaonline.org/testing>. The sampling test of stoves by such certification bodies/agents or manufacturers shall be conducted following a 90/10 precision in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities".</p> <p>3. However, the following simplified approach may be used, when the efficient cookstoves are produced by a manufacturer with a good quality management system in place to ensure that the individual equipment produced do not vary beyond the range of acceptance limits (e.g. characteristics such as materials, critical dimensions):</p> <ul style="list-style-type: none"> (i) Conduct a sample test on three cookstoves with three tests conducted for each stove. The test can be carried out by project proponents by themselves or stove manufacturers; (ii) If the standard deviation of the nine test results indicated above is very small and 90/10 precision requirement is met (in this case, the value of the t-distribution for 90 per cent confidence shall be used instead of Z value), the efficiency determined is acceptable, otherwise more sample tests would be required until 90/10 precision is met. <p>4. For project activities that implement cookstoves with saucepan capacities both greater than 30 L as well as smaller than 30 L, the most conservative value among the results of efficiency tests conducted (i.e. the least efficiency determined) on cookstoves of sizes equal to or smaller than 30 L may be used for stoves that are larger than 30 L in lieu of actual testing of the efficiency of stoves that are above 30 L capacity. The simplified approach above may also be used to comply with eligibility requirements under paragraph 3 and can be used only if the following conditions are met:</p> <ul style="list-style-type: none"> (i) Stoves that can hold saucepans that are larger than 30 L are from the same manufacturer⁷ and of similar design (e.g. with respect to construction materials including insulation material, placement of grate, cooking vessels and if applicable chimney) as compared to the stoves that are smaller than 30 L; (ii) Project proponents should demonstrate that comparable repair and maintenance practices are undertaken on all project stoves, irrespective of the size
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⁷ For in-situ constructed stoves, show that the prefabricated components are sourced from the same supplier.

			<p>Monitoring frequency: Recorded at the time of commissioning/distribution and adjusted for the loss of efficiency as per the paragraph 32.</p> <p>Justification for the compliance: Validation team has checked the monitoring parameter and found that the monitoring parameter is complying with the applied methodology i.e. AMS-II.G. version 10.0 and CME/CPA Implementer is able to implement the monitoring plan.</p>
	4.	<p>Date of commissioning of batch <i>j</i></p> <p>(Unit: Date, Description: To establish the date of commissioning, the Project Participant may opt to group the devices in “batches” and the latest date of commissioning of a device within the batch shall be used as the date of commissioning for the entire batch)</p>	<p>Source of data: Internal records</p> <p>Measurement procedures (if any): N/A</p> <p>Monitoring frequency: Fixed and recorded at the time of commissioning/distribution of the last project device in the batch</p> <p>Justification for the compliance: Validation team has checked the monitoring parameter and found that the monitoring parameter is complying with the applied methodology i.e. AMS-II.G. version 10.0 and CME/CPA Implementer is able to implement the monitoring plan.</p>
	5.	<p>Date of commissioning of project device <i>l</i></p> <p>(Unit: Date, Description: Actual date of commissioning of the project device)</p>	<p>Source of data: Internal records</p> <p>Measurement procedures (if any): N/A</p> <p>Monitoring frequency: Fixed and recorded at the time of commissioning/distribution</p> <p>Justification for the compliance: Validation team has checked the monitoring parameter and found that the monitoring parameter is complying with the applied methodology i.e. AMS-II.G. version 10.0 and CME/CPA Implementer is able to implement the monitoring plan.</p>
	6.	<p>$N_{d,HH}$</p> <p>(Unit: Number, Description: Number of project devices distributed per household)</p>	<p>Source of data: Number</p> <p>Measurement procedures (if any): N/A</p> <p>Monitoring frequency: Recorded at the time of commissioning/distribution of project devices</p> <p>Justification for the compliance: Validation team has checked the monitoring parameter and found that the monitoring parameter is complying with the applied methodology i.e. AMS-II.G. version 10.0 and CME/CPA Implementer is able to implement the monitoring plan.</p>
	<p>The monitoring plan will give opportunity for real measurements of achieved emission reductions. The monitoring plan (in the generic CPA part of the PoA) is in compliance with the applied methodology AMS-I.I.G., version 10.0 /4/.</p>		
Findings	<p>CL 05, CAR 05 was raised during the validation process which was successfully closed. For more information, please refer Appendix-4 of this report.</p>		

