




**Validation report form for
CDM programme of activities
(Version 03.0)**

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

BASIC INFORMATION

Title of the programme of activities (PoA)	The African Cookstoves Initiative Programme of Activities
Version number of the validation report	1.0 Reference – TN P-No.: 14380 – 20/131
Completion date of the validation report	30/12/2020
Version number of PoA-DD to which this validation report applies	3.6
Date when PoA-DD was uploaded for global stakeholder consultation	26/03/2020
Coordinating/managing entity (CME)	ALLCOT AG
Host Parties	Senegal, Côte d'Ivoire
Applied methodologies and standardized baselines	AMS-II.G Energy efficiency measures in thermal applications of non- renewable biomass --- Version 11.1 Standardized baseline: N.A.
Mandatory sectoral scopes	Scope: 3 - Energy demand
Conditional sectoral scopes, if applicable	N/A
Name and UNFCCC reference number of the DOE	TÜV NORD CERT GmbH (E-0022)
Name, position and signature of the approver of the validation report	 Stefan Winter Final Approver

SECTION A.Executive summary

ALLCOT AG has commissioned the TÜV NORD JI/CDM Certification Program (CP) to validate the Programme of Activities:

“The African Cookstoves Initiative Programme of Activities”

with regard to the relevant requirements of the UNFCCC for CDM project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria include article 12 of the Kyoto Protocol, the modalities and procedures for CDM (Marrakech Accords) and the relevant decisions by COP/MOP and CDM Executive Board.

The PoA encompasses Component Project Activities that provide improved cookstove (ICS) technology and dryers to the underserved populations of Senegal and Côte d'Ivoire that use inefficient cookstoves and dryers and to facilitate the project's expansion through the two host countries.

The PoA is a voluntary action by the CME and its implementation is not required by law.

The PoA will implement two different types of CPAs:-

1. Improved Cookstoves with rated thermal efficiency of at least 20% (CPA Category 1)
2. Improved Dryer systems (CPA Category 2)

Therefore, two generic CPA-DDs have been developed.

Scope of Validation

The validation scope is given as a thorough independent and objective assessment of the project design including especially: the correct application of the methodology(ies), the project's baseline study, additionality justification, local stakeholder commenting process, environmental impacts and monitoring plan, which are included in the PoA-DD and other relevant supporting documents, to ensure that the proposed CDM programme of activities meets all relevant and applicable CDM criteria.

The information included in the PoA-DD and the supporting documents were reviewed against the requirements as set out for CDM by the UNFCCC. The validation team has, based on the requirements in the Validation and Verification Standard^{VVS/}, carried out a full assessment of all evidences to assess the compliance of the PoA with the CDM criteria.

The validation is based on the information made available to TÜV NORD JI/CDM CP and on the contract conditions.

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

The following parties to the Kyoto Protocol, CME and project participants are involved in this PoA activity (Table A-1):

Table A-1: Project Party, CME and Project Participant of PoA

Characteristic	Party	Project Participants	CME
Non-Annex 1 Country	Senegal	ALLCOT AG	X
Non-Annex 1 Country	Côte d'Ivoire	ALLCOT AG	X

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk review	On-site inspection	Interview(s)	Validation findings
1.	Team Leader	EI	Quireza	Oliver	TNMX	x	-	x	x
2.	Team Member	EI	Mitre	Raul	TNMX	x	-	x	x
3.	Technical Expert	EI	Kochaniewicz	Gregor	-	x	-	x	x

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	EI	Lubanga	David	-
2.	Approver	IR	Winter	Stefan	TÜV NORD CERT

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

During the desk review all documents initially provided by the client and publicly available documents relevant for the validation were reviewed. The main documents are listed below:

- PoA-DD^{/POADD/};
- documents of CDM prior consideration and starting date^{/PSD/};
- host government approvals^{/LoA/} ;
- local stakeholders' consultations^{/SHCP/};
- Baseline information from the host countries^{/BL/}

Other supporting documents, such as publicly available information on the UNFCCC website and background information were also reviewed.

C.2.On-site inspection

In accordance with the CDM VVS version 2.0 on-site inspection is not mandatory for the validation of a PoA. Nonetheless, interviews have been carried out with CME personnel representatives in order to confirm the relevant information provided in the PoA-DD such as national regulation, local stakeholders consultation, technology information and PoA location.

C.3.Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Hernandez	Encarnacion	ALLCOT AG	23/10/2020	General aspects Monitoring Procedures	Oliver Quireza Gregor Kochaniewicz Raul Mitre
2.	Garcia	Mercedes	ALLCOT AG	23/10/2020	General aspects Sampling plan	Oliver Quireza Gregor Kochaniewicz

3.	Aramburu	Asier	ALLCOT AG	23/10/2020	Sampling plan Local regulations	Raul Mitre Oliver Quireza Gregor Kochaniewicz Raul Mitre
----	----------	-------	-----------	------------	------------------------------------	--

C.4.Sampling approach

>>

<input checked="" type="checkbox"/>	No sampling approach has been used by the CME to validate any parameter			
<input type="checkbox"/>	A sampling approach has been applied by the CME for the following parameter(s):			
Parameter	Sampling approach ¹⁾	Sampling Type ²⁾	Population	Sample Size
-	-	-	-	-

¹⁾ Sampling Approaches:

SiRS: Simple Random Sampling
 StRS: Stratified Random Sampling
 SS: Systematic Sampling
 CS: Cluster Sampling
 MSS: Multi-stage Sampling

²⁾ Sampling Types:

PS: Parameter Sampling

C.4.1. Sampling approaches during on-site inspection

<input checked="" type="checkbox"/>	No sampling approach has been used by the VT at on-site inspection			
<input type="checkbox"/>	A sampling approach has been applied by the VT for field check of the following parameter(s):			
Parameter	Sampling approach ¹⁾	Sampling Type ²⁾	Population	Sample Size
-	-	-	-	-

¹⁾ Sampling Approaches:

SiRS: Simple Random Sampling
 StRS: Stratified Random Sampling
 SS: Systematic Sampling
 CS: Cluster Sampling
 MSS: Multi-stage Sampling

²⁾ Sampling Types:

AS: Acceptance Sampling
 PS: Parameter Sampling
 COM: Full data check at higher data aggregation levels and sampling at original data levels

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

Areas of validation of compliance	No. of CL	No. of CAR	No. of FAR
Programme of activities	-	-	-
Identification of programme type	-	-	-
Description of PoA	-	1	-
Management system	-	2	-
Demonstration of additionality of PoA	-	1	-
Start date and duration of PoA	-	-	-
Environmental impacts	-	-	-
Socio-economic impacts	-	-	-
Local stakeholder consultation	-	-	-
Sustainable development co-benefits	-	-	-
Approval	-	-	-
Authorization	-	-	-

Modalities of communication	-	-	-
Global stakeholder consultation	-	-	-
Generic component project activities	-	-	-
General description of generic CPAs	-	1	-
Selection of methodologies and standardized baselines	-	-	-
•Deviation from methodologies and/or methodological tools	-	-	-
•Clarification on applicability of methodology, tool and/or standardized baseline	-	-	-
Application of methodologies and standardized baselines	-	-	-
•General	-	-	-
•Project boundary, sources and GHGs	-	1	-
•Baseline scenario	-	1	-
•Estimation of emission reductions or net anthropogenic removals	-	-	-
•Monitoring plan	-	4	-
Crediting period type and duration	-	-	-
Eligibility criteria for inclusion of CPAs	-	5	-
Data and parameters fixed ex ante	-	-	-
PPs contact data		1	
Total	-	17	-

SECTION D.Validation findings

D.1.Programme of activities

D.1.1.Identification of programme type

Means of validation	<p>A draft PoA-DD was submitted to the validation team by the CME. By means of the UNFCCC website it has been checked whether a valid PoA-DD template (CDM-PoA-DD-FORM) has been used. Further, it has been checked whether the latest instructions for filling out the PoA-DD template have been followed. Every section has been checked against the respective guidance.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/PoADD-T/ •/unfccc/ 		
Findings	<input checked="" type="checkbox"/>	A valid applicable reporting template CDM-PoA-DD-FORM as listed on the UNFCCC website has been used for the Programme Design Document to be uploaded.	
	<input checked="" type="checkbox"/>	Valid applicable instructions for filling out the PoA-DD have been followed. All raised findings have been correctly solved.	
	<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:	
Conclusion	<input checked="" type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.	
	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 04.	
		A valid applicable PoA-DD template (CDM-PoA-DD-FORM - version 09.0) has been used and correctly filled out. This is still applicable as per implementation plan for new regulatory framework.	

D.1.2.Description of PoA

Means of validation	<p>By means of comparison of the PoA-DD presented to the validation team by CME and interviews with representatives, the validation team has assessed the description of the proposed PoA in accordance with applicable related validation requirements of VVS.</p> <p>1.The proposed PoA was assessed as follow:</p> <p>a)The policy/measure or stated goal that the proposed PoA seeks to promote</p> <p><i>The proposed PoA seeks to promote the implementation of several non-conventional thermal energy saving projects, while providing an important contribution for energy efficiency and achievement of the voluntary climate change mitigation goals of Senegal and Côte d'Ivoire.</i></p> <p>The provided description was assessed against the applicable methodology AMS-II.G Version 11.1 and the national policies of <i>Senegal and Côte d'Ivoire</i>. Relevant baseline references were reviewed in detail as background investigations^{BL/} for validation.</p> <p>b)The framework developed for the implementation of the proposed PoA is the following:</p> <p><i>The framework developed for the implementation of the proposed PoA, and defining a proposed generic CPA and specific-case CPA under the PoA has been developed as follows:</i></p> <ul style="list-style-type: none"> •any CPA to be included in the PoA can be developed, implemented and/or operated by: <ul style="list-style-type: none"> i.ALLCOT AG or any of its subsidiaries, branches, shareholding companies, joint ventures or partnerships with other companies; ii.any entrepreneurs acting in Senegal and Côte d'Ivoire, as CPA proponents, conditional upon the eligibility criteria of this PoA and ALLCOT AG approval; •the coordinating/managing entity of all CPAs will be ALLCOT AG; •each CPA will include different ICS types but same technology which will be managed individually and will report directly to ALLCOT AG; •ALLCOT AG will conduct the inclusion of the CPAs in the PoA and provide proper CDM training to the CPA personnel. <p>The (CME) – ALLCOT AG is clearly identified as the managing entity of the PoA so that CPA incorporation is expected to be aligned with the management system of the CME.</p> <p>c)That the proposed PoA is a voluntary action by the CME</p> <p>The proposed PoA is a voluntary action by ALLCOT AG, as there are no mandatory laws in Senegal and Côte d'Ivoire, that requires the CME or any other party to develop such as this PoA . In addition, these kind of projects are also voluntary at the geographical boundary of the PoA Senegal and Côte d'Ivoire. The voluntary implementation of the PoA is also confirmed by the LoAs issued by the two countries.</p> <p>d)The contribution of the PoA to the sustainable development of the host Party</p> <p>As per PoA-DD the following contributions are considered:</p> <ul style="list-style-type: none"> ✓ <i>Social well-being</i> ✓ <i>Economic well-being</i> ✓ <i>Environmental well-being</i> ✓ <i>Technological transfer</i> <p>Such information is in line with the expected outputs of the energy efficiency CPAs.</p> <p>2. Explain how the physical/geographical boundary of the proposed CDM</p>
---------------------	--

	<p>PoA was assessed in accordance with the relevant validation requirements in the VVS.</p> <p>The physical/geographical boundary of the PoA is clearly described as the the national territory of <i>Senegal and Côte d'Ivoire</i>, which is in line with the PoA-VVS §39.</p> <p>3. Confirm that a generic CPA part of a PoA-DD (hereinafter referred to as generic CPA-DD) has been prepared for each technology/measure, each methodology and each combination thereof, or that technologies/measures have been combined in one generic CPA-DD in accordance with the relevant requirements in the “CDM project standard for programmes of activities”.</p> <p>Two categories for generic CPA-DDs have been elaborated for each technology type:</p> <ul style="list-style-type: none"> •Distribution of micro scale cookstoves systems. •Distribution of micro scale dryer systems <p>In line with “CDM project standard for programmes of activities”.</p> <p>4. Describe the process undertaken to validate the accuracy and completeness of the description in the PoA-DD.</p> <p>The PoA-DD was assessed against the instructions for fulfilment the PoA-DD form version 9.0 and the requirements stated in the CDM project standard for programmes of activities” and the PoA-VVS version 2.0 In general, the PoA-DD description was prepared in line with the PoA instructions.</p>								
Findings	<table border="1"> <tr> <td><input checked="" type="checkbox"/></td><td>The PoA-DD contains a clear, accurate and complete programme description.</td></tr> <tr> <td><input checked="" type="checkbox"/></td><td>The information regarding the project participants and CME of the PoA is listed at the PoA-DD and it is consistent with Appendix 1 that contains the contact information.</td></tr> <tr> <td><input type="checkbox"/></td><td>The PoA qualifies as an afforestation and reforestation (A/R) CDM project activity.</td></tr> <tr> <td><input checked="" type="checkbox"/></td><td>The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CARs 03 and 04</td></tr> </table>	<input checked="" type="checkbox"/>	The PoA-DD contains a clear, accurate and complete programme description.	<input checked="" type="checkbox"/>	The information regarding the project participants and CME of the PoA is listed at the PoA-DD and it is consistent with Appendix 1 that contains the contact information.	<input type="checkbox"/>	The PoA qualifies as an afforestation and reforestation (A/R) CDM project activity.	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CARs 03 and 04
<input checked="" type="checkbox"/>	The PoA-DD contains a clear, accurate and complete programme description.								
<input checked="" type="checkbox"/>	The information regarding the project participants and CME of the PoA is listed at the PoA-DD and it is consistent with Appendix 1 that contains the contact information.								
<input type="checkbox"/>	The PoA qualifies as an afforestation and reforestation (A/R) CDM project activity.								
<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CARs 03 and 04								
Conclusion	<table border="1"> <tr> <td><input type="checkbox"/></td><td>No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.</td></tr> <tr> <td><input checked="" type="checkbox"/></td><td>The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.</td></tr> </table> <p>After resolution of the findings the description provided in the PoA-DD and further evidence is considered correct and in line with the approved methodology and the local legislation and policies of the host countries Senegal and Côte d'Ivoire.</p>	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.				
<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.								
<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.								

D.1.2.1.Generic CPA(s)

Title, identification/reference number and/or version number	Sectoral scope(s)	Selected methodology(ies) and/or standardized baseline(s)
Category 1 Generic CPA-1: Distribution of micro scale cookstoves systems	3 : Energy demand	Methodology: AMS-II.G “Energy efficiency measures in thermal applications of non-renewable biomass” (Version 11.1.0) Methodological Tools: TOOL19: “Demonstration of additionality of micro-scale project activities” Version 09.0 TOOL30: “Calculation of the fraction of non-renewable biomass” Version 02.0
Category 2 Generic CPA-2:	3 : Energy demand	Methodology:

Title, identification/reference number and/or version number	Sectoral scope(s)	Selected methodology(ies) and/or standardized baseline(s)
Distribution of micro scale dryer systems		AMS-II.G "Energy efficiency measures in thermal applications of non-renewable biomass" (Version 11.1.0) Methodological Tools: TOOL19: "Demonstration of additionality of micro-scale project activities" Version 09.0 TOOL30: "Calculation of the fraction of non-renewable biomass" Version 02.0

The exact reference for applied methodology and tools can be verified at Appendix 3 of this Report.

In accordance with the PS-PoA §77 and relevant requirements in the VVS, no technologies/measures or methodologies have been combined in the generic CPA-DDs.

D.1.3. Management system

Means of validation	<p>During the validation, management system was assessed in accordance with the applicable requirements in the VVS and the PS-PoA.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/METH/ •/TOOL/ •/unfccc/ •/PS/ <p>The provided description in section B of the PoA-DD contains the information required by the PoA-DD form, as follows:</p> <p><i>a) Definition of roles and responsibilities</i> <i>b) Records of arrangements for training and capacity development for personnel</i> <i>c) Procedures for technical review of inclusion of CPAs</i> <i>d) Procedure to avoid double counting (e.g. to avoid the case of including a new CPA that has already been registered either as a CDM project activity or as a CPA of another PoA)</i> <i>e) Records and documentation control process for each CPA under the PoA</i> <i>f) Measures for continuous improvements of the PoA management system</i> <i>a) Provisions to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA</i></p>	
Findings	<input checked="" type="checkbox"/>	The management system enables the CME to check the features of potential CPAs been developed, implemented and made available to the DOE.
	<input checked="" type="checkbox"/>	The management system includes all necessary provisions (e.g. definition of roles, record control process, etc.).
	<input checked="" type="checkbox"/>	The monitoring plan covers all monitoring parameters given in the applied monitoring methodology or all parameters which have to be monitored w.r.t. the CPA/PoA boundary.
	<input checked="" type="checkbox"/>	The monitoring plan to be implemented and all monitoring arrangements are feasible within the CPA design.
	<input checked="" type="checkbox"/>	The means of implementation of the monitoring plan, including data management and quality assurance and quality control procedures are sufficient to ensure that the ERs to be achieved by each individual CPA can be properly reported and verified.
	<input checked="" type="checkbox"/>	A sampling plan has been provided in line with the standard for sampling and surveys.
	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CARs 09, 10, 14 and 15
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.

