




Validation report form for CDM programme of activities

(version 01.0)

VALIDATION REPORT

Title of the programme of activities (PoA)	Tandavanala <i>TsinjoHarena</i> Improved cookstoves in Madagascar
Version number of the validation report	3.0
Completion date of the validation report	03/03/2017
Version number of PoA-DD applicable to this validation report	03
Date when PoA-DD was uploaded for global stakeholder consultation	17/11/2016
Coordinating/managing entity (CME)	Tandavanala
Host Party(ies)	Republic of Madagascar
Sectoral scope(s)	03: Energy Demand
Selected methodology(ies)	Applied Methodology: AMS II.G "Energy efficiency measures in thermal applications of non-renewable biomass" (Version 08) Reference: EB 90 Annex-13, valid from 22/07/2016
Selected standardized baseline(s)	NA
Name of DOE	KBS Certification Services Pvt. Ltd. (KBS)
Name, position and signature of the approver of the validation report	 Mr. Kaushal Goyal Managing Director

SECTION I. Executive summary

>>

KBS Certification Services Pvt. Ltd. has been contracted by 'Tandavanala' to perform a validation of the PoA:
PoA Title: Tandavanala *TsinjoHarena* Improved cookstoves in Madagascar

Host Party(ies): Republic of Madagascar

The validation was performed in accordance with the UNFCCC criteria for the Clean Development Mechanism PoAs, Validation and Verification Standard 9.0 and host country criteria, as well as criteria given to provide for consistent PoA operations, monitoring and reporting.

The proposed Programme of Activities will result in reductions of greenhouse gas (GHG) emissions that are real, measurable and give long-term benefits to the mitigation of climate change. In our opinion, the PoA meets all relevant UNFCCC, CDM criteria and all relevant host country criteria.

The PoA correctly applies methodology AMS-II.G version 08. It is demonstrated that the PoA is not a likely baseline scenario. The emission reductions attributable to the PoA are hence additional to any that would occur in the absence of the programme of activities.

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

☒ Will be recommended to the CDM Executive Board with a request for registration

☐ Is not recommended for registration

SECTION II. Validation team, technical reviewer and approver

II.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, Technical Expert	IR	Kandari	Sanjay	Central Office	✓	✓	✓	✓
2.	Local Expert	EI	Aina	Ny	Central Office		✓	✓	

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Sharma	Chetan Swaroop	Central
2.	Technical Expert	IR	Kanal	M P	Central
3.	Manager Technical & Certification	IR	Sharma	Chetan Swaroop	Central

SECTION III.Means of validation

III.1. Desk review

>> The validation is performed primarily as a document review of the publicly available PoA-DD version 01 dated 14/11/2016 and the intermediate versions up to final version dated 03/03/2017. The cross checks between information provided in the PoA/CPA DD and information from sources other than those used, if available, the validation team's sectoral or local expertise and, if necessary, independent background investigations.

III.2. On-site inspection

Duration of on-site inspection: 22/12/2016, 23/12/2016 & 24/12/2016				
No.	Activity performed on-site	Site location	Date	Team member
1.	Approval of project activity from Host Party and approval of participation of Project Participant(s).	Madagascar	22/12/2016	Sanjay Kandari Ny Aina
2.	<ul style="list-style-type: none"> Eligibility Criteria for Inclusion of a CPA in the PoA Competence of CME to evaluate the inclusion of a CPA Technology/measure employed in specific CPA; Baseline identification and Additionality demonstration of the CPA 	Madagascar	22/12/2016	Sanjay Kandari
3.	<ul style="list-style-type: none"> Emission reductions calculations. Monitoring plan 	Madagascar	22/12/2016	Sanjay Kandari Ny Aina
4.	<ul style="list-style-type: none"> Implementation, Operation and Management of specific CPA; Training of personnel Local laws and regulations in host country applicable to the project activity. 	Madagascar	23/12/2016 & 24/12/2016	Sanjay Kandari

III.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1	Manantsoa	Tiana	Executive Director, Tandavanala (CME)	22/12/2016, 23/12/2016 & 24/12/2016	Approval of CPA from Host Party and approval of participation of Project Participant(s). PoA (Technology, Location and Implementation), Public Funding of the CPA	Sanjay Kandari & Ny Aina
2	Fransois	Ratsimbazaly	Local Stakeholder (staff of Municipality)	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
3	Albert	Rakotomanantsoa	Local Stakeholder	22/12/2016	Local stakeholder consultation, baseline fuel,	Sanjay Kandari & Ny Aina