Conclusion	<p>Validation team can confirm that the parameters to be determined ex-post have been presented correctly and according to requirements of the applied methodology AMS-II.G. version 10 and that CME/CPA Implementer shall be able to monitor and report emission reductions ex-post.</p> <p>Validation team has also checked the sampling plan and other elements of the monitoring plan for each generic CPA of the PoA and found in compliance with the applied methodology AMS-II.G. version 10 /4/, Standard for sampling and surveys for CDM project activities and programme of activities, Version 07.0 and Guidelines for sampling and survey for CDM project activities and programme of activities Version 04.0 /7/ and that CME/CPA Implementer shall be able to implement the sampling pan.</p> <p>Also, the sampling plan contained in each generic CPAs has summarized a description of the sampling approach, important assumptions, and justification for the selection of the chosen approach. The validation team regards it complied with the Section 4 of Sampling Standard Ver.07 /8/.</p>
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D.2.5. Eligibility criteria for inclusion of CPAs

Means of validation	No.	Eligibility Criterion – Category	Eligibility Criterion – Required Condition	Supporting evidence for inclusion	Means of validation/Findings/Conclusion
	1.	The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA	The CPA will be located within the geographical boundary set in the PoA in Section A.2. of PoA-DD	Database of project device distribution records	<p>The CPA will be located within the geographical boundary set in the PoA.</p> <p>There is no change in this eligibility criteria in compared to the registered PoA-DD.</p> <p>The eligibility criteria is in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>Validation team has checked the eligibility criteria and found OK.</p> <p>This criterion was further validated by means of interviews performed with the CME. Therefore, criterion complied.</p>
	2.	Non-renewable biomass use	It can be shown that non-renewable biomass has been used since 31 December 1989, within the geographic boundary of PoA where CPA is implemented	Published literature	<p>There is no change in this eligibility criteria as compared to the registered PoA-DD.</p> <p>The eligibility criteria is in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA</p>

					Version 02. Validation team has checked the eligibility criteria and found OK. This criterion was further validated by means of interviews performed with the CME. Therefore, criterion complied.
	3.	Conditions that avoid double counting of ECSs and CPAs	<p>i. ECSs A unique serial numbering or identification system for the stoves disseminated is applied. The serial should be sequential.</p> <p>ii. CPAs The CPA is exclusively bound to the PoA. Confirmation that the programme activity has not been and will not be registered either as a single CDM project activity or as a CPA under another PoA. The serial numbers are listed in the CME Database.</p> <p>iii. Database of stove distribution records</p>	<p>A unique serial number assigned to each project device</p> <p>CPA joining agreement</p> <p>Database of project device distribution records</p>	<p>The eligibility criteria has been updated in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>The eligibility criteria is in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>Validation team has checked the eligibility criteria/supportive evidence for each generic CPA and found OK.</p> <p>This criterion was further validated by means of interviews performed with the CME. Therefore, criterion complied.</p>
	4.	The specifications of technology/measure and performance level	<p>Improved cookstove has a minimum efficiency of 20%.</p> <p>The efficiency of the project systems to be certified by a national standards body or an appropriate certifying agent recognized by it.</p>	Performance test results	<p>The eligibility criteria has been updated in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>The eligibility criteria is in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>Validation team has checked the eligibility criteria/supportive evidence for each</p>

					<p>generic CPA and found OK.</p> <p>This criterion was further validated by means of interviews performed with the CME. Therefore, criterion complied.</p>
	5.	Conditions to check the start date	The CPA start date shall be after the PoA validation start following a successful pilot phase.	The first set of conformity letters obtained during the stove distribution or the receipt of stove order	<p>There is no change in this eligibility criteria as compared to the registered PoA-DD.</p> <p>The eligibility criteria is in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the Project Standard for PoA, Version 02.</p> <p>Validation team has checked the eligibility criteria and found OK.</p> <p>This criterion was further validated by means of interviews performed with the CME. Therefore, criterion complied.</p>
	6.	The conditions that ensure that CPAs meet the additionality requirements	The CPA includes solely of units that qualify as "microscale CDM units" as defined in the "Methodological tool 19: Demonstration of additionality of microscale project activities", such that it is not required to meet the small-scale or microscale thresholds within those thresholds.	Not applicable; refer to PoA-DD Section C for description	<p>The eligibility criteria has been updated in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>The eligibility criteria is in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>Validation team has checked the eligibility criteria/supportive evidence for each generic CPA and found OK.</p> <p>This criterion was further validated by means of interviews performed with the CME. Therefore, criterion complied.</p>

