




Validation report form for CDM component project activities

(version 01.0)

Complete this form in accordance with the attachment: "Instructions for filling out the validation report form for CDM component project activities" at the end of this form.

VALIDATION REPORT

Reference number and title(s) of the specific-case CPA(s)	Ref. no.	Title
	PoA 8438: CPA03	Improved Jikos Project -CPA03
Version number of the validation report	02.1	
Completion date of the validation report	18 October 2016	
Title and UNFCCC ref. no. of the PoA (where applicable) into which the specific-case CPA(s) is/are included	PoA 8438 : Clean Cook Stoves in Sub-Saharan Africa by ClimateCare Limited	
Version number of the PoA-DD into which the specific-case CPA(s) is/are included	PoA-DD Version 06, dated 07 September 2016 ¹	
Coordinating/managing entity (CME)	ClimateCare Limited	
Host Party(ies)	Kenya	
Estimated annual average emission reductions or net GHG removals in the crediting period (tCO ₂ e) for each specific-case CPA	CPA Ref. no.	Estimated annual average emission reductions or net GHG removals in the crediting period (tCO ₂ e)
	CPA03	40,064
Sectoral scope(s) for each specific-case CPA	CPA Ref. no.	Sectoral scope(s)
	CPA03	3 : Energy demand
Selected methodology(ies) for each specific-case CPA	CPA Ref. no.	Selected methodology(ies)
	CPA03	AMS-II.G. - Energy efficiency measures in thermal applications of non-renewable biomass, ver. 04
Selected standardized baseline(s) for each specific-case CPA	CPA Ref. no.	Selected standardized baseline(s)
	CPA03	N/A
Name of DOE	ERM Certification and Verification Services Limited	
Name, position and signature of the approver of the validation report	 Melanie Eddis Head of Climate Change	

¹ The PoA has been subject to a post-registration change, submitted at the same time as this CPA inclusion

SECTION I. Executive summary

>> ERM Certification and Verification Services (ERM CVS) has performed the validation of the component project activity against the latest version of the validated PoA-DD including eligibility criteria. The PoA-DD has been subject to a post registration change, submitted at the same time as this CPA inclusion – please refer to the separate validation report into the post registration changes to the PoA. This small scale CPA will distribute efficient designs of charcoal cooking stoves for domestic use to households in Kenya. The CPA aims to distribute improved cooking stoves, and will do so via Programme Activity Implementers (PAIs), partner organisations who will assist with stove marketing, dissemination, follow up and monitoring. Under this CPA03, ClimateCare is acting as Coordinating Managing Entity (CME) and also as Project Implementer, will work with different Programme Activity Implementer (PAI), starting with Finlays Horticulture Fairtrade Association (FHFA).

The validation employed standard auditing techniques, and addressed the requirements of the CDM Validation and Verification Standard. The validation has provided sufficient evidence to demonstrate that the CPA is eligible for inclusion in the PoA, that it is not the baseline scenario, and that emission reductions would be additional to what would have taken place in the absence of the CPA. The CPA meets the eligibility criteria of the PoA “Clean Cook Stoves in Sub-Saharan Africa by ClimateCare Limited” and correctly applies methodology AMS-II.G, “Energy efficiency measures in thermal applications of non-renewable biomass”, Version 04, and is therefore expected to result in real, measurable and long term reductions in greenhouse gas emissions. The monitoring plan provides for the collection and archiving of data sufficient to ensure that emission reductions can be verified. Nothing came to our attention to suggest that the CPA, if implemented as described, would not result in emission reductions of annual 40,064 tCO₂e per year on average over the crediting period.

In summary, it is the opinion of ERM CVS that the CPA as described in the CPA-DD Version 05 of 07 September 2016, is eligible for inclusion in the PoA, meets all stated criteria of the CDM, correctly applies the methodology, and is expected to result in real, measurable and long term emission reductions.

ERM CVS therefore confirms that the CPA meets the requirements of the PoA ‘Clean Cook Stoves in Sub-Saharan Africa by ClimateCare Limited’ and therefore includes this CPA in the PoA by forwarding the specific CDM-CPA-DD to the CDM Executive Board.

SECTION II. Validation team, technical reviewer and approver**II.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 review	On-site inspection	Interview(s)	Validation findings
1.	Lead validator	IR	Avis	Jonathan	ERM CVS	Yes	Yes	Yes	Yes

II.2. Technical reviewer and approver of the validation report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Pumputyte	Neringa	ERM CVS
2.	Approver	IR	Eddis	Melanie	ERM CVS

SECTION III. Means of validation**III.1. Desk review**

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A detailed document review of the CPA-DD, methodology and all other associated documentation and references took place after the un-validated CPA-DD was forwarded by the PP to ERM CVS. The document review includes:

- A review of data and information to verify the correctness, credibility and interpretation of presented information;
- Cross checks between information provided in the CPA-DD and information from other sources, not limited to those provided by the CME and CPA operator.

Where the review of the CPA-DD at the document review stage raised issues, these were further reviewed and validated through supporting documentation and cross-checking from other sources. During the document review the validation team also compared the proposed CPA with available information relating to projects or technologies similar to the proposed CPA under validation. Where appropriate, the validation team assessed the appropriateness of formulae and the correctness of calculations presented by the CME/CPA operator. A list of all documents reviewed or referred to in the course of this validation is included in Appendix A.

III.2. On-site inspection

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The site visit included a tour of one of the physical sites where the proposed CPA will be implemented, at Naivasha in central Kenya, and interviews with representatives of the CME and CPA developer ClimateCare Limited, and first Programme Activity Implementer (PAI) 'Finlays Horticulture Fairtrade Association' (FHFA).

Site visits and interviews provide additional information and background to the CPA as well as cross checks with CPA documentation. Interviews were undertaken with relevant stakeholders in the host country, as well as personnel with knowledge of the CPA design and implementation. A list of interviewees, and the main topics discussed with each person can be found in appendix A. The site visit was designed to enable the validation team to

- undertake a detailed review of additional CPA documentation and verify the supporting documentation;
- inspect the CPA site and confirm the validity of the CPA description in the CPA-DD;
- assess the validity of the CPA boundary;
- cross-check the validity of the CPA information with other sources of information; and
- interview relevant stakeholders involved in the CPA as required.

Duration of on-site inspection: 03/02/2015 to 05/02/2016				
No.	Activity performed on-site	Site location	Date	Team member
1.	Interviews with relevant stakeholders in the host country, personnel with knowledge of the project design and implementation	Naivasha (0°50'13.99"S, 36°21'3.36"E)	03/02/2016	Jonathan Avis

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			
3.	Detailed review of additional CPA documentation and verify the supporting documentation			
4.	Inspect the CPA site and confirm the validity of the CPA description in the CPA-DD and assess the validity of the CPA boundary			

III.3. Interviews

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No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Obare	Joash	Project Manager, ClimateCare	03/02/2016	PoA-DD, CPA-DD, additionality, monitoring plan, project design, CME and CPA operator roles and responsibilities	Jonathan Avis
2.	Owino	Tom	ClimateCare		PoA establishment	
3.	Morton	Tom	Director, ClimateCare		Public funding, carbon rights	
4.	Mburu	John	Fairtrade Liaison Officer, FHFA		CPA description, timeline, subsidy mechanism for stove dissemination, stakeholder consultation, serial numbering system (double counting), sales records (monitoring)	
5.	Wasike	Susan	FHFA			
6.	Masinde	Pamela	FHFA			
7.	Nelima Khaemba	Lilly	Beneficiary / stove user		User satisfaction, stakeholder consultation, baseline stove use	
8.	Monene	Nancy	Beneficiary / stove user			
9.	Hezekiel	Happiness	Beneficiary / stove user			

III.4. Sampling approach

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Not applicable – sampling was not applied in this validation.

III.5. Clarification requests, corrective action requests and forward action requests raised

Areas of validation of compliance	No. of CL	No. of CAR	No. of FAR
General description of the CPAs			
• Title of the proposed or registered PoA			
• Title(s) of the proposed specific-case CPAs and the corresponding generic CPA			
• Specific-case CPA design document		1	
• Purpose and general description of the specific-case CPAs	2		
Environmental analysis			
Local stakeholder consultation			
Eligibility of CPAs and estimation of emissions reductions			
• Applicability of selected methodology and/or standardized baseline	1		

Areas of validation of compliance	No. of CL	No. of CAR	No. of FAR
○ Deviation from methodology			
○ Clarification on applicability of methodology, tool and/or standardized baseline			
• Sources and GHGs		1	
• Description of baseline scenario			
• Demonstration of eligibility for the CPAs	6	2	
• Estimation of emission reductions or net GHG removals by sinks			
○ Explanation of methodological choices	1		
○ Data and parameters fixed ex ante		1	
○ Ex ante calculation of emission reductions or net GHG removals by sinks			
○ Summary of ex ante estimates of emission reductions or net GHG removals by sinks			
• Application of the monitoring methodology and description of the monitoring plan			
○ Data and parameters to be monitored		1	
○ Description of the monitoring plan	1	1	
Total	11	7	

SECTION IV. Internal quality control

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The process of validation and decision of the validation team has been subject to an independent Technical Review. The scope of the Technical Review process is to independently assess that all procedures have been followed, necessary requirements have been met, and all conclusions are justified. The final validation decision is based on the findings and conclusions of the validation team, assessing the compliance of the CPAs with the PoA eligibility criteria and related CDM requirements, and the technical evaluation of the independent technical reviewer. The final report is then reviewed and approved by the qualified signatory / final decision maker within ERM CVS.

SECTION V. Validation opinion

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ERM CVS based its validation work on:

- CDM approved monitoring methodology AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass (version 04.0)
- CDM Validation and Verification Standard (version 09.0)
- ERM CVS's internal CDM validation methodologies and protocols
- CDM decisions and guidance issued by the CDM Executive Board
- UNFCCC criteria for the Clean Development Mechanism
- Host Country criteria for the Clean Development Mechanism

ERM CVS is responsible to provide a thorough independent third party assessment of the proposed CPA and the specific CPA-DD against the latest version of the PoA to determine whether the CPA meets the requirements of the PoA.

The Project Participants and CPA operator are responsible for preparing the CPA-DD, supporting documentation and providing all necessary evidences to support the information included in the CPA-DD.

ERM CVS conducted its activities in accordance with the CDM Validation and Verification Standard. The validation consisted of a review of CPA documentation, cross checking information

through other reliable sources and reporting. Validation work was based on a validation protocol that sets out relevant PoA and CDM requirements. Where necessary, Clarification Requests and Corrective Action Requests were raised and closed out with the Project Participants. The validation work was subject to detailed Technical Review and assessment prior to submission. No component of the CPAs was excluded from the validation.

ERM Certification and Verification Services (ERM CVS) has performed the validation of the CPAs against the latest version of the PoA-DD which is submitted in parallel as a post-registration change request, including revised eligibility criteria. The validation employed standard auditing techniques, and addressed the requirements of the CDM Validation and Verification Standard.