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					baseline scenario etc.	
4	Rinah Zo	Rakotananarivo	Project Coordinator Tandavanala (CME	22/12/2016, 23/12/2016 & 24/12/2016	Approval of CPA from Host Party and approval of participation of Project Participant(s). PoA (Technology, Location and Implementation), Public Funding of the CPA	Sanjay Kandari & Ny Aina
5	Marie Rosette	RASOAMAMPIONONI MARO	Local Stakeholder	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
6	Henri Lys	RAHERINIAINA	Local Stakeholder	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
7	Jean Pierre	RAKOTOZAFY	Local Stakeholder	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
8	Roger Michel	RANDRIANANDRASA NA	Local Stakeholder	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
9	Albert	RAKOTOMANANTSO A	Local Stakeholder	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
10	Jeannine Odette	RASOA	Local Stakeholder and end user ICS	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
11	Lalao Noeline	RAHARISOA	Local Stakeholder and end user ICS	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
12	Leonie	RAHARIMALALA	Local Stakeholder	22/12/2016	Local stakeholder consultation, baseline fuel, baseline	Sanjay Kandari & Ny Aina

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					13scenario etc.	
13	Fanomezant soa Mahafaly	RANDRIANANDRASA NA	Local Stakeholder	22/12/2016	Lo14cal stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
14	Manandraibe Joseph	RAJOMALAHY	Local Stakeholder	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
15	Fabien Michel	RANDRIANIRINA	Local Stakeholder and end user ICS	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
16	Maurice	Jean	Local Stakeholder end user ICS	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
17	Roland	FANOMEZANTSOA R.	Local Stakeholder end user ICS	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
18	Michel	RALAIBOTSY	Local Stakeholder end user ICS	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
19	RABIALAHY	Justin	Local Stakeholder end user ICS	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
20	Jean Emmanuel	Rakotovao	Local Stakeholder end user ICS	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
21	Zanabololon a Clarisse	RAZAFINDRAMASY	Local Stakeholder end user ICS	22/12/2016	Local stakeholder consultation, baseline fuel, baseline scenario etc.	Sanjay Kandari & Ny Aina
22	Chand	Phool	CDM Consultant	24/12/2016	Baseline, monitoring	Sanjay Kandari

III.4. Sampling approach

>> No Sampling approach used by validation assessment team during on-site visit as the ICS were distributed to only one of the CPA. However the boundary of stove distribution and baseline was checked and found appropriate.

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

Areas of validation of compliance	No. of CL	No. of CAR	No. of FAR
Part I			
General description of the PoA	-	-	-
• PoA design document	-	01	-
• Purpose and general description of the PoA	-	-	-
o Generic CPA(s)	02		
o Specific-case CPA(s) submitted with the PoA	-	-	-
Demonstration of additionality and development of eligibility criteria			
• Demonstration of additionality of the PoA	-	01	-
• Eligibility criteria for inclusion of CPA(s) in the PoA	02	01	
Management system	-	-	-
Duration of the PoA	-	-	-
Environmental impacts	01	-	-
Local stakeholder consultation	01	01	-
Approval and authorization	-	01	-
Global stakeholder consultation	-	-	-
Contribution to sustainable development	-	-	-
Modalities of communication	-	01	-
Part II			
General description of generic CPA	-	-	-
Application of a baseline and monitoring methodology and standardized baseline			
• Applicability of selected methodology(ies) and/or standardized baseline		01	-
o Deviation from methodology	-	-	-
o Clarification on applicability of methodology, tool and/or standardized baseline	-	-	-
• Sources and GHGs	-	-	-
• Description of baseline scenario	-	-	-
• Demonstration of eligibility for a generic CPA	01		
• Estimation of emission reduction or net GHG removals by sinks of the generic CPA			
o Explanation of methodological choices	-	-	
o Data and parameters fixed ex ante	-	-	
o Ex ante calculation of emission reductions or net GHG removals by sinks	-	-	
• Application of the monitoring methodology and description of the monitoring plan	-	-	-
o Data and parameters to be monitored by the generic CPA	-	-	-
o Description of the monitoring plan for the generic CPA	-	-	-
Total	07	07	-

Section IV. Internal quality control

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

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

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

Section V. Validation opinion

>> Tandavanala (CME) has commissioned KBS to perform the validation of the proposed CDM programme of activities:

PoATitle:	Tandavanala TsinjoHarena Improved cookstoves in Madagascar
Methodology Applied:	AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass --- Version 8.0
Sectoral Scopes:	TA 3.1
Validity of methodology/ies (for RfR):	Valid from 22 Jul 16 onwards

The scope of the validation is defined as an independent and objective review of the PoA DD, the PoA's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against the latest version of CDM Validation and Verification, Kyoto Protocol requirements and UNFCCC rules.

