

Validation report form for inclusion of component project activities

(Version 02.0)

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

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Basic	INFORMATION				
Title and UNFCCC reference number of the programme of activities (PoA)	Distribution of Improved Cook Stoves in Sub-Saharan Africa				
, ,	UNFCCC Ref.	No.: 9007			
Version numbers of the PoA-DD to which this report applies	xxxx				
Title and reference number of each CPAs to	CPA Ref. no.	Title			
be included	CPA-002	Distribution of Improved Cook Stoves in Sub-Saharan Africa-Malawi-CPA-002			
Sectoral scopes for each CPA	CPA Ref. no.	Sectoral scopes			
ocoloral soopes for each of A	CPA-002	Sectoral Scope 3: Energy demand			
Applied methodologies and standardized	CPA Ref. no.	Selected methodologies and standardized baselines			
baselines for each CPA	CPA-002 AMS-II.G (version 4) - Energy effit measures in thermal applications renewable biomass				
Version number of the validation report	Version 01				
Completion date of the validation report	xxxx				
Coordinating/managing entity (CME)	C-Quest Capit	tal Malaysia Global Stoves Limited			
Host Party(ies)	Republic of M	alawi			
Estimated amount of annual average	CPA Ref. no.	tCO2e			
greenhouse gas (GHG) emission reductions or GHG removals by sinks in the crediting period (tCO2e), per CPA	CPA-002	46,532			
Name and UNFCCC reference number of the	Carbon Check (India) Private Ltd.				
DOE	UNFCCC Ref	.No.: E-0052			
Name, position and signature of the approver of the validation report	Amit Anand, CEO				

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SECTION A. Executive summary

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C-Quest Capital Malaysia Global Stoves Limited (CQC) has commissioned Carbon Check (India) Private Ltd. (CCIPL) to perform the validation of the proposed small scale CPA "Distribution of Improved Cook Stoves in Sub-Saharan Africa-Malawi-CPA-002" requesting to be included in the PoA. CCIPL was commissioned to assess the information in the CDM-CPA-DD-FORM for the CPA titled "Distribution of Improved Cook Stoves in Sub-Saharan Africa-Malawi-CPA-002" (hereafter called "the CPA") against the requirements for including CPA to the registered PoA "Distribution of Improved Cook Stoves in Sub-Saharan Africa" and further documentation requirements for including CPA to a PoA.

This report summarizes the findings of the validation of the small-scale Component Project Activity Design Document (CDM-CPA-DD-FORM), performed on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting and eligibility criteria for inclusion of the CPA as established in the PoA-DD /B02/. The term "UNFCCC criteria" refers to Article 12 of the Kyoto Protocol, the CDM modalities and procedures and the simplified modalities and procedures for small scale CDM project and the subsequent decisions by the COP/MOP and CDM Executive Board. In addition to these criteria, host country criteria are also taken into account.

The assessment of a CPA requesting to be included in a PoA shall ensure that all the requirements (as defined in the form of eligibility criteria) determined in the PoA are met. The assessment was performed on the basis of the eligibility and additionality criteria established in the PoA and the UNFCCC criteria for including CPA to a Programme of Activities (PoA) under the Clean Development Mechanism (CDM), as well as criteria given to provide for consistent project operations, monitoring and reporting according to AMS-II.G, Version 04.0 /B03/.

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

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

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

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

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

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

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SECTION B. Validation team, technical reviewer and approver

B.1. Validation team member

No.	Role		Last name	First name	Affiliation	lr	nvolve	ment i	n
		Type of resource			(e.g. name of central or other office of DOE or outsourced entity)	Desk/document review	On-site inspection	Interviews	Validation findings
1.	Team Leader / Validator / Technical Expert	IR	Singh	Vikash Kumar	CCIPL	X	NA	Х	X
2.	Team Member	IR	Sharma	Kranav	CCIPL	Χ	NA	Χ	Χ

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Dimri	Anubhav	CCIPL
2.	Approver	IR	Anand	Amit	CCIPL

SECTION C. Means of validation

C.1. Desk/document review

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

C.2. On-site inspection

Since the CPA is not yet implemented, no on-site visit was conducted.

C.3. Interviews

No.	Interviewee		Date	Subject	Team member	
	Last name	First name	Affiliation			
1.	Goswami	Tridip	C-Quest Capital (CQC)	08/02/2017	Baseline scenario, Technology to be used in the CPA; CPA implementation; ICS distribution procedure; Record keeping and monitoring plan and ER calculations	Vikash Kumar Singh and Kranav Sharma

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2.	Garg	Vineet	C-Quest	08/02/2017	Baseline	Vikash Kumar Singh
			Capital		scenario and	and Kranav Sharma
			(CQC)		additionality;	
					Methodology	
					applicability;	
					Eligibility criteria	
					for inclusion of	
					CPA in the PoA;	
					Record keeping	
					and monitoring	
					plan and ER	
					calculations	

C.4. Sampling approach

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Not Applicable

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

requests (i Aits) raiseu			
Areas of validation of compliance (SECTION D)	No. of CL	No. of CAR	No. of FAR
Titles of the CPAs and corresponding generic CPAs			
Compliance with CPA-DD form		01	
General description of the CPAs	01		
Application of methodologies and standardized baselines			
Reference to methodologies and standardized baselines			
 Project boundary, sources and GHGs 			
Baseline scenario			
Estimation of emission reductions			
 Equations and parameters applied to calculate GHG emission 			
reductions or net anthropogenic GHG removals			
Data and parameters fixed ex ante			
 Ex ante calculation of GHG emission reductions or net anthropogenic GHG removals 			
 Summary of ex ante estimates of GHG emission reductions or net anthropogenic GHG removals 			
Monitoring plan			
Data and parameters to be monitored			
Description of the monitoring plan			
Start date, crediting period type and duration	01		
Environmental impacts			
Local stakeholder consultation			
Eligibility for inclusion			
Others (Editorial findings)		01	
Total	02	02	

SECTION D. Validation findings

D.1. Proposed CPAs and corresponding generic CPAs

Specific-case CPA title and reference number	Version number of the specific-case CPA-DD	Host Party		Generic CPA title, identification/reference number	Version number of the PoA-DD into which the CPA is included
Distribution of Improved Cook Stoves in Sub- Saharan Africa- Malawi-CPA-002	xxxx	Republic o Malawi	of	Distribution of Improved Cook Stoves in Sub- Saharan Africa-[insert country name]-CPA- XXX	xxxx

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D.2. Compliance with CPA-DD form

Means of validation	DR, I
Findings	CAR01 has been raised in this regard. Refer to Appendix-4 for further details.
Conclusion	Through means of document review and interviews with CME, the validation team considers that the description of the CPA in the CPA-DD titled "Distribution of Improved Cook Stoves in Sub-Saharan Africa-Malawi-CPA-002", as described in the CPA-DD /01-(b)/ is accurate and complete; meets the requirements to be included in the PoA titled "Distribution of Improved Cook Stoves in Sub-Saharan Africa" /B02/ and correctly apply the baseline and monitoring methodology AMS-II.G, Version 04 /B03/ and requirements of VVS for PoAs (version 01.0) /B01-1/. The validation team confirms that the requirements of the CDM-CPA form filling guidelines /B04-3/ and section 8.1 of CDM VVS for PoA (version 01.0) /B01-1/ have been appropriately met.

D.3. General description of the CPAs

D.3. General desc	cription of the CPAs
Means of validation	DR, I
Findings	CL01 has been raised in this regard. Refer to Appendix-4 for further details.
Conclusion	The following description of the proposed component project activitiy as per CPA-DD /01-(b)/ is verified: The CPA titled "Distribution of Improved Cook Stoves in Sub-Saharan Africa-Malawi-CPA-002" is developed under the Small-Scale Programme of Activities
	(PoA) titled "Distribution of Improved Cook Stoves in Sub-Saharan Africa" /B02/, which is coordinated and managed by C-Quest Capital Malaysia Global Stoves Limited (CQC). The CPA of the PoA /B02/ involves the promotion and installation of ICS in Malawi, as per the CPA-DD /01-b/ and involve approximately 20,763 domestic fuel-efficient improved cook stoves (ICS) in Malawi.
	The main objective of this CPA is ICS dissemination and will replace the prevailing inefficient three-stone fires or traditional stoves, which (ICS) combust wood more efficiently and improve thermal transfer to pots, hence saving fuel and lowering greenhouse gas emissions. The amount of woody biomass that would be saved due to the implementation of the CPA shall directly translate into reduction of GHG emissions. The CPA shall also lead to a reduced pressure on forests and woody biomass resources, reduced indoor air pollution associated with use of traditional stoves.
	The CPA implementer is Total LandCare (TLC) Malawi, as confirmed by reviewing the CPA-DD /01-(b)/, agreement /14/ between the CME and CPA implementer and interviews with the representative of the CME. The CME shall be responsible to perform quality control activities for the proposed CPA and the same has been checked and confirmed by reviewing the CPA-DD /01-(b)/ and interviews with the representative of the CME.
	The CPA will involve dissemination and implementation of TLC-CQC Rocket Stove proposed under the CPA. It is a type of single pot fixed cook stoves with an average thermal efficiency of 25.66% /03/. The thermal efficiency of the stove was verified through review of Water Boiling Test (WBT) results of Cook Stoves as performed by a third party /03/. The CPA is only replacing wood-fuel stoves. As per the CPA-DD /01-(b)/, the TLC-CQC Rocket Stove is a simple design with basic features. As verified /17/, the design uses a total of 16 readily available building bricks that are made by the household using locally available clay. The average size of the brick used on the TLC-CQC Rocket Stove /17/ which is produced using a standard mold is 22.5cm x 11cm x 6.5cm. The bricks are mortared together using locally available material (clay soil, cow dung, and sand) for better insulation and heat loss reduction. The mud mortar is a mix of 5 liters clay, 5 liters sand, 5 liters manure with 5 liters of water.
	Start date for the CPA is expected on XX/XX/XXXX as stated in the CPA-DD /01-(b)/. CME has also submitted a declaration in this respect /09/. As the expected start date of the CPA is after the start date of PoA (on 17/01/2012), the validation

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team found it acceptable.

This confirms the requirements of §199 of CDM VVS for PoA (version 01.0) /B01-1/.