	<div data-bbox="432 138 1447 241"> <input checked="" type="checkbox"/> The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4. </div> <div data-bbox="432 241 1447 546"> <p>A feasible management system has been set which enables the CME to have full access to the monitoring of each specific CPA and provide traceable data to the DOE and to ensure a proper reporting and verification of the ERs to be achieved by each individual CPA.</p> <p>A CDM team of the PoA will be appointed by the CME with roles and responsibilities clearly defined. A specific training will be provided.</p> <p>Means for the technical review for the inclusion of a CPA, procedures to avoid double counting, procedures recording and controlling of documentation, measures for continuous improvements of the PoA and clarifications to personnel operating the CPAs are set to be implemented by the CME.</p> </div>
--	---

D.1.4.Demonstration of additionality of PoA

Means of validation	<p>By means of comparison of the PoA-DD with the applied CDM methodology AMS-II.G “Energy efficiency measures in thermal applications of non-renewable biomass” (Version 11.1.0) and Methodological Tools: -</p> <p>TOOL 19: “Demonstration of additionality of micro-scale project activities” Version 09.0</p> <p>the validation team has assessed the additionality of the programme of activities in accordance with applicable validation requirements in the VVS-PoA and PS-PoA.</p> <p>The PoA is additional by requiring all CPAs to demonstrate additionality explained as follows: -</p> <p>Additionality criteria for all CPAs set out and prescribed in section C of the PoA-DD follows requirements of the applied baseline and monitoring methodology.</p> <p>Option 3</p> <p>CPAs will demonstrate additionality by applying paragraph 12 of the “TOOL19: Demonstration of additionality of microscale project activities”</p> <p>Paragraph 12</p> <p>Energy efficiency project activities that aim to achieve energy savings at a scale of no more than 20 GWh per year are additional if any one of the conditions below is satisfied:</p> <ol style="list-style-type: none"> a) The geographic location of the project activity is in an LDC/SIDS or SUZ of the host country; b) The project activity consists of one or more of the following technology/measures related to energy efficiency where end users of the technology/measure are households, communities or SMEs: <ol style="list-style-type: none"> (i) High efficiency biomass fired devices (e.g. energy efficient cookstoves). <p>In line with further requirements of the methodology and the Appendix in the TOOL19, the penetration of the proposed technology(ies) (i.e. High efficiency biomass fired devices (e.g. energy efficient cookstoves & dryers)) shall be equal to or less than 5 per cent of the technologies/measures (providing similar services) in the region (host country) in order to be considered as automatically additional, for countries that are not LDC/SIDS or SUZ.</p> <p>Moreover, the CPAs will involve the distribution of high efficiency biomass devices (Improved Cookstoves & Improved Efficient Dryers). In line with the eligibility criterion 12, each of the devices contained in the CPA shall satisfy the condition to qualify as a ‘microscale CDM unit’, then the coordinating/managing entity or CPA implementer will not be required to demonstrate compliance of the CPA with the</p>
---------------------	---

	<p>microscale or small-scale thresholds at the aggregate level of the CPA.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/METH/ •/TOOL/ •/unfccc/ •/PS/ <p>PoA-DD has defined clearly, that the additionality will be assessed at CPA level as per applied methodology AMS-II.G and TOOL19.</p>
Findings	<input checked="" type="checkbox"/> The PoA-DD describes how the programme is additional in accordance with the requirements.
	<input checked="" type="checkbox"/> The demonstration of additionality will be done at the CPA level.
	<input checked="" type="checkbox"/> The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CAR 06 and CAR 07
Conclusion	<input type="checkbox"/> No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/> The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	<p>The PoA-DD follows the requirements of the PS-PoA in order to demonstrate that none of the CPAs to be implemented would occur in the case of the absence of the CDM PoA.</p> <p>The additionality will be demonstrated at the CPA level following the requirements set at the PoA-DD.</p> <p>The validation team can confirm that the additionality criteria is sufficient</p>

D.1.5.Start date and duration of PoA

Means of validation	<p>By means of comparison of the PoA-DD and evidences presented, the validation team has checked the compliance of the start date of the PoA in accordance with the applicable requirements in the VVS.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/PSD/ •/unfccc <p>The CME notified UNFCCC on 26/03/2020 about the development of the PoA. The notification dates are the following</p> <ul style="list-style-type: none"> ✓ Senegal DNA: 17/08/2020 ✓ Ivory Coast DNA: 05/10/2020 <p>The start date of the PoA is 26/03/2020, which is the date of notification of the intention to seek the CDM status by the coordinating/managing entity to the UNFCCC. The CME chose the option to take that date as the POA start date in line with the POA-PS.</p>
Findings	<input checked="" type="checkbox"/> The start date of the PoA was correctly determined and correctly evidenced.
	<input type="checkbox"/> The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: -
Conclusion	<input checked="" type="checkbox"/> No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/> The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4. <p>The start date is confirmed by the communication sent to the Senegal and Côte d'Ivoire; DNAs and to the secretariat by the UNFCCC website.</p> <p>The duration of the PoA is 28 years which is in line with the PoA-PS</p>

D.1.6.Environmental impacts

Means of validation	In line with the PoA-PS and PoA-form the CME decided that the environmental impact assessment is performed at the specific-case CPA level and adequately justified. As the PoA will be developed several countries, the environmental requirements vary from country to country and from region to region. In case EIA approval is required by the local government this will be assessed and validated at CPA level.	
Findings	<input type="checkbox"/>	The programme complies with host Party requirements for an Environmental Impact Assessment.
	<input checked="" type="checkbox"/>	The environmental analysis is performed at the CPA level.
	<input checked="" type="checkbox"/>	The PoA qualifies as a small scale CDM project activity as defined in decision 4 / CMP.1 annex II.
	<input type="checkbox"/>	The PoA qualifies as an afforestation and reforestation (A/R) CDM project activity.
	<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: -
Conclusion	<input checked="" type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	-	

D.1.7.Socio-economic impacts

Means of validation	Not Applicable	
Findings	<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: -
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	N/A	

D.1.8.Local stakeholder consultation

Means of validation	In line with the PoA-PS the CME proposes to perform the LSC at CPA level, which is assessed as appropriate because the local circumstances in each of the five countries could vary from each other, nevertheless this will be assessed at CPA level. The justification provided by the CME is correct.	
Findings	<input type="checkbox"/>	An exemption from the requirement of paragraph 79 of the CDM Project Standard for PoA– version 02.0 was granted to the programme of activities by the EB.
	<input type="checkbox"/>	The local stakeholder consultation process was completed before the submission of the PoA-DD to the DOE.
	<input type="checkbox"/>	The local stakeholder consultation process can be assessed as adequate and in accordance with host Country requirements.
	<input checked="" type="checkbox"/>	Not applicable as the local stakeholder consultation process was carried out at the CPA level.
	<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: -
	<input checked="" type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
Conclusion	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For

	details please refer to Appendix 4.
	Not applicable as the local stakeholder consultation process shall be carried out at CPA level.

D.1.9.Sustainable development co-benefits

Means of validation	Not applicable	
Findings	<input type="checkbox"/>	The PoA-DD clearly states that the project contributes to sustainable development of the host country and evidences were presented to the validation team to confirm this information.
	<input type="checkbox"/>	The LoA confirms that the project contributes to sustainable development of the host country.
	<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:
		-
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	-N/A	

D.1.10.Approval

Means of validation	<p>By means of the LoA issued by the DNAs of host countries, the validation team has assessed the approval from the DNAs in accordance with related applicable validation requirements in the VVS.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/LoA/ •/unfccc/ <p>The VT confirms that the LoAs contains the following:</p> <p>Senegal:</p> <ul style="list-style-type: none"> a)Confirms that the host party, Senegal, is a Party to the Kyoto Protocol; b)Confirms that the participation in the proposed CDM PoA is voluntary; c)Refers to the precise title of the proposed CDM PoA. d)The CME is mentioned in the LoA. e)The letter has been issued by the DNA of Senegal,. f)The VT doesn't doubt about the authenticity of the LoA, as it is stamped and looks similar to other LoAs issued by the Senegal, DNA. g)The letter was received directly by the CME <p>Côte d'Ivoire:</p> <ul style="list-style-type: none"> a)Confirms that the host party, Côte d'Ivoire, is a Party to the Kyoto Protocol; b)Confirms that the participation in the proposed CDM PoA is voluntary; c)Refers to the precise title of the proposed CDM PoA. d)The CME is mentioned in the LoA. e)The letter has been issued by the DNA of Côte d'Ivoire,. <p>The VT doesn't doubt about the authenticity of the LoA, as it is stamped and looks similar to other LoAs issued by the Côte d'Ivoire DNA.</p> <ul style="list-style-type: none"> f)The letter was received directly by the CME 	
Findings	<input checked="" type="checkbox"/>	All DNAs from each party involved in the PoA issued a LoA.
	<input checked="" type="checkbox"/>	The LoA(s) confirms: <ul style="list-style-type: none"> -that the party is a party to the Kyoto Protocol; -that participation is voluntary; -that the project contributes to sustainable development (only host party LoA); -the precise project activity title in the PDD intended for submission for registration.
	<input type="checkbox"/>	The LoA is authentic.

Conclusion	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CAR 18
	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		The LoA of the Senegal and Côte d'Ivoire. DNAs (host countries) are issued and its authenticity verified and confirmed that it complies with the requirement as per PoA-VVS version § 69-72.

D.1.11.Authorization

Means of validation		By means of the LoA issued by the DNAs of Senegal and Côte d'Ivoire, the validation team will be able to assess the approvals from the DNAs in accordance with related applicable validation requirements in the VVS. The following sources of information have been used in this context: <ul style="list-style-type: none"> •/PoADD/ •/CPADD/ •/LoA/ •/unfccc/ •The LoAs are directed solely to the CME and PP ALLCOT AG •It is confirmed that the Parties Senegal and Côte d'Ivoire are Parties to the Kyoto Protocol; •The letters have been issued by the respective country Senegal and Côte d'Ivoire, DNAs •Senegal authorizes Allcot AG as CME whereas Côte d'Ivoire, authorizes Allcot AG as both CME and PP.
Findings	<input checked="" type="checkbox"/>	All DNAs from each party involved in the PoA issued a LoA.
	<input checked="" type="checkbox"/>	The LoA(s) confirms: -that the party is a party to the Kyoto Protocol; -that participation is voluntary; -that the project contributes to sustainable development (only host party LoA); -the precise project activity title in the PDD intended for submission for registration.
	<input checked="" type="checkbox"/>	The LoA is authentic.
	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CAR 18
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		The LoAs of the Senegal and Côte d'Ivoire, DNAs (host countries) are issued and its authenticity verified and confirmed that it complies with the requirement as per PoA-VVS version § 75-80.

D.1.12.Modalities of communication

Means of validation		By means of comparison of the Modalities of Communication (MoC) Statement including the MoC Annex 1, fulfilled from version 3.0, submitted by the CME, the validation team has assessed the MoC in accordance with applicable related validation requirements in the PoA-VVS Chapter 7.12 The following sources of information have been used in this context: /PDD/ /MoC/ /CDM-MOC-Form/
----------------------------	--	---

	/unfccc/ /IDs/ /Power of attorney/ The notarized documents of the signing person were reviewed to check their authenticity and approval to sign the MoC. Herewith the DOE confirms that it has performed due diligence on the MoC statement in accordance with the requirements in section 7.12.1 of the PoA-VVS. In line with PoA-VVS §89 the DOE states that the MoC statement was completed and duly authorized in accordance with the valid version of the form and the information required therein.
Findings	<input checked="" type="checkbox"/> A valid Modalities of Communication (MoC) was provided to the validation team from the coordinating/managing entity. <input checked="" type="checkbox"/> The MoC was signed by a duly authorized person on behalf of the coordinating/managing entity. <input checked="" type="checkbox"/> The MoC statement was correctly completed. <input type="checkbox"/> The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: -
Conclusion	<input checked="" type="checkbox"/> No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements. <input type="checkbox"/> The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4. The MoC has been received from the CME ALLCOT AG The representative who submitted the MoC statement to the DOE is duly authorized to do so, on behalf of the CME.

D.1.13.Global stakeholder consultation

Means of validation	By means of the draft PoA-DD and specific CPA-DD submitted to the validation team by the CME, the DOE has made the PoA-DD publicly available prior to the start of the validation activities through a dedicated interface on the UNFCCC CDM website in accordance with applicable validation requirements related to the global stakeholder consultation in the VVS. The following sources of information have been used in this context: https://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/N25PX7VV5PI9XJ52BDNSF1EO1V193H/view.html •/PoADD/ •/CPADD/ •/unfccc/
Findings	<input checked="" type="checkbox"/> The PoA-DD and specific CPA-DD were made publicly available through a dedicated interface on the UNFCCC CDM website for global stakeholder consultation. <input checked="" type="checkbox"/> No comments were received during the global stakeholder consultation period. <input type="checkbox"/> Comments were received during the global stakeholder consultation period. The comments (in unedited form) and the consideration/response of the validation team are presented below: - <input type="checkbox"/> The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: -
Conclusion	<input checked="" type="checkbox"/> No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements. <input type="checkbox"/> The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4. The DOE has made the draft PoA-DD and specific CPA-DD submitted to the validation team by the project participants publicly available prior to the start of the validation activities on 26/03/2020. The period for comments was from 26/03/2020 to 25/04/2020 (23:59:59 GMT).

No comments were received.

D.2.Generic component project activities**Category 1 Generic CPA-1: Distribution of micro scale cookstoves systems****D.2.1.General description of generic CPA**

Means of validation	<p>By means of comparison of the Generic CPA in the PoA-DD presented to the validation team by CME and interviews with representatives, the validation team has assessed the description of the proposed Category 1 Generic CPA 1 in accordance with applicable related validation requirements of VVS.</p> <p>The Generic CPA has been described in section H.3 the Part II of the PoA-DD in accordance with PoA-PS requirements. The description and purpose of the Generic CPA is complete and accurate and provides an understanding of the proposed component project activity to be included in the PoA.</p> <p>The activities shall be the production and dissemination of biomass ICS to replace traditional open fires who use wood or charcoal in urban, peri-urban and rural communities and the target segments shall be households, schools or street vendors located within Senegal and Côte d'Ivoire; .</p>	
Findings	<input checked="" type="checkbox"/>	The generic CPA contains a clear, accurate and complete description of the CPAs with regard to the technology/measures to be used.
	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CARs 01, CAR 03
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	After correction and amendments in the description of the Category 1 generic CPA 1 is clear and provides an understanding of the measures/technologies to be adopted by the CPA	

D.2.2.Selection of methodologies and standardized baselines**D.2.2.1.Deviation from methodologies and/or methodological tools**

Means of validation	<p>By means of comparison of the generic CPA in the PoA-DD with the applied CDM methodology and methodological tools, it has been checked whether any deviation from applied methodologies, including standardized baselines have been requested or approved.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/METH/ •/TOOL/ •/unfccc/ 	
Findings	<input checked="" type="checkbox"/>	No deviation from or revision of the methodology is necessary.
	<input type="checkbox"/>	A deviation from or revision of the methodology is to be requested and approved.
	<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: -
Conclusion	<input checked="" type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.

	The generic CPA applies approved methodology AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass --- Version 11.1 and associated tools, which are valid at the time of submission for registration of the PoA. No deviation is requested or necessary.
--	---

D.2.2.2. Clarification on applicability of methodology, tool and/or standardized baseline

Means of validation	By means of validation of the proposed generic CPA with (i) the applied CDM methodology, (ii) all applicable CDM Meth tools, and (iii) if applicable, a standardized baseline The validation team has checked whether any clarification on applicability of methodology, tool and/or standardized baseline to the proposed generic CPA has been issued. The following sources of information have been used in this context: •/PoADD/ •/METH/ •/TOOL/ •/unfccc/
Findings	<input checked="" type="checkbox"/> No clarification on applicability of methodology, tool and/or standardized baseline to the proposed generic CPA has been issued.
	<input type="checkbox"/> A clarification on applicability of methodology, tool and/or standardized baseline to the proposed generic CPA has been issued.
	<input type="checkbox"/> The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: -
	<input type="checkbox"/> -
Conclusion	<input checked="" type="checkbox"/> No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/> The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	No clarification on applicability of methodology, applied methodological tools to the proposed PoA has been issued.