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

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

Section VI. Validation findings

PART I. Programme of activities

SECTION A. General description of the PoA

A.1. PoA design document

Means of validation	The PoA-DD version 1.0/1/ was webhosted on 17/11/2016 for 'Global stakeholder Consultation. The validation team validated that the final PoA-DD which is based on the currently valid CDM-SSC-PoA-DD-FORM, version 05.0 and is correctly completed in accordance with the guidelines given along within the template.
Findings	CAR#08 is raised and closed satisfactorily. The finding is discussed in Appendix 04 of the validation report.
Conclusion	The final PoA-DD used as a basis for validation opinion has been prepared in accordance with the latest CDM-SSC-PoA-DD-FORM and CDM-SSC-CPA-DD-FORM respectively and the guidance to fill the form given in the same document. The PoA-DD and CPA-DD satisfy the requirements of VVS, version 09.

A.2. Purpose and general description of the PoA

Means of validation	This PoA involves two aspects – improvement of efficiency of two type of biomass stoves (i.e. charcoal and fuelwood) used for cooking with the efficient improved cook stoves with efficiency above 31% for woody biomass and 45% for charcoal stoves for the CPAs to be included with PoA. The PoA involves the 'Republic of Madagascar' as host country. The efficiencies of each type of cook stove are
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	<p>tested in the national laboratory. The test reports were provided to assessment team and assessment team reviewed and concluded that the efficiency tests/9/10/ were conducted in accordance with the procedure stipulated in the applied methodology AMSIIG.</p> <p>The main objective of PoA is the dissemination of the efficient improved cooking stove to the rural and urban household of Madagascar resulting in the reduction of firewood consumption leading to climate change mitigation in a sustainable manner. The individual households using ICS will sign an agreement with the CME acknowledging the inclusion of their stove into CPAs under this PoA. The sample agreements/12/ were validated by the assessment team for the already distributed cook stoves for each type of technology (charcoal and woody biomass based) and found them in line with the PoA DD. The PoA is undertaken voluntarily by the CME Tandavanala in Madagascar.</p> <p>The physical and geographical boundary of PoA is entire host country i.e. Madagascar as validated during site visit by interviewing the top management of CME. The PoA has not received any public funding as confirmed by interviewing the representative of CME Mr. Tiana Manantsoa during the site visit.</p>
Findings	CL#04 is raised and closed satisfactorily. The finding is discussed in Appendix 04 of the validation report.
Conclusion	The validation team conducted document review and onsite interviews/ inspection of the PoA and the CPA. The validation team has also conducted site visit for interaction with local stakeholders and ICS endusers. Based on the site visit and document review, the validation team confirms that the PoA-DD contains a clear description of the project that provides a clear understanding of the precise nature of the PoA. This description is also found to be accurate and complete.

A.2.1. Generic CPA(s)

Title, identification/reference number and/or version number	Sectoral scope(s)	Selected methodology(ies) and/or standardized baseline(s)
Tandavanala <i>TsinjoHarena</i> Improved cookstoves in Madagascar (Part I for the woody biomass improved stoves)	3 (TA 3.1)	Applied Methodology: AMS II.G "Energy efficiency measures in thermal applications of non-renewable biomass", version 08 Reference: EB 90 Annex-13, valid from 22/07/2016/18/
Tandavanala <i>TsinjoHarena</i> Improved cookstoves in Madagascar (Part II for the charcoal based improved biomass stoves)	3 (TA 3.1)	Applied Methodology: AMS II.G "Energy efficiency measures in thermal applications of non-renewable biomass" Reference: EB 90 Annex-13, valid from 22/07/2016/18/, version 08