The validation team based on the review of the declaration from the CME /07/ confirms that there is no double counting of emission reductions due to the implementation/inclusion of the CPA, as the CPA does not belong to or are included in any other PoA or stand-alone CDM project. The validation team has cross-checked this from the UNFCCC website /B05-1/ and interviews with representatives of CME and confirms that there is no double counting, the double-counting risk is prevented by the unique serial number prefixed by "CQC-SSA" /06/ borne by each distributed cookstove. Furthermore, the validation team based on the review of CPA-DD /01-(b)/ and CME manual /16/ confirms that in order to avoid double counting, the CME has adopted a provision of a record keeping system. The record keeping system for the proposed CPA under the PoA includes detailed sales information collected from end-user through registration process /06/. The registration process /06/ contains a provision that the carbon credits generated from the use of ICS are transferred to the CME of the PoA. The information from the registration process /06/ will be entered into the CPA database /13/. Double counting of emissions reductions will be avoided because each CPA and each ICS distributed will have a unique identification number.

In addition, the duration of the crediting period for all the CPA was confirmed to be renewable at 7 years and is as per requirements of §189 of CDM PS for PoA (version 01.0)/B01-2/ and §200 of CDM VVS for PoA (version 01.0)/B01-1/.

The CPA implementer intends to disseminate about 20,763 stoves and given that the CPA would be implemented as described in the CPA-DD /01-(b)/, it is likely that the CPA achieves the estimated amount of emission reductions of 325,724 /02-(b)/ tCO₂e over the 7 years renewable crediting period, leading to an annual average of 46,532 /02-(b)/ tCO₂e as indicated in the final CPA-PDD /01-(b)/ and also in the ER calculation sheet /02-(b)/. In addition, the steps used for ER calculations were found to be in conformance with the requirements of the methodology AMS-II.G, Version 04 /B03/.

Based on the information furnished by the CME /10/, no ODA contributes to the financing of the CPA.

The validation team has checked that the CPA is not a de-bundled component of large scale project or PoA in line with the Guidelines on assessment of debundling for SSC project activities (version 03.1) /B04-5/ and the same has been described/demonstrated in the CPA-DD /01-(b)/, checked and confirmed by the validation team.

This is deemed appropriate to the validation team and is in conformance with the requirements of §10 of the debundling guidelines /B04-5/, §197 of CDM PS for PoA (version 01.0) /B01-2/ and §205 of CDM VVS for PoA (version 01.0) /B01-1/.

D.4. Application of methodologies and standardized baselines

D.4.1. Reference to methodologies and standardized baselines

Means of validation	DR, I
Findings	-
Conclusion	The validation team has reviewed the CPA-DD /01-(b)/ along with relevant supporting documentation provided by CME and the combined assessment (for the requirement to be checked during inclusion of the CPA in the PoA) is provided in Appendix-5. This is in conformance with the requirements of §192 of CDM VVS for PoA (version 01.0) /B01-1/.

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D.4.2. Project boundary, sources and GHGs

Means of validation	DR, I
Findings	-
Conclusion	As per the applied methodology AMS-II.G, Version 04 /B03/, "Energy efficiency measures in thermal applications of non-renewable biomass", the boundary of a typical CPA under this PoA confines to 'is the physical, geographical site of the efficient systems using biomass.' (as per §3 of the applied methodology). The information has been also correctly given in section B.2 of the CPA-DD /01-(b)/ and is consistent with the description of project boundary provided in the PoA-DD /B02/.
	The physical delineation of the CPA and the description of the emission sources and GHGs that are included in the CPA boundary are appropriate for the purpose of calculating project and baseline emissions for the CPA.
	For the CPA, a leakage factor of 0.95 has been considered to account for use/diversion of non-renewable woody biomass saved under the project activity by non-project households/users that previously used renewable energy sources. This value is the default value provided under §13(a) of the applied methodology AMS-II.G, Version 04 /B03/.
	The methodology indicates CO ₂ as the only GHG from baseline as well as project activity sources to be included in the boundary. Validation team confirms that the justification provided by the CME is reasonable and evidenced. Besides, there are no other sources, which are impacted by the projects and not addressed by the applied methodology.
	This is in conformance with §3 of the applied methodology /B03/ and §193 of CDM VVS for PoA (version 01.0) /B01-1/.

D.4.3. Baseline scenario

Means of validation	DR, I
Findings	-
Conclusion	For the CPA, the baseline scenario has been identified in accordance with the §4 of the methodology AMS-II.G, Version 04 /B03/.
	As stated in the applied methodology AMS II.G, Version 04 /B03/ and the CPA-DD /01-(b)/, the baseline scenario would be the use of fossil fuels for meeting similar thermal energy needs.
	Thus, the above baseline scenario is considered to be accurate and in conformance with the requirements of §4 of the applied methodology /B03/ and §194 of CDM VVS for PoA (version 01.0) /B01-1/.

D.5. Estimation of emission reductions

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

Means of validation	DR, I
Findings	-

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Conclusion	The equations and choices provided in the applied methodology /B03/ are correctly quoted in the CPA-DD /01-(b)/. The emission reductions of the CPA of the PoA would be calculated using the formulae mentioned in the applied methodology AMS-II.G (Version 04.0) /B03/.
	The parameters and equations presented in the PoA-DD /B02/, CPA-DD /01-(b)/ and ER spread-sheet /02-(b)/ have been compared with the information and requirements presented in the methodology /B03/. Validation team based on the review of CPA-DD /01-(b)/ and the ER spread sheet /02-(b)/ and other supporting documents, confirms that the formula are correctly presented for the determination of emission reductions at CPA level and the values of the input parameters used are accurate, appropriate and consistent.
	Thus, the equations and parameters applied to calculate the emission reductions are considered to be accurate and in conformance with the requirements of §196(a) of CDM VVS for PoA (version 01.0) /B01-1/.

D.5.2. Data and parameters fixed ex ante

Means of validation	DR, I			
Findings	-			
Conclusion	to be appropriat /B03/. Ex-ante p	te and in line with the parameters of the prop	applied methodology A osed CPA is as follows:	MS-II.G (version 04.0)
	Parameter	Description	Verified Value	Verified Source
	Bold	Quantity of woody biomass used in absence of the project activity (per stove) from fire wood in the country/region and fuel-type specified in the CPA as defined below	3.2558 tonnes/year	The values were sourced from Baseline Survey Report /11/. The validation team deemed the value to be appropriate and correct.
	η _{old}	Efficiency of 3- stone fire or traditional pot support cooking method (system being replaced)	0.1	Default value as per AMS-II.G. Vesion 04.0) /B03/. The validation team deemed the value to be appropriate and correct.

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f _{NRB,y}	Fraction of woody biomass saved by the project activity in year y that can be established as non-renewable biomass	0.97	The values were sourced from a local study included in an Independent Report made by C4 EcoSolutions /12/. The validation team deemed the value to be appropriate and correct.
NCV _{biomass}	Net calorific value of the non- renewable woody biomass that is substituted	0.015	Default value as per AMS-II.G. (Version 04.0) /B03/. The validation team deemed the value to be appropriate and correct.
EFprojected_foss ilfuel	Emission factor for the substituion of non-renewable biomass by similar consumers	81.6 tCO ₂ /TJ	2006 IPCC Guidelines for National Greenhouse Gas Inventory /B07/. The validation team deemed the value to be appropriate and correct.
	Leakage Adjustment Factor	0.95	Default value as per AMS-II.G. (Version 04.0) /B03/. The validation team deemed the value to be appropriate and correct.

Thus, the data and parameters fixed ex-ante are considered to be accurate and in conformance with the requirements of \$196(b) of CDM VVS for PoA (version 01.0) /B01-1/.

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

Means of validation	DR, I
Findings	-
Conclusion	The equations and choices provided in the applied methodology /B03/ are correctly quoted in the CPA-DD /01-(b)/. The emission reductions due to the CPA has been calculated using the formulae mentioned in the applied methodology AMS-II.G (Version 04.0) /B03/ and the registered PoA-DD /B02/. The total ex ante emission reductions resulting from the CPA for the entire first renewable crediting period of seven years is estimated to be 325,724 /02-(b)/ tCO ₂ e, leading to an annual average of 46,532 tCO ₂ e. The validation team reviewed the ER spread-sheets

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calculations /02-(b)/ and confirms the same to be correct.
The validation team conducted assessment of emission reductions calculation. The parameters and equations presented in the CPA-DD /01-(b)/, as well as other applicable documents, have been compared with the information stipulated in the methodology /B03/. The assumptions and data (both ex-ante and ex-post) used to determine the emission reductions are described in the CPA-DD /01-(b)/ and all the sources have been checked and confirmed by validation team. Based on the reviewed information, it can be confirmed that the sources used are correctly quoted and interpreted in the CPA-DD /01-(b)/. The values in the CPA-DD /01-(b)/ are considered to be reasonable based on the documentation and references
reviewed, as well as, the result of the interviews. The baseline methodology has
been correctly applied according to the requirements.

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

Means of validation	DR, I
Findings	-
Conclusion	The estimation of ER values is carried out based on equations given in the applied methodology AMS-II.G (Version 4.0) /B03/ and conforms to the requirements of section 8.3.4 (titled 'Estimation of emission reductions') of CDM VVS for PoA (version 01.0) /B01-1/. The total ex ante emission reductions resulting from the CPA for the entire first renewable crediting period of seven years is estimated to be 325,724 /02-(b)/ tCO2e, leading to an annual average of 46,532 tCO2e. The validation team reviewed the ER spread-sheets calculations /02-(b)/ and confirms the same to be correct.

D.6. Monitoring plan

D.6.1. Data and parameters to be monitored

Means of validation	DR, I
Findings	-

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Conclusion

The monitoring plan presented in the CPA-DD /01-(b)/ complies with the requirements of the PoA-DD /B02/ and the applied monitoring methodology /B03/. The validation team has verified all parameters in the monitoring plan against the requirements of the methodology and no deviations have been found.

The validation team through a document review and interviews with the relevant stakeholders has reviewed the procedures. The information provided has allowed the validation team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the CME.

The parameters /01-(b)/, /B02/ that are to be monitored ex-post are:

Parameter	Data unit	Description	Frequency
n _{y,i}	Number of stoves	Number of stoves still in operation during the monitoring period as determined by the monitoring survey in each stove vintage. This includes total number of stoves distributed/installed in the entire CPA.	Annually
. t _{y,j}	fraction	Fraction of monitoring period the stove is in operation (days in operation/total days in monitoring period)	Annually
$\eta_{new,y}$	fraction	Continuing efficiency of ICS	Annually
SSy	percentage	The percentage of ongoing baseline stove use within the population of in-use ICS in each vintage during a monitoring period.	Annually

In summary, the parameter(s) to be monitored have been presented correctly according to requirements and are considered in accordance with the applied methodology /B03/ and registered PoA-DD /B02/. This is in conformance with the requirements of §197(a) of CDM VVS for PoA (version 01.0) /B01-1/.