D.2.3. Application of methodologies and standardized baselines

D.2.3.1. General

Means of validation	By means of comparison of the PoA-DD and the Category 1 generic CPA 1 the validation team has assessed whether the CME has applied properly the selected methodology and methodological tools. The following sources of information have been used in this context: •/PoADD/ •/METH/ •/unfccc/ •/TOOLS/ •/PS/ Sections I.1 to I.2 of PoA-DD provides the applicability analysis, justification and evidence to confirm that the proposed generic CPA is in line with methodology AMS-II.G (version 11.1). The analysis also refers to the following tools: ✓ TOOL 19, version 9.0 ✓ TOOL 30, version 2.0 In line with the VT assessment provided in Appendix 5 it can be concluded that the PoA-DD and generic CPA-DD are in line with the selected methodology and methodological tools.
Findings	<input type="checkbox"/> Not applicable as the monitoring plan for the PoA and its generic CPA(s) has been submitted.
	<input checked="" type="checkbox"/> The CME has chosen to delay the submission of the monitoring plan for the PoA and its generic CPA(s). CAR 19

Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		The applied methodology and tools are valid at the time of request for registration and have been properly applied.

D.2.3.2. Project boundary, sources and GHGs

Means of validation		<p>In line with methodology the project boundary is defined by the physical geographic site where the ICS are located and the biomass is collected, being Senegal and Côte d'Ivoire; which has been correctly defined in section I.4 of the generic CPA-DD.</p> <p>Also, the GHG considered in the boundary are clearly identified in line with the methodology. Also in line with the methodology for the leakage emissions LEy the fixed ex ante adjustment factor 0.95 has been considered in place of surveys.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/METH/
Findings	<input checked="" type="checkbox"/>	The generic CPA includes a correct and complete description of the system boundary (GHG gases and GHG sources) which is in accordance with the PoA.
	<input checked="" type="checkbox"/>	The generic CPA includes sufficient proofs that the geographical location of the CPA shall be within the boundary definition of the PoA.
	<input type="checkbox"/>	The generic CPA includes a flow diagram physically delineating a CPA.
	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CAR 17
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		-The provided boundary, sources and GHGs justifications for inclusion/exclusion of GHGs is in line with the provisions of the applied methodology AMS-II.G version 11.1.

D.2.3.3. Baseline scenario

Means of validation		<p>According to the applied methodology AMS-II.G (version 11.1), it is assumed that in the absence of the project activity, the baseline scenario would be the continued use of inefficient cooking and drying devices that consume more non-renewable biomass fuel to meet similar thermal energy needs as those provided by the project devices. By means of reviewing studies from relevant authors from the two host parties Senegal and Côte d'Ivoire; it is confirmed that the baseline considers the actual situation of the host countries.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/METH/ •/BL/
Findings	<input checked="" type="checkbox"/>	The baseline scenario is given by the applied methodology.
	<input type="checkbox"/>	All possible baseline scenarios have been considered.
	<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: -
Conclusion	<input checked="" type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.

details please refer to Appendix 4.

The baseline scenario is defined by the applied methodology and is in line with the actual situation in the host countries.

D.2.3.4. Estimation of emission reductions or net anthropogenic removals

Means of validation

In accordance with the applied CDM baseline and monitoring methodology, the generic CPA-DD Category 1 has described the methodological choices as follows:

$$ER_y = \sum_i \sum_j ER_{y,i,j} - LE_y \quad \text{Equation (1)}$$

Where:

- i = Indices for the situation where more than one type of project device is introduced to replace the pre-project devices⁶
- j = Indices for the situation where there is more than one batch of project device
- ER_y = Emission reductions during year y in t CO₂e
- $ER_{y,i,j}$ = Emission reductions by project device of type i and batch j during year y in t CO₂e
- LE_y = Leakage emissions in the year y

$$ER_{y,i,j} = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossil\ fuel} \quad \text{Equation (2)}$$

Where:

- $B_{y,savings,i,j}$ = Quantity of woody biomass that is saved in tonnes per cookstove device of type i and batch j during year y
- $f_{NRB,y}$ = Fraction of woody biomass that can be established as non-renewable biomass (fNRB)⁷
- $NCV_{biomass}$ = Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.0156 TJ/tonne, based on the gross weight of the wood that is 'air-dried')
- $EF_{projected_fossil\ fuel}$ = Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers.
- $N_{y,i,j}$ = Number of project devices of type i and batch j operating during year y
- μ_y = Adjustment to account for any continued use of pre-project devices during the year y when applying equations 7 and 9 (fraction). Use 1.0 in other cases.

Also, in accordance with §25 of the methodology:

With regard to emission factor for the substitution of non-renewable woody biomass by similar consumers, either the default regional⁸ values in table 2 below or a value calculated from Equation (3) may be used.

Table 2. Default regional values of the fossil fuel emission factor (CO₂ and non-CO₂ GHG emissions)

	Fossil fuel emission factor (t CO ₂ e/TJ) incl. CH ₄ and N ₂ O emissions
Middle East and North Africa	63.9
East Asia and the Pacific	85.7
Europe and Central Asia	57.8
Latin America and the Caribbean	68.6
South Asia	64.4
Sub-Saharan Africa	73.2

$EF_{projected_fossil\ fuel}$

Equation (3)

$$= \sum_j \{x_j \times (EF_{FF,j,CO_2} + EF_{FF,j,CH_4} \times GWP_{CH_4} + EF_{FF,j,N_2O} \times GWP_{N_2O})\}$$

Where:

- x_j = Percentage share of fossil fuel use¹⁰ (a fraction representing the share of fossil fuel type j in total fossil fuel used in the region/country or project area for cooking)
- EF_{FF,j,CO_2} = CO₂ emission factor for the fossil fuel j . Use a value in the table 3 below (t CO₂/TJ)
- EF_{FF,j,CH_4} = CH₄ emission factor for the fossil fuel j . Use a value in the table 3 below (t CH₄/TJ)
- EF_{FF,j,N_2O} = N₂O emission factor for the fossil fuel j . Use a value in the table 3 below (t N₂O/TJ)
- GWP_{CH_4} = Global Warming Potential of CH₄ valid for the commitment period
- GWP_{N_2O} = Global Warming Potential of N₂O valid for the commitment period

Where:

Table 3. Default emission factors (kg of GHG per TJ on a Net Calorific Basis)

Fuel	Default CO ₂ Emission Factor	Default CH ₄ Emission Factor	Default N ₂ O Emission Factor
Kerosene	71,900	10	0.6
Liquefied Petroleum Gases (LPG)	63,100	5	0.1
Coal	94,600	300	1.5

Source: Table 2.5, Chapter 2, 2006 IPCC Guidelines for National Greenhouse Gas Inventories

Also:

The value of fNRB shall be calculated using either of the following two options:

- (a) **Ex ante:** the fNRB value is determined once at the validation stage, thus no monitoring and recalculation of the fNRB value during the crediting period is required;
- (b) **Ex post:** the fNRB_y value is determined for the year "y" in the crediting period, requiring the fNRB value to be updated annually, following a consistent calculation procedure throughout the crediting period.

Furthermore for the calculation of woody biomass savings the following 4 options prescribed by the applied methodology can be applied:

Option 1: Thermal Energy Output (TEO):

$$B_{y,savings,i,j} = \frac{HR_{y,i,j}}{NCV_{biomass}} \times \left(\frac{1}{\eta_{old,i,j}} - \frac{1}{\eta_{new,i,j}} \right) \quad \text{Equation (4)}$$

Where:

- $HR_{y,i,j}$ = Useful thermal energy output delivered per project device i in batch j during year y (TJ)
- $\eta_{old,i,j}$ = Efficiency of the old devices being replaced by project devices of type i and batch j
- $\eta_{new,i,j}$ = Efficiency of the project device i and batch j

The useful thermal energy shall be calculated based on the rated capacity of the project device multiplied by the number of utilization hours:

$$HR_{y,i,j} = HC_{i,j} \times t_{y,i,j} \times 0.0000036 \quad \text{Equation (5)}$$

Where:

- $HC_{i,j}$ = Rated thermal capacity as per manufacturer specification (kW)
- $t_{y,i,j}$ = Number of hours of utilization of the device during the year y
- 0.0000036 = Factor to convert kWh to TJ

Option 2: kitchen performance test (KPT):

$$B_{y,savings,i,j} = B_{old,i,j} - B_{new,KPT,i,j} \quad \text{Equation (6)}$$

Where:

- $B_{old,i,j}$ = Annual quantity of woody biomass that would have been used in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project device type i and batch j
- $B_{new,KPT,i,j}$ = Annual quantity of woody biomass used in tonnes per project device of type i and batch j , measured as per the KPT protocol. The KPT shall be carried out in accordance with national standards (if available) or international standards or guidelines (e.g. the KPT Protocol listed by Clean Cooking Alliance (See <<https://www.cleancookingalliance.org/technology-and-fuels/testing/protocols.html>>)).

Option 3: water boiling test (WBT):¹¹

$$B_{y,savings,i,j} = B_{old,i,j} \times \left(1 - \frac{\eta_{old,i,j}}{\eta_{new,i,j}}\right) \quad \text{Equation (7)}$$

$$B_{y,savings,i,j} = B_{y=1,new,i,j,survey} \times \left(\frac{\eta_{new,i,j}}{\eta_{old,i,j}} - 1\right) \quad \text{Equation (8)}$$

Where:

- $B_{y=1,new,i,j,survey}$ = Quantity of woody biomass used by project devices in tonnes per device of type i and batch j

Option 4: controlled cooking test (CCT):

$$B_{y,savings,i,j} = B_{old,i,j} \times \left(1 - \frac{SC_{new,i,j}}{SC_{old}}\right) \quad \text{Equation (9)}$$

Where:

- SC_{old} = Specific fuel consumption or fuel consumption rate of the pre-project devices
- $SC_{new,i,j}$ = Specific fuel consumption or the fuel consumption rate of the devices of type i and batch j deployed as part of the project

In line with the methodology the equations 4 - 9 assume that only one device per HH is installed, nevertheless in line with the methodology:

The calculations in the equations above assume that there is only one device per household. Considering that baseline surveys or other methods may estimate the total consumption per household, an adjusted formula as below shall be used in case more than one project device is used in the household. For example, if 2 project devices are installed per household, 0.5 times the baseline woody biomass consumption per household ($B_{old,HH}$) is used as the total annual quantity of woody biomass that would have been used in the absence of the project activity in each device ($B_{old,i,j}$). Where more detailed data is available, e.g. the thermal capacity of the project devices and respective utilisation hours, a weighted average thermal output ($HR_{y,i,j}$) may be used to determine the savings of baseline consumption for each device.

$$B_{old,i,j} = B_{old,HH} \div N_{d,HH} \quad \text{Equation (10)}$$

$$B_{old,HH} = B_{old,p} \times N_{p,HH} \quad \text{Equation (11)}$$

Where:

- $B_{old,HH}$ = Annual quantity of woody biomass that would have been used in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices (tonnes/household/year)
- $N_{d,HH}$ = Number of project devices per household (number)
- $B_{old,p}$ = Annual quantity of woody biomass that would have been used per person in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices (tonnes/person/year)
- $N_{p,HH}$ = Average number of persons per household (number)

The methodological choices provided in the PoA-DD are in line with the methodology.

The modalities for ex ante calculation of ER are therefore provided as follows:

$$ER_y = \sum_i \sum_j ER_{y,i,j} - LE_y$$

Equation (1)

Where:

- i = Indices for the situation where more than one type of project device is introduced to replace the pre-project devices⁶
- j = Indices for the situation where there is more than one batch of project device
- ER_y = Emission reductions during year y in t CO₂e
- $ER_{y,i,j}$ = Emission reductions by project device of type i and batch j during year y in t CO₂e
- LE_y = Leakage emissions in the year y

$$ER_{y,i,j} = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossil\ fuel}$$

Equation (2)

Where:

- $B_{y,savings,i,j}$ = Quantity of woody biomass that is saved in tonnes per cookstove device of type i and batch j during year y
- $f_{NRB,y}$ = Fraction of woody biomass that can be established as non-renewable biomass (fNRB)⁷
- $NCV_{biomass}$ = Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.0156 TJ/tonne, based on the gross weight of the wood that is 'air-dried')
- $EF_{projected_fossil\ fuel}$ = Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers.
- $N_{y,i,j}$ = Number of project devices of type i and batch j operating during year y
- μ_y = Adjustment to account for any continued use of pre-project devices during the year y when applying equations 7 and 9 (fraction). Use 1.0 in other cases.

Also, in accordance with §25 of the methodology:

With regard to emission factor for the substitution of non-renewable woody biomass by similar consumers, either the default regional⁸ values in table 2 below or a value calculated from Equation (3) may be used.

Table 2. Default regional values of the fossil fuel emission factor (CO₂ and non-CO₂ GHG emissions)

	Fossil fuel emission factor (t CO ₂ e/TJ) incl. CH ₄ and N ₂ O emissions
Middle East and North Africa	63.9
East Asia and the Pacific	85.7
Europe and Central Asia	57.8
Latin America and the Caribbean	68.6
South Asia	64.4
Sub-Saharan Africa	73.2

$$EF_{projected_fossil\ fuel}$$

Equation (3)

$$= \sum_j \{x_j \times (EF_{FF,j,CO_2} + EF_{FF,j,CH_4} \times GWP_{CH_4} + EF_{FF,j,N_2O} \times GWP_{N_2O})\}$$

Where:

- x_j = Percentage share of fossil fuel use¹⁰ (a fraction representing the share of fossil fuel type j in total fossil fuel used in the region/country or project area for cooking)
- EF_{FF,j,CO_2} = CO₂ emission factor for the fossil fuel j . Use a value in the table 3 below (t CO₂/TJ)
- EF_{FF,j,CH_4} = CH₄ emission factor for the fossil fuel j . Use a value in the table 3 below (t CH₄/TJ)
- EF_{FF,j,N_2O} = N₂O emission factor for the fossil fuel j . Use a value in the table 3 below (t N₂O/TJ)
- GWP_{CH_4} = Global Warming Potential of CH₄ valid for the commitment period
- GWP_{N_2O} = Global Warming Potential of N₂O valid for the commitment period

Where:

Table 3. Default emission factors (kg of GHG per TJ on a Net Calorific Basis)

Fuel	Default CO ₂ Emission Factor	Default CH ₄ Emission Factor	Default N ₂ O Emission Factor
Kerosene	71,900	10	0.6
Liquefied Petroleum Gases (LPG)	63,100	5	0.1
Coal	94,600	300	1.5

Source: Table 2.5, Chapter 2, 2006 IPCC Guidelines for National Greenhouse Gas Inventories

The manner to calculate the ex-ante ER at CPA level is fully in line with the methodology.

Furthermore, each parameter is clearly defined so that the reader can easily reproduce the ER calculations at CPA level.

Findings	<input checked="" type="checkbox"/>	The equations applied for calculation are correctly applied according to the approved methodology.
	<input checked="" type="checkbox"/>	All values of data to be applied are considered to be reasonable, applicable and conservative.
	<input checked="" type="checkbox"/>	The ER calculation formula as described in B.6.3 is correct.
	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CAR 02
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
All equations and formulas have been correctly selected as per the applied methodology, including the methodological choices. The prescribed steps are in accordance with the applied methodology and the methodological tools.		

D.2.3.5. Monitoring plan and data and parameters to be monitored by the generic CPA

Means of validation	<p>The following monitoring parameters have been assessed:</p> <ol style="list-style-type: none"> 1. $N_{y,i,j}$ - Number of project devices of type i and batch j operating during year y 2. μ_y - Adjustment to account for any continued use of pre-project devices during the year y 3. $t_{y,i,j}$ - Number of hours of utilization of the device during the year y 4. $\eta_{new,i,j}$ - Efficiency of the device of each type i and batch j implemented as part of the project activity 5. $NCV_{biomass}$ - Net calorific value of the non-renewable woody biomass, briquettes or charcoal used in project devices 6. $SC_{new,i,j}$ - Specific fuel consumption or fuel consumption rate during year y of the device(s) of type i deployed as part of the project that is fuel consumption per quantity of item/s processed (e.g. food cooked) or fuel consumption per hour respectively with the age a 7. $B_{y=1,new,i,j,survey}$ - Quantity of woody biomass used by project devices in tonnes per device of type i 8. $B_{new,KPT,i,j}$ - Annual quantity of woody biomass used in tonnes per project device of type i 9. $\eta_{old,i,j}$ - Efficiency of pre-project device, which is a three-stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney; for other types of devices, a default value of 0.2 may be optionally used. Use weighted
---------------------	---

average values (taking the amount of woody biomass consumed by each device as the weighting factor) if more than one type of device is being replaced

10. **Life Span** - The operating lifetime of the project device. The life span should be reported in cases where the PPs are opting to account the efficiency loss as per paragraph 37
11. **Date of commissioning of batch j** - To establish the date of commissioning, the Project Participant may opt to group the devices in "batches" and the latest date of commissioning of a device within the batch shall be used as the date of commissioning for the entire batch
12. **Date of commissioning of device** - actual date of commissioning of the project device
13. $N_{d,HH}$ - Number of project devices distributed per household

The provided and sampling plan is in line with the applied methodology, which includes the relevant sampling requirements for the monitoring parameters and for PoAs.