A.2.2. Specific-case CPA(s) submitted with the PoA

Specific-case CPA(s) reference number(s)	Generic CPA title, identification/ reference number and version number	Host Party	Crediting period dates of the specific-case CPA
Tandavanala <i>TsinjoHarena</i> Improved cookstoves in Madagascar-CPA001	Tandavanala <i>TsinjoHarena</i> Improved cookstoves in Madagascar (Part I for the woody biomass improved stoves)	Madagascar	07/03/2017 to 06/03/2024
Tandavanala <i>TsinjoHarena</i> Improved cookstoves in Madagascar-CPA002	Tandavanala <i>TsinjoHarena</i> Improved cookstoves in Madagascar (Part II for the charcoal based improved stoves)	Madagascar	07/03/2017 to 06/03/2024
Tandavanala <i>TsinjoHarena</i> Improved	Tandavanala <i>TsinjoHarena</i> Improved cookstoves in	Madagascar	07/03/2017 to 06/03/2024

cookstoves in Madagascar-CPA003	Madagascar (Part I for the woody biomass improved stoves)		
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SECTION B. Demonstration of additionality and development of eligibility criteria

B.1. Demonstration of additionality of the PoA

Means of validation	<p><u>Prior consideration of the clean development mechanism:</u></p> <p>The start date for PoA is considered as 17/11/2016, the date when the PoA DD is published for global stakeholder consultation process. CME has intimated the UNFCCC and DNA on 19/10/2016 for the CDM consideration of PoA. The same has been confirmed from the UNFCCC website and email communication to host party DNA/14/. The notification was sent before the start date of PoA therefore it complies with the requirement of para 14 of CDM PCP version 09.</p> <p><u>Additionality of the PoA:</u></p> <p>The PoA consists of one or more small-scale projects as CPAs, the eligibility criteria for the demonstration of additionality were based on the “Tool to demonstration of additionality of small-scale project activities” and Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities.</p> <p>The additionality of each CPA is demonstrated by complying with the eligibility criterion 6 (Each CPA will have a maximum capacity of 180 GWh_{th}/year throughout the CPA's crediting period), with the eligibility criterion 6 stated in the PoA-DD (CPAs must demonstrate, The additionality of the project activity is demonstrated by a barrier analysis that is in line with para 11 c) of EB 83, Annex 14, “Demonstration of additionality of small-scale project activities”/22/.</p> <p>This criterion 6 is in compliance with the tool for “demonstration of additionality of small scale project activities” (version 10.0).and criterion 12 is in accordance with the “Assessment of debundling for small-scale project activities” (version 04).</p> <p>Tool for “Demonstration of additionality of small-scale project activities, version 10” states that the:</p> <p>Documentation of barriers, barriers, as per paragraph 1, is not required for the positive list of technologies and project activity types that are defined as automatically additional for project sizes up to and including the small-scale CDM thresholds. The positive list comprises of:</p> <p>Project activities solely composed of isolated units where the users of the technology/measure are households or communities or Small and Medium Enterprises (SMEs) and where the size of each unit is no larger than 5% of the small-scale CDM thresholds;</p> <p>“Assessment of debundling for small-scale project activities” (EB 83, Annex 13, version 04)/23/ in paragraph 14 states that:</p> <p>If each of the independent subsystems/measures (e.g., biogas digester, solar home system) included in the CPA of a PoA is no larger than 1% of the small-scale thresholds defined by the methodology applied, then that CPA of PoA is exempted from performing de-bundling check i.e., considering as not being a de-bundled component of a large scale activity.</p> <p>The eligibility criterion 12 ensures that each CPA under the PoA will remain below the threshold of 180 GWth/year throughout the CPA's crediting period, eligibility criterion 14 ensures that the size of each unit will be no larger than 1% of the SSC CDM threshold, thus paragraph 14 of EB 83, Annex 13 is complied with. By having a size of each unit which is not larger than 1% of the SSC CDM threshold means at the same time not to exceed 5% of the SSC threshold since 1% is more restrictive than 5%.</p>
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	As a result, it can be confirmed that the requirements of the “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities” with respect to the demonstration of additionality are fully met.
Findings	CAR#04 (b) is raised and closed satisfactorily. The finding is discussed in Appendix 04 of the validation report.
Conclusion	It can be confirmed that the requirements of the “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities” with respect to the demonstration of additionality are fully met.