The validation has provided sufficient evidence to demonstrate that the CPA is eligible for inclusion in the PoA, that the PoA is not the baseline scenario, and that emission reductions would be additional to what would have taken place in the absence of the CPA.

The CPA meets the eligibility criteria of the PoA: “Clean Cook Stoves in Sub-Saharan Africa by ClimateCare Limited” and correctly apply methodology AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass (version 04.0).

The monitoring plans provide for the collection and archiving of data sufficient to ensure that emission reductions can be verified.

Nothing came to our attention to suggest that the CPA, if implemented as described, would not result in annual emission reductions per year on average of 40,064 tCO₂e.

SECTION VI. Validation findings

SECTION A. General description of the CPA(s)

A.1. Title of the proposed or registered PoA

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The title of the registered PoA is ‘Clean Cook Stoves in Sub-Saharan Africa by ClimateCare Limited’ (#8438).

A.2. Title(s) of the proposed specific-case CPA(s) and the corresponding generic CPA

Specific-case CPA title and reference number	Version number of the specific-case CPA-DD	Host Party	Generic CPA title, identification/reference number	Version number of the PoA-DD into which the CPA is included
Improved Jikos Project —CPA03	05	Kenya	N/A	PoA-DD Version 06, dated 07 September 2016

A.3. Specific-case CPA design document

Means of validation	ERM CVS reviewed the CPA-DD to determine whether it has been prepared in accordance with the validated generic CPA-DD in the PoA-DD and guidance from the CDM Executive Board available on the UNFCCC website.
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Findings	<p>The CPA-DD shall be updated to the latest version of the CPA-DD template, as per the updated PoA-DD and generic CPA-DD. Please see CAR 6</p> <p>CAR 6 was addressed and the CPA-DD was updated to use the latest version of the template. Following resolution of CAR 6, ERM CVS confirmed that:</p> <p>The CPA-DD has been checked against the latest template for the CPA Design Document available on the CDM website, and the CPA-DDs are in compliance with the latest template and guidelines.</p>
Conclusion	<p>ERM CVS has confirmed that the CPA-DD has been prepared in accordance with the latest relevant forms and guidance as well as in accordance with the registered generic CPA as described in the registered PoA-DD.</p>

A.4. Purpose and general description of the specific-case CPA(s)

Means of validation	<p>ERM CVS reviewed the description of the CPA in the CPA-DD in order to evaluate whether it provides a clear and accurate description of the proposed CPA. Validation of the CPA description was based on review of documentation.</p>
Findings	<p>ERM CVS checked whether the CPA description in section A of the CPA-DD provides a clear, accurate and sufficiently detailed description of all relevant elements of the proposed CPA, including the following:</p> <p>(a) Entity/individual responsible for the operation of the CPA(s);</p> <p>The CPA-DD makes it clear that under this CPA, ClimateCare is acting as Coordinating Managing Entity (CME) and also as Project Implementer.</p> <p>(b) Technology/measures to be employed and/or implemented by the CPA(s);</p> <p>The CPA description has been validated against manufacturer's specifications /04/ and the stove testing report /18/ for the 'Jiko Koa' stove, the first stove design to be used in the CPA, and also against the contract between ClimateCare and DFID for the establishment of the project (in which DfID provided funding to set up a revolving fund) /05/, the contract between ClimateCare and FHFA (the first PAI) /06/, interviews with representatives of the CME and interviews with representatives of FHFA, as well as a site visit to the Naivasha area which included visits to households who have already received stoves under the project.</p> <p>The technical description of the CPA in section A.5 only provides details of the 'Jiko Koa' stove design, whereas the CPA plans to disseminate a range of stove designs in the future. Summary information on the different stove designs to be included in the CPA has not been provided in section A.5.</p> <p>Please see CL 1</p> <p>A summary of the sustainable development benefits is not provided in section A.3 of the CPA-DD.</p> <p>Please see CL 1</p> <p>CL 1 was addressed. Please see Appendix 4 for details. The contribution of the proposed SSC-PoA to sustainable development has been described in section A.3. Summary information on the different stove designs to be included in the CPA has been provided in section A.5.</p> <p>It was therefore confirmed that the CPA description in the CPA-DD sections A.3 and A.5 provides a clear, accurate and sufficiently detailed description of all relevant</p>

	<p>elements of the proposed CPA,.</p> <p>(c) The Party(ies) involved, confirming whether each specific-case CPA has only one host Party;</p> <p>ERM CVS confirms that the CPA is located in Kenya, which does not wish to be considered as a PP. The CPA has only one host Party.</p> <p>(d) Geographic reference or other means of identification;</p> <p>Geographic reference is provided in the CPA-DD. The CPA is located in Kenya, and all the stoves to be distributed by the CPA will have serial numbers which are sequential and unique.</p> <p>(e) Duration, crediting period and start date of the CPA(s);</p> <p>The duration, crediting period and start date of the CPA is clearly stated in the CPA. The start date is validated below in the section on eligibility criteria</p> <p>(f) Estimated amount of emission reductions during the crediting period;</p> <p>The amount of emission reductions during the crediting period have been verified by reviewing the CPA-DD and the ER reduction spreadsheet /08/</p> <p>(g) Public funding of the CPA(s).</p> <p>The CPA has received some funding from DFID to subsidise the stove purchase price and set up loan revolving fund. Use of public funding is validated below in the section on eligibility criteria.</p> <p>ERM CVS also confirmed whether there is a clear description of the baseline scenario in the CPA-DD. Please refer to section D.3.</p>
Conclusion	<p>The CPA description in the CPA-DD contains a clear description of the CPA that provides the reader with a clear understanding of the precise nature of the CPA and the technical aspects of its implementation. The description sufficiently covers all relevant elements, is accurate, and clearly states the differences resulting from the CPA compared to the pre-CPA situation.</p>

SECTION B. Environmental analysis

Means of validation	<p>ERM CVS determined whether the project participants conducted an analysis of the environmental impacts of the proposed CPA, including transboundary impacts where applicable, and whether these impacts are considered significant by the host Party. Where the host Party required an EIA to be completed, ERM CVS confirmed whether an EIA was in place covering the CPAs. ERM CVS assessed this by means of a document review.</p>
Findings	<p>Local approval/license of the CPA by the host country environmental regulatory authority and an EIA License/Approval are not relevant for this CPA because under legislation in the host country, such activities are not required to undergo an EIA or seek environmental licencing or approval. ERM CVS has reviewed the relevant legislation in Kenya /08/.</p>
Conclusion	<p>The project participants have conducted an analysis of the environmental impacts of the proposed CPAs, including transboundary impacts where applicable, and whether these impacts are considered significant by the host Party. According to host country legislation, an EIA is not required for the activities covered under the CPAs.</p>

SECTION C. Local stakeholder consultation

Means of validation	<p>ERM CVS determined whether the project participants have completed a local stakeholder consultation process and that due steps were taken to engage stakeholders and solicit comments for the proposed CPAs. ERM CVS also determined if the LSC conducted was applicable and suitable for the proposed CPAs.</p> <p>ERM CVS reviewed the local stakeholder consultation report /15/ and the website of the DNA /16/ to confirm any national requirements.</p>
Findings	<p>Local stakeholder consultation meetings were carried out at Finlays operations in Naivasha and Mount Kenya. The meetings involved demonstrations of the stoves to all Finlays workers at the staff canteen during their lunchbreak, with an opportunity for questions. Stakeholders were invited to raise their questions and concerns, and to record their name in the attendance register if they wished. ERM CVS has reviewed the LSC report /11/ which includes an account of the meetings as well as photographs of the events, attendance lists /12/, and minutes of the meetings /13/. The main questions raised by stakeholders were around the speed of cooking on the stove, the mode of payment, and confirmation of the benefits of using the improved stoves. No negatives concerns were raised that necessitated any changes to the project design.</p> <p>During the verification site visit ERM CVS interviewed a number of beneficiaries who attended the consultation in Naivasha. No negative comments on the project were received. Further consultation meetings will be held as the CPA expands to other areas and other PAIs.</p>
Conclusion	<p>Based on the document reviews undertaken, ERM CVS concludes that relevant local stakeholders were invited to comment on the CPA prior to the start date of the CPA and submission of the CPA-DD to the DOE for validation, and that the consultation undertaken was adequate in the context of the CP. Where comments were raised, it was validated that these were taken into account in the development of the CPA and that this was properly described in the CPA-DD.</p> <p>ERM CVS has therefore validated that the local stakeholder consultation is adequate.</p>

SECTION D. Eligibility of CPAs and estimation of emissions reductions**D.1. Applicability of selected methodology and/or standardized baseline**

Means of validation	ERM CVS has evaluated the baseline and monitoring methodology selected by the CME/CPA operator to confirm its applicability and whether or not it has been appropriately applied to the CPAs.
Findings	The findings are set out in the table below.
Conclusion	The applied methodology and associated tools are fully applicable to the CPAs and is correctly applied in the CPA-DDs. There are no greenhouse gas emissions occurring within the proposed CPA boundary as a result of the implementation of the proposed CPAs which are expected to contribute more than 1% of the overall expected average annual emissions reductions, which are not addressed by the applied methodology, were identified.

Methodology applicability conditions	Validation findings (including justification and substantiation of information, data and evidence)	Draft OK/ CAR/CL	Final OK/ Not OK
This category comprises appliances involving the efficiency improvements in the thermal applications of non-renewable biomass. Examples of these technologies and measures include the introduction of high efficiency biomass fired cook stoves or ovens or dryers and/or improvement of energy efficiency of existing biomass fired cook stoves or ovens or dryers.	The CPA implements improved efficient charcoal cooking stoves.	OK	OK
Single pot or multi pot portable or in-situ cook stoves with specified efficiency of at least 20%. The efficiency of the stoves shall be tested by a national standards body or by an appropriate certifying agent recognised by it.	The CPA-DD clearly references this requirement. Stove designs to be included in the CPA will have a thermal efficiency greater than 20%, which is ensured by means of the eligibility criteria (see below for validation of compliance with these criteria). The efficiency of the devices being deployed as part of the project activity will be monitored annually as per the CPA monitoring plan, in line with the methodology. Stove testing: a stove testing report by a national standards body or an appropriate certifying agent recognized by it was not provided. Please see CL 3 CL 3 was addressed and the PP has demonstrated that the CPA meets the criterion.	CL 3	OK
Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods or referring to published literature, official reports or statistics.	Please see CAR 1 Evidence was provided that non-renewable biomass has been used in Kenya since 1989 – please see annex 4 for details. CAR 1 was closed.	CAR 1	OK
The use of this methodology in a project activity under a programme of activities	Bold is multiplied by a net to gross adjustment factor of 0.95 to account for leakages, hence surveys are not required.	OK	OK