D.6.2. Description of the monitoring plan

Means of validation	DR, I
Findings	-
Conclusion	The monitoring plan presented in the CPA-DD /01-(b)/ complies with the requirements of the PoA-DD /B02/ and the applied monitoring methodology /B03/. The validation team of CCIPL has verified all parameters in the monitoring plan against the requirements of the methodology and no deviations have been found.
	The validation team through a document review and interviews with the relevant stakeholders has reviewed the procedures. The information provided has allowed the validation team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the CME.
	The responsibilities and institutional arrangements for data collection and archiving have been clearly provided. The information provided in the CPA-DD /01-(b)/ could be confirmed based on the interviews and also through the submitted documentary evidence namely CME management manual /16/ covering all requirements as stated in section B.5.1 and B.5.2 of CPA-DD /01-(b)/. Based on the same, it can be confirmed that the CME and the CPA implementer will be able to implement the monitoring plan and the achieved emission reductions can be reported ex-post and verified.

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

Means of validation	DR, I
Findings	CL02 has been raised in this regard. Refer to Appendix-4 for further details.
Conclusion	Start date for the CPA is expected to be XX/XX/XXXX as stated in the CPA-DD /01-(b)/. CME has also submitted a declaration in this respect /09/. As the expected start date of the CPA is after the start date of PoA (on 17/01/2012), the validation team found it acceptable. The expected operational lifetime of the CPA is considered to be 21 years. The above is in conformance to the requirements of §199 of CDM VVS for PoA (version 01.0) /B01-1/. In addition, the duration of the crediting period for the CPA was confirmed to be renewable at 7 years and is as per requirements of §189 of CDM PS for PoA
	(version 01.0) /B01-2/ and §200 of CDM VVS for PoA (version 01.0) /B01-1/.

D.8. Environmental impacts

Means of validation	DR, I
Findings	-
Conclusion	As mentioned in the PoA-DD /B02/, the environmental impact analysis has to be carried out at the CPA level.
	Validation Team confirms that conducting environment impact assessment is not mandatory as per the host party requirements for the type of project under the proposed CPA.
	This is in conformance with the requirements of §209 and §210 of CDM VVS for PoA (version 01.0) /B01-1/ and deemed appropriate to the validation team.

D.9. Local stakeholder consultation

Means of validation	DR, I
Findings	-
Conclusion	It has been indicated in the PoA-DD /B02/ that LSC is carried out at PoA level.
	Hence further validation is not required.

D.10. Eligibility for inclusion

Means of validation	DR, I
Findings	
Conclusion	All the eligibility criteria required for the inclusion of the CPA under the PoA have
	been addressed in the CPA-DD /01-(b)/. The stated confirmation against each
	eligibility criteria has been checked / assessed and found acceptable by the
	validation team and complete assessment is provided in Appendix-6.

SECTION E. Internal quality control

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

SECTION F. Validation opinion

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Under the validation (by means of document review and interviews with stakeholders), the validation team considers that the description of CPA titled "Distribution of Improved Cook Stoves in Sub-Saharan Africa-Malawi-CPA-002" as described in the CPA-DD /01-(b)/ is accurate and complete; meets the requirements to be included in the PoA titled ""Distribution of Improved Cook Stoves in Sub-Saharan Africa" /B02/ and correctly applies the baseline and monitoring methodology AMS-II.G, Version 04.0 /B03/.

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

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

The validation was executed in the following steps so far:

- Receipt of CPA-DD /01-(b)/
- Desk review of revised CPA-DD applying AMS-II.G "Energy efficiency measures in thermal applications of non-renewable biomass" Version 04.0
- Issue of checklist with corrective action requests (CARs) and clarification requests (CLs) and the draft validation report
- Interview with the CME
- · Follow up actions (interviews) for cross checking data
- Review of responses for CARs/CLs
- Issue of the final validation report

The CPA correctly apply the baseline and monitoring methodology of the PoA namely AMS-II.G, Version 04, "Energy efficiency measures in thermal applications of non-renewable biomass" /B03/.

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

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

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

During the course of validation a total of 02 (two) Corrective Action Requests (CARs) and 02 (two) Clarification Requests (CLs), for the CPA, were identified on the initially submitted CPA-DD /01-(b)/. Upon evaluation of responses provided by the CME, all the identified issues were closed successfully.

The single purpose of this report is its use during the inclusion process (of the specific CPA). The review of the CPA-DD /01-(b)/, subsequent follow-up interviews and further verification of references have provided CCIPL, with sufficient evidence to determine the fulfilment of stated criteria in the PoA-DD /B02/ and the CPA-DD /01-(b)/. In the opinion of CCIPL, the CPA meet all relevant UNFCCC requirements for the CDM if the underlying assumptions do not change. CCIPL recommends the CPA for inclusion in the registered PoA.

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Appendix 1. Abbreviations

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

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Appendix 2. Competence of team members and technical reviewers

To be provided with FVR



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Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
/01/	CQC	a) Initial CPA-DD	Version 01, dated 26/01/2018	CQC
		b) Final CPA-DD	Version xx, dated xx/xx/xxxx	CQC
/02/	CQC	a) Emission reduction calculation spread-sheet corresponding to /01/(a)		CQC
		b) Emission reduction calculation spread-sheet corresponding to /01/(b)		CQC
/03/	Aprovecho Research Center.	WBT Report of independent stove efficiency tests performed by Aprovecho Research Center		CQC
/04/	TLC	CPA implementer self-declaration that all stoves will be installed within the boundary of Malawi and are wood stoves.	Dated 09/02/2018	CQC
/05/	CQC	Sample/template of project database		CQC
/06/	CQC/TLC	Photograph of a sample ICS with unique serial number	_	CQC
/07/	CQC	A self-declaration from CME attesting that this CPA is not a part of any other registered PoA or CDM	Dated 09/02/2018	CQC
/08/	CQC	A self-declaration from CME regarding the approval of this CPA for inclusion into the PoA and description of ICS promotion and distribution methods	Dated 09/02/2018	CQC
/09/	TLC	A self-declaration from CPA Implementer for the appropriateness of the start date of the CPA	Dated 09/02/2018	CQC
/10/	CQC	A self-declaration from the CQC confirming that investment finance for this CPA is not from diversion of ODA funds	Dated 09/02/2018	CQC
/11/	HED Consulting Ltd	Baseline Firewood Consumption Study (survey) report for Malawi	Dated 11/12/2012	CQC
/12/	C4 Eco Solutions	Independent report (local study) made by C4 EcoSolutions for determining the value of fNRB,y	Dated 03/2012	CQC
/13/	CQC	Sample/Template of Registration Card (in hard or electronic format, as available) containing provision for demonstrating the following: Recording of ICS end user contact information Confirmation that ICS end user is a household Confimation that participation of ICS end user is voluntary Confimation that the rights of CERs generated from ICS usage will be transferred from the end user to the CME Confirmation that the end user previously used three-stone fire or traditional pot support and did not/does not own and use an ICS		CQC
/14/	CQC/TLC	Service agreement between CQC as CME and TLC as CPA Implementer	Dated 20/02/2014	CQC
/15/	CQC	Cook Stoves Monitoring Training Manual		CQC
/16/	CQC	CME manual		CQC

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			CDM-CPA-VA	L-FURIVI
/17/	TLC	Technical Specifications of Stove (TLC		CQC
		Construction brochure)		
/18/	CQC/TLC	PoA and CPA implementation schedule		CQC
/19/	CQC/Ecoeye	Agreement between CQC as CME and Ecoeye Co.	Dated 26/10/2017	CQC
, ,	Co. Ltd.	Ltd. as PP	Dated 20/10/2011	040
/20/	TLC	Cook stove Maintenance Guide		CQC
/21/	TLC	Cook stove User Guide		CQC
/B01/	UNFCCC	1. CDM Validation and Verification Standard for Programme of Activities (Version 01.0).	http://cdm.unfccc.int/	Others
		2. CDM Project Standard for Programme of		
		Activities (Version 01.0)		
		3. CDM Project Cycle Procedure for Programme of		
		Activities (Version 01.0)		
/B02/	UNFCCC	PoA-DD, version 11, 11/10/2013 and the	http://cdm.unfccc.int/	Others
		corresponding validation report for the registered		
		PoA "Distribution of Improved Cook Stoves in Sub-		
		Saharan Africa-Malawi-CPA-002", having UNFCCC Ref. No. 9007		
/B03/	UNFCCC	AMS-II.G. Energy efficiency measures in thermal	http://cdm.unfccc.int/	Others
, 200,		applications of non-renewable biomass (version		
		04.0)		
/B04/	UNFCCC	PoA Specific guidelines / standards / Forms	http://cdm.unfccc.int/	Others
		published by UNFCCC:		
		 Guideline: Sampling and surveys for CDM project activities and programmes of activities 		
		(Version 04.0)		
		Standard for Sampling and Surveys for CDM		
		Project Activities and Programme of Activities		
		(Version 04.0)		
		3. Instructions for filling out the component		
		project design document form for CDM		
		component project activities (Version 08.1)		
		 Component project activity design document form for CDM component project activities 		
		(CDM-CPA-DD-FORM), (Version 08.1)		
		5. Guidelines on assessment of de-bundling for		
		SSC project activities (version 03.1)		
/B05/	-	Websites:	-	Others
		1. www.unfccc.int		
		 http://www.ipcc.ch https://maps.google.co.in/ 		
		 https://maps.google.co.in/ http://www.pciaonline.org/testing 		
		5. http://www.goldstandard.org		
		6. http://www.v-c-s.org		
/B06/	UNFCCC	Glossary of CDM terms (version 09.1)		Other
/B07/	IPCC	IPCC Guidelines for National Greenhouse Gas	Dated 2006	Other
·		Inventory (2006)		
/B08/	FAO	Global Forest Resources Assessment report (2010)	Dated 2010	Other

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

Table 1. CLs from this validation

CL ID	01	Section no.	D.3 of DVR	Date: 22/02/2018
Description	Description of CL			
As indicated	d in table in this section	n, PP is quested	I to transparently clarify wh	ether the entity 'Ecoeye Co.,
Ltd.' is a C	PA Implementer as its	designation as	such is not consistent with	n the information provided in
section A.1	of this report.			
	·			
Project par	Project participant response Date: DD/MM/YYYY			
Documenta	Documentation provided by project participant			
DOE asses	sment			Date: DD/MM/YYYY

CL ID	02	Section no.	D.7 of DVR	Date: 22/02/2018	
Descriptio	Description of CL				
As the start date of the CPA has passed, CME is requested to clarify whether implementation of the CPA has occurred and if yes, provide an update on the status of the same.					
Project pa	rticipant respo	nse		Date: DD/MM/YYYY	
Documentation provided by project participant					
DOE assessment Date: DD/MM/YYYY			Date: DD/MM/YYYY		

Table 2. CARs from this validation

CAR ID	01	Section no.	D.2 of DVR	Date: 22/02/2018
Description	of CAR			

The following findings have been raised due to non-compliances with the following filling guidelines of CPA-DD form (version 08.1):

- a) Section A.1 does not contain information in conformance to the requirements of paragraphs 1(c), 1(e) and 3 of the form filling guidelines for this section.
- b) The inclusion of the entity 'C-Quest Capital Malaysia Global Stoves Limited' (CQC) in Appendix-1

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seems to be inappropriate as it is not consistent with the information contained in section A.5 of the CPA-DD.