B.2. Eligibility criteria for inclusion of CPA(s) in the PoA

No.	Eligibility criteria as set out in the PoA-DD	Means of validation/Findings/Conclusion
1	The geographical boundary of the CPA including any time- induced boundary consistent with the geographical boundary set in the PoA	The project boundary was validated by conducting the site visit and it was confirmed by the CME during the onsite interview that the CPAs will be distributed within the country. The criterion stipulated is in compliance with the standard “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4”/20/.
2	Conditions that avoid double counting of emission reductions like unique identification of product and end-user locations	The unique numbering will be provided by the CME and the same would be recorded in the documentation of CME. Validation team visited the households where the ICS were distributed and found that each ICS is included a unique numbering plate and it is recorded in the agreement signed between the CME and end user and also recorded in the database of CME. The criterion stipulated is in compliance with the standard “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4”/20/.
3	The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications	The thermal efficiency of the ICS distributed in each CPAs will have efficiency of more than 20% in compliance with the applied methodology. Validation team reviewed the efficiency test conducted by the third party national lab and found that the efficiency for the ICSs pertaining to the CPAs were higher than 20% threshold. The criterion stipulated is in compliance with the standard “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4”/20/.
4	Conditions to check the start date of the CPA through documentary evidence	The CPA start date shall be after the start date of PoA i.e. 17/11/2016 (date of publication of PoA DD for global stakeholder consultation). Validation team reviewed the start date of CPA included with the PoA validation and found them in compliance with the eligibility criteria stipulated in the PoA DD. The criterion stipulated is in compliance with the standard “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4”/20/.
5	Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs	The criterion is in line with the requirement of applied methodology and standard “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes

No.	Eligibility criteria as set out in the PoA-DD	Means of validation/Findings/Conclusion
		of activities, version 4"/20/.
6	The conditions that ensure that the CPA meets the requirements pertaining to the demonstration of additionality.	The additionality of the CPAs will be demonstrated in line barrier analysis that is in line with para 11 c) of EB 83, Annex 14, "Demonstration of additionality of small-scale project activities" (version 10). The criterion stipulated is in compliance with the standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4"/20/.
7	The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis	The proof of local stakeholder meeting/11/ conducted at PoA level has been confirmed from the following documents: <ul style="list-style-type: none"> • Invitation letters to stakeholders via email / hand delivery/news paper publication/11/ • Minutes of stakeholder consultation meeting • Photographs of the meeting • List of stakeholders attending the meeting The EIA is not required to the PoA as confirmed by the local expert during the site visit. The same was also verified by Decree no.99-954 Compatibility of investments with the environment (MECIE) : (available online by typing on google: "Decret MECIE Madagascar"). PP has also submitted the letter/27/ from the ministry of environment and the letter also confirms that the EIA is not a requirement for the PoA.
8	Conditions to provide an affirmation that funding from Annex I Parties, if any, does not result in a diversion of official development assistance	The criterion is in line with the requirement of applied methodology and standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4". The representatives of CME were interviewed during the site visit to confirm the criteria.
9	Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid- connected/off-grid) and distribution mechanisms (e.g. direct installation)	The criterion is in line with the requirement of applied methodology and standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4". Moreover validation team visited the villages where the ICS are already distributed and found that the target group are rural/urban population.
10	Where applicable, the conditions related to sampling requirements for the PoA in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities"	The criteria is in line with the requirement of applied methodology and standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4". The sampling is validated in further section of report.
11	Where applicable, the conditions that ensure that every CPA (in aggregate if it comprises of independent sub units) meets the small-scale or micro scale threshold and remains within those thresholds throughout the crediting period of the CPA	The criteria is in line with the requirement of applied methodology and standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4".
12	Where applicable, the requirements for the debundling check, in case the CPAs belongs to small-scale or micro scale project categories.	The criteria is in line with the requirement of applied methodology and standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4".
13	Approval of CPA by CME	The criteria is in line with the requirement of applied methodology and standard "Demonstration of additionality, development of eligibility criteria and

No.	Eligibility criteria as set out in the PoA-DD	Means of validation/Findings/Conclusion
		application of multiple methodologies for programmes of activities, version 4"/20/.
14	CER ownership	The criteria is in line with the requirement of applied methodology and standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4"/20/. The copy of agreement with households is validated to confirm the criteria.
15	Awareness and agreement of those operating a CPA on PoA subscription	The criterion is in line with the requirement of applied methodology and standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4"/20/.