Methodology applicability conditions	Validation findings (including justification and substantiation of information, data and evidence)	Draft OK/ CAR/C L	Final OK/ Not OK
<p>is legitimate if the following leakages are estimated and accounted for, if required on a sample basis using a 90/30 precision for the selection of samples, and accounted for:</p> <p>a) Use of non-renewable woody biomass saved under the project activity to justify the baseline of other CDM project activities can also be a potential source of leakage. If this leakage assessment quantifies a portion of non-renewable woody biomass saved under the project activity that is then used as the baseline of other CDM project activities then Bold is adjusted to account for the quantified leakage;</p> <p>b) Increase in the use of non-renewable woody biomass outside the project boundary to create non-renewable woody biomass baselines can also be a potential source of leakage. If this leakage assessment quantifies an increase in the use of non-renewable woody biomass outside the project boundary then Bold is adjusted to account for the quantified leakage;</p> <p>c) As an alternative to subparagraphs (a) and (b), Bold can be multiplied by a net to gross adjustment factor of 0.95 to account for</p>			

Methodology applicability conditions	Validation findings (including justification and substantiation of information, data and evidence)	Draft OK/ CAR/C L	Final OK/ Not OK
leakages, in which case surveys are not required.			
The project participants shall apply the general guidelines to SSC CDM methodologies as per paragraph 21 of the "General guidelines for SSC methodologies"; Version 18.0.	The general guidelines to SSC CDM methodologies have been applied by the CPA. Each improved cook stove saves less than 1% of the energy limit for Type II projects using small-scale methodologies (threshold of 180 GWh thermal savings) and the total number of stoves in the CPA shall not exceed the 180GWh thermal threshold. The emission reduction calculation spreadsheet has been reviewed to confirm this /03/.	OK	OK

D.1.1. Deviation from methodology

Means of validation	Not applicable
Findings	Not applicable
Conclusion	Not applicable

D.1.2. Clarification on applicability of methodology, tool and/or standardized baseline

Means of validation	Not applicable
Findings	Not applicable
Conclusion	Not applicable

D.2. Sources and GHGs

Means of validation	ERM CVS determined whether all main GHG emission sources, the physical delineation of the proposed CPA, and other relevant project and baseline emission sources covered in the selected methodology and, where applicable, the selected standardized baseline are included within the CPA boundary for the purpose of calculating project and baseline emissions for the proposed CPA. ERM CVS confirmed the project boundary based on comparison of the CPA-DD with the approved methodology and documented evidence related to the CPA and its boundary.
Findings	The sources and gases included in the project boundary are validated in the table below.
Conclusion	The identified boundary and the selected sources and gases are justified for the proposed CPA. ERM CVS did not identify any emission sources that will be affected by the implementation of the CPA and which are expected to contribute more than 1 per cent of the overall expected average annual emissions reductions, and are not addressed by the selected methodology and, where applicable, the selected standardised baseline.

	Source	Gas	Included in generic CPA-DD?	Is inclusion / exclusion justified in the CPA-DD?	How has this been validated?
Baseline emissions	Emissions from fossil fuels utilised or fossil fuels that would be utilised for cooking	CO ₂	Yes	Yes	Major source of emissions as per the methodology
		CH ₄	No	Yes	Minor source of emissions as per the methodology
		N ₂ O	No	Yes	Minor source of emissions as per the methodology
Project emissions	Emissions from the consumption of biomass for cooking.	CO ₂	Yes	Yes	Major source of emissions as per the methodology
		CH ₄	No	Yes	Minor source of emissions as per the methodology
		N ₂ O	No	Yes	Minor source of emissions as per the methodology

D.3. Description of baseline scenario

Means of validation	ERM CVS determined whether the baseline identified for the proposed CPA is the scenario that reasonably represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the CPA. ERM CVS reviewed the description of the baseline in the CPA-DD and compared it with that in the methodology. ERM CVS applied its sectoral and local knowledge to ensure that the baselines are appropriate for the proposed CPA.
Findings	<p>Since the methodology does not require several alternative scenarios to be considered in the identification of the most plausible baseline scenario, no analysis of different baseline scenarios has been performed. The baseline scenario is defined in the methodology as follows: "It is assumed that in the absence of the project activity, the baseline scenario is the use of fossil fuels for meeting similar thermal energy needs".</p> <p>ERM CVS confirms that the described baseline scenario is consistent with the PoA-DD and generic CPA-DD.</p> <p>A discussion of national policies and regulations and whether these mandate the use of efficient charcoal stoves has not been included in the CPA-DD. Please refer to CL 5.</p> <p>Confirmation that laws, policies or mandatory requirements stipulating the adoption of efficient charcoal cook-stoves do not exist in the country of the CPA implementation has been provided in the CPA-DD. Please see annex 4 for details of how this was validated. CL 5 was closed.</p> <p>The identified baseline is in line with all relevant national and/or sectoral policies and circumstances. ERM CVS confirms that there are no laws, policies, or mandatory requirements stipulating the distribution of efficient cook stoves. This is a completely voluntary PoA, and CPA.</p>
Conclusion	<p>ERM CVS confirmed that:</p> <p>The baseline scenario is defined by the methodology, therefore further assessment of baseline alternatives was not conducted. All the assumptions, documentation and data used by the PPs to describe the baseline are listed in the CPA-DDs, and are</p>

	<p>appropriately justified where applicable.</p> <p>ERM CVS has, drawing on its local and sectoral knowledge, confirmed that all applicable CDM requirements have been taken into account in the identification of the baseline scenario.</p> <p>Relevant national and/or sectoral policies and circumstances are considered and there are no national or sectoral policies and circumstances which contradict the identified baseline.</p> <p>The approved baseline methodology has therefore been correctly applied to identify the most plausible baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed CPAs.</p>
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D.4. Demonstration of eligibility for the CPA(s)

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ERM CVS assessed whether the proposed specific-case CPAs comply with the eligibility criteria for inclusion of the CPAs in the PoA. Each of the eligibility criteria has been assessed in the table below.

The PoA standard 'Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities' requires that the DOE shall assess the elements of the CME's management system referred to in paragraph 21 of the standard as part of the validation of the PoA *or* as part of the validation of a CPA inclusion. In the case of this PoA, the CME's management system was already assessed as part of the validation of the PoA /23/.

The eligibility criteria, as listed in the CPA-DD, do not match those in the registered PoA-DD. Please see CAR 7.

The eligibility criteria have been updated to match those in the PoA-DD. CAR 7 was closed.

Criteria	Conditions to be met (as set out in the PoA-DD and template CPA-DD)	Means of proof required by the PoA-DD/generic CPA-DD (as set out in the PoA-DD and template CPA-DD)	Validation findings (including justification and substantiation of information, data and evidence).	Conclusion: Does the CPA meet this Eligibility Criterion (yes/no)
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.5, namely, Ghana and Kenya, with the possibility of expanding to other Sub-Saharan African countries.	Location and boundary of the CPA is specified in the specific CPA. The database maintained by the CME.	The CPA is located in Kenya. The CPA boundary is clearly stated in the CPA-DD.	Yes
Non-renewable biomass use	It can be shown that non-renewable biomass has been used since 31 December 1989, within the geographic	Published independent data at the geographic country	CAR 1: evidence for use of non-renewable biomass in Kenya since 31 December 1989 has not	Yes

Criteria	Conditions to be met (as set out in the PoA-DD and template CPA-DD)	Means of proof required by the PoA-DD/generic CPA-DD (as set out in the PoA-DD and template CPA-DD)	Validation findings (including justification and substantiation of information, data and evidence).	Conclusion: Does the CPA meet this Eligibility Criterion (yes/no)
	boundary (Ghana and Kenya, and later if included, other Sub-Saharan African Countries) where CPA is implemented	boundary level	been provided. Official statistics from the FAO were provided to demonstrate that non-renewable biomass has been used since 31 December 1989 in Kenya. Please see Appendix 4 for details.	
Conditions that avoid double counting of ECSs and CPAs	<p>i. ECSs</p> <p>A unique serial numbering or identification system for the stoves disseminated is applied. The serial number will be traceable to the following:</p> <ol style="list-style-type: none"> 1. Programme identification 2. The CPA and its location 3. Acronym of project participants <p>ii. CPAs</p> <p>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.</p> <p>The serial numbers are listed in the CME</p>	<p>The specific numbering or identification regime is included in the specific CPA-DD. This shall be verified against the first stove sales receipt (first CPA of PoA).</p> <p>A statement is included in the CPA-DD that the specific CPA will not be part of another single CDM project activity or CPA under another PoA.</p> <p>This will be checked and verified with the UNFCCC, Gold Standard and Voluntary Carbon Standard websites with date of access. Confirmation from the CPA Implementer to the CME that</p>	<p>Serial numbering: The CPA-DD describes a serial numbering system that includes a unique serial number attached to each improved cook stove. This will ensure that each stove is uniquely identifiable, both individually and as part of the CPA and PoA and project participants.</p> <p>During the site visit, ERM CVS visited a number of households in Naivasha region who had already received 'Jiko Koa' stoves from FHFA, the first PAI under the CPA. Each stove had a serial number attached to it as a sticker on the base, with a barcode. ERM CVS also observed new 'Jiko Koa' stoves, which also had a serial number attached to them. Based on interviews with the CPA Implementer, ClimateCare Limited, and the first PAI, FHFA, the manufacturer of the 'Jiko Koa' stoves, Burn, assigns a unique number to each stove at the factory. Burn maintain a database with all of the serial numbers for the</p>	Yes

Criteria	Conditions to be met (as set out in the PoA-DD and template CPA-DD)	Means of proof required by the PoA-DD/generic CPA-DD (as set out in the PoA-DD and template CPA-DD)	Validation findings (including justification and substantiation of information, data and evidence).	Conclusion: Does the CPA meet this Eligibility Criterion (yes/no)
	<p>Database.</p> <p>The CPA shall not be proposed as an individual CDM project and/or as a part of any other CDM PoA and/or any other mechanism to avail climate change mitigation benefits</p>	<p>the CPA has/shall not been proposed as an individual CDM project and/or as a part of any other CDM PoA and/or any other mechanism to avail climate change mitigation benefits.</p> <p>CME database</p> <p>The specific numbering or identification regime is included in the specific CPA-DD</p> <p>Document:</p> <p>First stove sales receipt (first CPA of PoA)</p>	<p>stoves they have produced. As the stoves leave the factory and are shipped to customers like FHFA, Burn scans the barcode of each stove and records to whom it is being sent. In this was Burn can easily identify which stoves have been supplied to FHFA, and hence which 'Jiko Koa' stoves are part of the CPA. This information is provided by Burn to the CPA implementer and PAI and the serial numbers can therefore be added to the CME database. ERM CVS reviewed a copy of the CME database for CPA 1 during the site visit. The CME database for CPA 2 has not yet been developed however ERM CVS reviewed the sales record spreadsheet /07/, which does record the unique serial number of each stove.</p> <p>A statement is included in the CPA-DD that the specific CPA will not be part of another single CDM project activity or CPA under another PoA.</p> <p>Confirmation of verification against the UNFCCC, Gold Standard and VCS databases for the purpose of avoiding double counting has not yet been provided. Please see CL 2.</p> <p>The confirmation has been included in the CPA-DD.</p>	