Project participant response

Date: DD/MM/YYYY

Documentation provided by project participant

DOE assessment

Date: DD/MM/YYYY

CAR II)	02	Section no.	Other (Editorial findings)	Date: 22/02/2018
Descri	ption	of CAR			
a)		ne title page, the name e CPA-DD.	of the host part	ty is not consistent with the na	ame provided in section A.5
b)		opriate unit for the para not been specified.	ameter 'Estimat	ed amount of annual average	GHG emission reductions'
c)	In sec	ction B.4.3, the f _{NRB} val	ue used to calc	ulate the value of 'ER _y ' is incor	rect.
d)		letermination of value protocol used.	of parameter 'ı	η _{new,i} ' CME has not indicated	the appropriate version of
e)		chosen start date of the dy passed.	ne crediting per	riod indicated in section C.3.2	2 is inappropriate as it has
Projec	t parti	cipant response			Date: DD/MM/YYYY
_					
Docum	Documentation provided by project participant				
DOF	DOE assessment Date: DD/MM/YYYY				
DOE a	33622	IIIeIII			Date: DD/MM/YYYY

Table 2. FARs from this validation

FAR ID	XX	Section No.	Date: DD/MM/YYYY
Description	of FAR		
Not Applicab	le.		
CME respon	CME response Date: DD/MM/YYYY		
Documentat	ion provided by CMI		
DOE assess	ment		Date: DD/MM/YYYY

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Appendix 5. Assessment of methodological applicability of the CPA to be included into the PoA

S.No.	Methodology Applicability Criteria	DOE Assessment
1.	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 will involve dissemination and implementation of only TLC-CQC Rocket Stove (proposed under the CPA is a type of single pot fixed cook stove) cook stoves with an average thermal efficiency of 25.66%. The thermal efficiency of the stove was verified through review of Water Boiling Test (WBT) of Cook Stoves performed by Aprovecho Research Center /03/.
		Thus, the proposed CPA complies with the requirements of this particular applicability criteria of the methodology.
2.	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.	Non-renewable biomass has been used in the host country of Malawi since 31 December 1989. This was confirmed based on the review of published literature in the form of FAOs Global Forest Resources Assessment report (2010) /B08/ and information contained in the PoA-DD /B02/.
		Thus, the proposed CPA complies with the requirements of this particular applicability criteria of the methodology.
3.	The use of this methodology in a project activity under a programme of activities 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:	Leakage has been accounted by multiplying Bold by a net to gross adjustment factor of 0.95. The same is in line with §22(c) of the applied methodology /B03/. This was confirmed based on the review of CPA-DD /01-(b)/.
	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;	Thus, the proposed CPA complies with the requirements of this particular applicability criteria of the methodology.
	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 nonrenewable woody biomass outside the project boundary then Bold is adjusted to account for the quantified leakage;	
	c) As an alternative to subparagraphs (a) and (b), old B can be multiplied by a net to gross adjustment factor of 0.95 to account for leakages, in which case surveys are not	

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	required.
4.	The following further conditions apply for the value of fraction of non-renewable (fNRB) applied in a component project activity (CPA) of a POA. The choice between (a) conduct own studies to determine the local fNRB value and then apply those values in the CPAs; and (b) use default national values approved by the Board; shall be made ex ante. A switch from national value i.e. choice (b) to sub-national values i.e. choice (a) is permitted, under the condition that the selected approach is consistently applied to all CPAs.

The value of non-renewable biomass fraction (f_{NRB}) was obtained from independent f_{NRB} study conducted by C4 EcoSolutions which calculated the f_{NRB} value to be equal to 0.97 (97%). The same is in line with §23(a) (conduct own studies to determine the local f_{NRB} value) of the applied methodology /B03/.

The Validation Team reviwed the Independent report (local study) made by C4 EcoSolutions /12/ and CPA-DD /01-(b)/ to confirm the above.

Thus, the proposed CPA complies with the requirements of this particular applicability criteria of the methodology.



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Appendix 6. Assessment of the response to the requirements of the eligibility criteria for inclusion of CPA into the PoA

No.	Eligibility criterion - Category	Eligibility criterion - Required condition	Supporting evidence for inclusion	Description of this CPA in relation to the criterion and supporting evidence	DOE Assessment
1	Conditions to check the target group of ICS.	Promote and install / distribute ICS in/to residential households in rural, urban, and periurban areas that use wood or charcoal fuel following the SSC-PoA specifications.	Indication of ICS model to be distributed/installed, geographic scope of distribution/installation, and thermal efficiency tests to confirm model is a high biomass fired cook stove.	This CPA will only distribute TLC Rocket Stove to residential rural wood-fuel using households. A WBT shows TLC-CQC Rocket Stove has an efficiency of 25.66%, a significant improvement over three stone fires and traditional pot supports used for cooking. Testing results that show this efficiency level have been provided to the validating DOE.	Based on review of CPA-DD /01-(b)/, it is confirmed that the CPA involves promotion and installation of ICS in residential households of rural, urban, and peri- urban areas of Malawi and will utilise wood fuel. The TLC-CQC Rocket Stove is a fixed single pot ICS that has a thermal efficiency of 25.66%, in accordance with manufacturer's specifications and evidenced by a WBT conducted by an independent third party /03/. Conclusion: Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
2	Geographical boundaries of CPAs consistent with the geographical boundary of the PoA.	Be implemented entirely within a single fuel-specific geographical boundary (as specified in Part I Section A.5 of the PoA-DD) according to the targeted fuel type,	Self declaration by CPA Implementer indicating single fuel-specific geographical boundary of the CPA. The possible geographic boundaries should be within the limits	The CPA implementer self-declares that all stoves will be sold within the boundary of Malawi and are wood stoves. A self-declaration was provided to the validating DOE.	Validated against a self declaration letter /04/ issued by the CPA implementer (TLC) regarding the CPA which mentions the geographical boundary (across Malawi) of the CPA

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		fuel-consumption cluster (if applicable), and host country region of the CPA;	outlined in Part I Section A.5 of this document.		and further confirms that all the project stoves will employ wood as fuel. Conclusion:
					Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
3	Conditions to ensure that CPAs that will be included meet the small-scale thresholds and remain within those thresholds throughout the crediting period of the CPAs.	Have a maximum energy saving of 180 GWHth/ year throughout the CPA's crediting period to conform with the SSC threshold for type II projects as per EB 61 Annex 21 paragraph 3;	Calculations of energy savings per unit and maximum number of stoves that can be added to the CPA. Specification that all stoves included in the CPA will be shown in the CPA database and that ICSs that take the CPA over the 180GWHth/yr energy savings threshold will be excluded from the ER calculations.	The number of stoves in this CPA has been limited to 20,763 stoves, each one saving a tiny fraction of one GWH _{th} /yr. Together the stoves energy savings is less than 180 GWH _{th} /yr. A separate Excel spreadsheet providing this information has been provided to the validator. All stoves distributed under the CPA will be shown on the project database. Any ICS that takes the CPA over the 180GWH _{th} /yr energy savings threshold will be excluded from the ER calculations.	Validated against ER calculation excel spreadsheets /02-(b)/. The calculations for the maximum energy savings per stove and the maximum number of stoves which can be included in a CPA without exceeding the threshold of 180 GWhth/year has been verified by reviewing the CPA ER calculation excel sheets /02-(b)/. Validation team based on assessment of the formulae and calculations confirms that the CPA will not pass the threshold of 180 GWhth/year. Conclusion: Based on the above assessment, validation team concludes that the subject CPA complies with this
4	Conditions related to the database requirements of ICS user.	Have a database that will uniquely identify and define households in which ICS have been installed or distributed. In addition, each stove	Outline of the status of the database, a database (empty of stoves if no stoves have been added to the CPA), and description of CPA	A project database is being developed. This database will include all the information contained on the Registration Card (or ICT/SMS) - including the serial number starting with	eligibility criterion of the PoA. Based on review of sample project database /05/, validation team confirms that there is a provision of database for the CPA of the PoA that will uniquely identify

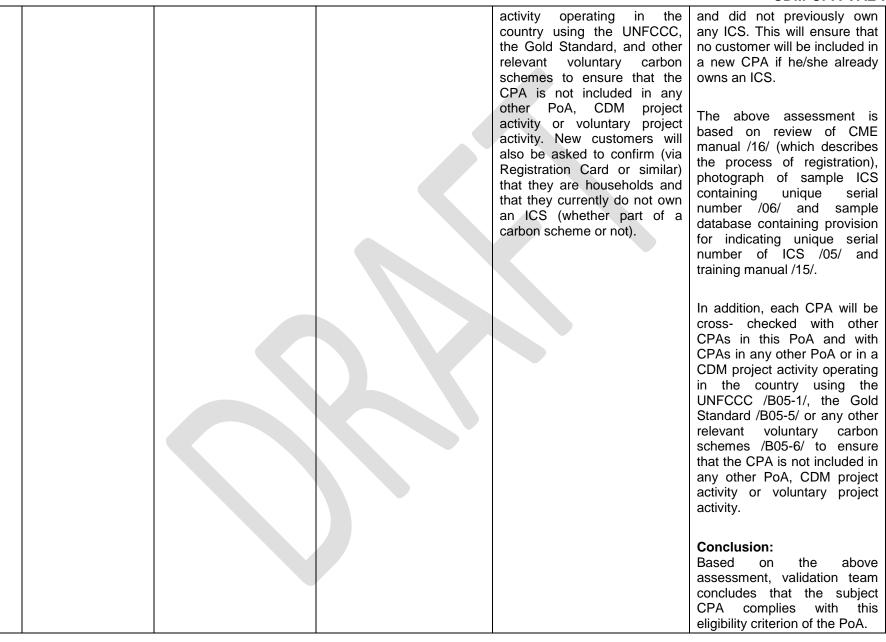
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		itself will be uniquely identified with a serial number clearly starting with "CQC-SSA"	database.	"CQC-SSA". The database will be sortable by customer name, contact details (if available), stove model, location (address/geocoordinates), date of purchase, retailer/distributer, serial number and be available to the DOE upon each verification.	and define households in which ICS have been installed or distributed. Moreover, each ICS in the CPA will have a unique serial number starting with the suffix "CQC-SSA". No individual serial number can be in more than one CPA, so it will not be possible for one stove to be counted in two different CPAs.
					Furthermore, along with the stove serial number, the database will also include end user contact details including location (address/geocoordinates), stove model of stove, date of purchase, retailer/distributer.
					The above assessment is based on review of CME manual /16/ (which describes the process of registration) and sample project database /05/.
					Conclusion: Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA
5	Conditions to ensure compliance with the applicability of the applied methodologies.	Comply with the applicability conditions set out in the methodology AMS II.G version 4 "Energy	 Thermal efficiency tests of stove to be installed/distributed; Statement that 	The applicability conditions and other requirements of AMS II.G (version 4) are applied and followed by the PPs. CPA compliance with the	The complete assessment of methodological applicability of the proposed CPA is provided in Appendix-5 above.