In the PoA-DD the sampling plan has been provided for the parameters to be obtained via sampling in line with the applied methodology.

The target population defined in section I.7.2 of the PoA-DD of the sampling plan is based in parameters ($N_{y,i,j}$) and (μy) which is in line with the applied methodology.

The sampling plan also provides the approach of a simple random sampling in a subset of a population for each CPA chosen randomly.

The surveys are planned to achieve a confidence / precision 95/10.

The sample size calculation proposed by the CME for the parameters that are to be determined by the sampling approach considers a sample sampling plan, in line with the following formula:

$$n \geq \frac{1.96^2 N \times p (1-p)}{(N-1) \times 0.1^2 \times p^2 + 1.96^2 \times p (1-p)}$$

Where:

n	= Sample size
N	= Population size (Total number of households/ICS)
P	= Expected proportion
1.96	= Represents the 95% confidence required
0.1	= Represents the 10% relative precision

Where: If the sample size calculation returns a value of less than 30 samples, a minimum sample size of 30 shall be chosen.

The PoA-DD provides a framework to monitor the monitoring parameters in line with the applied methodology AMS-II.G version 11.1 at CPA level. No specific or additional requirements have been defined by the CME as the methodology which at the same time refers to the Standard for Sampling and surveys for CDM project activities and programmes of activities, version 8, are very specific regarding the sampling requirements, specially the following:

- ✓ The CME entity shall use 95/10 confidence/precision as the criteria for the reliability of sampling efforts for annual monitoring frequency and 95/10 for biennial frequency
- ✓ If the sample size calculation returns a value of less than 30 samples, a minimum sample size of 30 shall be chosen when the parameter of interest is a proportion and minimum sample size with 30
- ✓ In the case of CPAs solely composed of "microscale CDM units" 95/10 confidence/precision shall be applied for sampling surveys in all cases, even when they are conducted at the CPA level and/or annually.

No estimates or any monitoring parameters are provided at PoA level as the values are going to be determined at CPA level.

The monitoring parameters included in the monitoring plan have been checked with regard to the applied methodology and tools considering the following:

	<ul style="list-style-type: none"> ✓ Label ✓ Data Unit ✓ Description ✓ Source of data ✓ Measurement equipment / measure method ✓ Monitoring frequency ✓ QA/QC procedures ✓ Purpose of data ✓ Standard format ✓ SI units ✓ Short scale naming <p>The monitoring arrangements for the parameters can be implemented, the QA/QC procedures are appropriate and sufficient to ensure that the emission reductions to be achieved from a CPA can be reported ex-post and further verified. In addition, procedures, type of data and responsibilities are identified and provisions for data archiving are made.</p> <p>In line with the Standard for sampling and surveys for CDM project activities and programme of activities, version 08 the PoA-DD has provided minimum requirements of the sampling plan to be performed at CPA level. The provided plan includes all relevant aspects to be considered at CPA level as per the Standards such as the parameters to be determined, the sampling method, sample sizing, expected variation, precision, confidence, frequency, conditions for micro scale projects, sample frames and survey teams. Furthermore, other relevant elements of the sampling plan have been provided in line with the standard, such as training, data gathering, QA/QC and reporting.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/METH/ •/TOOL/ •/PoA-PS/ •/unfccc/ •/IPCC/ •/SAM/ 								
Findings	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;"><input checked="" type="checkbox"/></td><td style="padding: 5px;">The monitoring plan of the generic CPA is in accordance with the underlying methodology/ies.</td></tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td><td style="padding: 5px;">The means of monitoring of all parameters contained in the monitoring plan are feasible.</td></tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td><td style="padding: 5px;">A sampling plan has been provided in line with the standard for sampling and surveys.</td></tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td><td style="padding: 5px;">The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CAR 08, CAR 09, CAR 12 and CAR 13</td></tr> </table>	<input checked="" type="checkbox"/>	The monitoring plan of the generic CPA is in accordance with the underlying methodology/ies.	<input checked="" type="checkbox"/>	The means of monitoring of all parameters contained in the monitoring plan are feasible.	<input checked="" type="checkbox"/>	A sampling plan has been provided in line with the standard for sampling and surveys.	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CAR 08, CAR 09, CAR 12 and CAR 13
<input checked="" type="checkbox"/>	The monitoring plan of the generic CPA is in accordance with the underlying methodology/ies.								
<input checked="" type="checkbox"/>	The means of monitoring of all parameters contained in the monitoring plan are feasible.								
<input checked="" type="checkbox"/>	A sampling plan has been provided in line with the standard for sampling and surveys.								
<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CAR 08, CAR 09, CAR 12 and CAR 13								
Conclusion	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;"><input type="checkbox"/></td><td style="padding: 5px;">No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.</td></tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td><td style="padding: 5px;">The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.</td></tr> </table> <p>It can be confirmed that the monitoring plan and the means of the monitoring of its parameters is feasible. In addition, the monitoring plan for a CPA is in accordance with the approved monitoring methodology.</p> <p>The sampling plan is in line with the applied methodology, which includes the relevant sampling requirements for the monitoring parameters and for PoAs. At the same time the applied methodology AMS-II.G and the standard for Sampling and surveys for CDM project activities and programmes of activities, version 8, are followed in the proposed sampling plan. The PoA-DD complies the sampling requirements.</p>	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.				
<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.								
<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.								

D.2.3.6.Data and parameters fixed ex ante

Means of validation	<p>At CPA level several parameters are expected to be determined ex ante. No parameter is fixed ex-ante at PoA level. The following parameters are considered:</p> <ol style="list-style-type: none"> 1. x_j - Percentage share of fossil fuel use (a fraction representing the share of fossil fuel type j in total fossil fuel used in the region/country or project area for cooking) 2. $B_{old,p}$ - Annual quantity of woody biomass that would have been used per person in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices 3. $N_{p,HH}$ - Average number of persons served per household prior to project implementation 4. $B_{old,HH}$ - Annual quantity of woody biomass that would have been used in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices 5. $B_{old,i,j}$ - Annual quantity of woody biomass that would have been used in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project device type i and batch j 6. $f_{NRB,y}$ - Fraction of woody biomass saved by the project activity during year y that can be established as non-renewable biomass 7. SC_{old} - Specific fuel consumption or fuel consumption rate of the pre-project devices 8. HCI,j - Rated capacity for delivering heat as per manufacturer specification (kW) <p>The following information has been checked for each parameter:</p> <ul style="list-style-type: none"> ✓ Data unit ✓ Description ✓ Source of data ✓ Value(s) applied ✓ Choice of data or measurement methods and procedures ✓ Purpose of data ✓ Additional comment (if applicable) <p>For the parameters to be determined via sampling approach at CPA level the PoA clearly stated that the sampling procedures from the applied methodology AMS-II.G and the Standard for Sampling and surveys for CDM project activities and programmes of activities, shall be followed.</p> <p>During the validation, the stepwise approach established by the CME for all parameters that are not monitored during the crediting period (as listed in chapter 1.6.2 of the generic PoA-DD) have been checked in accordance with the requirements of the methodology, tools, underlying PoA, VVS, PS-PoA.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/METH/ •/TOOL/ •/SAM/ •/PoA-PS/ •/unfccc/ •/IPCC/ 								
Findings	<table border="1"> <tr> <td><input checked="" type="checkbox"/></td> <td>The list of parameters which are determined ex-ante is complete.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>The provided values are correct for all parameters.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:</td> </tr> <tr> <td></td> <td>-</td> </tr> </table>	<input checked="" type="checkbox"/>	The list of parameters which are determined ex-ante is complete.	<input type="checkbox"/>	The provided values are correct for all parameters.	<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:		-
<input checked="" type="checkbox"/>	The list of parameters which are determined ex-ante is complete.								
<input type="checkbox"/>	The provided values are correct for all parameters.								
<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:								
	-								
Conclusion	<table border="1"> <tr> <td><input checked="" type="checkbox"/></td> <td>No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.</td> </tr> </table>	<input checked="" type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.				
<input checked="" type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.								
<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.								

	The list of the ex-ante parameters is complete in accordance with applied methodology, tools and Sampling Standard.
--	---

D.2.4.Crediting period type and duration

Means of validation	In accordance with the PoA-PS the duration of the Generic CPA Category 1 Crediting Period (CP) is 7 years and it is renewable in line with the PoA-PS	
Findings	<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:
		-
Conclusion	<input checked="" type="checkbox"/>	No CARs / CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/>	The raised CARs / CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	The crediting period of a CPA shall be 7 years 0 months renewable twice in line with the guidance of paragraph 122 a) of the CDM validation and verification standard for programmes of activities_v2.0.	

D.2.5.Eligibility criteria for inclusion of CPAs

No.	Eligibility criterion (EC) category	Eligibility criterion – Category/Required condition	Means of validation	Findings	Conclusion
1.	Geographical	Each CPA is located within the physical/geographical boundary of PoA	Location and boundary are specified in each CPA-DD. - Information for geographical coordinate of CPA.	CAR 10	The established evidence in the PoA to confirm the EC is sufficient to confirm the CPA eligibility
2.	Avoid double counting	<p>Each CPA will not be involved in another registered or under validation as a CDM project activity or as a CPA under the proposed or another PoA or as other GHG reduction project related to small-scale renewable power generation.</p> <p>The CME before adding a CPA under this PoA shall review the project activity database on the UNFCCC website to ensure that the CPA is not already registered as a CDM project or a CPA of another PoA.</p> <p>Each CPA will have under control an updated database of the devices in order to have identified each one. The contract will</p>	Declaration of double counting check, and unique GPS coordinates to unique identify the stove. This information will be compared with project information provided in international standards recognized as UNFCCC, VCS and Gold Standard (among others) and description in each CPA- DD.	CAR 10	The established evidence in the PoA to confirm the EC is in accordance with the actual carbon market situation regarding the relevant carbon programs, furthermore the unique identification of the ICS minimises the risk to include the same ICS or batch in other projects/POAs. The VT concludes that the established evidence in the PoA to confirm the EC is sufficient to confirm the CPA eligibility.

		specify how the ownership of the carbon credits corresponds to the CME, being the only one allowed for their claim and sale.			
3.	Specification of the technology/measure	Specification of technology/ measures proposed to be implemented under the CPA. The CPA-DD shall incorporate relevant details on the technological specifications, including level and type of service, performance specifications including compliance with testing/certifications.	Description of the technologies including type of stove, thermal efficiency (at least a 20%), expected lifetime, and any manufacturer specifications of CPA-DD;	CAR 10	<p>The technical data required by the CME is in accordance with the technology type to define his capacity and efficiency observed in the ICS actual market observed in cookstoves studies^{BL/} in the host countries consulted by the DOE and other registered carbon (CDM, GS) projects.</p> <p>The VT concludes that the established evidence in the PoA to confirm the EC is sufficient to confirm the CPA eligibility.</p>
4.	Start date	The start date of each CPA will be the date on which the project participants commit to making expenditures for the purchase of the first ICS. The start date of any proposed CPA will be on or after the start date of the proposed CDM PoA, i.e. 26/03/2020.	1 st Contract of the purchase of devices (receipt, financial closure)	CAR 10	<p>The proposed evidence to confirm the start date is in line with the start date definition provided in the CDM glossary of terms.</p> <p>The established evidence in the PoA to confirm the EC is sufficient and in accordance with the PoA-PS to confirm the CPA eligibility</p>
5.	Compliance with the applicability conditions of AMS-II.G	Each CPA will satisfy the applicability conditions for simplified baseline and monitoring methodologies as specified in the AMS-II.G. (Version 11.1)	Applicability conditions of AMS-II.G. (Version.11.1)	CAR 10	The established evidence in the PoA to confirm the EC is sufficient an in accordance with the applicable methodology to confirm the CPA eligibility
6.	Additionality	Each CPA under this category will follow the process in Section C of PoA-DD to demonstrate additionality of the micro-scale project activities.	Description of the process in the Section C of the PoA-DD. In each CPA, the demonstration of the additionality will fulfill requirements contained in the additionality section of the methodology AMS-II.G Ver 11.1	CAR 10	<p>The established EC and evidence is correctly defined in line with the applied methodology AMS-II.G Ver 11.1 and TOOL19 which provides guidance for demonstration of additionality of micro-scale projects</p> <p>The EC is sufficient and in accordance with the applicable methodology to confirm the CPA eligibility</p>

7.	Local Stakeholder Consultation and Environmental Impact Analysis	<p>Each CPA will hold local stakeholder consultation before the inclusion in PoA and construction.</p> <p>Each CPA will conduct environmental impact analysis as per the National Environmental Regulation of the country where the CPA is located.</p>	<p>Minutes, stakeholder consultation reports, evidence of invitations of relevant stakeholders, and any other documented evidence to justify the local consultation process will be provided as per the requirements stated in the CDM Project Standard for Programme of Activities.</p> <p>Environmental Impact Assessment Report and approval if it is required by the national regulation.</p>	CAR 10	The established evidence in the PoA to confirm both EC is sufficient and in accordance with the applicable methodology and the CDM Project Standard for Programme of Activities to confirm the CPA eligibility
8.	Public funding	Each CPA will provide an affirmation that funding from Annex I party, if any, does not result in a diversion of official development assistance	Signed affirmation that public funding received is not part of ODA from Annex I party.	CAR 10	The established evidence in the PoA to confirm the EC is sufficient and in line with the applicable methodology and the CDM Project Standard for Programme of Activities to confirm the CPA eligibility
9.	Target group	The distribution mechanism is the direct distribution of ICS to the households in rural area through the CME or regional partners. The target group is households, schools and street food vendors.	<p>The selected distribution mechanisms included in each CPA are distinguished in each CPA.</p> <p>Described in the Section A.1 of the PoA-DD</p>	CAR 10	the established evidence in the PoA to confirm the EC is sufficient to confirm the CPA eligibility
10.	Sampling	The CPA sampling plan shall comply the requirements as listed in the "Standard for sampling and surveys for CDM project activities and programme of activities".	Sampling results (database and the ER sheet)	CAR 10	the established evidence in the PoA to confirm the EC is sufficient and in accordance with the applicable methodology and the Standard for sampling and surveys for CDM project activities and programme of activities to confirm the CPA eligibility
11.	Debundling check	If each of the independent subsystems/measures included in the CPA of the PoA is no larger than 1% of the micro-scale thresholds defined by the methodologies applied, then this is exempted	Confirmation that CPA consists solely of a project activity that qualify the small-scale CDM project activity in each CPA-DD.	CAR 10	The established evidence in the PoA to confirm the EC is sufficient and in accordance with the applicable methodology to confirm the CPA eligibility

		from performing debundling check.			
12.	Small-scale or microscale thresholds	If each of the units contained in the CPA satisfies the condition to qualify as a 'microscale CDM unit', then the coordinating/managing entity is not required to demonstrate compliance of the CPA with the microscale or small-scale thresholds at the aggregate level of the CPA.	As described in the Section A.3 of the CPA-DD, each CPA will detail how it complies with the conditions to be qualify as microscale CDM unit.	CAR 07 CAR 10	The established evidence in the PoA to confirm the EC is sufficient a in accordance with the applicable methodology to confirm the CPA eligibility

D.2. Generic component project activities

Category 2 Generic CPA-2: Distribution of micro scale dryer systems

D.2.1.General description of generic CPA

Means of validation	<p>By means of comparison of the Generic CPA in the PoA-DD presented to the validation team by CME and interviews with representatives, the validation team has assessed the description of the proposed Generic CPA Category 2 in accordance with applicable related validation requirements of VVS.</p> <p>The Generic CPA was described in section H.3 the Part III of the PoA-DD in accordance with PoA PS requirements. The description and purpose of the generic Component project The proposed Generic CPA is complete and accurate and provides an understanding of the proposed component project activity to be included in the PoA.</p> <p>The activities shall be the production and dissemination of biomass dryers to replace traditional open fires who use wood or charcoal in urban, peri-urban and rural communities and the target segments shall be households, schools or street vendor located within Senegal and Côte d'Ivoire;</p>	
Findings	<input checked="" type="checkbox"/>	The generic CPA contains a clear, accurate and complete description of the CPAs with regard to the technology/measures to be used.
	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CAR 01
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
The description of the generic CPA 2 is clear and provides an understanding of the measures/technologies to be adopted by the CPA		

D.2.2.Selection of methodologies and standardized baselines

D.2.2.1.Deviation from methodologies and/or methodological tools

Means of validation	By means of comparison of the generic CPA in the PoA-DD with the applied CDM methodology and methodological tools, it has been checked whether any deviation from applied methodologies, including standardized baselines have been requested or approved.
----------------------------	--

		The following sources of information have been used in this context: •/PoADD/ •/METH/ •/TOOL/ •/unfccc/
Findings	<input checked="" type="checkbox"/>	No deviation from or revision of the methodology is necessary.
	<input type="checkbox"/>	A deviation from or revision of the methodology is to be requested and approved.
	<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: -
Conclusion	<input checked="" type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		The generic CPA applies approved methodology AMS-II.G “Energy efficiency measures in thermal applications of non-renewable biomass” (Version 11.1.0) and associated tools, which are valid at the time of submission for registration of the PoA.