Criteria	Conditions to be met (as set out in the PoA-DD and template CPA-DD)	Means of proof required by the PoA-DD/generic CPA-DD (as set out in the PoA-DD and template CPA-DD)	Validation findings (including justification and substantiation of information, data and evidence).	Conclusion: Does the CPA meet this Eligibility Criterion (yes/no)
			<p>ERM CVS has confirmed that the project has not been separately registered as a CDM, Gold Standard or VCS project.</p> <p>CL 2 was closed.</p> <p>Since this is not the first CPA of the PoA, the first stove sales receipt was not applicable.</p>	
The specifications of technology/measure and performance level	<p>Improved cookstove has a minimum efficiency of 20%. Stoves shall be tested annually for continued performance</p> <p>The efficiency of the project systems to be certified by a national standards body or an appropriate certifying agent recognized by it. Alternatively, manufacturer specifications on efficiency based on water boiling test (WBT) may be used</p>	<p>Technical specifications of the project stoves provided by means of efficiency test reports provided by independent testers - through Water Boiling Test (WBT) on annual basis.</p> <p>Evidence that the stove tester is the national body or a body recognised by it or manufacturer specifications on efficiency based on water boiling test (WBT).</p>	<p>ERM CVS has reviewed manufacturer's specifications for the 'Jiko Koa' stove, which is the stove design being used for the first PAI under the CPA /14/. The specifications show that the manufacturer's stated efficiency is greater than 20%. ERM CVS has also reviewed a stove testing report carried out by the manufacturer's own laboratory 'Burn design Lab' confirming that the tested efficiency of the 'Jiko Koa' stove is 45.7% (or 46% rounded to the nearest percentage point) /15/. However efficiency test reports provided by independent testers through WBTs have not yet been provided.</p> <p>CL 3: Please provide a stove testing report by a national standards body or an appropriate certifying agent recognized by it.</p> <p>A stove testing report by the Kenya Industrial Research and Development Institute /18/</p>	Yes

Criteria	Conditions to be met (as set out in the PoA-DD and template CPA-DD)	Means of proof required by the PoA-DD/generic CPA-DD (as set out in the PoA-DD and template CPA-DD)	Validation findings (including justification and substantiation of information, data and evidence).	Conclusion: Does the CPA meet this Eligibility Criterion (yes/no)
			has been provided. CL 3 was closed.	
Conditions to check the start date	The CPA start date shall be after the PoA validation start following a successful pilot phase.	The start date of the CPA will be specified in each CPA-DD and appropriate supporting documents for the start date as per CDM definition shall be provided	ERM CVS has reviewed the contract between Climate Care Limited and DfID for the release of funds to set up the rolling fund that will enable the implementation of the CPA. This represents the date of financial closure of the CPA and ERM CVS confirmed that this was the earliest date of implementation or real action on the project. The contract was signed on 26 February 2014 /05/. This is after the start date of the PoA. CL 4: Please correct the start date specified in the CPA-DD to match the actual date of financial close. The start date was corrected and CL 4 was closed.	Yes
The conditions that ensure that CPAs meet the additionality requirements	Each CPA will demonstrate the additionality by establishing that in the absence of CDM PoA, the CPA would not occur by either using a positive list of technology and project activity types that are defined as automatically additional or barrier analysis, as per the demonstration of additionality of small-scale project	Additionality analysis in the CPA-DD, including confirmation that such laws, policies or mandatory requirements do not exist in the country of the CPA implementation.	Additionality analysis is provided in the CPA-DD. However in line with the "Guidelines on the demonstration of additionality of small-scale project activities" as referenced in the PoA, documentation of barriers is not required for the positive list of technologies and project activity types that are defined as automatically additional. The CPA is solely composed of isolated units (cooking stoves) where	Yes

Criteria	Conditions to be met (as set out in the PoA-DD and template CPA-DD)	Means of proof required by the PoA-DD/generic CPA-DD (as set out in the PoA-DD and template CPA-DD)	Validation findings (including justification and substantiation of information, data and evidence).	Conclusion: Does the CPA meet this Eligibility Criterion (yes/no)
	<p>activities, ver 10.0, EB 83 annex 14. Barrier Analysis will be done in accordance with the latest versions of the “Guidelines on the demonstration of additionality of small-scale project activities” and the “Standard for the demonstration of additionality, development of eligibility criteria and application of multiple methodologies for Programme of Activities”.</p> <p>The country in which the CPA is to be implemented has no laws, policies or mandatory requirements stipulating the adoption of efficient charcoal cook-stoves and the CPA is a voluntary action by the PAI.</p>		<p>the users of the technology/measure are households or communities or Small and Medium Enterprises (SMEs) and where the size of each unit is no larger than 5% of the small-scale CDM thresholds (as confirmed by review of the emission reduction calculations /03/). Therefore no further demonstration or validation of the barriers is required, and the CPA is deemed to be additional.</p> <p>However confirmation that laws, policies or mandatory requirements stipulating the adoption of efficient charcoal cook-stoves do not exist in the country of the CPA implementation has not been provided in the CPA-DD. Please see CL 5.</p> <p>Confirmation that laws, policies or mandatory requirements stipulating the adoption of efficient charcoal cook-stoves do not exist in the country of the CPA implementation was provided in the CPA-DD section A.3 and CL 5 was closed – see appendix 4 for details.</p>	
SSC limit for CPAs	c. The annual energy savings of each CPA shall not exceed the limits of 180 GWhth/year over the entire crediting period (Ref Clarification about	<p>GHG emission reduction calculation spreadsheet for the CPA.</p> <p>CPA-DD</p>	The annual energy savings of each CPA do not exceed the limits of 180 GWhth/year over the entire crediting period. This has been confirmed by review of the emission reduction calculation	Yes

Criteria	Conditions to be met (as set out in the PoA-DD and template CPA-DD)	Means of proof required by the PoA-DD/generic CPA-DD (as set out in the PoA-DD and template CPA-DD)	Validation findings (including justification and substantiation of information, data and evidence).	Conclusion: Does the CPA meet this Eligibility Criterion (yes/no)
	<p>the threshold of thermal energy savings in AMS-II.G (submitted 21 Sep 08); http://cdm.unfccc.int/filestorage/A/M/_/AM_CLAR_VIIC5MTUUWR9PRPJL0EXOT3G2CKSFQ/Response%20SSC%20WG%20provided.pdf?t=a3F8bWFhaWJwfDDgR6TVWAKpcLVnwbAqV3mr</p> <p>d. At the time of joining the PoA, the maximum number of stoves required to reach the SSC threshold shall be determined and documented in the CPA-DD. Once the maximum number of appliances under the threshold is reached (or before, as deemed appropriate), the CPA shall be closed and, depending on the circumstances, a new CPA may be started to accommodate any new stoves sold.</p>		<p>spreadsheet /03/.</p> <p>The maximum number of stoves required to reach the SSC threshold has been determined and documented in the CPA-DD. This has been confirmed by review of the emission reduction calculation spreadsheet /03/.</p>	
Exception from de-bundling rules	<p>Each ECS shall reduce energy consumption by less than 1.8GWhth/year.</p> <p>At the time of joining the PoA, the energy saving per stove shall be determined and verified by the</p>	<p>GHG emission reduction calculation spreadsheet for the CPA</p> <p>CPA-DD</p>	<p>The energy savings per stove are less than 1.8GWhth/year. This has been confirmed by review of the emission reduction calculation spreadsheet /03/.</p>	Yes

Criteria	Conditions to be met (as set out in the PoA-DD and template CPA-DD)	Means of proof required by the PoA-DD/generic CPA-DD (as set out in the PoA-DD and template CPA-DD)	Validation findings (including justification and substantiation of information, data and evidence).	Conclusion: Does the CPA meet this Eligibility Criterion (yes/no)
	CME as not greater than 1.8 GWhth/year (1% of 180 GWhth/year). Only CPAs meeting this criterion will be listed in the PoA and the actual unit ECS energy saving will be documented in the CPA-DD.			
Carbon rights ownership	The CPA Implementer shall cede the rights for issuance of the CERs to the CME	Authorisation from the CPA Implementer to the CME.	<p>ERM CVS has reviewed a Carbon rights agreement between ClimateCare Limited, Burn Manufacturing USLLC and Finlays Horticulture Fairtrade Association, signed by ClimateCare on 14 October 2014, in which the PAI (FHFA) and manufacturer (Burn) cede rights to the carbon credits to the CME (ClimateCare Limited) /09/.</p> <p>In order to inform end users of the fact that the project is subsidised through carbon revenues, each device has a label on the box clearly stating that the stove is subsidised due to support from ClimateCare (the CME) and DfID /10/.</p> <p>However, authorisation from the CPA Implementer to the CME concerning ownership of carbon rights shall be provided. Please see CL 6.</p> <p>The Carbon Rights Agreement was provided /09/ and CL 6 was closed.</p>	Yes

Criteria	Conditions to be met (as set out in the PoA-DD and template CPA-DD)	Means of proof required by the PoA-DD/generic CPA-DD (as set out in the PoA-DD and template CPA-DD)	Validation findings (including justification and substantiation of information, data and evidence).	Conclusion: Does the CPA meet this Eligibility Criterion (yes/no)
			Please see Appendix 4 for details.	
The PoA-specific requirements stipulated by the CME including any conditions related to undertaking 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. Further details are presented in section C of the CPA-DD. The consultations shall meet both CDM and Gold Standard requirements.</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. Where such evidence is not available, an EIA will be conducted at the CPA level.</p>	<p>The Local Stakeholder Consultation Report/minutes</p> <p>Local approval/license of the CPA by the host country environmental regulatory authority</p> <p>PoA Joining Agreement</p> <p>EIA License/Approval</p>	<p>Local stakeholder consultation meetings were carried out at Finlays operations in Naivasha and Mount Kenya. The meetings involved demonstrations of the stoves to all Finlays workers at the staff canteen during their lunchbreak, with an opportunity for questions. Stakeholders were invited to raise their questions and concerns, and to record their name in the attendance register if they wished. ERM CVS has reviewed the LSC report /11/ which includes an account of the meetings as well as photographs of the events, attendance lists /12/, and minutes of the meetings /13/. The main questions raised by stakeholders were around the speed of cooking on the stove, the mode of payment, and confirmation of the benefits of using the improved stoves. No negatives concerns were raised that necessitated any changes to the project design.</p> <p>During the verification site visit ERM CVS interviewed a number of beneficiaries who attended the consultation in Naivasha. No negative comments on the project were received. Further consultation meetings will be held as</p>	Yes