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	,		1		
		efficiency measures in thermal applications of non-renewable biomass" and further described in Part II Section B.2 of the PoA-DD;	documentation has been provided to the DOE demonstrating that non-renewable biomass has been used since 31 December 1989 within the CPA boundaries; - Statement on the adoption of a default gross adjustment factor of 0.95 for leakage.	three applicability criteria are evidenced by the following: TLC-CQC Rocket Stove installed under this CPA are single pot fixed cook stoves that have an efficiency of 25.66% as per the manufacturers specifications as tested by the WBT, hence over the 20% minimum specified in paragraph 1 of the methodology; supporting documentation provided to the DOE demonstrating that nonrenewable biomass has been used since 31 December 1989 within the CPA boundaries (Malawi); and adoption of default gross adjustment factor of 0.95 for leakage.	Conclusion: Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
6	Conditions to avoid double counting of GHG emission reductions or net anthropogenic GHG removals, such as unique identifications of product and enduser locations.	Do not involve households already using an ICS - including households involved in any other CPA or CDM or other voluntary scheme (such as Gold Standard, VCS, VER+) project involving the distribution or installation of ICS, and households which have purchased or received an ICS on a commercial or noncommercial basis (eg. NGO distributed or government distributed stoves);	- Outline of how each ICS will be uniquely identified - Statement of how CPA will be cross-checked to confirm no double counting with other CPAs, PoAs or projects (in the CDM or other carbon credit schemes) - Statement of how households will confirm that they currently do not own an ICS (whether part of a carbon scheme or not).	Each ICS in each SSC-CPA included in this PoA will be identified by a unique combination of customer name and geographical location, as well as a unique serial number. The serial number will start with an identifier "CQC-SSA" which will allow for a clear distinction between the stoves from this PoA with those of other potential PoAs. No individual serial number can be in more than one CPA, so it will not be possible for one stove to be counted in two different CPAs. In addition, each CPA will be cross-checked with other CPAs in this PoA and with CPAs in any other PoA or in a CDM project	Every ICS sold under the CPA will have a unique serial number starting with the suffix "CQC-SSA" and will have a unique combination of customer name and geographical location. No individual serial number can be in more than one CPA thus will ensuring that no ICS is counted more than once in two or more CPAs under one or different PoAs. Besides, when a new ICS registration card is filled out, or sent via SMS or ICT, the customer will acknowledge that he/she is a household, previously used a three-stone fire or traditional pot support

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Conclusion: Based on the above

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					ODIVI-OI A-VAL-I
					assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
8	Conditions to confirm the approval of CPA by the CME for inclusion of CPA into the PoA.	Be approved by the CME prior to its incorporation into the SSC-PoA;	Declaration from CME that CPA received approval for incorporation into PoA.	CQC has self-declared that this CPA is approved by the CME. A self-declaration was provided to the validating DOE.	The proposed CPA has been approved by the CME (CQC) for inclusion into the PoA. A self-declaration /08/ by the CME was provided to the validation team.
					Conclusion: Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
9	Conditions to check the start dates of CPAs through documentary evidence.	Be able to provide documentary evidence of the start date;	Self-declaration from CME or CPA Implementer stating the starting date of the CPA according to the relevant CDM guidance.	A self-declaration from CPA Implementer was provided to the validator stating that the start date of the CPA will be the latest of 31/01/2018 or when the first stove is distributed (as evidenced in the database), whichever is later.	The start date of the CPA is indicated as xx/xx/xxxx or the date of first distribution of ICS, whichever comes later. The CME along with the CPA Implementer plans to start the installation of ICS in rural households of Malawi from xx/xx/xxxx onwards. The start date is in conformance to the requirments of Glossary of CDM terms (version 09.1) /B06/. Also, the start date of the CPA will be after the start date of the PoA. Hence the expected start date of the CPA is in compliance with relevant requirements of CDM PS for PoAs /01-2/, the eligibility criterion requirement of the CDM PoA-DD /B02/ and CPA-DDs /01-b/.

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					ODIVI-CI A-VAL-I
					The Validation Team reviwed the Self-declaration letter from CPA Implementer /09/ and CPA-DD /01-(b)/ to confirm the above. Conclusion: Based on the above
					assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
10	Conditions to provide an affirmation that funding from Annex I Parties, if any, does not result in a diversion of official development assistance.	Affirm that no funding is coming from Annex I parties or if it does, that this is not a diversion of Official Development Assistance (ODA);	Self-declaration from CME or CPA Implementer	Letters provided to the validator show that investment finance for this first CPA is coming from the private sector and their incentive in participating in the program is based on the project's ability to generate and sell CERs.	Validated against self-declaration letter /10/ from the CME confirming that funding for the CPA is provided by a private entity namely Ecoeye Co., Ltd. (Ecoeye) and no ODA funding is involved in the CPA. The validation team also reviwed the contract agreement /19/ between CQC (as CME) and Ecoeye Co. Ltd. (as PP) to confirm the same.
					Conclusion: Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
11	Specification of the technology/measure and performance specification based on testing/certification.	Ensure that the ICS installed/distributed under the CPA are single pot or multi pot portable or in-situ cook stoves with specified efficiency of at least	WBT results	TLC-CQC Rocket Stove installed under this CPA are single pot portable cook stoves that have an efficiency of 25.66% as per the manufacturers specifications and as tested by a WBT, hence over the 20% minimum	Validated against water boiling test report /03/ which mentions a thermal efficiency of 25.66%. Thus, the requirements of §1 of the appied methodlogy are complied with.

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			T	T	
		20%. The efficiency of the project systems (ICS) are certified by a national standards body or an appropriate certifying agency recognized by it (using the WBT outlined in AMS IIG, Version 4 approved by the CDM Executive Board). Alternatively manufacturers' specifications may be used;		specified in paragraph 1 of the methodology. The WBT results have been provided to the validating DOE.	Conclusion: Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
12	Conditions to ensure the compliance with Bold requirements of the applied methodologies.	Use baseline fuel consumption (Bold) data from the household fuel survey (as per baseline reports attached to the PoA-DD and further described in Part II Section B.6.2 of the POA- DD) for the country region and fuel-type which is specifically eligible under this POA;	Statement of which baseline included in the CPA will be used in this CPA.	The CPA applies data from Malawi household wood-fuel survey. The baseline report has been provided to the validating DOE.	A baseline firewood consumption study was carried out by a 3rd party namely HED Consulting Ltd. which resulted in a mean baseline firewood household consumption across Malawi of 8.92 kg/stove/day (or 3.2558 tonnes/stove/year). The Validation Team reviwed the Baseline firewood consumption study (survey) report /11/ and CPA-DD /01-(b)/ to confirm the above. Conclusion: Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
13	Conditions to ensure the compliance with f_{NRB} requirements of	Use the non-renewable biomass (NRB) fraction (as per NRB Reports	Specification of the source of f _{NRB} value. The source is included in this	The CPA applies the f _{NRB} obtained from independent reports elaborated by C4	The value of non-renewable biomass fraction (f _{NRB}) was

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	the applied methodologies.	attached to the PoA-DD and further described in Part II Section B.6.2 of the POA-DD or CDM default values as per EB67 Annex 22) for the country region in which the CPA will be implemented and that is eligible under this POA or develop their own regional level NRB survey in accordance with AMS II.G (version 4). The geographical scope of	PoA.	EcoSolutions. The f _{NRB} study was conducted for Malawi.	obtained from independent f _{NRB} study conducted by C4 EcoSolutions which calculated the f _{NRB} value to be equal to 0.97 (97%). The Validation Team reviwed the Independent report (local study) made by C4 EcoSolutions /12/ and CPA-DD /01-(b)/ to confirm the above. Conclusion: Based on the above assessment, validation team concludes that the subject
		each CPA must be limited to the geographical scope of the NRB analysis applied in that CPA;			CPA complies with this eligibility criterion of the PoA.
14	Conditions for the debundling check based on the "Methodological tool: Assessment of debundling for small-scale project activities".	Ensure that the CPA meets the criterion for not being a de-bundled component of a larger project activity and is additional the debundling rule does not apply if the ICS as independent subsystem, does not exceed 1% of the SSC threshold (as per guidance EB54 Annex 13 and clarification SSC_233) and a CPA is additional if the ICS does not exceed 5% of the SSC threshold (as	Calculations demonstrating that each of the improved cook stoves included in the CPA is not greater than 1% of the small- scale threshold of 1.8 GWh thermal energy savings per year.	Each of the ICS included in the CPA is not greater than 1% of the small scale threshold of 1.8 GWh thermal energy savings per year. The thermal energy savings of the ICS distributed under this CPA is approximately 0.00867 GWhth/year. Separate Excel spreadsheet has been provided to the validating DOE.	The calculation for the maximum energy savings per stove has been verified by the validation team based on review of CPA ER calculation spreadsheets/02-(b)/. Validation Team by assessing the formulae and calculation confirms that none of the independent subsystems (ICS) will exceed 1% of 180 GW _{th} i.e. 1.8 GWh _{th} /year. Also as the energy saving capacity of the individual ICS is 0.00867 GWh _{th} /year which is less than 5% (9 GWh _{th}) of the threshold limit of 180 GWh _{th} for SSC projects and

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		per guidance of EB68 Annex 27);			the installed technology (ICS installation) are isolated units where the users of the technology/measure are households, the CPA is additional.
					Conclusion: Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
15	Conditions to check the mechanism that transfers the ownership rights of CERs from the ICS user to the CME.	Include a mechanism that transfers the ownership rights of CERs from the ICS user to the CME (or any affiliate it so designates), the precise mechanism to be established on a CPA basis. For example, a Registration Card, SMS, ICT or other means, which is signed or received by the enduser upon distribution or installation of the ICS, which shall state that the end-user transfers ownership of the carbon assets to the CME for the life of the stove ¹ ;	Indication of how the mechanism that transfer the ownership rights of CERs will be implemented.	The CPA requires that CPA Implementer collect user data using a Registration Card (or as appropriate through SMS/ICT). Sales Team and distributers will be instructed to read the transfer ownership of the carbon assets to the enduser and tick a box next to this paragraph to confirm that the user acknowledge that by purchasing the ICS, it is transferring the carbon rights to CME.	Based on review of CME manual /16/ and sample Registration Card /13/, the validation team confirms that appropriate mechanism is in place for transfer of the ownership rights of CERs from the end user to CME, as required by this eligibility criterion. Conclusion: Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
16	If the generic CPA	Adhere to all	Indication that CPA	This CPA follows all of the	As verified from the CPA-DDs

¹ Part II Section A.1 of the POA-DD and CME manual further describes the methods and mechanisms mentioned in this eligibility criterion.