D.2.2.2. Clarification on applicability of methodology, tool and/or standardized baseline

Means of validation		By means of validation of the proposed generic CPA with (i) the applied CDM methodology, (ii) all applicable CDM Meth tools, and (iii) if applicable, a standardized baseline the validation team has checked whether if any clarification on applicability of methodology, tool and/or standardized baseline to the proposed generic CPA has been issued. The following sources of information have been used in this context: •/PoADD/ •/METH/ •/TOOL/ •/unfccc/
Findings	<input checked="" type="checkbox"/>	No clarification on applicability of methodology, tool and/or standardized baseline to the proposed generic CPA has been issued.
	<input type="checkbox"/>	A clarification on applicability of methodology, tool and/or standardized baseline to the proposed generic CPA has been issued.
	<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: -
Conclusion	<input checked="" type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		No clarification on applicability of methodology, applied methodological tools to the proposed PoA has been issued or necessary.

D.2.3. Application of methodologies and standardized baselines**D.2.3.1. General**

Means of validation	By means of comparison of the PoA-DD and generic CPA the validation team has assessed whether the CME has applied properly the selected methodology and methodological tools. The following sources of information have been used in this context: •/PoADD/
----------------------------	---

	<ul style="list-style-type: none"> •/METH/ •/unfccc/ •/TOOLS/ •/PoA-PS/ <p>Sections I.1 to I.2 of PoA-DD provides the applicability analysis, justification and evidence to confirm that the proposed generic CPA is in line with methodology AMS-II.G (version 11.1). The analysis also refers to the following tools:</p> <ul style="list-style-type: none"> ✓ TOOL 19, version 9.0 ✓ TOOL 30, version 2.0 <p>The full validation of the methodology applicability is provided in Appendix 5 of this report.</p> <p>It can be concluded that the PoA-DD and generic CPA-DD are in line with the selected methodology and methodological tools.</p>																
Findings	<table border="1"> <tr> <td><input checked="" type="checkbox"/></td><td>The generic CPA applies a valid version of a CDM Methodology.</td></tr> <tr> <td><input checked="" type="checkbox"/></td><td>All applied methodological tools are valid and approved.</td></tr> <tr> <td><input checked="" type="checkbox"/></td><td>The applied methodology and methodological tools derived from UNFCCC CDM website.</td></tr> <tr> <td><input checked="" type="checkbox"/></td><td>All methodology applicability conditions are met.</td></tr> <tr> <td><input checked="" type="checkbox"/></td><td>The generic CPA is in line with all requirements and stipulations mentioned in all sections of the applied methodology.</td></tr> <tr> <td><input type="checkbox"/></td><td>The generic CPA is expected to result in significant emissions, related both to project and leakage, other than those listed in the methodology.</td></tr> <tr> <td><input type="checkbox"/></td><td>The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:</td></tr> <tr> <td></td><td>-</td></tr> </table>	<input checked="" type="checkbox"/>	The generic CPA applies a valid version of a CDM Methodology.	<input checked="" type="checkbox"/>	All applied methodological tools are valid and approved.	<input checked="" type="checkbox"/>	The applied methodology and methodological tools derived from UNFCCC CDM website.	<input checked="" type="checkbox"/>	All methodology applicability conditions are met.	<input checked="" type="checkbox"/>	The generic CPA is in line with all requirements and stipulations mentioned in all sections of the applied methodology.	<input type="checkbox"/>	The generic CPA is expected to result in significant emissions, related both to project and leakage, other than those listed in the methodology.	<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:		-
<input checked="" type="checkbox"/>	The generic CPA applies a valid version of a CDM Methodology.																
<input checked="" type="checkbox"/>	All applied methodological tools are valid and approved.																
<input checked="" type="checkbox"/>	The applied methodology and methodological tools derived from UNFCCC CDM website.																
<input checked="" type="checkbox"/>	All methodology applicability conditions are met.																
<input checked="" type="checkbox"/>	The generic CPA is in line with all requirements and stipulations mentioned in all sections of the applied methodology.																
<input type="checkbox"/>	The generic CPA is expected to result in significant emissions, related both to project and leakage, other than those listed in the methodology.																
<input type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:																
	-																
Conclusion	<table border="1"> <tr> <td><input checked="" type="checkbox"/></td><td>No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.</td></tr> <tr> <td><input type="checkbox"/></td><td>The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.</td></tr> </table> <p>The applied methodology and tools are valid at the time of request for registration and have been properly applied.</p>	<input checked="" type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.												
<input checked="" type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.																
<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.																

D.2.3.2. Project boundary, sources and GHGs

Means of validation	<p>In line with methodology the project boundary is defined by the physical geographic site where the dryers are located and the biomass collected, being Senegal and Côte d'Ivoire; which has been correctly defined in the PoA-DD.</p> <p>Also, the GHG considered in the boundary are clearly identified in line with the methodology. Also in line with the methodology for the leakage emissions LEy the fixed ex ante adjustment factor 0.95 has been considered instead of ex-post surveys.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/METH/ 										
Findings	<table border="1"> <tr> <td><input checked="" type="checkbox"/></td><td>The generic CPA includes a correct and complete description of the system boundary (GHG gases and GHG sources) which is in accordance with the PoA.</td></tr> <tr> <td><input checked="" type="checkbox"/></td><td>The generic CPA includes sufficient proofs that the geographical location of the CPA shall be within the boundary definition of the PoA.</td></tr> <tr> <td><input type="checkbox"/></td><td>The generic CPA includes a flow diagram physically delineating a CPA.</td></tr> <tr> <td><input checked="" type="checkbox"/></td><td>The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:</td></tr> <tr> <td></td><td>CAR 17</td></tr> </table>	<input checked="" type="checkbox"/>	The generic CPA includes a correct and complete description of the system boundary (GHG gases and GHG sources) which is in accordance with the PoA.	<input checked="" type="checkbox"/>	The generic CPA includes sufficient proofs that the geographical location of the CPA shall be within the boundary definition of the PoA.	<input type="checkbox"/>	The generic CPA includes a flow diagram physically delineating a CPA.	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:		CAR 17
<input checked="" type="checkbox"/>	The generic CPA includes a correct and complete description of the system boundary (GHG gases and GHG sources) which is in accordance with the PoA.										
<input checked="" type="checkbox"/>	The generic CPA includes sufficient proofs that the geographical location of the CPA shall be within the boundary definition of the PoA.										
<input type="checkbox"/>	The generic CPA includes a flow diagram physically delineating a CPA.										
<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:										
	CAR 17										
Conclusion	<table border="1"> <tr> <td><input type="checkbox"/></td><td>No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.</td></tr> <tr> <td><input checked="" type="checkbox"/></td><td>The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.</td></tr> </table>	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.						
<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.										
<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.										

	The provided boundary, sources and GHGs justifications for inclusion/exclusion of GHGs is in line with the provisions of the applicable methodology AMS-II.G version 11.1.
--	--

D.2.3.3. Baseline scenario

Means of validation	<p>According to the applied methodology AMS-II.G (version 11.1), it is assumed that in the absence of the project activity, the baseline scenario would be the continued use of inefficient cooking devices that consumes more non-renewable biomass fuel to meet similar thermal energy needs as those provided by the project devices. By means of reviewing studies from relevant authors from the two host parties Senegal and Côte d'Ivoire; it is confirmed that the baseline considers the actual situation of the host countries.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/METH/ •/BL/
Findings	<p><input checked="" type="checkbox"/> The baseline scenario is given by the applied methodology.</p> <p><input type="checkbox"/> All possible baseline scenarios have been considered.</p> <p><input type="checkbox"/> The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:</p> <p>-</p>
Conclusion	<p><input checked="" type="checkbox"/> No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.</p> <p><input type="checkbox"/> The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.</p> <p>The baseline scenario is defined by the applied methodology and in line with the actual situation in the host countries.</p>

D.2.3.4. Estimation of emission reductions or net anthropogenic removals

Means of validation	<p>In accordance with the applied CDM baseline and monitoring methodology, the generic CPA-DD Category 2 has described the methodological choices as follows:</p> $ER_y = \sum_i \sum_j ER_{y,i,j} - LE_y \quad \text{Equation (1)}$ <p>Where:</p> <ul style="list-style-type: none"> i = Indices for the situation where more than one type of project device is introduced to replace the pre-project devices⁶ j = Indices for the situation where there is more than one batch of project device ER_y = Emission reductions during year y in t CO₂e $ER_{y,i,j}$ = Emission reductions by project device of type i and batch j during year y in t CO₂e LE_y = Leakage emissions in the year y $ER_{y,i,j} = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossil\ fuel} \quad \text{Equation (2)}$ <p>Where:</p> <ul style="list-style-type: none"> $B_{y,savings,i,j}$ = Quantity of woody biomass that is saved in tonnes per cookstove device of type i and batch j during year y $f_{NRB,y}$ = Fraction of woody biomass that can be established as non-renewable biomass (fNRB) ⁷ $NCV_{biomass}$ = Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.0156 TJ/tonne, based on the gross weight of the wood that is 'air-dried') $EF_{projected_fossilfuel}$ = Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers. $N_{y,i,j}$ = Number of project devices of type i and batch j operating during year y μ_y = Adjustment to account for any continued use of pre-project devices during the year y when applying equations 7 and 9 (fraction). Use 1.0 in other cases. <p>Also, in accordance with §25 of the methodology:</p>
----------------------------	---

With regard to emission factor for the substitution of non-renewable woody biomass by similar consumers, either the default regional⁸ values in table 2 below or a value calculated from Equation (3) may be used.

Table 2. Default regional values of the fossil fuel emission factor (CO₂ and non-CO₂ GHG emissions)

	Fossil fuel emission factor (t CO ₂ e/TJ) incl. CH ₄ and N ₂ O emissions
Middle East and North Africa	63.9
East Asia and the Pacific	85.7
Europe and Central Asia	57.8
Latin America and the Caribbean	68.6
South Asia	64.4
Sub-Saharan Africa	73.2

$$EF_{projected, fossil fuel} \quad \text{Equation (3)}$$

$$= \sum_j \{x_j \times (EF_{FF,j,CO_2} + EF_{FF,j,CH_4} \times GWP_{CH_4} + EF_{FF,j,N_2O} \times GWP_{N_2O})\}$$

Where:

- x_j = Percentage share of fossil fuel use¹⁰ (a fraction representing the share of fossil fuel type j in total fossil fuel used in the region/country or project area for cooking)
- EF_{FF,j,CO_2} = CO₂ emission factor for the fossil fuel j . Use a value in the table 3 below (t CO₂/TJ)
- EF_{FF,j,CH_4} = CH₄ emission factor for the fossil fuel j . Use a value in the table 3 below (t CH₄/TJ)
- EF_{FF,j,N_2O} = N₂O emission factor for the fossil fuel j . Use a value in the table 3 below (t N₂O/TJ)
- GWP_{CH_4} = Global Warming Potential of CH₄ valid for the commitment period
- GWP_{N_2O} = Global Warming Potential of N₂O valid for the commitment period

Where:

Table 3. Default emission factors (kg of GHG per TJ on a Net Calorific Basis)

Fuel	Default CO ₂ Emission Factor	Default CH ₄ Emission Factor	Default N ₂ O Emission Factor
Kerosene	71,900	10	0.6
Liquefied Petroleum Gases (LPG)	63,100	5	0.1
Coal	94,600	300	1.5

Source: Table 2.5, Chapter 2, 2006 IPCC Guidelines for National Greenhouse Gas Inventories

Also:

The value of fNRB shall be calculated using either of the following two options:

- Ex ante:** the fNRB value is determined once at the validation stage, thus no monitoring and recalculation of the fNRB value during the crediting period is required;
- Ex post:** the fNRB_y value is determined for the year "y" in the crediting period, requiring the fNRB value to be updated annually, following a consistent calculation procedure throughout the crediting period.

Furthermore, for the calculation of woody biomass savings the following 4 options prescribed by the applied methodology can be applied:

Option 1: Thermal Energy Output (TEO):

$$B_{y,savings,i,j} = \frac{HR_{y,i,j}}{NCV_{biomass}} \times \left(\frac{1}{\eta_{old,i,j}} - \frac{1}{\eta_{new,i,j}} \right) \quad \text{Equation (4)}$$

Where:

- $HR_{y,i,j}$ = Useful thermal energy output delivered per project device i in batch j during year y (TJ)
- $\eta_{old,i,j}$ = Efficiency of the old devices being replaced by project devices of type i and batch j
- $\eta_{new,i,j}$ = Efficiency of the project device i and batch j

The useful thermal energy shall be calculated based on the rated capacity of the project device multiplied by the number of utilization hours:

$$HR_{y,i,j} = HC_{i,j} \times t_{y,i,j} \times 0.0000036 \quad \text{Equation (5)}$$

Where:

- $HC_{i,j}$ = Rated thermal capacity as per manufacturer specification (kW)
- $t_{y,i,j}$ = Number of hours of utilization of the device during the year y
- 0.0000036 = Factor to convert kWh to TJ

Option 2: kitchen performance test (KPT):

$$B_{y,savings,i,j} = B_{old,i,j} - B_{new,KPT,i,j} \quad \text{Equation (6)}$$

Where:

- $B_{old,i,j}$ = Annual quantity of woody biomass that would have been used in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project device type i and batch j
- $B_{new,KPT,i,j}$ = Annual quantity of woody biomass used in tonnes per project device of type i and batch j , measured as per the KPT protocol. The KPT shall be carried out in accordance with national standards (if available) or international standards or guidelines (e.g. the KPT Protocol listed by Clean Cooking Alliance (See <<https://www.cleancookingalliance.org/technology-and-fuels/testing/protocols.html>>)).

Option 3: water boiling test (WBT):¹¹

$$B_{y,savings,i,j} = B_{old,i,j} \times \left(1 - \frac{\eta_{old,i,j}}{\eta_{new,i,j}} \right) \quad \text{Equation (7)}$$

$$B_{y,savings,i,j} = B_{y=1,new,i,j,survey} \times \left(\frac{\eta_{new,i,j}}{\eta_{old,i,j}} - 1 \right) \quad \text{Equation (8)}$$

Where:

- $B_{y=1,new,i,j,survey}$ = Quantity of woody biomass used by project devices in tonnes per device of type i and batch j

Option 4: controlled cooking test (CCT):

$$B_{y,savings,i,j} = B_{old,i,j} \times \left(1 - \frac{SC_{new,i,j}}{SC_{old}} \right) \quad \text{Equation (9)}$$

Where:

- SC_{old} = Specific fuel consumption or fuel consumption rate of the pre-project devices
- $SC_{new,i,j}$ = Specific fuel consumption or the fuel consumption rate of the devices of type i and batch j deployed as part of the project

In line with the methodology the equations 4 - 9 assume that only one device per HH is installed, nevertheless in line with the methodology:

The calculations in the equations above assume that there is only one device per household. Considering that baseline surveys or other methods may estimate the total consumption per household, an adjusted formula as below shall be used in case more than one project device is used in the household. For example, if 2 project devices are installed per household, 0.5 times the baseline woody biomass consumption per household ($B_{old,HH}$) is used as the total annual quantity of woody biomass that would have been used in the absence of the project activity in each device ($B_{old,i,j}$). Where more detailed data is available, e.g. the thermal capacity of the project devices and respective utilisation hours, a weighted average thermal output ($HR_{y,i,j}$) may be used to determine the savings of baseline consumption for each device.

$$B_{old,i,j} = B_{old,HH} \div N_{d,HH} \quad \text{Equation (10)}$$

$$B_{old,HH} = B_{old,p} \times N_{p,HH} \quad \text{Equation (11)}$$

Where:

- $B_{old,HH}$ = Annual quantity of woody biomass that would have been used in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices (tonnes/household/year)
- $N_{d,HH}$ = Number of project devices per household (number)
- $B_{old,p}$ = Annual quantity of woody biomass that would have been used per person in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices (tonnes/person/year)
- $N_{p,HH}$ = Average number of persons per household (number)

The methodological choices provided in the PoA-DD are in line with the methodology.