Criteria	Conditions to be met (as set out in the PoA-DD and template CPA-DD)	Means of proof required by the PoA-DD/generic CPA-DD (as set out in the PoA-DD and template CPA-DD)	Validation findings (including justification and substantiation of information, data and evidence).	Conclusion: Does the CPA meet this Eligibility Criterion (yes/no)
			<p>the CPA expands to other areas and other PAIs.</p> <p>Local approval/license of the CPA by the host country environmental regulatory authority and an EIA License/Approval are not relevant for this CPA because under legislation in the host country, such activities are not required to undergo an EIA or seek environmental licencing or approval. ERM CVS has reviewed the relevant legislation in Kenya /08/.</p>	
Documentation	The CPA is described appropriately in a CPA-DD document which is approved by the CME and validated by the DOE assigned by the CME	The CPA-DD for the specific CPA.	A complete CPA-DD has been provided and has been validated by ERM CVS.	Yes
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.	Confirmation by CPA implementer/CM E in the CPA-DD and evidence of funding sources	<p>The CPA uses public funding from the UK, which is an Annex 1 party, for the establishment of the revolving fund which will finance the implementation of the CPA. This was confirmed by review of the contract between DfID and ClimateCare Limited /05/.</p> <p>CAR 02: Please provide confirmation of non-diversion of ODA funding from DfID.</p> <p>Confirmation was provided /22/ and CAR 02 was closed – please see annex</p>	Yes

Criteria	Conditions to be met (as set out in the PoA-DD and template CPA-DD)	Means of proof required by the PoA-DD/generic CPA-DD (as set out in the PoA-DD and template CPA-DD)	Validation findings (including justification and substantiation of information, data and evidence).	Conclusion: Does the CPA meet this Eligibility Criterion (yes/no)
			4 for details.	
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. The target beneficiaries will be identified based on the any identification cards given to the households by the government, where available, phone numbers and otherwise the name of the stove purchaser will be stated. Also, the name of the area/locality or town will be recorded.	<p>This CPA will distribute charcoal stoves for domestic and commercial use.</p> <p>Document:</p> <p>Stove Sales Database</p> <p>Business plan and distribution model.</p> <p>Documentation of the common practice of fuel usage for cooking in the project areas e.g. based on representative sample surveys, official data or peer reviewed literature)</p>	<p>The target group for the CPA is domestic users (households). This is clearly stated in the CPA-DD and has been confirmed by interviews with the CPA Implementer, first PAI, and by visits to end user households in the Naivasha area. The target beneficiaries under the first PAI are identified by their employee numbers at Finlays, and their ID cards are also checked where applicable. The name of the area/locality is recorded in the stove sales database. ERM CVS has also reviewed the stove sales database for the first PAI, FHFA /07/.</p> <p>CL 7: Please provide a copy of the business plan and distribution model.</p> <p>The business plan / distribution model was provided /19/ and CL 7 was closed – please see CL 7 for details.</p> <p>CL 8: Please provide documentation of the common practice of fuel usage for cooking in Kenya e.g. based on representative sample surveys, official data or peer reviewed literature (as required by the eligibility criterion).</p> <p>Documentation of the common practice of fuel</p>	Yes

Criteria	Conditions to be met (as set out in the PoA-DD and template CPA-DD)	Means of proof required by the PoA-DD/generic CPA-DD (as set out in the PoA-DD and template CPA-DD)	Validation findings (including justification and substantiation of information, data and evidence).	Conclusion: Does the CPA meet this Eligibility Criterion (yes/no)
			usage for cooking in Kenya was provided and CL 8 was close – please see annex 4 for details.	
Where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys	<p>Each CPA will conduct sampling & surveying as appropriate or applicable based on requirements of:</p> <p>i. Sampling and survey methods described in the approved methodology AMS II.G, version 04.0, Energy efficiency measures in thermal applications of non-renewable biomass.</p> <p>ii. “Standard for sampling and surveys for CDM project activities and programme of activities”, version 03.0, Annex 4, EB 69</p>	The CPA monitoring plan in the specific to the CPA and documented in the CPA-DD.	<p>CAR 3: Please describe the CPA sampling plan in the CPA-DD.</p> <p>The sampling plan was described in the CPA-DD and CAR 3 was closed. Please see CAR 3 for details.</p>	Yes

Conclusion:

The eligibility criteria are correctly defined in line with the PoA-DD, and sufficient evidence has been provided to demonstrate that the CPA meets all of the eligibility criteria for inclusion in the PoA.

D.5. Estimation of emission reductions or net GHG removals by sinks**D.5.1. Explanation of methodological choices**

Means of validation	Where the methodology provides for selection between different options for data and parameters ERM CVS checked whether the choice of data and parameters is justified at the PoA level.
Findings	Please refer to the registered PoA for explanation and validation of the Methodological choices.

Conclusion	Please refer to the registered PoA for explanation and validation of the Methodological choices.
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D.5.2. Data and parameters fixed ex ante

Means of validation	Each parameter required by the methodology for the CPA, and project specific parameters used for this project are listed and validated in detail in the table below.
Findings	Please see the table below.
Conclusion	ERM CVS confirms that the parameters required by the methodology / tools have been correctly described in the CPA-DD, in line with the methodological choices and requirements set out at the PoA level. ERM CVS confirms that the values of each parameters set at the CPA level are appropriate – please see the table below for details of how this was validated.

Parameter required as per methodology / tools	Description of the parameter (as per methodology)	Is the parameter included in the CPA-DD?	Title & description in line with Meth?	Data unit correctly expressed?	Value in CPA-DD correct and provides for conservative estimate of Emission Reductions? How was this validated?	Measurement method correctly described in the CPA-DD (if applicable)
η_{old}	Efficiency of the system being replaced, measured using representative sampling methods or based on referenced literature values (fraction), use weighted average values if more than one type of system is being replaced	Yes	Yes	Yes	No. A default value of 0.10 is used, however this is not suitable for charcoal stoves. Please see CAR 4. A value of 0.2 has been applied, in accordance with the methodology, since the replaced systems in the project area will be charcoal stoves which are semi improved but lack high efficiency. This value is appropriate and conservative. CAR 4 was closed.	Not applicable – default values from the methodology are used.
L_{NRB}	Net-to-gross adjustment factor for NRB Leakage (fixed parametric value of 0.95)	Yes	Yes	Yes	Yes – default value from the methodology	n/a
L_{POA}	Net-to-gross adjustment factor for PoA Leakage (fixed parametric value of 0.95)	Yes	Yes	Yes	Yes – default value from the methodology	n/a

CDM-CPA-VAL-FORM

Parameter required as per methodology / tools	Description of the parameter (as per methodology)	Is the parameter included in the CPA-DD?	Title & description in line with Meth?	Data unit correctly expressed?	Value in CPA-DD correct and provides for conservative estimate of Emission Reductions? How was this validated?	Measurement method correctly described in the CPA-DD (if applicable)
	value of 0.95)					
EF _{projected_fossilfuel}	Emission factor for the substitution of non-renewable biomass by similar consumers	Yes	Yes	Yes	Yes – default value from the methodology	n/a
NCV _{biomass}	Net calorific value of the non-renewable woody biomass that is substituted	Yes	Yes	Yes	Yes – default value from the methodology	n/a
B _{bold, appliance survey}	Quantity of charcoal used in the absence of the project activity per appliance(stove)	Yes	Yes	Yes	.Bold,appliance, survey is determined from the following literature review of published data. The thermal energy baseline has been derived using historical data applicable for Kenya. Using data from third party research carried out by Camco Advisory Services (Kenya) limited in 2013 for Kenya Forest Services (KFS). ERM CVS reviewed the survey /17/	n/a

D.5.3. Ex ante calculation of emission reductions or net GHG removals by sinks

Means of validation	ERM CVS conducted validation activities to determine whether the equations and parameters in the CPA-DD has been correctly applied by comparing them to those in the registered PoA-DD. Where the generic CPA (part II of the PoA-DD) and the methodology provide for selection between different options for equations or parameters, ERM CVS confirmed that adequate justification has been provided (based on the choice of the baseline scenario, context of the proposed CPA and other evidence provided) and that the correct equations and parameters have been used, in accordance with the methodology selected.
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	ERM CVS verified the justification given in the CPA-DD for the choice of data and parameters used in the equations. Where data and parameters will not be monitored throughout the crediting period of the proposed CPA but have already been determined and will remain fixed throughout the crediting period (ex-ante parameters), ERM CVS assessed that all data sources and assumptions are appropriate and calculations are correct, applicable to the proposed CPA and will result in a conservative estimate of the emission reductions. Where data and parameters will be monitored on implementation and hence become available only after validation of the CPA, ERM CVS confirmed that the estimates provided in the CPA-DD for these data and parameters are reasonable (please see section 8 for details of the validation of the monitored parameters).
Findings	<p>The PP has correctly described the framework for emission reductions calculations including the relevant formulae in the CPA-DD. Furthermore, the CPA-DD presents all parameters required by the methodology and tools. It also states which equations will be used to calculate emission reductions.</p> <p>ERM CVS confirmed that the emission reduction calculations in the CPA-DD are in line with the framework and methodological choices set out and in line with the registered PoA. The CME/CPA Operator has correctly applied all relevant calculations as required by the methodology and associated tools and as set out in the generic CPA.</p>
Conclusion	<p>Every choice of options for calculating CPA emissions, baseline emissions and leakage offered by the methodology correctly justified in the context of the CPA and baseline scenario. The CPA follows the methodological choices and calculation steps set out in the generic CPA and validated at the PoA level.</p> <p>The formulae required for the determination of emission reductions are correctly presented in a complete and transparent manner in the CPA-DD, enabling a complete identification of parameters to be used and / or monitored.</p>

D.5.4. Summary of ex ante estimates of emission reductions or net GHG removals by sinks

Means of validation	ERM CVS checked the CPA-DD and the spreadsheet for the calculation of emission reductions /03/.
Findings	Detailed calculations have been provided in a traceable spreadsheet showing relevant information.
Conclusion	<p>The CPA-DD correctly applies the methodology and appropriate tools to estimate emission reductions of the CPA. All assumptions and data used are properly listed, including references and sources where applicable. ERM CVS can confirm the following:</p> <ul style="list-style-type: none"> a) All assumptions and data used are listed in the CPA-DD, including their references and sources; b) All documentation used as the basis for assumptions and the sources of data are correctly quoted and interpreted in the CPA-DD; c) All values used in the CPA-DD are considered reasonable in the context of the proposed CPA; d) The baseline methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions; e) All estimates of the baseline emissions can be replicated using the data and parameter values provided in the CPA-DD.

D.6. Application of the monitoring methodology and description of the monitoring plan**D.6.1. Data and parameters to be monitored**

Means of validation	ERM CVS evaluated the monitoring plan for the proposed CPA to ensure that it is based on the validated PoA-DD and approved monitoring methodology that has been applied.
Findings	The monitoring plan in the CPA-DD includes all parameters necessary for monitoring of the CPA in accordance with the registered PoA-DD and the approved methodology that has been applied for this CPA. The parameters are clearly described and the means of monitoring described in the plan complies with the requirements of the methodology.
Conclusion	The monitored parameters included in the monitoring are complete, in accordance with the generic CPA, and appropriate for monitoring of the CPA. In ERM CVS's opinion, the CPA implementer is able to implement the monitoring plan set out for the CPA.