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	applies sampling for the determination of parameter values for calculating GHG emission reductions or net anthropogenic GHG removals, conditions related to sampling requirements for the PoA in accordance with the "Standard: Sampling and surveys for CDM project activities and programme of activities.	requirements related to sampling for a PoA in accordance with Part II section B.7.2 of the PoA-DD;	follows the sampling requirements outlined in Part II Section B.7.2 of this document.	sampling requirements as specified in in PoA-DD.	/01-(b)/ and Emission reduction spread sheets /02-(b)/, CME has developed a 'CPA specific sampling plan', which is based on simple random sampling, according to the applied methodology AMS-II.G (version 04.0) /B03/ and as per the requirements of the PoA-DD /B02/. Validation team confirms that the CPA follows the sampling requirements outlined in Part II of Section I.7.2 of the PoA-DD /B02/. Conclusion:
	activities.				Based on the above assessment, validation team concludes that the subject CPA complies with this eligibility criterion of the PoA.
17	Conditions to check the distribution mechanisms of the ICS.	Involve the promotion and distribution of ICS through direct distribution/installation, delivery, community distribution events, direct or distribution through commercial/retail outlets;	Description of ICS promotion and distribution methods under the CPA.	This CPA will distribute ICS on a commercial and non-commercial basis to end-users through the CPA Implementers sales team, direct distribution, community events and agent distributers.	Based on review of CPA-DDs /01-(b)/ and self declaration letter /08/ issued by CME regarding the CPA, which mention that ICS under the CPA will be installed on a commercial and non-commercial basis to end-users through the CPA implementer's field team, direct installation, community events and commercial retailers.
					Conclusion: Based on the above assessment, validation team

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					concludes that the subject CPA complies with this eligibility criterion of the PoA.
18	Conditions related to environmental impact analysis.	CPA shall indicate what type of environmental analysis is undertaken and provide evidence of compliance with national and local (eg. province level) regulations;	Environmental assessment or statement of why an environmental assessment is not needed in the context of the CPA.	In accordance with Malawian regulations, neither an environmental assessment, nor a license nor any other compliance document is required by the government since it is expected that the CPAs has no significant negative environmental impacts.	As mentioned in the PoA-DD /B02/, the environmental impact analysis has to be carried out at the CPA level. Validation Team confirms that conducting environment impact assessment is not mandatory as per the host party requirements for the type of project under the proposed CPA. Conclusion: This eligibility criteria is not applicable for the proposed CPA.

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Appendix 7. Validation Protocol for proposed CPA Inclusion into the PoA

Conformity of Component Project Activities

CDM-CPA-DD Requirements Checklist

"Distribution of Improved Cook Stoves in Sub-Saharan Africa-Malawi-CPA-002"

in Malawi



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

Checklist	Comment	Ref.	Draft Concl.	Final Conc.
Specific requirements of CPA				
SECTION A. General description of CPA				
A.1. Title of the proposed or registered PoA				
A.1.1. Is the reference and title of the PoA to which this CPA is included provided?	Yes, the reference number of the PoA has been provided in this section.	/01-(a)/	OK	
A.2. Title of the CPA				
A.2.1. Is the title of the CPA and the unique identification of the CPA Indicated?	Yes, the title of the CPA and the unique identification of the CPA has been appropriately indicated.	/01-(a)/	ОК	
A.2.2. Is the current version number of the CPA-DD Indicated?	Yes, the current version number of CPA-DD has been provided in this section.	/01-(a)/	OK	
A.2.3.Is the date the CPA-DD was completed (DD/MM/YYYY) Indicated?	Yes, the date of completion of CPA-DD has been provided in this section.	/01-(a)/	OK	
A.3. Description of the CPA				
A.3.1 Is the description of the technology(ies) and/or measures used by the CPA is in accordance with the proposed or registered PoA, and in accordance with the applicable provisions in the Project standard?	Yes, the description of the technology and/or measure used by the CPA is in accordance with the proposed or registered PoA, and the applicable provisions in the Project standard.	/01-(a)/	ОК	
A.4 Entity/individual responsible for CPA				
A.4.1.1 Is the information on the CPA implementer(s) provided? (CPA implementers can be project participants of the PoA, under which the CPA is submitted, provided)	Yes, appropriate information on the CPA implementer has been provided. CPA will be implemented by Total Land Care (TLC).	/01-(a)/	CL01	
	However, CL01 has been raised seeking clarification on identification of any other CPA Implementers.			
A.4.1.2 Is the name of CPA implementers included in the CPA is consistent with the proposed/ registered PoA?	Yes, the name of CPA implementer included in the CPA is consistent with the registered PoA.	/01-(a)/	OK	
A.5 Technical description of the CPA				

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A.5.1. Is the description the technologies and/or measures to be employed and/or implemented by the CPA including a list of the facilities, systems and equipment that will be installed and/or modified by the CPA provided?	Yes, the description of the technologies and/or measures to be employed and/or implemented by the CPA including a list of the facilities, systems and equipment that will be installed and/or modified by the CPA has been appropriately provided.	/01-(a)/, /B02/	ОК
A.5.2 Does the description includes;			
A.5.2.1 A list and the arrangement of the main manufacturing/production technologies, systems and equipment involved provided?	Not Applicable	/01-(a)/, /B02/	ОК
A.5.2.2 information about the age and average lifetime of the equipment based on manufacturer's specifications and industry standards, and existing and forecast installed capacities, load factors and efficiencies?	Yes, information about the age and average lifetime of the equipment is based on manufacturer's specifications.	/01-(a)/	ОК
A.5.2.3 The monitoring equipment detail and their location in the systems. Does the monitoring detail provided are complete to measure all data and parameters such that Emission reduction can be measured or calculated?	Not Applicable	/01-(a)/, /B02/	ОК
A.5.2.4 Energy and mass flows and balances of the systems and equipment included in the CPA?	Not Applicable	/01-(a)/, /B02/	ОК
A.5.2.5 The types and levels of services (normally in terms of mass or energy flows) provided by the systems and equipment that are being modified and/or installed under the CPA and their relation, if any, to other manufacturing/production equipment and systems outside the project boundary?	Not Applicable	/01-(a)/, /B02/	ОК
A.5.2.6 if the types and levels of services provided by those manufacturing/production systems and equipment outside the project boundary also constitute important parameters of the description.	Not Applicable	/01-(a)/, /B02/	ОК
Does the description clearly explain how the same types and levels of services provided by the CPA would have been provided in the baseline scenario?			
A.5.3 Does the description contains a list of:-			
A.5.3.1 Facilities, systems and equipment in operation under the existing scenario prior to the implementation of the CPA?	Yes, this section contains description of systems/equipment in operation under the existing scenario prior to the implementation of the CPA.	/01-(a)/, /B02/	ОК
A.5.3.2 Facilities, systems and equipment in the baseline scenario?	Yes, this section contains description of systems/equipment in operation existing in the baseline scenario.	/01-(a)/, /B02/	ОК

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A.5.3.3 In case the baseline scenario is a continuation of current practice. Is it stated that both the scenarios are same?	Yes, the baseline scenario is a continuation of current practice.	/01-(a)/, /B02/	ОК
A.5.3.4 Does the information provides the purpose of the CPA and how it reduces GHG emissions?	Yes, information provided describes the purpose of the CPA and how it reduces GHG emissions.	/01-(a)/, /B02/	ОК
A.6. Party(ies)			
A.6.1 Does the Party (ies) and CPA implementer(s) involved in the CPA provided in tabular format and in Appendix 1 Consistent and the contact information complete?	Yes, the Party and CPA implementer involved in the CPA has been provided in tabular format and is further consistent with the information contained in Appendix 1 and is complete.	/01-(a)/	ОК
A.7. Geographic reference or other means of identification			
A.7.1 Is the geographic reference or other means of identification that allows for the unique identification of the CPA provided? (maximum in one page)?	Yes, appropriate geographic reference has been provided which allows for the unique identification of the CPA provided.	/01-(a)/	OK
A.8. Duration of the CPA			
A.8.1 Start date of the CPA			
A.8.1 Is the start date provided in (DD/MM/YYYY) format?	Yes, the expected start date has been provided in the DD/MM/YYYY format.	/01-(a)/	ОК
A.8.1 Does the description, of how the start date was determined and is in line with the definition of start date in "Glossary of CDM terms" and provided in POA-DD?	Yes, the description of how the start date was determined has been provided and is further in line with the definition of start date in "Glossary of CDM terms".	/01-(a)/	CL02
	CL02 has been raised seeking clarification on the exact start date and start of project implementation.		
A.8.2 Expected operational lifetime of the CPA			
A.8.2.1 Is the expected operational lifetime of the CPA stated in years and months?	Yes, the expected operational lifetime of the CPA stated in years.	/01-(a)/	ОК
A.9. Choice of the crediting period and related information			
Does the type of crediting period renewable or Fixed chosen and clearly stated?	The type of crediting period chosen is renewable and is clearly stated.	/01-(a)/	ОК
A.9.1 Choice of the crediting period and related information			
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Is the expected start date of the crediting period of the CPA indicated in (DD/MM/YYYY) format, and line with PoA?	Yes, the expected start date of the crediting period of the CPA (i.e. 05/02/2018) has been indicated in (DD/MM/YYYY) format and is line with PoA.	/01-(a)/	OK	
A.9.2 Length of the crediting period				
A.9.2.1 Is the length of the crediting period chosen clearly indicated?	Yes, the length of the crediting period chosen is 7 years (twice renewable) and has been clearly indicated.	/01-(a)/	OK	
A.9.2.1.1 In case a renewable crediting period is chosen, does the length of the first crediting period and the number of renewal periods provided?	Yes, renewable crediting period is chosen and the length of the first crediting period and the number of renewal periods has been appropriately provided.	/01-(a)/	OK	
A.9.2.1.2 Does the total renewal periods comply and do not exceed the PoA validity period?	Yes, the total renewal periods comply and do not exceed the PoA validity period.	/01-(a)/	OK	
A.10 Estimated amount of GHG emission reductions				
Does the estimated annual GHG emission reductions for each year of the crediting period and, the annual average and the total GHG emission reductions over the chosen crediting period (or the first crediting period) provided in the table?	Yes, the estimated annual GHG emission reductions for each year of the crediting period and, the annual average and the total GHG emission reductions over the chosen crediting period (or the first crediting period) have been provided in the table	/01-(a)/	OK	
A.11. Public funding of the CPA				
A.11.1 Does the PoA receives public funding from Parties included in Annex I?	No, the PoA does not receive public funding from Parties included in Annex I.	/01-(a)/	ОК	
A.11.2 if the PoA receives public funding from Parties included in Annex , is the information on Parties providing public funding Provided in Appendix 2 and the affirmation obtained from such Parties is in accordance with applicable provisions related to official development assistance in the Project standard?	Not Applicable	/01-(a)/	ОК	
A.12. Confirmation for CPA				
A.12. Does the description include and confirm that the CPA is neither registered as an individual CDM project activity nor is part of another registered PoA?	Yes, the description includes and further confirms that the CPA is neither registered as an individual CDM project activity nor is part of another registered PoA.	/01-(a)/	OK	
SECTION B. Environmental analysis				
B.1. Analysis of the environmental impacts				