The modalities for ex ante calculation of ER are therefore provided as follows:

$$ER_y = \sum_i \sum_j ER_{y,i,j} - LE_y \quad \text{Equation (1)}$$

Where:

- i = Indices for the situation where more than one type of project device is introduced to replace the pre-project devices⁶
- j = Indices for the situation where there is more than one batch of project device
- ER_y = Emission reductions during year y in t CO₂e
- $ER_{y,i,j}$ = Emission reductions by project device of type i and batch j during year y in t CO₂e
- LE_y = Leakage emissions in the year y

$$ER_{y,i,j} = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossil\ fuel} \quad \text{Equation (2)}$$

Where:

- $B_{y,savings,i,j}$ = Quantity of woody biomass that is saved in tonnes per cookstove device of type i and batch j during year y
- $f_{NRB,y}$ = Fraction of woody biomass that can be established as non-renewable biomass (fNRB)⁷
- $NCV_{biomass}$ = Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.0156 TJ/tonne, based on the gross weight of the wood that is 'air-dried')
- $EF_{projected_fossilfuel}$ = Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers.
- $N_{y,i,j}$ = Number of project devices of type i and batch j operating during year y
- μ_y = Adjustment to account for any continued use of pre-project devices during the year y when applying equations 7 and 9 (fraction). Use 1.0 in other cases.

Also, in accordance with §25 of the methodology:

With regard to emission factor for the substitution of non-renewable woody biomass by similar consumers, either the default regional⁸ values in table 2 below or a value calculated from Equation (3) may be used.

Table 2. Default regional values of the fossil fuel emission factor (CO₂ and non-CO₂ GHG emissions)

	Fossil fuel emission factor (t CO ₂ e/TJ) incl. CH ₄ and N ₂ O emissions
Middle East and North Africa	63.9
East Asia and the Pacific	85.7
Europe and Central Asia	57.8
Latin America and the Caribbean	68.6
South Asia	64.4
Sub-Saharan Africa	73.2

$$EF_{projected, fossil fuel} = \sum_j \{x_j \times (EF_{FF,j,CO_2} + EF_{FF,j,CH_4} \times GWP_{CH_4} + EF_{FF,j,N_2O} \times GWP_{N_2O})\} \quad \text{Equation (3)}$$

Where:

- x_j = Percentage share of fossil fuel use¹⁰ (a fraction representing the share of fossil fuel type j in total fossil fuel used in the region/country or project area for cooking)
- EF_{FF,j,CO_2} = CO₂ emission factor for the fossil fuel j . Use a value in the table 3 below (t CO₂/TJ)
- EF_{FF,j,CH_4} = CH₄ emission factor for the fossil fuel j . Use a value in the table 3 below (t CH₄/TJ)
- EF_{FF,j,N_2O} = N₂O emission factor for the fossil fuel j . Use a value in the table 3 below (t N₂O/TJ)
- GWP_{CH_4} = Global Warming Potential of CH₄ valid for the commitment period
- GWP_{N_2O} = Global Warming Potential of N₂O valid for the commitment period

Where:

Table 3. Default emission factors (kg of GHG per TJ on a Net Calorific Basis)

Fuel	Default CO ₂ Emission Factor	Default CH ₄ Emission Factor	Default N ₂ O Emission Factor
Kerosene	71,900	10	0.6
Liquefied Petroleum Gases (LPG)	63,100	5	0.1
Coal	94,600	300	1.5

Source: Table 2.5, Chapter 2, 2006 IPCC Guidelines for National Greenhouse Gas Inventories

The manner to calculate the ex-ante ER at CPA level is fully in line with the methodology.

Furthermore, each parameter is clearly defined so that the reader can easily reproduce the ER calculations at CPA level.

Findings	<input checked="" type="checkbox"/>	The equations applied for calculation are correctly applied according to the approved methodology.
	<input checked="" type="checkbox"/>	All values of data to be applied are considered to be reasonable, applicable and conservative.
	<input checked="" type="checkbox"/>	The ER calculation formula as described in B.6.3 is correct.
	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CAR 02
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
All equations and formulas have been correctly selected as per the applied methodology, including the methodological choices. The prescribed steps are in accordance with the applied methodology and the methodological tools.		

D.2.3.5. Monitoring plan and data and parameters to be monitored by the generic CPA

Means of validation	The following monitoring parameters have been assessed:
----------------------------	---

1. $N_{y,i,j}$ - Number of project devices of type i and batch j operating during year y
2. H_y - Adjustment to account for any continued use of pre-project devices during the year y
3. $t_{y,i,j}$ - Number of hours of utilization of the device during the year y
4. $\eta_{new,i,j}$ - Efficiency of the device of each type i and batch j implemented as part of the project activity
5. $NCV_{biomass}$ - Net calorific value of the non-renewable woody biomass, briquettes or charcoal used in project devices
6. $SC_{new,i,j}$ - Specific fuel consumption or fuel consumption rate during year y of the device(s) of type i deployed as part of the project that is fuel consumption per quantity of item/s processed (e.g. food cooked) or fuel consumption per hour respectively with the age a
7. $B_{y=1,new,i,j,survey}$ - Quantity of woody biomass used by project devices in tonnes per device of type i
8. $B_{new,KPT,i,j}$ - Annual quantity of woody biomass used in tonnes per project device of type i
9. $\eta_{old,i,j}$ - Efficiency of pre-project device, which is a three-stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney; for other types of devices, a default value of 0.2 may be optionally used. Use weighted average values (taking the amount of woody biomass consumed by each device as the weighting factor) if more than one type of device is being replaced
10. **Life Span** - The operating life time of the project device. The life span should be reported in cases where the PPs are opting to account the efficiency loss as per paragraph 37
11. **Date of commissioning of batch j** - To establish the date of commissioning, the Project Participant may opt to group the devices in "batches" and the latest date of commissioning of a device within the batch shall be used as the date of commissioning for the entire batch
12. **Date of commissioning of device** - actual date of commissioning of the project device
13. $N_{d,HH}$ - Number of project devices distributed per household

The provided and sampling plan is in line with the applied methodology, which includes the relevant sampling requirements for the monitoring parameters and for PoAs.

In the PoA-DD the sampling plan has been provided for the parameters to be obtained via sampling in line with the applied methodology.

The target population defined in section I.7.2 of the PoA-DD of the sampling plan is based in parameters ($N_{y,i,j}$) and (μ_y) which is in line with the applied methodology.

The sampling plan also provides the approach of a simple random sampling in a subset of a population for each CPA chosen randomly.

The surveys are planned to achieve a confidence / precision 95/10.

The sample size calculation proposed by the CME for the parameters that are to be determined by the sampling approach considers a sample sampling plan, in line with the following formula:

$$n \geq \frac{1.96^2 N \times p (1-p)}{(N-1) \times 0.1^2 \times p^2 + 1.96^2 \times p (1-p)}$$

Where:

n	= Sample size
N	= Population size (Total number of households/ICS)
P	= Expected proportion
1.96	= Represents the 95% confidence required
0.1	= Represents the 10% relative precision

Where: If the sample size calculation returns a value of less than 30 samples, a minimum sample size of 30 shall be chosen.

	<p>The PoA-DD provides a framework to monitor the monitoring parameters in line with the applied methodology AMS-II.G version 11.1 at CPA level. No specific or additional requirements have been defined by the CME as the methodology which at the same time refers to the Standard for Sampling and surveys for CDM project activities and programmes of activities, version 8, are very specific regarding the sampling requirements, specially the following:</p> <ul style="list-style-type: none"> ✓ The CME entity shall use 95/10 confidence/precision as the criteria for the reliability of sampling efforts for annual monitoring frequency and 95/10 for biennial frequency ✓ If the sample size calculation returns a value of less than 30 samples, a minimum sample size of 30 shall be chosen when the parameter of interest is a proportion and minimum sample size with 30 ✓ In the case of CPAs solely composed of “microscale CDM units” 95/10 confidence/precision shall be applied for sampling surveys in all cases, even when they are conducted at the CPA level and/or annually. <p>No estimates or any monitoring parameters are provided at PoA level as the values are going to be determined at CPA level.</p> <p>The monitoring parameters included in the monitoring plan have been checked with regard to the applied methodology and tools considering the following:</p> <ul style="list-style-type: none"> ✓ Label ✓ Data Unit ✓ Description ✓ Source of data ✓ Measurement equipment / measure method ✓ Monitoring frequency ✓ QA/QC procedures ✓ Purpose of data ✓ Standard format ✓ SI units ✓ Short scale naming <p>The monitoring arrangements for the parameters can be implemented, the QA/QC procedures are appropriate and sufficient to ensure that the emission reductions to be achieved from a CPA can be reported ex-post and further verified. In addition, procedures, type of data and responsibilities are identified and provisions for data archiving are made.</p> <p>In line with the Standard for sampling and surveys for CDM project activities and programme of activities, version 08 the PoA-DD has provided minimum requirements of the sampling plan to be performed at CPA level. The provided plan includes all relevant aspects to be consider at CPA level as per the Standards such as the parameters to be determined, the sampling method, sample sizing, expected variation, precision, confidence, frequency, and conditions for micro scale projects, sample frames and survey teams. Furthermore, other relevant elements of the sampling plan have been provided in line with the standard, such as training, data gathering, QA/QC and reporting.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/METH/ •/TOOL/ •/PoA-PS/ •/unfccc/ •/IPCC/ •/SAM/ 				
Findings	<table border="1"> <tr> <td data-bbox="440 1966 496 2029"><input checked="" type="checkbox"/></td> <td data-bbox="496 1966 1457 2029">The monitoring plan of the generic CPA is in accordance with the underlying methodology/ies.</td> </tr> <tr> <td data-bbox="440 2029 496 2063"><input checked="" type="checkbox"/></td> <td data-bbox="496 2029 1457 2063">The means of monitoring of all parameters contained in the monitoring plan</td> </tr> </table>	<input checked="" type="checkbox"/>	The monitoring plan of the generic CPA is in accordance with the underlying methodology/ies.	<input checked="" type="checkbox"/>	The means of monitoring of all parameters contained in the monitoring plan
<input checked="" type="checkbox"/>	The monitoring plan of the generic CPA is in accordance with the underlying methodology/ies.				
<input checked="" type="checkbox"/>	The means of monitoring of all parameters contained in the monitoring plan				

		are feasible.
	<input type="checkbox"/>	A sampling plan has been provided in line with the standard for sampling and surveys.
	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context: CAR 12 and CAR 13
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		It can be confirmed that the monitoring plan and the means of the monitoring of its parameters is feasible. In addition, the monitoring plan for a CPA is in accordance with the approved monitoring methodology. The sampling plan is in line with the applied methodology, which includes the relevant sampling requirements for the monitoring parameters and for PoAs. At the same time the applied methodology AMS-II.G and the standard for Sampling and surveys for CDM project activities and programmes of activities, version 8.0, are followed in the proposed sampling plan. The prescribed sampling plan complies with all the CDM sampling requirements.

D.2.3.6.Data and parameters fixed ex ante

Means of validation	<p>At CPA level several parameters are expected to be determined ex ante. No parameter is fixed ex-ante at PoA level. The following parameters are considered:</p> <ol style="list-style-type: none"> 1. x_j - Percentage share of fossil fuel use (a fraction representing the share of fossil fuel type j in total fossil fuel used in the region/country or project area for cooking) 2. $B_{old,p}$ - Annual quantity of woody biomass that would have been used per person in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices 3. $N_{p,HH}$ - Average number of persons served per household prior to project implementation 4. $B_{old,HH}$ - Annual quantity of woody biomass that would have been used in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices 5. $B_{old,i,j}$ - Annual quantity of woody biomass that would have been used in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project device type i and batch j 6. $f_{NRB,y}$ - Fraction of woody biomass saved by the project activity during year y that can be established as non-renewable biomass 7. SC_{old} - Specific fuel consumption or fuel consumption rate of the pre-project devices 8. HCI,j - Rated capacity for delivering heat as per manufacturer specification (kW) <p>For the parameters to be determined via sampling approach at CPA level the PoA clearly stated that the sampling procedures from the applied methodology AMS-II.G and the Standard for Sampling and surveys for CDM project activities and programmes of activities shall be followed.</p> <p>During the validation, the stepwise approach established by the CME for all parameters that are not monitored during the crediting period (as listed in chapter 1.6.2 of the generic PoA-DD) have been checked in accordance with the requirements of the methodology, tools, underlying PoA, VVS, PS-PoA.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> •/PoADD/ •/METH/
---------------------	---

	<ul style="list-style-type: none"> •/TOOL/ •/SAM/ •/PoA-PS/ •/unfccc/ •/IPCC/
Findings	<input checked="" type="checkbox"/> The list of parameters which are determined ex-ante is complete.
	<input checked="" type="checkbox"/> The provided values are correct for all parameters.
	<input checked="" type="checkbox"/> The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:
Conclusion	<input checked="" type="checkbox"/> No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/> The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	The list of the ex-ante parameters is complete in accordance with applied methodology and tools

D.2.4.Crediting period type and duration

Means of validation	In accordance with the PoA-PS the duration of the Generic CPA Category 2 Crediting Period (CP) is 7 years and it is renewable in line with the PoA-PA
Findings	<input type="checkbox"/> The respective requirements have widely been complied with. However, the following issues needed to be addressed in this context:
Conclusion	<input checked="" type="checkbox"/> No CARs / CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/> The raised CARs / CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	The crediting period of a CPA shall be 7 years 0 months renewable twice in line with the guidance of paragraph 122 a) of the CDM validation and verification standard for programmes of activities_v2.0.

D.2.5.Eligibility criteria for inclusion of CPAs

No.	Eligibility criterion - Category/Required condition	Means of validation	Findings	Conclusion
1.	Each CPA is located within the physical/geographical boundary of PoA	Location and boundary are specified in each CPA-DD. - Information for geographical coordinate of CPA.	CAR 14	The established evidence in the PoA to confirm the EC is sufficient to confirm the CPA eligibility
2.	Each CPA will not be involved in another registered or under validation as a CDM project activity or as a CPA under the proposed or another PoA or as other GHG reduction project related to small-scale renewable power generation. The CME before adding a CPA under this PoA shall review the project activity database on the UNFCCC website to	Declaration of double counting check and unique GPS coordinates to unique identify the device with project information provided in international standards recognized as UNFCCC, VCS and Gold Standard (among others) and description in each CPA- DD.	CAR 14	The established evidence in the PoA to confirm the EC is in accordance with the actual carbon market situation regarding the relevant carbon programs, furthermore the unique identification of the dryer minimises the risk to include the same dryer or batch in other projects/POAs. The VT concludes that the established evidence in the PoA to confirm the EC is

	ensure that the CPA is not already registered as a CDM project or a CPA of another PoA. Each CPA will have under control an update databased of the devices in order to have identified each one. The contract will specify how the ownership of the carbon credits corresponds to the CME.			sufficient to confirm the CPA eligibility.
3.	Specification of technology/ measures proposed to be implemented under the CPA. The CPA-DD shall incorporate relevant details on the technological specifications, including level and type of service, performance specifications including compliance with testing/certifications.	Description of the technologies including type of device, thermal efficiency (at least a 20%), expected lifetime, and any manufacturer specifications of CPA-DD.	CAR 14	The technical data required by the CME is considered suitable to define the technology types, their capacity and efficiency at CPA level. The VT concludes that the established evidence in the PoA to confirm the EC is sufficient to confirm the CPA eligibility.
4.	The start date of each CPA will be the date on which the project participants commit to making expenditures for the purchase of dryer devices. The start date of any proposed CPA will be on or after the start date of the proposed CDM PoA, i.e. 26/03/2020.	1 st Contract of purchase of devices (receipt, financial closure) can be checked	CAR 14	The proposed evidence to confirm the start date is in line with the start date definition provided in the CDM glossary of terms. The established evidence in the PoA to confirm the EC is sufficient and in accordance with the PoA-PS to confirm the CPA eligibility
5.	Each CPA will satisfy the applicability conditions for simplified baseline and monitoring methodologies as specified in the AMS-II.G. (Version 11.1)	Applicability conditions of AMS-II.G. (Version.11.1)	CAR 14	The established evidence in the PoA to confirm the EC is sufficient an in accordance with the applicable methodology to confirm the CPA eligibility
6.	Each CPA under this category will follow the process in Section C of PoA-DD to demonstrate additionality of the micro scale-scale project activities	Description of the process in the Section C of the PoA-DD. In each CPA, the demonstration of the additionality and will fulfil requirements contained in the additionality section of the methodology AMS-II.G Ver 11.1	CAR 14	The established EC and evidence is correctly defined in line with the applied methodology AMS-II.G Ver 11.1 and TOOL19 which provides guidance for demonstration of additionality of micro-scale projects The EC is sufficient and in accordance with the applicable methodology to confirm the CPA

				eligibility
7.	Each CPA will hold local stakeholder consultation before the inclusion in PoA and construction. Each CPA will conduct environmental impact analysis as per the National Environmental Regulation of the country where the CPA is located.	Minutes, stakeholder consultation reports, evidence of invitations of relevant stakeholders and any other documented evidence to justify the local consultation process will be provided as per the requirements stated in the CDM Project Standard for Programme of Activities. Environmental Impact Assessment Report and approval if it is required by the national regulation.	CAR 14	The established evidence in the PoA to confirm both EC is sufficient an in accordance with the applicable methodology and the CDM Project Standard for Programme of Activities to confirm the CPA eligibility
8.	Each CPA will provide an affirmation that funding from Annex I party, if any, does not result in a diversion of official development assistance	Signed affirmation that public funding received is not part of ODA.	CAR 14	The established evidence in the PoA to confirm the EC is sufficient and in line with the applicable methodology and the CDM Project Standard for Programme of Activities to confirm the CPA eligibility
9.	The distribution mechanism is the direct distribution of dryers to the households in rural area through the CME or regional partners. The target group is households, schools and street food vendors.	The selected distribution mechanisms included in each CPA are distinguished in each CPA. Described in the Section A.1 of the PoA-DD	CAR 14	the established evidence in the PoA to confirm the EC is sufficient to confirm the CPA eligibility
10.	The CPA sampling plan shall comply the requirements as listed in the "Standard for sampling and surveys for CDM project activities and programme of activities".	Sampling results (database and the ER sheet)	CAR 14	the established evidence in the PoA to confirm the EC is sufficient a in accordance with the applicable methodology and the Standard for sampling and surveys for CDM project activities and programme of activities to confirm the CPA eligibility
11.	If each of the independent subsystems/measures included in the CPA of the PoA is no larger than 1% of the micro- - scale thresholds defined by the methodologies	Confirmation that CPA consists solely of a project activity that qualify the small- scale CDM project activity in each CPA-DD.	CAR 14	the established evidence in the PoA to confirm the EC is sufficient a in accordance with the applicable methodology to confirm the CPA eligibility

	applied, then this exempted from performing de-bundling check.			
12.	If each of the units contained in the CPA satisfies the condition to qualify as a 'microscale CDM unit', then the coordinating/managing entity is not required to demonstrate compliance of the CPA with the microscale or small-scale thresholds at the aggregate level of the CPA	As described in the Section A.3 of the CPA-DD, each CPA will details how comply with the conditions to be qualify as microscale CDM unit. CME will check that device is less than 20 GWh/year based on design specifications of stoves	CAR 14 CAR 11	the established evidence in the PoA to confirm the EC is sufficient a in accordance with the applicable methodology to confirm the CPA eligibility

SECTION E. Internal quality control

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

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

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

After this step the submission for requesting the registration of the PoA is conducted.