Completeness of monitoring parameters:

Parameter Name	Parameter Description	Is the parameter appropriately included in the Monitoring Plan? (including justification and substantiation of information, data and evidence)
Annual energy saving per appliance	Annual energy saving per appliance	No – please see CAR 5 Following resolution of CAR 5 it was confirmed that the parameter is appropriately included in the monitoring plan.
Annual number of appliances to reach small scale threshold	Annual number of appliances to reach small scale threshold	No – please see CAR 5 Following resolution of CAR 5 it was confirmed that the parameter is appropriately included in the monitoring plan.
B_{old}	Quantity of woody biomass used in the absence of the project activity	No – please see CAR 5 Following resolution of CAR 5 it was confirmed that the parameter is appropriately included in the monitoring plan.
$f_{NRB,y}$	Fraction of woody biomass saved by the project activity in period y that can be established as non-renewable biomass in %	Yes. The project has applied a default value of 92% for non-renewable fraction of Kenya which has been endorsed by Kenyan DNA and approved by the CDM EB http://cdm.unfccc.int/DNA/fNRB/index.html
N_y	Adjusted total number of stoves deployed until period y	Yes. The parameter is denoted as $N_{y,i,a}$, the number of project devices of type i and age a that are operating in year y. However the CPA-DD does not explain how the parameter will be adjusted for any continued use of baseline stoves. Please see CL 9. CL 9 was addressed – please see CL 9 for details. Furthermore, the CPA-DD does not assume any lag time

CDM-CPA-VAL-FORM

Parameter Name	Parameter Description	Is the parameter appropriately included in the Monitoring Plan? (including justification and substantiation of information, data and evidence)
		<p>between the date of stove sale and the date of first use of the stoves. Please justify the expected lag time between the date of sale and the date of first use – please see CL 9.</p> <p>CL 9 was addressed – please see CL 9 for details.</p> <p>The parameter is appropriately included in the monitoring plan.</p>
DO _y	<p>Statistically adjusted drop out from total population of appliances in period y</p> <p>Drop out means that the ECS are either not used, outside of the project boundary as defined in the CPA or damaged beyond repair</p>	<p>No – please see CAR 5</p> <p>CAR 5 was addressed. The parameter is now appropriately included in the monitoring plan.</p>
η_{new}	Efficiency of the project stoves deployed as part of the project activity (fraction), as determined using the Water Boiling Test (WBT) protocol	Yes.

Validation of monitoring parameters:

Parameter required as per methodology / tools and the PoA-DD	Description of the parameter (as per PoA-DD)	Is the parameter included in the CPA-DD?	Title and description in the CPA-DD line with the Methodology and the PoA-DD?	Data unit correctly expressed in CPA-DD?	Value in PDD correct and provides for conservative estimate of Emission Reductions? How was this validated?	Measurement method correctly described in the CPA-DD (if applicable)
Annual energy saving per appliance	Annual energy saving per appliance	Yes	Yes	Yes	In line with the registered PoA, this is calculated from $B_{y,\text{saving, appliance}}$, which is determined from B_{old} , η_{old} and η_{new} , and $\text{NCV}_{\text{charcoal}}$ (0.0295 TJ/t; set	n/a

CDM-CPA-VAL-FORM

Parameter required as per methodology / tools and the PoA-DD	Description of the parameter (as per PoA-DD)	Is the parameter included in the CPA-DD?	Title and description in the CPA-DD line with the Methodology and the PoA-DD?	Data unit correctly expressed in CPA-DD?	Value in PDD correct and provides for conservative estimate of Emission Reductions? How was this validated?	Measurement method correctly described in the CPA-DD (if applicable)
					in the registered PoA).	
Annual number of appliances to reach small scale threshold	Annual number of appliances to reach small scale threshold	Yes	Yes	Yes	Calculated from the annual energy saving per appliance. ERM CVS has reviewed the emission reduction spreadsheet /03/	n/a
B _{old}	Quantity of woody biomass used in the absence of the project activity	Yes	Yes	Yes	Calculated from Bold, appliance,survey (please see above for validation of this parameter) and Ny – see below	n/a
Ny	Adjusted total number of stoves deployed until period y	Yes	Yes	Yes	The value is based on stove sales projections. ERM CVS has reviewed the emission reduction spreadsheet /03/	Sales will be monitored continuously and recorded in a sales database
DOy	Statistically adjusted drop out from total population of appliances in period y Drop out means that the ECS are either not used, outside of the project boundary as defined in the CPA or damaged beyond repair.	Yes	Yes	Yes	A 5% value is assumed, based on the project developer's experience of similar projects. The value is considered reasonable for the purposes of estimating expected emission reductions, based on ERM CVS's	The parameter will be monitored by means of surveys. Home visits with interviews will check if appliances are still operational.

CDM-CPA-VAL-FORM

Parameter required as per methodology / tools and the PoA-DD	Description of the parameter (as per PoA-DD)	Is the parameter included in the CPA-DD?	Title and description in the CPA-DD line with the Methodology and the PoA-DD?	Data unit correctly expressed in CPA-DD?	Value in PDD correct and provides for conservative estimate of Emission Reductions? How was this validated?	Measurement method correctly described in the CPA-DD (if applicable)
					local and sectoral knowledge	
η_{new}	Efficiency of the project stoves deployed as part of the project activity (fraction), as determined using the Water Boiling Test (WBT) protocol.	Yes	Yes	Yes	The value used for the purposes of ex-ante estimation of emission reductions was validated against stove testing results /18/	Efficiency will be determined following the Water Boiling Test (WBT) protocol

D.6.2. Description of the monitoring plan

Means of validation	ERM CVS evaluated the feasibility and sufficiency of the monitoring plan. ERM CVS conducted interviews with the CPA implementer, to determine the feasibility of the proposed monitoring plan.
Findings	<p>CL 10 was raised due to insufficient description of the monitoring plan. A revised CPA-DD was provided and CL 10 was closed. Please see Appendix 4 for details. Following resolution of CL 10, ERM CVS confirmed that:</p> <p>The monitoring plan in the CPA is in line with the methodology and the monitoring plan set out in the generic CPA. All relevant monitoring parameters have been included, and the parameter title, description and data units are in line with methodology. The measurement methods are correctly described, measurement and recording frequency correctly defined, and QA/QC procedures are appropriate. The monitoring plans are in line with the generic monitoring plan validated and approved at PoA level, and which has already been subject to verification for the existing CPA 1. Therefore the monitoring plan is considered feasible within the project design.</p>

Conclusion	<p>Based on the validation activities performed, ERM CVS concludes that:</p> <ul style="list-style-type: none"> a) The monitoring plan is fully in compliance with the requirements of the methodology and in line with the monitoring plan outlined in the PoA-DD; b) The monitoring arrangements described in the monitoring plan are feasible within the CPA design and PoA operational plan; c) The means of implementation of the monitoring plan, including the data management and quality assurance and quality control procedures, are in accordance with the PoA management plan and sufficient to ensure that the emission reductions achieved by/resulting from the proposed CPA can be reported ex post and verified. <p>The assessment conducted by ERM CVS is by means of review of the documented procedures, interviews with relevant personnel, CPA plans and physical inspections of the proposed CPA site.</p>
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Appendix 1. Abbreviations

Abbreviations	Full Texts
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CH ₄	Methane
CHW	Community Health Workers
CL	Clarification request
CME	Coordinating/managing entity of a PoA
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
COP	Conference of the Parties
CPA	Component Project Activity
CPA-DD	CPA Design Document
DNA	Designated National Authority
FAR	Forward Action Request
DOE	Designated Operational Entity
EB	Executive Board
EIA	Environmental Impact Assessment
GHG	Greenhouse Gas
GSP	Global Stakeholder Process
GWh	Giga Watt hour
IPCC	Intergovernmental Panel on Climate Change
LoA	Letter of approval
MOP	Meeting of the Parties
MP	Monitoring Plan
NGO	Non-Governmental Organisation
ODA	Official Development Assistance
PoA	Programme of Activities
UNFCCC	United Nations Framework Convention on Climate Change
VVS	CDM Validation and Verification Standard

Appendix 2. Competence of team member and technical reviewer

Jonathan Avis is the CDM Business Manager for ERM CVS, and a Lead GHG Assessor and Technical Reviewer with over 10 years of experience in the CDM, Gold Standard and VCS. Since joining ERM CVS Jonathan has worked as a Technical Reviewer or GHG Assessor on more than 50 CDM validations in Renewable Energy (scope 1), more than 10 CDM validations in Manufacturing Industries (scope 04), 10 CDM validations in Mining (scope 8), and 10 CDM validations in Waste Handling and Disposal (scope 13). Jonathan's previous work experience involved screening and due diligence of carbon projects, Project Design Document (PoA-DD & CPA-DD) development, quality assurance and technical review of CDM and GS project documentation, the development of carbon monitoring plans, and management of carbon projects through the validation, registration and verification stages. Jonathan has completed the ERM CVS CDM training as well as the GHGMI Renewable Energy training and Gold Standard training. Jonathan holds a BA in Geography and an MSc in Environmental Change and Management from the University of Oxford.

Neringa Pumputyte is a lead assessor and technical reviewer at ERM CVS, where she conducts validations and verifications of CDM and Gold Standard projects and Programmes of Activities (PoAs), and works on assurance projects. She has over 5 years of experience in climate change and GHG emission reductions, having worked as a consultant and project developer prior to joining ERM CVS. Neringa has successfully completed 7 validations of PoAs in the sectors of renewable energy, energy demand, and manufacturing; 5 Gold Standard verifications in the sector of energy demand; and worked on project validations in the sectors of landfill gas and fugitive emissions (oil and gas), as well as corporate GHG assurances. She has led development of the Gold Standard programme in ERM CVS. Before joining ERM CVS, Neringa worked on hydro, cook stove and animal waste handling projects as a project developer. Neringa has completed the ERM CVS CDM training, Gold Standard training, and GHGMI renewable energy training. Neringa also has a BSc and MSc in Geography, and an MSc in Environmental Change and Management from the University of Oxford.