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B.1.1 Is the analysis of the environmental impacts required and is undertaken,	Yes, analysis of the environmental impacts is not mandatory as per host party regulations.	/01-(a)/	OK
B.1.2 Does the description and the analysis of environmental impacts undertaken is as per the PoA.	Not Applicable	/01-(a)/	ОК
B.2. Environmental impact assessment			
B.2.1. Is an environmental impact assessment required?	No, EIA is not mandatory as per host party regulations.	/01-(a)/	ОК
B.2.1.1 Does the assessment of the requirement of Environmental impact assessment and the conclusion & related references to all documentation provided?	Not Applicable	/01-(a)/	OK
B.2.2 In case the section B1and B.2 is kept blank. Is it indicated and confirmed that the environmental analysis is provided at the PoA level.	Not Applicable	/01-(a)/	ОК
SECTION C. Local stakeholder comments			
C.1. Solicitation of comments from local stakeholders			
C.1 Is the detail of process by which comments from local stakeholders have been invited for the CPA described?	Local Stakeholder Consultation was conducted at PoA level.	/01-(a)/, /B02/	ОК
	Thus, this section is Not Applicable.		
C.2. Summary of comments received			
C.2 Are all stakeholders that have made comments Identified and Is the summary of these comments provided?	Not Applicable	/01-(a)/, /B02/	ОК
C.3. Report on consideration of comments received			
C.3.1 Does the information provided demonstrate that all comments received have been considered?	Not Applicable	/01-(a)/, /B02/	ОК
C.3.2. In case the section C1 and C.2 is kept blank. Is it indicated and confirmed that the stakeholder consultation information is provided at the PoA level?	Not Applicable	/01-(a)/, /B02/	ОК
SECTION D. Eligibility of CPA and estimation of emissions reductions			
D.1. Title and reference of the approved baseline and monitoring methodol	ogy(ies) selected.		
D.1. Is the exact methodology(ies) Identified and reference & title of the approved methodology provided?	Yes, CME has provided the UNFCCC reference of the applied methodology.	/01-(a)/	ОК
D.2. Application of methodology(ies)			

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D.2.1 Is it demonstrated how the applicability conditions of the approved methodology(ies) and the PoA are met?	PP is requested to clarify and further state in the CPA-DD whether the above statement applies to rural, urban or total population of the host country	/01-(a)/	ОК
D.2.2 Has the documentation that has been used provided and explained? Is the reference of documentation included in Appendix 3?	Yes, appropriate documentation has been provided and explained. The references have been included in Appendix-3 of this report.	/01-(a)/	ОК
D.3. Sources and GHGs			
D.3.1 Does all the sources and GHGs included in the CPA boundary Described in accordance with the PoA?	The description of project boundary provided is complete and as per the narrative provided in the applied methodology.	/01-(a)/	ОК
D.3.2 Does the proof which shows that the CPA is located within the geographical boundary of the proposed or registered PoA Provide?	Yes, the proof which shows that the CPA is located within the geographical boundary of the proposed or registered PoA has been mentioned and provided.	/01-(a)/	ОК
D.3.3. Does all emission sources and GHGs included in the CPA boundary described, explained and justified using the table provided?	Yes, all emission sources and GHGs included in the CPA boundary described are explained and justified using the table provided.	/01-(a)/	ОК
D.3.4 Does the section Include a flow diagram of equipment, energy and mass flows based on the description provided in section A.5. of CPA-DD?	Yes, this section includes a flow diagram of equipment, energy and mass flows based on the description provided in section B.2. of CPA-DD. The section numbering has changed from A.5 to B.2 as the CPA-DD form has been revised.	/01-(a)/	ОК
D.4. Description of the baseline scenario			
D.4 Is the description of the baseline scenario and its identification for the CPA is in accordance with the PoA?	Yes, the description of the baseline scenario and its identification for the CPA is in accordance with the PoA.	/01-(a)/, /B02/	ОК
D.5. Demonstration of eligibility for a CPA			
D.5.1 Does CPA meets each of the eligibility criteria of the PoA including confirmation of additionality of the CPA for its inclusion into the PoA? Please provide assessment for each of the eligibility criteria as per the proposed or registered PoA DD, the eligibility criteria shall cover (unless differently mentioned in the registered PoA DD, if the registered PoA DD provides different set of eligibility criteria, consider those in the below row) a minimum the following:	Yes, the CPA meets each of the eligibility criteria of the PoA including confirmation of additionality of the CPA for its inclusion into the PoA.	/01-(a)/, /B02/	ОК

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(a) The geographical boundary of the CPA including any time-induced boundary # consistent with the geographical boundary set in the PoA # For example, an emission factor for electricity generation is dependent on the boundaries of regional or state or sub-regional grids.	The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-6 for further details.	/01-(a)/, /B02/	OK	
(b) Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);	The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-6 for further details.	/01-(a)/, /B02/	OK	
(c) The specifications of technology/measure # including the level * and type of service, performance specifications including compliance with testing/certifications; # Specifications of the technology/measure shall include the type, capacity and other key features of the design of the systems. For example, indicating the installed capacity (in kW), size or dimensions, fixed/portable operation, and other key design features that makes the project cook stoves efficient, would be appropriate; however, only indicating that all cook stoves will have an efficiency X% would not be sufficient. * The level of service shall be defined in comparison with the baseline system being replaced.	The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-6 for further details.	/01-(a)/, /B02/	OK	

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(d) Conditions to check the start date of the CPA through documentary evidence;	The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-6 for further details.	/01-(a)/, /B02/	OK
(e) Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs;	The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-6 for further details.	/01-(a)/, /B02/	OK
(f) The conditions that ensure that the CPA meets the requirements pertaining to the demonstration of additionality as assessed in section B.1 above;	The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-6 for further details.	/01-(a)/, /B02/	OK
(g) The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis;# # See also relevant paragraphs of "CDM project cycle procedure".	The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-6 for further details.	/01-(a)/, /B02/	OK
(h) Conditions to provide an affirmation that funding from Annex I Parties, if any, does not result in a diversion of official development assistance;	The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-6 for further details.	/01-(a)/, /B02/	OK
(i) Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation) \$; \$ This is to re-test the validity of assumptions made at the PoA level. For example, in a lighting efficiency application, lighting usage hours of 3.5 hours per day would be valid if the target group is residences/households. Usage hours would be different in commercial applications and vice versa.	The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-6 for further details.	/01-(a)/, /B02/	OK

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(j) Where applicable, the conditions related to sampling requirements for the PoA in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities";	The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-6 for further details.	/01-(a)/, /B02/	OK	
(k) Where applicable, the conditions that ensure that every CPA meets the small- scale or microscale threshold # and remains within those thresholds throughout the crediting period of the CPA. However, for a CPA that consists of only units that qualify as 'microscale CDM units' as defined in the methodological tool "Demonstration of additionality of microscale project activities", this condition is not required;	The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in Appendix-6 for further details.	/01-(a)/, /B02/	ОК	
# Please refer to the latest approved version of the methodological tool "Demonstrating additionality of microscale project activities" and the latest approved version of the "General Guidelines to SSC CDM methodologies".				
(I) Where applicable, the requirements for the debundling check, in case the CPA belongs to small-scale or microscale project categories #. However, if a CPA solely consists of 'microscale CDM units', the requirement regarding debundling is not applicable.	The demonstration of the CPA's compliance with this eligibility criterion has been successfully made by the CME. Refer to the assessment provided in	/01-(a)/, /B02/	ОК	
# Please refer to the latest approved version of the methodological tool "Assessment of debundling for small-scale project activities".	Appendix-6 for further details.			

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D.6. Estimation of emission reductions			
D.6.1.Explanation of methodological choices			
D.6.1.1 Is Explanation and justification for the methods and/or methodological steps, based on the applied methodology, for calculating baseline emissions applied to the CPA provided?	Yes, explanation and justification for the methods and/or methodological steps for calculating baseline emissions applied to the CPA have been provided in accordance with the applied methodology.	/01-(a)/, /B03/	ОК
D.6.1.2 Is Explanation and justification for the methods and/or methodological steps, based on the applied methodology, for calculating, project emissions, are applied to the CPA provided?	Not Applicable	/01-(a)/, /B03/	ОК
D.6.1.3 Is Explanation and justification for the methods and/or methodological steps, based on the applied methodology, for calculating, leakage emissions and emission reductions applied to the CPA provided?	Not Applicable	/01-(a)/, /B03/	ОК
D.6.1.4 Is Explanation and justification for the methods and/or methodological steps, based on the applied methodology, for calculating, emission reductions applied to the CPA provided?	Yes, explanation and justification for the methods and/or methodological steps, based on the applied methodology, for calculating, emission reductions applied to the CPA have been provided.	/01-(a)/, /B03/	ОК
D.6.1.5 Is the equation for calculating the emission reductions for CPA is in line with the methodology and the PoA?	Yes, the equation for calculating the emission reductions for CPA is in line with the methodology and the PoA.	/01-(a)/, /B03/	ОК
D.6.2. Data and parameters that are to be reported ex-ante			
D.6.2.1 Does the compilation of information on the data and parameters that are not monitored during the crediting period but are determined before the registration and remain fixed throughout the crediting period described and provided?	Yes, the compilation of information on the data and parameters that are not monitored during the crediting period but are determined before the registration and remain fixed throughout the crediting period has been described and provided.	/01-(a)/, /B02/	ОК
D.6.2.2. Is the compilation of information for data that are measured or sampled, and data that are collected from other sources (e.g. official statistics, expert judgment, proprietary data, IPCC, commercial and scientific literature, etc.) are complete and as per the methodology and applicable conditions?	Yes, the compilation of information for data that are measured or sampled, and data that are collected from other sources are complete and as per the methodology and applicable conditions	/01-(a)/, /B02/	ОК