	7.	Carbon ownership rights	The CPA Implementer shall cede the rights for issuance of the CERs to the CME	CPA Joining agreement	<p>There is no change in this eligibility criteria as compared to the registered PoA-DD.</p> <p>The eligibility criteria is in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>Validation team has checked the eligibility criteria and found OK.</p> <p>This criterion was further validated by means of interviews performed with the CME. Therefore, criterion complied.</p>
	8.	Local stakeholder consultations and environmental impact analysis	<p>Each CPA shall conduct a local stakeholder consultation process for informing the various relevant stakeholders and obtaining feedback and comments on the CPA as specified in section F of the PoA-DD. However, in cases where the CPA installs stoves and the small-scale limit is reached, and a new CPA is added, a new LSC is not necessary if the stoves are same and sold by same PAI.</p> <p>Environmental Impact Analysis (EIA) is not required to be conducted for CPAs under the PoA. Evidence will be provided that the CPA is exempt from undertaking the Environmental impact analysis (EIA) at CPA level.</p>	Local stakeholder consultation report	<p>The eligibility criteria has been updated in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>The eligibility criteria is in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>Validation team has checked the eligibility criteria/supportive evidence for each generic CPA and found OK.</p> <p>This criterion was further validated by means of interviews performed with the CME. Therefore, criterion complied.</p>
	9.	Non-diversion of ODA/Non-use of Public Funding	The CPA confirms that funding from Annex I parties, if any, does not result in a diversion of official development assistance.	CPA-DD Appendix 2, if applicable	<p>There is no change in this eligibility criteria as compared to the registered PoA-DD.</p> <p>The eligibility criteria is in compliance with the</p>

					<p>applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>Validation team has checked the eligibility criteria and found OK.</p> <p>This criterion was further validated by means of interviews performed with the CME. Therefore, criterion complied.</p>
10.	Where applicable, target group (e.g. domestic/commercial /industrial, rural/urban, grid connected/ off-grid) and distribution mechanisms (e.g. direct installation	The target group will be households, commercial user and institutions using inefficient charcoal stoves for cooking using non-renewable biomass in urban areas.	<ul style="list-style-type: none">• Conformity letters• Database of project device distribution records	<p>The eligibility criteria has been updated in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>The eligibility criteria is in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>Validation team has checked the eligibility criteria/supportive evidence for each generic CPA and found OK.</p> <p>This criterion was further validated by means of interviews performed with the CME. Therefore, criterion complied.</p>	
11.	No mandatory laws, policies or requirements mandating the use of efficient charcoal cookstoves	The CPA must confirm that the country where its being implemented, there is mandatory requirement for cookstoves project to be implemented using efficient stoves	<ul style="list-style-type: none">• Confirmation in the CPA-DD	<p>The new eligibility criteria has been added.</p> <p>The criteria is in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA Version 02.</p> <p>The eligibility criteria is in compliance with the applied methodology i.e. AMS-II.G. Version 10.0 and also para 124 of the PS for PoA</p>	

					<p>Version 02.</p> <p>Validation team has checked the eligibility criteria/supportive evidence for each generic CPA and found OK.</p> <p>This criterion was further validated by means of interviews performed with the CME. Therefore, criterion complied.</p>	
	<p>The eligibility criteria related to the “SSC limits for CPAs” and “Exception from debundling rules” as per the registered PoA-DD has been removed since the CPA in this PoA will not be limited by the small-scale threshold of AMS II.G (ver. 10.0) as they will include only stove units that qualify as “microscale CDM units” as defined in the “Methodological tool 19: Demonstration of additionality of microscale project activities”.</p> <p>Further there were two eligilbty criteria related to the “Documentation” and “Sampling requirement” which have been removed which is already covered in CL 06 which was successfully closed.</p>					
	Findings	CL 04, CL 06 & CL 07 were raised during the validation process which were successfully closed. For more information, please refer Appendix-4 of this report.				
	Conclusion	<ol style="list-style-type: none">1. Validation team confirm that the eligibility criteria for inclusion of corresponding CPAs in the registered PoA are updated by the CME in accordance with the applicable validation requirements related to the renewal of programme of activities period in the VVS for PoA Version 02.2. The Coordinating and Managing Entity (CME) has outlined clear and unambiguous Eligibility Criteria for the inclusion of a CPA under this PoA. The Eligibility Criteria, listed in section K of the generic part of CPA of PoA-DD has been validated by the validation team with regards to the applicability of the applied methodology AMS-II.G version 10 and found in compliance.3. Validation team confirm that the Eligibility Criteria are sufficiently, objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA. Further Validation team confirm that elgibility criteria for the inclusion of CPA have covered the minimum elgibility criteria as required by para 124 of PS for PoA Version 02.				