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	CME	CPA-DD for the proposed CPA Version 01 (unvalidated version forwarded to the DOE) Version 05 (final)	8 January 2015 7 September 2016	CME
2	CME	Registered PoA-DD: Version 04 Updated PoA-DD (revised to extend the PoA boundary to include Kenya): Version 06	23 December 2012 20 January 2015	CME

No.	Author	Title	References to the document	Provider
		(submitted for validation) Version 06 (final version submitted to UNFCCC)	7 September 2016	
3	CME	ER calculation spreadsheet	Undated	CME
4	BURN	BURN manufacturer's specifications for the 'Jiko Koa' stove	Undated	CME
5	HTSPE Ltd	Project Grant Agreement between HTSPE Ltd, as managers of the Finance Innovation for Climate Change Fund on behalf of the UK Department for International Development, and ClimateCare Limited	26 February 2014	CME
6	CME and Finlays Horticulture Fairtrade Association	Funding agreement between Climatecare Limited and Finlays Horticulture Fairtrade Association, signed by ClimateCare on 5 September 2014 and signed by FHFA on 10 September 2014 >This agreement sets up the CPA including the funding arrangements, and details of how the project will operate	5 September 2014	CME
7	CME	Sales record spreadsheet for Naivasha area	Undated	CME
8	Government of Kenya	THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT, 1999	1999	CME
9	ClimateCare Limited, Burn Manufacturing USLLC and Finlays Horticulture Fairtrade Association	Carbon rights agreement between ClimateCare Limited, Burn Manufacturing USLLC and Finlays Horticulture Fairtrade Association, signed by ClimateCare on 14 October 2014 >This agreement confirms that the manufacturer and the project partner Finlays Horticulture Fairtrade Association agree to transfer any claim to the carbon rights from the	14 October 2014	CME

No.	Author	Title	References to the document	Provider
		project to ClimateCare Limited		
10	CME	Copy of sicker attached to the box for each stove distributed by FHFA (the first PAI in the CPA) stating that "This jiko is uniquely available to members of Finlays Horticulture Fairtrade Association at a special price, due to support from the following: Finlays, ClimateCare, UKAid from the British People"	Undated	CME
11	ClimateCare Limited	Report of the local stakeholder consultation	16 January 2015	CME
12	ClimateCare Limited / FHFA	Lists of participants in the local stakeholder consultation meetings in Naivasha and Mount Kenya	11-13 November 2014 (Naivasha) and 22-23 January 2015 (Mount Kenya)	CME
13	ClimateCare Limited / FHFA	Minutes of the local stakeholder consultation meetings in Naivasha and Mount Kenya	11-13 November 2014 (Naivasha) and 22-23 January 2015 (Mount Kenya)	CME
14	BURN	Manufacturer's specifications for the 'Jiko Koa' stove www.burnmanufacturing.com/index.php/our-stove/lab-and-field-studies	Accessed 04 February 2015	Online
15	Burn Design Lab'	Water Boiling Test results for the 'Jiko Koa' stove showing results of WBTs carried out by the manufacturer's laboratory, 'Burn Design Lab'.	20 November 2012	CME
16	Mongabay.com	Kenya Forest Information and Data, 2011 update	2011	Online
17	Camco Advisory Services (Kenya) limited for Kenya Forest Services (KFS),	Analysis of the charcoal value chain in Kenya http://www.kenyaforestservice.org/documents/redd/Charcoal%20Value%20Chain%20Analysis.pdf	2013	Online
18	Kenya Industrial Research and Development Institute	Stove testing report	27 April 2016	CME
19	CME	Business plan / distribution	2015	CME

No.	Author	Title	References to the document	Provider
		model spreadsheet		
20	Geoffrey Ndegwa and Prof. Dr Johannes Hamhaber of Cologne University of Applied Sciences and Dr Thomas Breuer of GIZ	'Woodfuels in Kenya and Rwanda: powering and driving the economy of the rural areas'	Feb 2011 http://cleancookstoves.org/resources_files/woodfuels-in-kenya-and.pdf	Online
21	Kenya Ministry of Environment, Water and Natural Resources	ANALYSIS OF DEMAND AND SUPPLY OF WOOD PRODUCTS IN KENYA	July 2013 http://www.kenyaforestservice.org/documents/redd/Analysis%20of%20Demand%20and%20Supply%20of%20Wood%20Products%20in%20Kenya.pdf	Online
22	Finance Innovation for Climate Change Fund, a component of DfID	Letter: confirmation of non-diversion of ODA funding	3 July 2015	CME
23	RINA	Validation report for the registered PoA	28 November 2012	CDM website

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

Table 1. CL from this validation

CL ID	01	Section no.	A.4	Date: 04/02/2015
Description of CL				
(a) A summary of the sustainable development benefits is not provided in section A.3 of the CPA-DD. (b) The technical description of the CPA in section A.5 only provides details of the 'Jiko Koa' stove design, whereas the CPA plans to disseminate a range of stove designs in the future. Summary information on the different stove designs to be included in the CPA should be provided in section A.5.				
CME response				Date: 01/02/2016
(a) Summary of sustainable development has been included in the CPA-DD (b) The technical description section of the CPA-DD has been revised to set out the design criteria for improved stove types that can be included in the CPA. The CPA will install efficient cooking stoves which meet the minimum specifications of: a) Thermal Efficiency must be more than 20%, b) Fuel type used must be charcoal, c) The stoves should be manufactured locally.				
Documentation provided by CME				
Updated CPA-DD				
DOE assessment				Date: 01/03/2016
(a) The contribution of the proposed SSC-PoA to sustainable development has been described in section A.3. (b) Section A.5 describes that the stoves shall have a thermal efficiency of more than 20%, and will be manufactured locally, and specifies the fuel type (i.e. charcoal). CL closed				

CDM-CPA-VAL-FORM

CL ID	02	Section no.	D.4	Date: 04/02/2015
Description of CL				
Confirmation of verification against the UNFCCC, Gold Standard and VCS databases for the purpose of avoiding double counting has not yet been provided				
CME response				Date: 01/02/2016
The CME checked with carbon bodies and confirms that the CPA is not registered with any other carbon standard body. The confirmation has been included in the CPA-DD in section A.13.				
Documentation provided by CME				
Updated CPA-DD				
DOE assessment				Date: 01/03/2016
The confirmation has been included in the CPA-DD. ERM CVS has confirmed that the project has not been separately registered as a CDM, Gold Standard or VCS project.				

CL ID	03	Section no.	D.4	Date: 04/02/2015
Description of CL				
Please provide a stove testing report by a national standards body or an appropriate certifying agent recognised by it.				
CME response				Date: 01/02/2016
Stove testing was carried out by the Kenya Industrial Research and Development Institute and has been provided to the DOE				
Documentation provided by CME				
Stove testing report dated 27 April 2016 /18/				
DOE assessment				Date: 01/03/2016
A stove testing report dated 27 April 2016 by the Kenya Industrial Research and Development Institute, a Government standards and testing body, has been provided and reviewed /18/. ERM CVS has reviewed the stove testing report results and confirmed the efficiency of the stove as stated in the CPA-DD, and confirmed that the improved cookstove has an efficiency of greater than 20%. CL closed				

CL ID	04	Section no.	D.4	Date: 04/02/2015
Description of CL				
Please correct the start date specified in the CPA-DD to match the actual date of financial close				
CME response				Date: 01/02/2016
The start date has been updated				
Documentation provided by CME				
Updated CPA-DD				
DOE assessment				Date: 01/03/2016
The start date has been corrected. ERM CVS has reviewed the contract between Climate Care Limited and DfID which represents the date of financial closure, signed on 26 February 2014 /05/. CL closed				

CL ID	05	Section no.	D.3	Date: 04/02/2015
Description of CL				
Confirmation that laws, policies or mandatory requirements stipulating the adoption of efficient charcoal cook-stoves do not exist in the country of the CPA implementation has not been provided in the CPA-DD				
CME response				Date: 01/02/2016
The confirmation on the regulation and laws has been added in section A.3				
Documentation provided by CME				
Updated CPA-DD				
DOE assessment				Date: 01/03/2016

Confirmation that laws, policies or mandatory requirements stipulating the adoption of efficient charcoal cook-stoves do not exist in the country of the CPA implementation has been provided in the CPA-DD section A.3. Although the energy policy (2004), and the Vision 2030 for Kenya, sector plan for Energy (2008) set the goal of increasing the national adoption rate of efficient wood stoves to 30 percent by 2020, and efficient charcoal stoves to 100 percent in urban areas and 60 percent in the rural areas by 2020, inefficient stoves have not been prohibited from sale or manufacturer and are still used by the majority of the population. ERM CVS has confirmed, based on the site visit interviews and on its local and sectoral knowledge and experience of cooking stove and household energy interventions in Kenya, that there are no laws, policies or mandatory requirements which mandate the adoption of efficient charcoal cook-stoves by households.

CL closed

CL ID	06	Section no.	D.4	Date: 04/02/2015
Description of CL				
Authorisation from the CPA Implementer to the CME concerning ownership of carbon rights shall be provided				
CME response				Date: 01/02/2016
The CME has entered into contraction agreement regarding transfer and ownership of carbon rights by the CME. The copy of the agreement has been provided to the DOE				
Documentation provided by CME				
Agreement regarding transfer and ownership of carbon rights				
DOE assessment				Date: 01/03/2016
ERM CVS has reviewed the Carbon Rights Agreement signed between Burn Manufacturing USLLC, Finlays Horticulture Fairtrade Association and ClimateCare Limited on 14 th October 2014, wherein Burn undertakes to transfer the carbon rights from the project to ClimateCare and Finlays acknowledges that the carbon rights belong to ClimateCare /09/.				
CL closed				

CL ID	07	Section no.	D.4	Date: 04/02/2015
Description of CL				
Please provide a copy of the business plan and distribution model, as evidence for the target group and distribution mechanisms				
CME response				Date: 01/02/2016
The project viability report outlining the CPA set up has been provided to the DOE. Copy of confidential excel sheet file showing financial viability has been provided to the DOE				
Documentation provided by CME				
The project viability report outlining the CPA set up Copy of confidential excel sheet file showing financial viability				
DOE assessment				Date: 01/03/2016
The business plan / distribution model has been provided /19/, and reviewed by ERM CVS, to confirm the target group and distribution mechanisms.				
CL closed				

CL ID	08	Section no.	D.4	Date: 04/02/2015
Description of CL				
Please provide documentation of the common practice of fuel usage for cooking in Kenya e.g. based on representative sample surveys, official data or peer reviewed literature (as required by the eligibility criterion).				
CME response				Date: 01/02/2016
Charcoal is single most energy source for most urban and peri-urban areas. The principal energy supply sources in Kenya are biomass at 68 percent, petroleum at 22 percent, electricity at 9 percent and coal at less than 1 percent. Over 90 percent of rural households use firewood for cooking and heating while 80 percent of urban households depend on charcoal as a primary source of fuel for cooking.				
Charcoal is mainly produced for urban markets and with increasing population and urbanization, charcoal market share is steadily growing				
Documentation provided by CME				

'Woodfuels in Kenya and Rwanda: powering and driving the economy of the rural areas' by Geoffrey Ndegwa and Prof. Dr Johannes Hamhaber of Cologne University of Applied Sciences and Dr Thomas Breuer of GIZ /20/

ANALYSIS OF DEMAND AND SUPPLY OF WOOD PRODUCTS IN KENYA by the Ministry of Environment, Water and Natural Resources /21/