SECTION F. Validation opinion

ALLCOT AG has commissioned the TÜV NORD JI/CDM Certification Program (CP) to validate the Programme of Activities:

“The African Cookstoves Initiative Programme of Activities”

with regard to the relevant requirements of the UNFCCC for CDM project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria include article 12 of the Kyoto Protocol, the modalities and procedures for CDM (Marrakech Accords) and the relevant decisions by COP/MOP and CDM Executive Board.

In detail the conclusions can be summarized as follows:

The project is in line with all relevant host country criteria (Senegal and Côte d'Ivoire) and all relevant UNFCCC requirements for CDM. Project activity approval has been obtained from DNAs of the Host Countries, via Letters of Approval (LoAs).

- The baseline has been appropriately identified as per the applied methodology.
- The framework for determination project additionality is sufficiently justified in the PoA-DD in line with the applied methodology.
- All applicability conditions of the applied methodology have been fulfilled.
- the eligibility criteria established for CPA inclusions are deemed appropriate and sufficient;

- the proposed monitoring plan is transparent and adequate;
- information on the local stakeholders' consultation by the project participants prior to submitting the PoA for validation is sufficiently provided in the PoA-DD;
- all information has been consistently applied in the generic CPA-DD form;
- The proposed method to calculation the component project activity emission reductions is carried out in a transparent and conservative manner, so that the expected emission reductions calculation of ER are in line with the applicable methodology and methodological tools.
- Information on the environmental impact assessment and local stakeholders' consultation by the project participant is sufficiently provided.

The conclusions of this report show, that the PoA, as it was described in the project documentation, is in line with all criteria applicable for the validation.

Queretaro, 30/12/2020



Team Leader

Appendix 1. Abbreviations

Abbreviations	Full Texts
BAU	Business as usual
BM	Build Margin
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CM	Combined Margin
CME	Coordinating / Managing Entity
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
COP/MOP	Conference of Parties / Meeting of Parties
CP	Certification Program
DNA	Designated National Authority
CPA	Component Project Activity
CPA-DD	Component Project Activity Design Document
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GT	Glossary of Terms
IPCC	Intergovernmental Panel on Climate Change
LoA	Letter of Approval
MoC	Modalities of Communication
MP	Monitoring Plan
OSV	On-site visit
PA	Project Activity
PoA	Programme of Activities
PoA-DD	CDM Programme of Activities Design Document
PP	Project Participant(s)
PPA	Power Purchase Agreement
QA/QC	Quality Assurance/Quality Control
UNFCCC	United Nations Framework Convention on Climate Change
VT	Validation Team

Appendix 2.Competence of team member and technical reviewers



Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JVCDM Certification Program

Mr. Oliver Quireza Campos

SCHEME	STATUS	VALID UNTIL
CDM	Lead Assessor (Validation, Verification)	2021-05-28
VCS / ISO 14064-2	Lead Assessor	2021-05-28

Authorization status for technical areas within sectoral scopes:

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

337 - Rev. 5, Date: 2018-08-17



Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JVCDM Certification Program

Mr. Raul Gonzalez Mitre

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2021-06-27
VCS / ISO 14064-2	Senior Assessor	2021-06-27

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
13.1	Solid waste and wastewater

082 - Rev. 8, Date: 2018-08-09

337_S01-VAB05-F20_2018-08-17_mw5.doc

S01-VAB05-F20 mw3 / 2012-10-25

S01-VAB05-F20_2018-08-09_mw5.doc

S01-VAB05-F20 mw3 / 2012-10-25



Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JVCDM Certification Program

Mr. David Lubanga

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2021-10-20
VCS / ISO 14064-2	Senior Assessor Technical Reviewer	2021-10-20

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
3.1	Energy demand
13.2	Manure

251 - Rev. 7, Date: 2018-10-19



Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JVCDM Certification Program

Mr. Grzegorz Kochaniewicz

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2022-02-08
VCS / ISO 14064-2	Senior Assessor Technical Reviewer	2022-02-08

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
3.1	Energy Demand
13.1	Solid waste and wastewater
14.1	Afforestation and Reforestation

173 - Rev. 9, Date: 2019-04-18

251_S01-VAB05-F20_2018-10-19_mw7.doc

S01-VAB05-F20 mw3 / 2012-10-25

173_S01-VAB05-F20_2019-04-18_mw9

S01-VAB05-F20 mw3 / 2012-10-25

Appendix 3.Documents reviewed or referenced

No.	Reference	Author	Title	References to the document	Provider
-----	-----------	--------	-------	----------------------------	----------

1.	/CPM/	DOE	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)	-	Other
2.	/GOT/	UNFCCC	Glossary “CDM terms” – version 10.0	https://cdm.unfccc.int/Reference/old_reg.html	Other
3.	/IPCC/	IPCC	1. 1996 IPCC Guidelines for National Greenhouse Gas Inventories: work book 2. 2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book	www.ipcc-nggip.iges.or.jp	Other
4.	/KP/	UNFCCC	Kyoto Protocol (1997)	http://unfccc.int/kyoto_protocol/items/2830.php	Other
5.	/MA/	UNFCCC	Decision 3/CMP. 1 (Marrakesh – Accords)	http://cdm.unfccc.int/Reference/COPMOP/index.html	Other
6.	/METH/	UNFCCC	AMS-II.G Energy efficiency measures in thermal applications of non-renewable biomass --- Version 11.1	https://cdm.unfccc.int/methodologies/DB/ZI2M2X5P7ZLRGFO37YBVDYOW62UHQP	Other
7.	/TOOL/	UNFCCC	Methodological Tools: TOOL19: “Demonstration of additionality of micro-scale project activities” Version 09.0 TOOL30: “Calculation of the fraction of non-renewable biomass” Version 02.0	http://cdm.unfccc.int/Reference/tools/index.html	Other
8.	/PoADD-T/	UNFCCC	Programme design document form for CDM programmes of activities – version 09.0	https://cdm.unfccc.int/Reference/PDs_Forms/index.html	Other
9.	/PoA-PS/	UNFCCC	CDM Project Standard for programs of activities – version 2.0	https://cdm.unfccc.int/Reference/old_reg.html	Other
10.	/SAM/	UNFCCC	Standard for sampling and surveys for CDM project activities and programme of activities, version 8	https://cdm.unfccc.int/Reference/old_reg.html	Other
11.	/VVS/	UNFCCC	CDM Validation and Verification Standard – version 02.0	https://cdm.unfccc.int/Reference/old_reg.html	Other
12.	/CON/	DOE	Signed Contract for Carrying out the validation of the CDM project “The African Cookstoves Initiative Programme of Activities” between TÜV Nord and Allcot AG, signed 13/10/2020	-	Other
13.	/MoC/	CME	Modalities of Communication form, project African Cookstoves Initiative Programme of Activities, dated 23/11/2020	-	CME
14.	/LoA/	DNA	Letters of Approval and authorization issued by the DNAs: -Senegal, 27/11/2020 -Côte d’Ivoire, 23/10/2020 for “The African Cookstoves Initiative Programme of Activities” Including the authorization to Allcot AG as CME	-	PP
15.	/PoADD/	CME	Programme of Activities design document: “The African Cookstoves Initiative Programme of Activities” -Version 1.0, 14/08/2020	-	CME

			-Version 2.0, 27/10/2020 -Version 3.0, 24/11/2020 -Version 3.2, 27/11/2020 -Version 3.3, 28/11/2020 -Version 3.4., 06/12/2020 -Version 3.5, 18/12/2020 -Version 3.6, 30/12/2020		
16.	/PSD/	CME CME	<u>Prior consideration and project starting date:</u> -Email with CDM programme of activities prior consideration form sent to the secretariat	-	CME / Others
22.	/dna/	-	DNA of Senegal, Côte d'Ivoire	http://www.denv.gov.sn/ http://www.mdpcotedivoire.org/	Other
23.	/unfccc/		UNFCCC	http://cdm.unfccc.int	Other
24.	/BL/	Several	Baseline background investigation: Côte d'Ivoire Clean Cooking fuels- Driving investment, awareness and scale, Seema N. Patel NAMA study for a sustainable charcoal value chain, UNCP Senegal Promotion of Climate-friendly Cooking in Kenya and Senegal, 2019, Green Climate Fund project proposal E&SA	https://openknowledge.worldbank.org/handle/10986/2521	Other

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

Table 1. CLs from this validation

CL ID	xx	Section no.		Date: DD/MM/YYYY
Description of CL				
CME response				Date: DD/MM/YYYY
Documentation provided by CME				
DOE assessment				Date: DD/MM/YYYY
Conclusion <i>Tick the appropriate checkbox</i>		<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Table 2. CARs from this validation

CAR ID	CAR 01	Section no.	Several	Date: 23/10/2020
Description of CAR				
Throughout the PoA-DD the project Type is referred as Type III, but it is II as per applied methodology Several times the PoA location is describes as just Africa, nevertheless only 3 countries are impacted.				

CME response (1st round)	Date: 27/10/2020
<i>The references of Type III among the PoA-DD have been corrected to type II.</i> <i>It has been clarified, (in all the cases where scope of the PoA is described) specifying the countries included.</i>	
Documentation provided by project participant	
POA-DD version 02	
DOE assessment	Date: 27/10/2020
Project type II is consistent throughout the whole PoA-DD Countries have been properly defined throughout the PoA-DD Finding is closed	

CAR ID	CAR 02	Section no.	1.6.3	Date: 23/10/2020
Description of CAR				
The definition of the parameters used in equations 14 has not been provided.				
CME response (1 st round)				Date: 27/10/2020
All the parameters of the different equations have been explained among the PoA-DD in a consistent way with the applied methodology.				
Documentation provided by project participant				
PoA-DD version 02				
DOE assessment				Date: 27/10/2020
Parameters for all formulas have been properly defined in line with the methodology.				
Finding is closed				

CAR ID	CAR 03	Section no.	A.1 /K	Date: 23/10/2020
Description of CAR				
The framework for the PoA implementation has to be amended in section A.1 and K (eligibility) The financial structure shall to be provided, (including how the CPA managers will finance the project, how the CME will finance the CPA managers, will be banks or other financing sources involved) The cost the users will pay for the new devices has to be provided The requirements to become CPA manager have to be provided The specific countries where the PoA is taking place have to be provided				
CME response (1 st round)				Date: 27/10/2020
<i>The financial structure is different depending on the country.</i> <i>The cost of the new devices is not defined at this stage. A range between 25 and 35 USD is defined.</i> <i>The CPAs implementers will be the entities involved in the manufacturing and distribution of the devices.</i> <i>The countries involved in the PoA are Ivory Coast and Senegal. This scope has been consistently corrected in all sections of the POA-DD.</i>				
Documentation provided by project participant				
POA-DD version 02				
DOE assessment				Date: 27/10/2020
The CME provides proper justification about the financial structure The devices prices range have been provided. The prices are in accordance with prices from studies in the host counties The CPA implementers have been detailed Boundary of PoA has been properly defined Finding is closed				

CAR ID	CAR 04	Section no.	A.1	Date: 23/10/2020
Description of CAR				
It is not clear whether dryers are only used to smoke fish				
CME response (1 st round)				Date: 27/10/2020
Since this is a Programme of Activities, the final use of the dryers is not completely defined at this stage. The first use consulted with the local communities is to smoke fish.				
Documentation provided by project participant				
PoA-DD version 02				
DOE assessment				Date: 27/10/2020
As per CME the main use of dryers is smoking fish, nevertheless other uses could be define when CPA development is in process				
Finding is closed				

CAR ID	CAR 05	Section no.	B	Date: 23/11/2020
Description of CAR				
The responsibilities described under the organization chart are not complete and clearly differentiated between CME and CPAs implementers. i.e. approvals, training, PP roles, monitoring, among others				
CME response (1st round)				Date: 24/11/2020
<i>The description has been improved and roles and responsibilities are clarified in the new version of the POA-DD.</i>				
Documentation provided by project participant				
POA-DD version 03				
DOE assessment				Date: 24/11/2020
The description provided in section B Management System clearly states the CME, PP and CPA developers responsibilities. Finding is closed				

CAR ID	CAR 06	Section no.	C	Date: 23/11/2020
Description of CAR				
Applied additionality tools and options to be followed by the applicant CPAs have to be clearly provided				
CME response (1st round)				Date:
<i>Each generic CPA has included all the tools applied, including the links and versions.</i>				
Documentation provided by project participant				
POA-DD version 03				
DOE assessment				Date: xx/10/2020
The CME has defined that only micro-scales CPAs can be accepted under the POA, so that the only applied methodological tool for demonstration of additionality is the TOOL 19: "Demonstration of additionality of micro-scale project activities" Version 09.0. Finding is closed				

CAR ID	CAR 07	Section no.	H.3, PART II	Date: 23/11/2020
Description of CAR				
PART II				
Define clearly whether only micro scale CPAs are to be accepted and include the correct limits				
CME response (1st round)				Date: 24/11/2020
<i>Correct limit has been defined in new version of the POA-DD. The CPAs are solely composed of "microscale CDM units" in accordance with the Tool 19 which states that for CPAs applying microscale thresholds at the unit level rather than at the aggregate level of the CPA, the term 'project shall be understood as 'units'. Therefore, the threshold for each unit included in the CPAs will be 20 GWh per year.</i>				
Documentation provided by project participant				
POA-DD version 03				
DOE assessment				Date: 24/11/2020
The CME has clearly stated throughout the PoA-DD that only micro scale CPAs are accepted, where the limits of each installed unit is defined in TOOL 19: "Demonstration of additionality of micro-scale project activities" Version 09.0. Finding is closed				

CAR ID	CAR 08	Section no.	I.7.1, PART II	Date: 23/11/2020
Description of CAR				
Ny,i,j				
If biennial monitoring is chosen, 95/10 precision has to be ensured				
CME response (1st round)				Date: 24/11/2020
<i>A clarification has been included both possibilities are offered for each CPA regarding the frequency of the monitoring. When biennial inspection is chosen a 95 per cent confidence interval and a 10 per cent margin of error shall be achieved for the sampling parameter. When the project proponent chooses to inspect annually, a 90 per cent confidence interval and a 10 per cent margin of error shall be achieved for the sampled parameters. In cases where survey results indicate that 90/10 precision or 95/10 precision are not achieved, the lower bound of the 90 per cent or 95 per cent confidence interval of the parameter value may be chosen as an alternative to repeating the survey efforts to achieve the 90/10 or 95/10 precision.</i>				
Documentation provided by project participant				
POA-DD version 03				
DOE assessment				Date: 24/11/2020

The **Ny,i,j** sampling requirements have been clearly defined in line with the applied methodology AMS-II.G “Energy efficiency measures in thermal applications of non-renewable biomass” (Version 11.1.0)
Finding is closed