SECTION C. Management system

Means of validation	<p>The management system is designed as per the Standard for Demonstration of Additionality, Development of Eligibility Criteria and Application of Multiple Methodologies for Programme of Activities (Version 04.0 EB 87 Annex 03), and includes all relevant information as per paragraph 21 therein.</p> <p>Tandavanala (CME) will manage PoA and key role in the development of CPAs and will oversee the inclusion of CPAs under the PoA. Through a technical review, the CME assesses the competence of potential CPA/CPA implementers to ensure that they fulfil technical and eligibility aspects of potential CPAs and to plan technical and administrative processes to meet PoA requirements. The 'Executive Director' of Tandavanala was interviewed by the assessment team to confirm the information provided in the PoA DD.</p> <p>Tandavanala will also utilise dedicated professionals having in depth knowledge and extensive capabilities in survey and sampling to get quality and reliable data for emission reduction calculation for CPAs. Tandavanala has the desired expertise to implement the 'Management System' reported in the PoA DD.</p>
Findings	Nil
Conclusion	<p>The programme consists of the implementation of replacement traditional cook stoves in domestic households by improved cook stoves with higher efficiency in which 'Tandavanala' will coordinate the Programme of Activities (PoA) and will also involved in implementing the 'Component Project Activities (CPAs)' in 'Madagascar' while acting as the focal point for all CDM related activities.</p> <p>The CME has developed teams for the operation, management and verification of the PoA as detailed in the PoA DD. The CME has clearly defined roles and responsibilities of the personnel involved in the complete process. It has further divided the personnel involved into teams for operation and maintenance of the PoA. The validation team has assessed the process and competencies of the team members in each of the teams while carrying out interviews and based on the curriculum vitae of the team members provided by the CME during the course of validation and considers the same to be adequate and in line with the requirements of "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for program of activities" (Version 4.0, EB 87).</p>

SECTION D. Duration of the PoA

Means of validation		
	Starting date of PoA	Expected duration of PoA
	Start date of PoA – 17/11//2016. PP has chosen the date of publication of PoA for global stakeholder consultation as the start date of PoA in line Glossary of CDM terms.	28 years
Findings	Nil	
Conclusion	The validation team conducted document review and onsite interviews/ inspection of the PoA. Based on the site visit and document review, the validation team confirms that the PoA-DD contains a clear description of the project that provides a clear understanding of the precise nature of the PoA. This description is also found to be accurate and complete. The PoA-DD satisfies the requirements of §159 of VVS, version 09.	

SECTION E. Environmental impacts

Means of validation	<p>It has been indicated in section E.1 of the PoA-DD that the environmental analysis is undertaken at PoA level. The ICS using renewable biomass disseminated across all CPAs present similar positive environmental impacts (like e.g. avoidance of non-sustainable logging of trees and negative consequences of deforestation, reduction of GHG emissions and indoor air pollution, improvement of forest maintenance and prevention of forest fires) wherever they are applied and no anticipated negative impacts.</p> <p>This could be confirmed in interviews with local expert and end-users during the DOE's on-site visit. This was further confirmed by reviewing the local regulation Decree no.99-954 Compatibility of investments with the environment (MECIE) (available publically)/27/. Since the environmental impacts of the PoA will be broadly consistent across all CPAs and are not anticipated to vary significantly hence a PoA-level environmental analysis for each of the host countries is deemed to be most appropriate.</p>
Findings	CAR#06 was raised and closed satisfactorily.
Conclusion	The DOE confirms that the PoA does not require environment impact assessment in accordance with the procedures of the host Party. Thus, the requirement stated in §159 of the VVS, version 09/15/ has been complied with.

SECTION F. Local stakeholder consultation

Means of validation	<p>A local stakeholders meeting was carried out by the PoA participant on 31/10/2016 /09/ which was prior to the publication of PoA-DD on the UNFCCC website (17/11/2016 to 16/12/2016). The meeting took place in the premises of the 'Tandavanala' in Fianarantsoa (Madagascar). The validation team noted that all the relevant stakeholders identified are in line with the definition of stakeholders as per latest version of CDM Glossary of terms. The local stakeholders identified by the PoA participant were the representatives of NGOs, municipality, ICS users and other similar organizations. PP has utilized newspaper publication on 21/10/2016 to invite these stakeholders. The stakeholder meeting was conducted in French which is the local language of the host country. During the meeting, stakeholders were asked to directly comment on the project. A summary of the comments received and a note on how due account was taken of the concerns raised in the above public consultation are included in sections F.2 and F.3 of the PoA-DD. From the background of the stakeholders, it was reasonably believed that the general attitude of the local residents, who were likely to be affected, was positive towards the programme and same has been verified from the onsite visit interviews with the representative of local stakeholders.</p> <p>In general, the interviewees showed adequate understanding of the nature of the programme and felt that there would be no adverse impacts on the environment</p>
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	arising from the PoA. The interviewees also considered that the local economy would be benefitted from the PoA.
Findings	CL#05 was raised and closed satisfactorily.
Conclusion	Validation team reviewed all relevant information of local stakeholder consultation meeting /09/ and confirms that the LSC meeting meets to the requirement of §162 of VVS V9. The validation team also confirms that the process for conducting the local stakeholders meeting is adequate and credible.