SECTION E. Internal quality control

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Following the completion of the assessment process and a recommendation by the assessment team, the validation opinion prepared by Team Leader is independently reviewed by internal Technical Reviewer. TR has reviewed if all the KBS procedures have been followed and all conclusions are justified in accordance with applicable standards, procedures, guidance and CDM decisions. The TR either is qualified for the technical area within the CDM sectoral scope(s) applicable to project activity or is supported by qualified independent technical expert at this stage.

The Technical Reviewer would either accept or reject the recommendation made by the assessment team. The findings can be raised at this stage and PP must resolve them within agreed timeline.

The opinion recommended by Technical Reviewer was confirmed by Manager Technical & Certification and finally authorized by the Managing Director on behalf of KBS as final validation opinion. The Technical Reviewer and Manager T&C may be the same person.

SECTION F. Validation opinion

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KBS Certification Services Pvt. Ltd. has been contracted by 'ClimateCare Limited' (CME) to perform a validation of the CDM registered programme of activity 'Clean Cook Stoves in Sub-Saharan Africa by ClimateCare Limited' (UNFCCC Ref #8438) for renewal of the PoA period.

The validation was performed in accordance with the UNFCCC criteria for the Clean Development Mechanism, latest version of Validation and Verification Standard and related Standards/Guidance and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The programme of activity will result in reductions of greenhouse gas (GHG) emissions that are real, measurable and give long-term benefits to the mitigation of climate change, as stated in the generic CPA-DDs. In our opinion, the programme of activity meets all relevant UNFCCC, CDM criteria and all relevant host country criteria.

The review of the PoA-DD and the subsequent follow-up interviews have provided validation team with sufficient evidence to determine the validity of the original baseline and/or its update through an assessment. The PoA-DD (dated 05/11/2019) correctly applies small scale methodology AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass - Version 10.0.

The monitoring arrangements described in the monitoring plan are feasible within the PoA-DD, and it is validation team's opinion that the CME/CPA Implementer are able to implement the monitoring plan.

In summary, it is validation team's opinion that the CDM programme of activity 'Clean Cook Stoves in Sub-Saharan Africa by ClimateCare Limited' (UNFCCC Ref #8438) meets all relevant UNFCCC requirements for the renewal of the PoA period. Hence KBS requests the renewal of CDM programme of activity period.

Appendix 1. Abbreviations

Abbreviations	Full texts
BE	Baseline Emissions
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification request
CME	Coordinating/managing entity
CO ₂	Carbon dioxide
COP	Conference of Parties
CPA	Component Project Activity
DOE	Designated Operational Entity
DNA	Designated National Authority
ERs	Emission Reductions
FAR	Forward Action Request
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
JMP	Joint Monitoring Programme
KBS	KBS Certification Services Pvt. Ltd.
LDC	Least Developed Country
MOP	Meeting of Parties
MP	Monitoring Plan
MR	Monitoring Report
ODA	Official Development Assistance
PE	Project Emissions
PoA	Programme of Activities
POU	Point of Use
PRC	Post Registration Changes
QA/QC	Quality Assurance/Quality Control
QPW	Quantity of Purified Water
SEC	Specific Energy Consumption
TA	Technical Area
T&C	Technical & Certification
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation & Verification Standard
WHO	World Health Organization

Appendix 2. Competence of team members and technical reviewers

Personnel Name:		Rohit Badaya	
Qualified to work as:			
Team Leader	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>
Validator/Verifier	<input checked="" type="checkbox"/>	Financial Expert	<input checked="" type="checkbox"/>
Technical Reviewer	<input checked="" type="checkbox"/>	Local Expert (India)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			

Sectoral Scope	Technical Area
Energy industries (renewable/non-renewable sources)	TA 1.1: Thermal energy generation from fossil fuels and biomass including thermal electricity from solar
	TA 1.2: Energy generation from renewable energy sources
Energy demand	TA 3.1. Energy Demand
Waste Handling and Disposal	TA 13.1 Solid waste and wastewater TA 13.2 Manure
Approved By	Manager Competency & Training
Approval date:	16/10/2017