DOE assessment**Date:** 01/03/2016

ERM CVS has reviewed the document 'Woodfuels in Kenya and Rwanda: powering and driving the economy of the rural areas' by Geoffrey Ndegwa and Prof. Dr Johannes Hamhaber of Cologne University of Applied Sciences and Dr Thomas Breuer of GIZ /20/. The article confirms that over 90 percent of rural households in Kenya use firewood for cooking and heating (96 percent of whom use traditional three stone fires) while 80 percent of urban households use charcoal. /20/

ERM CVS reviewed the official document ANALYSIS OF DEMAND AND SUPPLY OF WOOD PRODUCTS IN KENYA by the Ministry of Environment, Water and Natural Resources, which confirms that the market share of charcoal is growing as more and more people live in urban areas. /21/

CL closed

CL ID	09	Section no.	D.6.1	Date: 04/02/2015
Description of CL				
a) The CPA-DD does not explain how parameter $N_{y,i,a}$, the number of project devices of type i and age a that are operating in year y , will be adjusted for any continued use of baseline stoves.				
b) The CPA-DD does not assume any lag time between the date of stove sale and the date of first use of the stoves. Please justify the expected lag time between the date of sale and the date of first use.				
CME response				Date: 01/02/2016
The parameter $N_{y,i,a}$, is determined based on the outcome of the survey to determine the parameter DO_y . The drop-out rate will be adjusted to determine the final number of stoves in operation in the specific year of monitoring. See section D.7.2 of the CPA-DD.				
The lag time is assumed to be one day. In the ER spread sheet, calculation of days in operation using excel sheet return a value which is less by 1. For example, if the period of monitoring in 01/01/2015-31/12/2015, the using excel, if you do a minus to return the number of days, for example ($=31/12/2015 - 01/01/2015$), then you get 364 days instead of 365. Since all ER calculations are done using excel, the one day lag time is accounted for.				
The lag time has been included in the CPA-DD to explain when emission reductions starts to be claimed.				
Documentation provided by CME				
Updated CPA-DD				
DOE assessment				Date: 01/03/2016
(a) The monitoring plan now states that the project will also carry out surveys to determine whether the baseline stoves continue to be used. The Monitoring Plan states that if any baseline stoves are found to be in use, the biomass fuel consumption of those stoves shall be excluded from Bold. The survey to be carried out in households, and those households found to still have baseline stoves will then be asked to state how often they use them (per day, week, month or year). The monitoring plan states that from the data, a usage factor of baseline stoves be determined. The values arrived at will then be used to calculate Bold per stove project stove for those households using baseline stoves in the ER calculations.				
(b) The lag time of one day has been assumed in the ex-ante estimation of emission reductions in the ER spreadsheet, and described in the CPA-DD. The Sales Database will also serve as the basis for the calculation of CERs since it will contain all information regarding the user. The database will contain the dates the stoves are sold to end users and this will help in confirming the 1 day lag time accounted for each stove in calculation of emission reductions as explained in section D.7.2				
CL closed				

CL ID	10	Section no.	D.6.2	Date: 04/02/2015
Description of CL				

Description of the operational and management structure for monitoring is missing from the monitoring plan. Description of provisions for Quality Assurance and Quality Control (QA/QC) of equipment and data is missing from the monitoring plan.	
CME response	Date: 01/02/2016
Operational and management structure for monitoring has been included in the CPA-DD	
Description of provisions for Quality Assurance and Quality Control (QA/QC) of equipment and data has been included in the CPA-DD	
Documentation provided by CME	
Updated CPA-DD	
DOE assessment	Date: 01/03/2016
Roles and responsibilities for monitoring have been included in the monitoring plan. The CME will be responsible for checking data, maintaining the database, preparing sampling and surveys and writing the monitoring report. The PAI will be responsible for maintaining the sales records and conducting surveys.	
Description of provisions for Quality Assurance and Quality Control (QA/QC) of equipment and data has been included in the CPA-DD. The CME is responsible for quality assurance and quality control by supervising all monitoring activities and maintaining the database. The CME is also responsible for checking the data collected by the PAI and archiving the data.	
CL closed	

Table 2. CAR from this validation

CAR ID	01	Section no.	D.1, D.4	Date: 04/02/2015
Description of CAR				
Evidence for use of non-renewable biomass in Kenya since 31 December 1989 has not been provided.				
CME response				Date:
Between 1990 and 2010, Kenya lost an average of 12,050 ha or 0.32% per year. In total, between 1990 and 2010, Kenya lost 6.5% of its forest cover, or around 241,000 ha.				
In 2005, all the wood used was used came from forests and was used either as industrial roundwood or woodfuel. In 2005, 1.6 million m3 was harvested for industrial roundwood and 27.4 million m3 was used as fuelwood. In summary 94 per cent of wood removal in 2005 was to be used as fuelwood and all of it came from forests. In total the country lost 6.5 per cent of forest cover in that 20-year period. Since forest cover has been decreasing steadily since 1990 it can be concluded that non-renewable biomass has been used in Kenya since 31 December 1989				
Documentation provided by CME				
Kenya Forest Information and Data, 2011 update				
DOE assessment				Date:
ERM CVS has reviewed the evidence provided /16/ and confirmed that according to official statistics from the FAO, Kenya has experienced ongoing loss of forest cover since 1990, at an average rate of 0.32% per year. The majority of wood consumption in Kenya is for wood fuel (94% in the year 2005) and therefore it can be concluded that non-renewable biomass consumption for wood fuel has been continuing since 31 December 1989 in the country.				
CAR closed				

CAR ID	02	Section no.	D.4	Date: 04/02/2015
Description of CAR				
Please provide confirmation of non-diversion of ODA funding from DfID				
CME response				Date: 01/02/2016
Confirmation on non-diversion has been provided to the DOE				
Documentation provided by CME				

Confirmation letter from DFID	
DOE assessment	Date: 01/03/2016
ERM CVS has reviewed the declaration letter from the Finance Innovation for Climate Change Fund, a component of DfID, confirming that the project has received funding from the fund, and that DfID expressly declares that no financing provided in connection with the project has come from or will come from ODA that has been or will be provided under the condition, whether express or implied, that any or all of the credits [CERs] issued as a result of the project's operation will be transferred directly or indirectly to the country of origin of the ODA /22/.	
CAR closed	

CAR ID	03	Section no.	D.4	Date: 04/02/2015
Description of CAR				
Please describe the CPA sampling plan in the CPA-DD				
CME response				Date: 01/02/2016
<p>The sampling plan has been described in section D.7.2 of the CPA-DD</p> <p>The sampling plan has been updated to be in line with registered PoA-DD. and explanation provided for on sampling method selected.</p> <p>Monitoring plan has also been updated</p>				
Documentation provided by CME				
Updated CPA-DD				
DOE assessment				Date: 01/03/2016
<p>A sampling plan has been included in the CPA-DD. The sampling plan includes the following:</p> <p>Sampling objectives: to determine parameters η_{new} (mean thermal efficiency of device type i) and U (the drop-off of stoves in use per year)</p> <p>Target population: all the efficient cooking stoves included in the CPA project activity.</p> <p>Sampling method: Stratified sampling is to be applied where the Stoves will be categorised into strata. If more than one stove type is disseminated by the CPA, then each stove design will form a strata. From the strata, a simple random sample will be selected.</p> <p>Sample size: the sample size calculation equations are applied as per The Guidelines for Sampling and Surveys for CDM Project Activities and Programme of Activities.</p> <p>Sampling frame: the sampling frame has been described in the CPA-DD. The sample will be drawn from the stoves sales database, stratified by type of users i.e, domestic households form a single strata.</p> <p>Quality assurance / quality control: the sampling plan briefly describes the quality control measures that will be put in place including training of field personnel, provisions for maximising response rates, etc.</p> <p>Implementation plan: the CPA-DD states that the sampling will be done by qualified personnel from the CME, the PAI and the monitoring team. It makes clear that all personnel who will be involved will have knowledge and experience in conducting sampling exercises and data collection and analysis.</p>				
CAR closed				

CAR ID	04	Section no.	D.5.2	Date: 04/02/2015
Description of CAR				
The value for η_{old} (efficiency of the systems being replaced) of 0.1 is not applicable for charcoal stoves with a grate. Please revise the value.				
CME response				Date: 01/02/2016
The value has been adjusted and the value of 0.2 has been applied				
Documentation provided by CME				
Updated CPA-DD				
DOE assessment				Date: 01/03/2016

A value of 0.2 has been applied, in accordance with the methodology, since the replaced systems in the project area will be charcoal stoves which are semi improved but lack high efficiency. This value is appropriate and conservative.

CAR closed

CAR ID	05	Section no.	D.6.1	Date: 04/02/2015
Description of CAR				
The following parameters from the generic CPA are missing in the monitoring plan: Annual energy saving per appliance Annual number of appliances to reach small scale threshold B_{old} DO_y				
CME response				Date: 01/06/2016
The annual energy savings per appliance are calculated in the excel spreadsheet.				
The number of appliances required to reach the small scale threshold are determined in the excel spreadsheet.				
DO_y has been included in the monitoring plan in section D.7.2. paragraph C.				
The $B_{old, appliance survey}$ has been updated and included in the CPA-DD and additional missing sections included in the updated CPA-DD				
Documentation provided by CME				
Updated CPA-DD				
DOE assessment				Date: 01/07/2016
Annual energy saving per appliance has been included in the monitoring plan.				
Annual number of appliances to reach small scale threshold has been included in the monitoring plan.				
B_{old} has been included in the monitoring plan.				
DO_y has been included in the monitoring plan.				
CAR closed.				

CAR ID	06	Section no.	A.3	Date: 04/02/2015
Description of CAR				
Please update the CPA-DD to the latest CPA-DD template.				
CME response				Date: 01/06/2016
The CPA-DD has been updated and latest CPA-DD template has been used.				
Documentation provided by CME				
Updated CPA-DD				
DOE assessment				Date: 01/07/2016
The CPA-DD has been updated to version 5.0 of the CPA-DD form for SSC CPA-DDs (in line with VVS, PCP and PS version 9).				
CAR closed				

CAR ID	07	Section no.	D.4	Date: 04/02/2015
Description of CAR				
The eligibility criteria as listed in the CPA-DD do not match those in the registered PoA-DD. Please update the CPA-DD accordingly.				
CME response				Date: 01/06/2016
The eligibility criteria has been updated to match with the revised PoA-DD				
Documentation provided by CME				
Updated CPA-DD				
DOE assessment				Date: 01/07/2016

The eligibility criteria have been updated to match those in the PoA-DD. Please see section 6 for details of how these were validated.

CAR closed

Table 3. FAR from this validation

FAR ID	xx	Section No.	Date: DD/MM/YYYY
Description of FAR			
<i>No FARs have been identified.</i>			
CME response			Date: DD/MM/YYYY
Documentation provided by CME			
DOE assessment			Date: DD/MM/YYYY

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
01.0	4 May 2015	Initial publication.
Decision Class: Regulatory		
Document Type: Form		
Business Function: Registration		
Keywords: component project activity, validation report		