SECTION G. Approval and authorization

Means of validation	<p>The project's host Party is - Republic of Madagascar and the party ratified the Kyoto protocol and established a DNA as the participating requirements for CDM under the Kyoto Protocol.</p> <p>The information of the DNA has been confirmed by the validation team against the relevant information on the UNFCCC CDM website (http://cdm.unfccc.int/DNA/index.html)</p> <p>The table given below summarizes the project participant(s) and party (ies) involved.</p>	
	CME	Tandavanala
	Part(ies) involved	Republic of Madagascar
	PoA title	Tandavanala <i>TsinjoHarena</i> Improved cookstoves in Madagascar
	Approval	Yes
	LoA received	Yes
	Date of LoA	30/01/2017
	Reference document of	Letter No: 26-17/MEEF/SG/BNCCC/AND
	LoA received from	Directly from CME
	Validation authenticity of	The assessment team has reviewed other LoAs issued by the DNA of Madagascar and confirmed the authenticity of signature and content of the LoA. The assessment team does not doubt the authenticity of the LoA.
	Validity of LoA	Valid
	Authorization -	
	Party is party to Kyoto Protocol	Yes. Madagascar ratified the Kyoto protocol.
	Voluntary participation	Yes, as confirmed from LoA..
	Diversion of official development aid towards host country	No, there is no Annex I country involved.
	Project contribution to sustainable development	Yes, as confirmed from LoA.
	<p>The host Party for the proposed project activity is Madagascar, fulfils the participation requirements, having ratified the Kyoto Protocol and established National Clean development Mechanism Authority), as its DNA. This has been confirmed from the UNFCCC website.</p> <p>The PoA's Annex 1 Party is 'Norwegian Ministry of Climate and Environment'. Annex 1 Party fulfil the requirements to participate in the CDM. Norway has ratified the Kyoto protocol and established a DNA as the participating requirements for CDM under the Kyoto Protocol.</p> <p>The Letter of Approval /03b/ was issued by the Climate and Pollution Agency, Norway on 02/03/2017. The authenticity of the letter of approval from Norway has been confirmed by checking the original LoA and comparing the LoA's from other registered CDM projects.</p>	
Findings	CAR#01 was raised and closed satisfactorily.	

Conclusion	<p>The LoA was reviewed and confirmed the following: LoA has been verified to be unconditional with respect to all the above confirmed aspects. The validation team has confirmed that the LoA has met the requirements of §44-48 of the VVS V9/15/.</p> <ul style="list-style-type: none"> a) Madagascar is a party to the Kyoto protocol; b) Norway is (Annex 1) party to the Kyoto protocol c) CDM is a voluntary participation; d) The PoA under validation will contribute to the sustainable development of Madagascar. e) The PoA title is in line with the title mentioned under section A.1 of the PoA DD. f) The participation of project participant has been approved/ authorized by the DNA of host Party. g) The participation has been confirmed in the LoAs itself, which contains the name of the PP to which it is issued h) The information is consistent within the project documentation viz., PoA DD, LoA and signed MoC. i) The validation of authorization has been done on the basis of § 53-55 of VVS V9 and validation team confirms that the proposed project activity meets the requirement of § 56 of VVS V9.
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SECTION H. Global stakeholder consultation

Means of validation	<p>In accordance with CDM modalities and procedures and section D of VVS V.9, the PoA DD of a proposed CDM programme of activities shall be made publicly available and the DOE shall invite comments on the validation requirements from Parties, stakeholders and UNFCCC accredited non-governmental organizations and make them publicly available. The PoA DD for this PoA was made available on and was open for comments from 17/11/2016 to 16/12/2016 on UNFCCC website¹.</p> <p>No comments received.</p>
Findings	Nil
Conclusion	No comments received.

SECTION I. Contribution to sustainable development

Means of validation	The host Party's DNA has confirmed the contribution of the project to the sustainable development of the host Party (Madagascar) through a letter of approval (or HCA) dated 30/01/2017 ^{03/} .
Findings	CAR#01 was raised and closed satisfactorily.
Conclusion	The validation of project contribution to sustainable development has been done on the basis of § 58 of VVS and validation team confirms that the proposed project activity meets the requirement of § 59 of VVS.