Personnel Name:		Mr. Martin Luther King Okore	
Qualified to work as:			
Team Leader	<input type="checkbox"/>	Technical Expert	<input type="checkbox"/>
Validator/Verifier	<input type="checkbox"/>	Financial Expert	<input type="checkbox"/>
Technical Reviewer	<input type="checkbox"/>	Local Expert (Kenya)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope		Technical Area	
NA		NA	
Approved by (Manager C & T)		Sanjay Kandari	
Approval date:		25/07/2018	

Personnel Name:		Amponsem Bright	
Qualified to work as:			
Team Leader	<input type="checkbox"/>	Technical Expert	<input type="checkbox"/>
Validator/Verifier	<input type="checkbox"/>	Financial Expert	<input type="checkbox"/>
Technical Reviewer	<input type="checkbox"/>	Local Expert (Ghana)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope		Technical Area	
N/A		N/A	
Approved by (Manager C & T)		Sanjay Kandari	
Approval date:		27/02/2019	

Personnel Name:		Sanjay Kandari	
Qualified to work as:			
Team Leader	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>
Validator/Verifier	<input checked="" type="checkbox"/>	Financial Expert	<input checked="" type="checkbox"/>
Technical Reviewer	<input checked="" type="checkbox"/>	Local Expert (India)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope		Technical Area	
Energy Industries (renewable/non-renewable)		TA 1.1: Thermal energy generation from fossil fuels and	

sources)	biomass including thermal electricity from solar
Energy industries (renewable/non-renewable sources)	TA 1.2: Energy generation from renewable energy sources
Energy demand	TA 3.1. Energy Demand
Waste Handling and Disposal	TA 13.1 Waste Handling and Disposal TA 13.2 Manure
Approved by (Manager C & T)	Akhilesh Joshi
Approval date:	11/12/2015

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1.	ClimateCare Limited.	PoA DD [Initial]	Version 01 dated 13/08/2019	ClimateCare Limited
2.	ClimateCare Limited	PoA DD [Final]	Version 02.0 dated 05/11/2019	ClimateCare Limited
3.	KBS and ClimateCare Limited	Validation contract in between KBS Certification Services Pvt. Ltd. and ClimateCare Limited	08/07/2019	ClimateCare Limited
4.	UNFCCC	AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass - Version 10.0	Version 10.0	UNFCCC Website
5.	UNFCCC	PoA-DD form and Instruction to fill the PoA design document	Version 09	UNFCCC Website
6.	UNFCCC	Glossary of CDM terms	Version 10	UNFCCC Website
7.	UNFCCC	Guidance for sampling and surveys for CDM project activities and programmes of activities	Version 04	UNFCCC Website
8.	UNFCCC	Standard: Sampling and surveys for CDM project activities and programme of activities	Version 07	UNFCCC Website
9.	UNFCCC	CDM VVS for PoA	Version 02	UNFCCC Website
10.	UNFCCC	CDM PS for PoA	Version 02	UNFCCC Website
11.	UNFCCC	CDM PCP for PoA	Version 02	UNFCCC Website
12.	UNFCCC	Registered PoA-DD	Version 04, dated 23/11/2012	UNFCCC

				Website
13.	UNFCCC	Revised PoA-DD Revised PoA-DD Revised PoA-DD	Version 06, dated 07/09/2016 Version 07, dated 23/03/2018 Version 10, dated 01/11/2018	UNFCCC Website
14.	UNFCCC	Validation Report on the PRC	Version 02, dated 19/09/2018	UNFCCC Website
15.	UNFCCC	Methodological Tool: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period.	Version 3.0.1	Publically available
16.	UNFCCC	Demonstration of additionality of microscale project activities	Version 09.0	Publically available
17.	Least Cost Planning Committee	Updated Least Cost Power Development Plan, Study Period: 2011-2031	-	Publically available
18.	Francis M. Munene	Household population and housing characteristics	-	Publically available
19.	Kenya National Bureau of Statistics	2015/16 Kenya Integrated Household Budget Survey (KIHBS)	March 2018	Publically available
20.	Practical Action Eastern Africa	Gender and Equity in Bioenergy Access and Delivery in Kenya	-	Publically available