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			CDIVI-CI A-VAL-I OINIV
D.6.2.3. Are all data or parameter, complete with respect to the: "Value(s) of data applied, Choice of data, Purpose of data, Measurement methods and procedures to enable Calculation of baseline emissions; Project Emission, Leakage Emission, Emission Reduction? Pleas list all ex-ante parameters (as below) along with their values and provide an assessment on its appropriateness.	Yes, all data or parameters are complete with respect to the: "Value(s) of data applied, Choice of data, Purpose of data, Measurement methods and procedures to enable calculation of baseline emissions; project emissions, and emission reductions.	/01-(a)/	ОК
Parameter: B _{old} Value: 3.2558 Source of value: Baseline Survey report	The validation team reviewed the reference source and deems the value to be appropriate. Refer to section D.5.2 for detailed assessment.	/01-(a)/	ОК
Parameter: η_{old} Value: 0.10 Source of value: default value of applied methodology AMS-II.G (version 04)	The validation team reviewed the reference source and deems the value to be appropriate. Refer to section D.5.2 for detailed assessment.	/01-(a)/	ОК
Parameter: f _{NRB,y} Value: 0.97 Source of value: Independent Report (local study) by C4 EcoSolutions	The validation team reviewed the reference source and deems the value to be appropriate. Refer to section D.5.2 for detailed assessment.	/01-(a)/	ОК
Parameter: NCV _{biomass} Value: 0.015 Source of value: default value of applied methodology AMS-II.G (version 04)	The validation team reviewed the reference source and deems the value to be appropriate. Refer to section D.5.2 for detailed assessment.	/01-(a)/	ОК
Parameter: EF _{projected_fossilfuel} Value: 81.6 tCO ₂ /TJ Source of value: IPCC (2006) default value	The validation team reviewed the reference source and deems the value to be appropriate. Refer to section D.5.2 for detailed assessment.	/01-(a)/	ОК
Parameter: L Value: 0.95 Source of value: default value of applied methodology AMS-II.G (version 04)	The validation team reviewed the reference source and deems the value to be appropriate. Refer to section D.5.2 for detailed assessment.	/01-(a)/	ОК

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			CDIVI-CPA-VAL-FORIVI
D.6.3. Ex-ante calculation of emission reductions			
D.6.3.1. Is ex ante calculation of project emissions, baseline emissions, Leakage emissions and /or Emission reduction expected during the crediting period, Provided in a transparent manner based on data or parameters (in the table in section D.6.2 above) applying all relevant equations provided in the selected methodology?	Yes, the ex-ante calculation of baseline emissions and Emission reduction expected during the crediting period are provided in a transparent manner based on data or parameters (in the table in section D.6.2 above) applying all relevant equations provided in the selected methodology.	/01-(a)/	OK
D.6.3.2 If any of these estimates has been determined by a sampling approach, then are the descriptions of the sampling efforts undertaken (in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities") Provided?	Yes, in cases where estimates have been determined by a sampling approach the descriptions of the sampling efforts undertaken have been provided.	/01-(a)/	ОК
D.6.3.3. Are the documentation of each equation applied, represented in a manner that enables the reader to reproduce the calculation?	Yes, the documentation of each equation applied is represented in a manner that enables the reader to reproduce the calculation.	/01-(a)/	ОК
D.6.3.4. Are the relevant, additional background information and/or data (including relevant electronic) spreadsheet provided in Appendix 4?	Not Applicable	/01-(a)/	ОК
D.6.3.5 Is a sample calculation for each equation used, substituting the values used in the equations Provided?	Yes, a sample calculation for each equation used, substituting the values used in the equations has been provided.	/01-(a)/	OK
D.6.4. Summary of the ex-ante estimates of emission reductions			
Is the summary of all ex-ante estimation of Baseline Emission, Project Emission, Leakage Emission and Emission Reduction provided in accordance with given table?	Yes, the summary of all ex-ante estimation of Baseline Emission and Emission Reduction is provided in accordance with given table.	/01-(a)/	OK
D.7. Application of the monitoring methodology and description of the monitoring	toring plan		
D.7.1. Data and parameters to be monitored			
D.7.1.1. Is the specific information related to procedures for measurement, monitoring, recording, collected, archiving of data and parameters that is required for estimation and calculation of Emission Reduction provided?	Yes, the specific information related to procedures for measurement, monitoring, recording, collected, archiving of data and parameters that is required for estimation and calculation of Emission Reduction have been provided.	/01-(a)/	OK

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D.7.1.2 Are all data or parameter, complete with respect to the: "Value(s) of data applied, Choice of data, Purpose of data, Measurement methods and procedures, QA/QC procedures to enable Calculation of baseline emissions; Project Emission, Leakage Emission, Emission Reduction?	Yes, all data or paramet respect to the: "Value(Choice of data, Foundation Measurement methods QA/QC procedures to ebaseline emissions; Procedures to Reduction.	/01-(a)/	OK		
D.7.1.3 Are the relevant, additional background information on data and parameters to be monitored is provided in Appendix 5?	Not Applicable.		/01-(a)/	OK	
D.7.1.4 Is the list of parameters presented in section B.7.1 (Part II of PoA-DD) considered to be complete with regards to the requirements of the applied methodology?					
Parameter: n _{y,j}	Monitoring Checklist Title and description in line with methodology? Data unit correctly	Yes / No / NA Yes	/01-(a)/, /B02/	OK	
	stated? Source clearly referenced?	Yes			
	Correct value provided for estimation? Has this value been verified?	Yes			
	Measurement method and procedure correctly described?	Yes			
	Purpose of data correctly described Additional comments	Yes			
	(if any)				

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	Monitoring Checklist	Yes / No / NA	(0.4.7.)	OK OK	
Parameter: t _{y,i}	Title and description in	Yes	/01-(a)/,	OIV.	
	line with	162	/B02/		
	methodology?				
	Data unit correctly	Yes			
	stated?	165			
	Source clearly	Yes			
	referenced?	163			
	Correct value provided	Yes			
	for estimation?				
	Has this value been	Yes			
	verified?				
	Measurement method	Yes			
	and procedure				
	correctly described?				
	Purpose of data	Yes			
	correctly described				
	Additional comments	NA			
	(if any)				
Parameter: η _{new,i}	Monitoring Checklist	Yes / No / NA	/01-(a)/,	OK	
The state of the s	Title and description in	Yes	/B02/		
	line with				
	methodology?				
	Data unit correctly	Yes			
	stated?				
	Source clearly	Yes			
	Source clearly referenced?				
	Source clearly referenced? Correct value provided	Yes			
	Source clearly referenced? Correct value provided for estimation?	Yes			
	Source clearly referenced? Correct value provided for estimation? Has this value been				
	Source clearly referenced? Correct value provided for estimation? Has this value been verified?	Yes			
	Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method	Yes			
	Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method and procedure	Yes			
	Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method and procedure correctly described?	Yes Yes Yes			
	Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method and procedure correctly described? Purpose of data	Yes			
	Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method and procedure correctly described? Purpose of data correctly described	Yes Yes Yes			
	Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method and procedure correctly described? Purpose of data	Yes Yes Yes			

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			T	1	1
Parameter: SS _y	Monitoring Checklist	Yes / No / NA	/01-(a)/,	OK	
,	Title and description in	Yes	/B02/		
	line with				
	methodology?				
	Data unit correctly	Yes			
	stated?				
	Source clearly	Yes			
	referenced?				
	Correct value provided	Yes			
	for estimation?	Vas			
	Has this value been verified?	Yes			
	Measurement method	Yes			
	and procedure	res			
	correctly described?				
	Purpose of data	Yes			
	correctly described	163			
	Additional comments	NA			
	(if any)	1471			
D.7.2. Description of the monitoring plan					
D.7.2.1 Is the description of the monitoring plan for the CPA provided in	Yes, the description of th	o monitoring plan for	/01-(a)/,	ОК	
accordance with the approved monitoring methodology (ies) and PoA?	the CPA is provided in		/B02/	OK	
accordance with the approved monitoring methodology (les) and FoA:	approved monitoring met		/602/		
			(0.4. () (014	
D.7.2.2 In case the data and parameters to be monitored determined by	Yes, for the data and		/01-(a)/	OK	
sampling approach, are the description of sampling plan provided in	monitored determined by				
accordance with the recommended outline for a sampling plan in the	the description of samplir accordance with the reco				
"Standard for sampling and surveys for CDM project activities and programme of activities"?	a sampling plan in the "S				
programme or activities ?	and surveys for CDM p				
	programme of activities.	oroject activities and			
D 7 0 O continue and and an afficial at			(04 ())	014	
D.7.3 Consistency check and font size	Yes all the information is	s consistent ant font	/01-(a)/	OK	
	size is accurate.				
D.7.3.1 Does the following key terms and there description is consistent					
within the various section of the PoA-DD?					
P.S.: Additional rows may be added if required.					
1 .5 Additional tows may be added it required.					

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D.7.3.1.1. CME and Participants of PoA	Yes, the description of CME and Participants of PoA is consistent within the various sections of the PoA-DD.	/01-(a)/	ОК
D.7.3.1.2. Description/ Technology or measures to be employed by the CPA	Yes, the description of Technology or measures to be employed by the CPA is consistent within the various sections of the PoA-DD.	/01-(a)/	ОК
D.7.3.1.3. Target group (end users type)	Yes, the Target group (end user type) listed are consistent within the various sections of the PoA-DD.	/01-(a)/	ОК
D.7.3.1.4. Eligibility criteria for inclusion of a CPA	Yes, the Eligibility criteria for inclusion of a CPA is consistent within the various sections of the PoA-DD.	/01-(a)/	ОК
D.7.3.2. Is the font size in all the respective documents is as per the requirements of Instructions for filling out the programme design document form for small-scale/large scale CDM programmes of activities?	Yes, the font size in all the respective documents is as per the requirements of Instructions for filling out the programme design document form for small-scale/large scale CDM programmes of activities. However, CAR01 has been raised due to non-compliances with the filling guidelines of CPA-DD form (version 08.1).	/01-(a)/	CAR01 and CAR02
	CAR02 has been rasied concerning certain editorial issues in the CPA-DD form.		

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Document information

Version	Date	Description
02.0	29 December 2017	Revision to align with the requirements of the "CDM validation and verification standard for programme of activities" (version 01.0).
01.0	4 May 2015	Initial publication.

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Keywords: component project activity, validation report

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