CAR ID	CAR 09	Section no.	I.7.2, PART II	Date: 23/11/2020
Description of CAR				
Sampling plan				
§§ 11, 14, 22 and 23 of the standard “Sampling and surveys for CDM project activities and programmes of activities version 8”, have to be considered when designing the sampling plan, especially regarding the 95/10 precision and minimum sample size with 30.				
CME response (1st round)				Date: 24/11/2020
<i>The description of the sampling plan has been modified to be aligned with the applied Standard “Sampling and surveys for CDM project activities and programmes of activities version 8”.</i>				
Documentation provided by project participant				
POA-DD version 03				
DOE assessment				Date: 24/11/2020
The description provided in the sampling plan section is in line with the applied methodology which includes the relevant sampling requirements for the monitoring parameters and for PoAs. At the same time the applied methodology AMS-II.G refers to the standard Sampling and surveys for CDM project activities and programmes of activities, version 8. The revised PoA-DD complies such sampling requirements. Finding is closed				

CAR ID	CAR 10	Section no.	K, PART II	Date: 23/11/2020
Description of CAR				
PART II Eligibility criteria are incomplete and have need further details				
CME response (1st round)				Date: 24/11/2020
<i>Eligibility criteria in both generic CPAs have been improved in order to be complete, verifiable, transparent and in accordance with the applied methodology.</i>				
Documentation provided by project participant				
POA-DD version 03				
DOE assessment				Date: 24/11/2020
The updated eligibility criteria has been developed base on the applied methodology AMS-II.G covering, boundary, double counting, sampling and scale among the other relevant requirements. Finding is closed				

CAR ID	CAR 11	Section no.	H.3, PART III	Date: 23/11/2020
Description of CAR				
PART III CEM shall clarify whether only micro scale CPAs are to be accepted and include the correct limits				
CME response (1st round)				Date: 24/11/2020
<i>Correct limit has been defined in new version of the POA-DD. The CPAs are solely composed of “microscale CDM units” in accordance with the Tool 19 which states that for CPAs applying microscale thresholds at the unit level rather than at the aggregate level of the CPA, the term ‘project shall be understood as ‘units’. Therefore, the threshold for each unit included in the CPAs will be 20 GWh per year.</i>				
Documentation provided by project participant				
POA-DD version 03				
DOE assessment				Date: 24/11/2020
The CME has clearly stated throughout the PoADD that only micro scale CPAs are accepted, where the limits of each installed unit is defined in TOOL 19: “Demonstration of additionality of micro-scale project activities” Version 09.0 with 20 GWh per year. Finding is closed				

CAR ID	CAR 12	Section no.	I.7.1, PART III	Date: 23/11/2020
Description of CAR				
Ny,i,j If biennial monitoring is chosen, 95/10 precision has to be ensured				
CME response (1st round)				Date: 24/11/2020

A clarification has been included both possibilities are offered for each CPA regarding the frequency of the monitoring. When biennial inspection is chosen a 95 per cent confidence interval and a 10 per cent margin of error shall be achieved for the sampling parameter. When the project proponent chooses to inspect annually, a 90 per cent confidence interval and a 10 per cent margin of error shall be achieved for the sampled parameters. In cases where survey results indicate that 90/10 precision or 95/10 precision are not achieved, the lower bound of the 90 per cent or 95 per cent confidence interval of the parameter value may be chosen as an alternative to repeating the survey efforts to achieve the 90/10 or 95/10 precision.

Documentation provided by project participant	
POA-DD version 03	
DOE assessment	Date: 24/11/2020
The Ny,i,j sampling requirements have been clearly defined in line with the applied methodology AMS-II.G “Energy efficiency measures in thermal applications of non-renewable biomass” (Version 11.1.0) Finding is closed	

CAR ID	CAR 13	Section no.	I.7.2, PART III	Date: 23/11/2020
Description of CAR				
Sampling plan §§ 11, 14, 22 and 23 of the standard “Sampling and surveys for CDM project activities and programmes of activities version 8”, have to be considered when designing the sampling plan, specially regarding the 95/10 precision and minimum sample size with 30.				
CME response (1st round)				Date: 24/11/2020
The description of the sampling plan has been modified to be aligned with the applied Standard “Sampling and surveys for CDM project activities and programmes of activities version 8”.				
Documentation provided by project participant				
POA-DD version 03				
DOE assessment				Date: 24/10/2020
PART III The description provided in the sampling plan section is in line with the applied methodology which includes the relevant sampling requirements for the monitoring parameters and for PoAs. At the same time the applied methodology AMS-II.G refers to the standard Sampling and surveys for CDM project activities and programmes of activities, version 8. The revised POADD complies such sampling requirements. Finding is closed				

CAR ID	CAR 14	Section no.	K, PART III	Date: 23/11/2020
Description of CAR				
PART III Eligibility criteria are incomplete and have need further details				
CME response (1st round)				Date: 24/11/2020
Eligibility criteria in both generic CPAs have been improved in order to be complete, verifiable, transparent and in accordance with the applied methodology.				
Documentation provided by project participant				
POA-DD version 03				
DOE assessment				Date: 24/11/2020
The updated eligibility criteria has been developed based on the applied methodology AMS-II.G and the PoA-PS covering, boundary, double counting, sampling and scale among the other relevant requirements. Finding is closed				

CAR ID	CAR 15	Section no.	K, PART III	Date: 23/11/2020
Description of CAR				
PART III Section I.6.2: It shall be clarified how certain parameter Bold,p shall be determined from all user types as these values may vary, or justify why it is the same; schools, HHs, street vendors. For instance Bold,p, Np,HH.				
CME response (1st round)				Date: 24/11/2020
Tables of the monitoring plan have been improved to be consistent with the methodology.				
Documentation provided by project participant				
POA-DD version 03				
DOE assessment				Date: 24/11/2020
The parameters where user distinction is relevant have been corrected so that it is clear whether the uses is HH, school or street vendor. Finding is closed				

CAR ID	CAR 16	Section no.	Appendix I	Date: 23/11/2020
Description of CAR				
Appendix 1: Provide contact information of the CME, and all PPs as required by template. See point one in both the sections A.4 and A.5 of the PoA-DD				
CME response (1st round)				Date: 24/11/2020
<i>Appendix 1 has been modified to include the contact details of all the Project participants and CPA implementers.</i>				
Documentation provided by project participant				
POA-DD version 03				
DOE assessment				Date: 24/11/2020
The provided information of CME and PPs is consistent with the information in section A.4 and A.5. Furthermore, the provided LoAs from all Parties authorizing the CME is in line with the LoA requirements as per PoA-PS. Furthermore, the communication correspondence between the CME and the DNAs have been provided. Finding is closed				

CAR ID	CAR 17	Section no.	I.4	Date: 23/11/2020
Description of CAR				
The CPAs boundary, sources and GHGs has not clearly justified				
CME response (1st round)				Date: 24/11/2020
<i>Table in section I.4 has been corrected and proper justification provided</i>				
Documentation provided by project participant				
POA-DD version 03				
DOE assessment				Date: 24/11/2020
The justification provided for inclusion/exclusion of GHGs is in line with the provisions of the applicable methodology AMS-II.G version 11.1. Finding is closed				

CAR ID	CAR 18	Section no.	Title page, A.5	Date: 30/12/2020
Description of CAR				
Host countries as indicated in POA-DD are not as per version 1 PoA-DD.				
CME response (1st round)				Date: 30/12/2020
<i>Two host countries removed, others no LoA received yet.</i>				
Documentation provided by project participant				
POA-DD version 3.6				
DOE assessment				Date: 30/12/2020
Host countries in line with published version and remaining two countries will be included any time after registration of the PoA-DD. Finding is closed				

CAR ID	CAR 19	Section no.	several	Date: 30/12/2020
Description of CAR				
Applied methodologies are not in line with version 1 PoA-DD.				
CME response (1st round)				Date: 30/12/2020
<i>Two methodologies are not relevant any more.</i>				
Documentation provided by project participant				
POA-DD version 3.6				
DOE assessment				Date: 30/12/2020
Two methodologies have been removed as not applied any more as not required any longer. Finding is closed				

Table 3. FAR from this validation

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

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

Appendix 5.Applicability Criteria of methodology AMS-II.G

Category 1 Generic CPA-1: Distribution of micro scale ICS

Nb.	Applicability of the methodology AMS-II.G	CME Justification of applicability	DOE Assessment and conclusion
1.	This methodology comprises efficiency improvements in thermal applications of non- renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency biomass fired project devices to replace the existing devices and/or energy efficiency improvements in existing biomass fired cookstoves or ovens or dryers.	The CPA includes dissemination of high efficiency biomass fired ICS to replace the existing traditional cookstoves in beneficiary households, schools and street food vendors. The same has been developed as an eligibility criterion 3 for inclusion of CPAs.	<p>The PoA consist of efficiency improvements in thermal applications of non- renewable biomass so is applicable to the methodology AMS-II.G ver. 11.1</p> <p>It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is applicable to the proposed PoA.</p>
2.	In the case of cookstoves, the methodology is applicable to the introduction of single pot or multi pot portable or in-situ cookstoves with rated efficiency of at least 20 per cent.	<p>The CPA shall include only those ICS that have a rated thermal efficiency of at least 20%. The same has been developed as an eligibility criterion 3 for inclusion of a CPA.</p> <p>Every type of ICS implemented in the CPA will present a certificate issued by manufacturer or an appropriate certifying agent at the time of CPA inclusion proving the thermal efficiency as required by the CDM methodology.</p>	<p>The PoA included single pot or multi pot portable or in-situ cookstoves with rated efficiency of at least 20 per cent.</p> <p>It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is applicable to the proposed PoA.</p>

3.	The aggregate energy savings of a single project activity shall not exceed the equivalent of 60 GWh per year or 180 GWh thermal per year in fuel input.	The CPA includes solely of units that qualify as “microscale CDM units” as defined in the “Methodological tool 19: Demonstration of additionality of microscale project activities”, such that it is not required to meet the small- scale or microscale thresholds within those thresholds. Demonstration of a compliance of the CPA with the small-scale thresholds at the aggregate level of the CPA is no longer required.	The CPAs are limited to the microscale CDM units in line with the TOOL19. It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is applicable to the proposed CPAs.
4.	Non-renewable biomass has been used in the project region since 31 December 1989, using survey methods or referring to published literature, official reports or statistics.	The CPA shall demonstrate the evidence of the use of the biomass (the non-renewable biomass in the region has been used since 1989).	The PoA design considered the use of Non-renewable biomass, which at CPA level has to demonstrate that the non-renewable biomass in the region has been used since 1989. It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is applicable to the proposed PoA.
5.	For cases where the biomass is sourced from renewable sources, the project participants should use a corresponding Type I methodology	Not applicable.	Not applicable
6.	If the project device requires a specific fuel for this device (e.g. briquettes, pellets, woodchips), the consumption of the fuel should be monitored during the crediting period.	Not applicable.	Not applicable.
7.	The CDM-PDD or CDM-PoA-DD/CPA-DD shall explain the proposed method for distribution of project devices including the method to avoid double counting of emission reductions such as unique identifications of product and end- user locations (e.g. programme logo).	Each CPA-DD will explain in detail the procedure of distribution of the devices to be implemented.	The PoA requirements to approve CPAs is properly assessed and justified by the CME. It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is fulfilled by the proposed PoA..

8.	The CDM-PDD or CDM-PoA-DD/CPA-DD shall also explain how the proposed procedures prevent double counting of emission reductions, for example to avoid that project stove manufacturers, wholesale providers or others claim credit for emission reductions from the project devices.	<p>Each CPA-DD will explain in detail the procedure to avoid the double counting emissions reductions.</p> <p>In the established contract, the serial numbers corresponding to each ICS will be indicated, which will be added to the corresponding database, in order to determine the novelty of the device and not their prior use.</p> <p>The contract will specify how the ownership of the carbon credits corresponds to the CME.</p>	As the double counting of emission reductions will be avoided by the PoA requirements to approve CPAs. This CME has ensured by establishing eligibility criterion 2. It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is fulfilled by the proposed PoA.
9.	Demonstrate that the design of the generic CPA qualifies as Type I, Type II, and/or Type III in accordance with applicable provisions on small-scale project type and eligibility in the project standard.	This Generic CPA comprises project activities the implementation of project activities based on the reduction of energy consumption on demand side with a maximum energy saving per unit of 20 GWh(e) per year, therefore, type II in accordance with paragraph 126 of the CDM Project Standard for Programme of Activities.	<p>The PoA design considered project category Type II.</p> <p>It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is fulfilled to the proposed PoA.</p>

Category 2 Generic CPA-2: Distribution of micro scale dryer systems

Id.	Applicability of the methodology AMS-II.G	CME Justification of applicability	DOE Assessment and conclusion
1.	This methodology comprises efficiency improvements in thermal applications of non-renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency biomass fired project devices to replace the existing devices and/or energy efficiency improvements in existing biomass fired cookstoves or ovens or dryers.	The CPA includes dissemination of high efficiency biomass fired dryers to replace the existing traditional ones in new users (mostly street vendors, but also households or schools)..	<p>The PoA consist of efficiency improvements in thermal applications of non- renewable biomass so is applicable to the methodology AMS-II.G ver. 11.1</p> <p>It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is applicable to the proposed PoA.</p>

2.	In the case of cookstoves, the methodology is applicable to the introduction of single pot or multi pot portable or in-situ cookstoves with rated efficiency of at least 20 per cent.	The CME shall assure that the minimum energy efficiency of the device distributed is 20%.	The PoA included single pot or multi pot portable or in-situ dryers with rated efficiency of at least 20 per cent. It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is applicable to the proposed PoA.
3.	The aggregate energy savings of a single project activity shall not exceed the equivalent of 60 GWh per year or 180 GWh thermal per year in fuel input.	The CPA includes solely of units that qualify as “microscale CDM units” as defined in the “Methodological tool 19: Demonstration of additionality of microscale project activities”, such that it is not required to meet the small-scale or microscale thresholds within those thresholds. Demonstration of a compliance of the CPA with the small-scale thresholds at the aggregate level of the CPA is no longer required.	The CPAs are limited to the microscale CDM units in line with the TOOL19. It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is applicable to the proposed CPAs.
4.	Non-renewable biomass has been used in the project region since 31 December 1989, using survey methods or referring to published literature, official reports or statistics.	The CPA shall demonstrate the evidence of the use of the biomass (the non-renewable biomass in the region has been used since 1989).	The PoA design considered the use of Non-renewable biomass, which at CPA level has to demonstrate that the non-renewable biomass in the region has been used since 1989. EC 5 in the generic CPA criteria analysis request to fulfil this methodology applicability condition. It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is applicable to the proposed PoA.
5.	For cases where the biomass is sourced from renewable sources, the project participants should use a corresponding Type I methodology	Not applicable.	Not applicable

6.	If the project device requires a specific fuel for this device (e.g. briquettes, pellets, woodchips), the consumption of the fuel should be monitored during the crediting period.	Not applicable.	Not applicable.
7.	The CDM-PDD or CDM-PoA-DD/CPA-DD shall explain the proposed method for distribution of project devices including the method to avoid double counting of emission reductions such as unique identifications of product and end- user locations (e.g. programme logo).	Each CPA-DD will explain in detail the procedure of distribution of the devices to be implemented.	The PoA requirements to approve CPAs is properly assessed and justified by the CME. As per generic CPA-DD the distribution procedure shall be designed at CPA level It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is fulfilled by the proposed PoA..
8.	The CDM-PDD or CDM-PoA-DD/CPA-DD shall also explain how the proposed procedures prevent double counting of emission reductions, for example to avoid that project stove manufacturers, wholesale providers or others claim credit for emission reductions from the project devices.	Each CPA-DD will explain in detail the procedure to avoid the double counting emissions reductions. In the established contract, the serial numbers corresponding to each device will be indicated, which will be added to the corresponding database, in order to determine the novelty of the device and not their prior use. The contract will specify how the ownership of the carbon credits corresponds to the CME, being the only one allowed for their claim and sale.	As the double counting of emission reductions will be avoided by the PoA requirements to approve CPAs. This CME has ensured by establishing eligibility criterion 2. It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is fulfilled by the proposed PoA.
9.	Demonstrate that the design of the generic CPA qualifies as Type I, Type II, and/or Type III in accordance with applicable provisions on small-scale project type and eligibility in the project standard.	The Generic CPA comprises project activities the implementation of project activities based on the reduction of energy consumption on demand side with a maximum energy saving per unit of 20 GWh(e) per year. Therefore, type II in accordance with paragraph 126 of the CDM Project Standard for Programme of Activities.	The PoA design considered project category Type II. It is concluded that the methodology AMS-II.G ver. 11.1 applicability criterion is fulfilled to the proposed PoA.

- - - - -

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
03.0	31 May 2019	Revision to: <ul style="list-style-type: none">•Ensure consistency with version 02.0 of the “CDM validation and verification standard for programmes of activities” (CDM-EB93-A08-STAN);•Make editorial improvements.
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.
Decision Class: Regulatory Document Type: Form Business Function: Registration Keywords: programme of activities, validation report		