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

Table 1. CL from this validation

CL ID	01	Section no.	Section A.5	Date: 11/09/2019
Description of CL				
It has been observed that the project participant “Swedish Energy Agency” has been deleted from the Section “Parties and project participants” in the PoA-DD, while the project participant “Norwegian Ministry of Climate and Environment” has been added to the PoA. However such change is not reflected in the latest MoC available on the UNFCCC website. Please refer the para 294 of the PS for PoAs, version 02.0 and para 390 (a)(vi), as per which <i>“the names of the coordinating/managing entity and the project participants in the updated PoA-DD are consistent with the names of the coordinating/managing entity and the project participants in the latest version of the MoC statement”</i> . Please clarify.				
Project participant response				Date: 24/09/2019
The PoA-DD has been updated and Swedish Energy Agency has been retained to ensure conformity with the latest MoC details available on the UNFCCC website.				
Documentation provided by project participant				
Updated MoC				
DOE assessment				Date: 18/11/2019
The CME has now corrected the project participants details inline with the details as available on the UN website. The project participant “Swedish Energy Agency” has been restored in the Section <i>“parties and project participants”</i> of the PoA-DD. Hence the issue is closed.				

CL ID	02	Section no.	Section A.5	Date:	11/09/2019
Description of CL					

The CME is requested to clarify whether any Letter of Approval has been obtained for the new project participant "Norwegian Ministry of Climate and Environment" as per the revised PoA-DD. Please refer the para70 of the PS for PoA, version 02 as per which <i>"each project participant shall be authorized by at least one Party involved in the proposed CDM PoA to participate in the PoA, to be confirmed in the letter of approval referred to in paragraph 69 above or in a separate authorization letter"</i> . Please clarify.	
Project participant response	Date: 24/09/2019
The PoA-DD has been revised and Norwegian Ministry of Climate and Environment have been removed as project participants.	
Documentation provided by project participant	
Letter of Approval from Norwegian Ministry of Climate and Environment	
DOE assessment	Date: 18/11/2019
The CME has now corrected the project participants details inline with the details as available on the UN website. The project participant "Swedish Energy Agency" has been restored in the Section <i>"parties and project participants"</i> of the PoA-DD. Hence there is no requirement for the Letter of Approval for the new project participant. Hence the issue is closed.	

CL ID	03	Section no.	Section A.3	Date: 11/09/2019
Description of CL				
As per the footnote 9 of the PoA-DD, the "CME is not required to demonstrate compliance of the CPA with the microscale or small-scale thresholds at the aggregate level of the CPA". The CME is requested to update the Section B (page-9) of the PoA-DD in line with the footnote 9 of the revised PoA-DD.				
Project participant response				Date: 24/09/2019
Section B of the PoA-DD has been updated.				
Documentation provided by project participant				
DOE assessment				Date: 17/10/2019
The Section B of the PoA-DD has been updated inline with the footnote 9 of the PoA-DD. Hence the issue is closed.				

CL ID	04	Section no.	Section B	Date: 11/09/2019
Description of CL				
The operational diagram as available in the Section B of the PoA-DD has been removed. Also the information which shall be contained in the warranty card has also removed. The PP to clarify as whether the same is not applicable during the renewal of the crediting period of the PoA.				
Project participant response				Date: 24/09/2019
The operation diagram was deleted because, it was designed following CPA01 operations only during PoA validation and registration. However, the PoA now has included other CPAs run by different PAIs and as such, the operational diagram was found not to be in synch with all PAIs, hence its removal. The warranty card information was also changed in order to align with the new data collection methods used by the various PAIs, including those PAIs that do not employ hard copy warranty cards, instead they rely on SMS based warranty activation system.				
In addition, the CME is also undertaking the Post Registration Change to the PoA as part of this renewal process which has necessitated the above changes.				
Documentation provided by project participant				
DOE assessment				Date: 17/10/2019
The Section B of the PoA-DD has been updated inline with the actual scenario/status of the PoA. A separate validation report for the post-registration changes to the PoA is being submitted along-with the renewal of the crediting period of the PoA. Hence the issue is closed.				

CL ID	05	Section no.	Section C	Date: 11/09/2019
Description of CL				
As per the requirement of the para 285 of the PS for the PoAs, version 02.0, <i>"for renewal of the PoA period of a registered CDM PoA, the coordinating/managing entity is not required to reassess the additionality of the PoA nor update the section of the PoA-DD relating to additionality"</i> . The PP shall clarify as whether the additionality demonstration has been updated in the revised PoA-DD.				
Project participant response				Date: 24/09/2019

The additionality section of the PoA-DD which is undergoing renewal has been re-assessed and updated.	
As per the para 285 of the PS for the PoAs, version 02.0, it states “for renewal of the PoA period of a registered CDM PoA, the coordinating/managing entity is not required to reassess the additionality of the PoA nor update the section of the PoA-DD relating to additionality”. The PS paragraph uses “not required to” which means, the CME has an option of either re-assessing the additionality or opting not to re-assess the additionality.	
Documentation provided by project participant	
DOE assessment	Date: 17/10/2019
The additionality section of the PoA-DD has been re-assessed and updated inline with the “Methodological Tool19: Demonstration of additionality of microscale project activities” and found correct. Hence the issue is closed.	

CL ID	06	Section no.	Section K	Date: 11/09/2019
Description of CL				
The CME has deleted the eligibility criteria related to the Debundling, Documentation, Sampling requirements in the Section K of the revised PoA-DD. The CME shall clarify the reasons for the same.				
Project participant response				Date: 24/09/2019
As part of the renewal process of the PoA, the CME is also carrying out a Post Registration Change to the PoA-DD in order to re-align the PoA-DD to be in line with project implementation experiences to accommodate implementation of different CPAs in different countries. Also, the additionality argument has been updated leading to several changes in the PoA-DD. The reason for deletion of the said sections are: Debundling – the CPAs in the PoA now do not have a limit on the number of units since they are now defined at unit level Documentation – The requirement is deleted since it describes the CPA-DD which would be prepared by new projects. This was considered repetitive since for a new CPA to be included in the PoA, it must prepare documentation in the form of CPA-DD. Sampling requirement –Section I.7.2 of the generic CPA-DD has a section on sampling which the new CPA-DD will adopt. The section was removed from eligibility criteria because it was considered a repetition.				
Documentation provided by project participant				
DOE assessment				Date: 17/10/2019
The post registration changes have been carried out along-with the renewal of the crediting period of the PoA to align the project inline with the actual PoA implementation in different countries. PP has now updated the additionality section inline with the “Methodological Tool19: Demonstration of additionality of microscale project activities” and found correct. Hence there is now no limit on the number of units since they are now defined at unit level, hence the debundling section has been removed. The Section B and Section I.7.2 has been revised to incorporate the actual scenario of the PoA and hence found correct. Hence the issue is closed.				

CL ID	07	Section no.	Section K	Date: 11/09/2019
Description of CL				
The CME has mentioned on page 4 of the PoA-DD that “Each CPA shall confirm that in each of the countries where the CPAs are implemented, there are no mandatory laws, policies or requirements mandating the use of efficient charcoal cookstoves”. However there is no such eligibility criteria available in Section K of the PoA-DD. Please clarify.				
Project participant response				Date: 24/09/2019
The eligibility criteria on mandatory laws, policies or requirements mandating the use of efficient charcoal cookstoves has been included in the eligibility criteria in Section K. This requirement has been included to be inline with PS requirements and it is being introduced as part of the Post Registration Change.				
Documentation provided by project participant				
DOE assessment				Date: 17/10/2019

The eligibility criteria related to “no mandatory laws, policies or requirements mandating the use of efficient charcoal cookstoves” has been included in Section K of the PoA-DD and found correct. Hence the issue is closed.

Table 2. CAR from this validation

CAR ID	01	Section no.	Section A.3	Date: 11/09/2019
Description of CAR				
As per the latest PoA-DD template available on the UNFCCC website, the Section A.3 is related to “Technologies/measures”, while as per the submitted PoA-DD, the Section A.3 is “Parties and project participants”. Similarly the discrepancies have been observed with respect to the Section A.4 of the PoA-DD. The CME is requested to use the same PoA-DD template as available on the UNFCCC website.				
Project participant response				Date: 24/09/2019
The PP has used the latest PoA-DD template and numbering inconsistencies have been rectified.				
Documentation provided by project participant				
DOE assessment				Date: 17/10/2019
The numbering of the various sections in the PoA-DD has been corrected inline with the PoA-DD template available on the UN website and found appropriate. Hence the issue is closed.				

CAR ID	02	Section no.	Section I.5	Date: 11/09/2019
Description of CAR				
As per the paragraph 287 of the Project Standard for PoA, version 02, “ <i>The coordinating/managing entity shall describe how to demonstrate the validity of the original baseline or how to update it for each of the corresponding CPAs in accordance with the provisions in paragraphs 288–291 below</i> ”. The CME shall provide additional information in the PoA-DD with regards to the above guidance.				
Project participant response				Date: 24/09/2019
The validity of the baseline has been assessed following guidance provided for in tool 11 in section I.5 of the PoA-DD				
Documentation provided by project participant				
DOE assessment				Date: 17/10/2019
The additional information on how to validate the original baseline has now been provided and demonstrated in line with “Methodological Tool 11; Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period” (Version 03.0.1) in Section I.5 of the PoA-DD. Hence the issue is closed.				

CAR ID	03	Section no.	Section I.5	Date: 11/09/2019
Description of CAR				
As per the paragraph 289 of the Project Standard for PoA, version 02, “ <i>The coordinating/managing entity shall assess and incorporate the impact of national and/or sectoral policies and circumstances existing at the time of requesting renewal of the PoA period on the modalities to estimate baseline GHG emissions for the subsequent crediting period of each corresponding CPA, without reassessing the baseline scenario</i> ”. The CME shall provide additional information in the PoA-DD with regards to the above guidance.				
Project participant response				Date: 24/09/2019
The impact of national and/or sectoral policies and circumstances existing at the time of requesting renewal of the PoA period on the modalities to estimate baseline GHG emissions for the subsequent crediting period of each corresponding CPA has been assessed in the PoA-DD in section I.5 of the PoA-DD.				
Documentation provided by project participant				

DOE assessment	Date: 17/10/2019
The additional information on the the impact of national and/or sectoral policies and circumstances existing at the time of requesting renewal of the PoA period on the modalities to estimate baseline GHG emissions for the subsequent crediting period of each corresponding CPA has been provided. The Energy Master Plan of both the countries (Ghana and Kenya) has been checked and found that the plan encourages the adoption of the efficient cookstoves, but it does not make it mandatory to use the efficient cookstoves. The PoA has been taken up as the voluntary action. It has been confirmed in the revised PoA-DD that there are no laws or regulation within the PoA boundary which makes it mandatory the sale/distribution or use of ECSs. Hence the issue is closed.	

CAR ID	04	Section no.	Section H.1	Date: 11/09/2019
Description of CAR				
The title of the generic CPA shall be provided in the Section H.1 (Part-II, Generic CPA) of the PoA-DD.				
Project participant response				Date: 24/09/2019
The PoA expects to include CPAs from different countries with different PAs which will join the PoA under different contractual terms. As such, the generic CPA-DD cannot have a title presently but the title will be provided on a case by case basis.				
Documentation provided by project participant				
DOE assessment				Date: 17/10/2019
The justification provided by the PP has been accepted. Hence the issue is closed.				

CAR ID	05	Section no.	Section I.7.2	Date: 11/09/2019
Description of CAR				
It has been observed that some of the ex-ante parameters and monitoring parameters have been deleted from the revised PoA-DD as compared to the registered PoA-DD. The CME is requested to explain the reasons for this revision. Further revisions have been observed in the Section I.7.2 (Other elements of monitoring plan), the CME shall further clarify on the same.				
Project participant response				Date: 24/09/2019
The registered PoA-DD applied AMS-II.G version 04, while the renewed PoA-DD is pplying AMS-II.G version 10.0. The two versions have different calculations steps and because of this, the CME had to re-align the renewed PoA-DD to the current version and this necessitated the deletion or revision of calcuations steps and the monitoring plan.				
Documentation provided by project participant				
DOE assessment				Date: 17/10/2019
The justification provided has been accepted. The latest version (version 10) of the applied methodology (AMS-II.G) has been used and the monitoring plan and the calculation steps have been revised inline with the updated version of the methodology, which is found appropriate. Hence the issue is closed.				

CAR ID	06	Section no.	-	Date: 11/09/2019
Description of CAR				
The History section of the PoA-DD has been deleted, which shall be restored again in the PoA-DD.				
Project participant response				Date: 24/09/2019
The section has been restored in the PoA-DD.				
Documentation provided by project participant				
DOE assessment				Date: 17/10/2019
The history section of the PoA-DD has been restored in the updated PoA-DD. Hence the issue is closed.				

Table 3. FAR from this validation

FAR ID	xx	Section no.		Date: DD/MM/YYYY
Description of FAR				

Project participant response	Date: DD/MM/YYYY
Documentation provided by project participant	
DOE assessment	Date: DD/MM/YYYY

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Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
02.0	31 May 2019	Revision to: <ul style="list-style-type: none">• Ensure consistency with version 02.0 of the “CDM validation and verification standard for programmes of activities” (CDM-EB93-A08-STAN) and version 02.0 of the “CDM project cycle procedure for programmes of activities” (CDM-EB93-A09-PROC);• Make editorial improvements.
01.0	29 December 2017	Initial publication.

Decision Class: Regulatory
Document Type: Form
Business Function: Renewal of crediting period
Keywords: crediting period, programme of activities, validation report