SECTION J. Modalities of communication

Means of validation	<p>The Modalities of Communication (MoC)/4/, signed on 02/03/2017, was received from the CME (i.e. Tandavanala). The validation team has directly checked the legal/corporate identity of the CME (Tandavanala) by verifying the company incorporation certificate of the PP along with written confirmation from 'Tandavanala' stating that all corporate and personal details, including specimen signatures, are valid and accurate. The letter was signed by an authorized signatory of CME . Since, the confirmation letter has been provided by CME having contractual relationship with DOE, it is deemed acceptable.</p> <p>Tandavanala (host) and 'Norwegian Ministry of Climate and Environment' (Annex 1</p>
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<http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/WE879RFG2DQN0UOJEG8APJPKQPDQX9/view.html>

	<p>party) have authorized 'Mr. Manatsoa Tiana A' & 'Edit Anita Nordgaard' as the primary authorized signatories in the MoC. The personal identity, specimen signature, contact details and employment status of the focal point have been checked by the corresponding evidence which can be considered as authentic and are found consistent with the MoC. Moreover, the name of the CME/PP mentioned in the LoAs is also same in the MoC.</p> <p>The CME/PP has correctly completed the latest version of form F-CDM-MOC including its Annex 1 with the details consistent with PDD and the evidence provided for identity check/4/. The given MoC statement complies with all relevant forms and requirements.</p>
Findings	CAR#02 is raised and closed satisfactorily.
Conclusion	<p>The assessment shall confirm that:</p> <ul style="list-style-type: none"> (a) It has performed due diligence on the MoC statement in accordance with the requirements established in VVS V9 (b) The MoC statement complies with all relevant forms and requirements. <p>The validation of MoC has been done on the basis of § 61-67 of VVS V9 and validation team confirms that the proposed project activity meets the requirement of VVS, version 09.</p>

PART II. Generic component project activity(ies) (For Woody Biomass based ICS)

SECTION A. General description of generic CPA

Means of validation	The validation team validated that the project design document is based on the currently valid CDM-SSC-PoA-DD template, version 5/19/ and is correctly applied in accordance with the guidelines given in the form.		
	Key revisions between the first PoA DD against the final version PoA DD		
	POA DD Section no.	Brief description of the changes	Relevant Findings
	A.1	General description is elaborated.	CL#04
	E.2	The reference of local regulation for the exemption of EIA is included.	CAR#06
	D.1	Start date of PoA updated.	CAR#05
Findings	Nil		
Conclusion	The validation team confirms that the proposed project activity meets the requirement of § 69 of VVS V9 and the PoA DD is completed using the latest version of the PDD form appropriate to the type of project activity		

SECTION B. Application of a baseline and monitoring methodology and standardized baseline

B.1. Applicability of selected methodology(ies) and/or standardized baseline

Means of validation	<p>Applicability criteria for the applied methodology in the PoA-DD against these criteria are assessed by the validation team by means of document review and interviews. Thus, the validation team confirms that the PoA participant has correctly applied the approved methodology for the proposed PoA and that the selected version of the methodology is valid at the time of submission of the proposed project activity for registration.</p> <p>Small scale CPA applies following methodology and tools: Methodology: AMS-II.G. "Energy Efficiency Measures in Thermal Applications of Non-Renewable Biomass", Version 08.0, is correctly mentioned in the relevant section of generic CPA DD. CME has correctly referred the latest version of methodology.</p>
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Findings	Nil
Conclusion	<p>The selected methodology is applicable to the PoA and selected version of the methodology is valid at the time of submission for registration. For each of the applicability condition listed in the methodology AMS-II.G. Version 08, the steps taken to assess the relevant information contained in the PoA-DD has been clearly described.</p> <p>Thus, it can be concluded that the proposed CDM PoA falls under the small scale projects category and the PoA-DD and project description justifies the applicability criteria of the applied methodology AMS-IIG version 08 satisfactorily.</p>

B.1.1. Deviation from methodology

Means of validation	No deviation is applied/sought.
Findings	Nil
Conclusion	NA

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

Means of validation	No clarification sought/applied.
Findings	Nil
Conclusion	NA

B.2. Sources and GHGs

Means of validation	The validation team was able to confirm that all the identified emission sources which are impacted by the project activity are addressed by the approved methodology /B02/ and can be seen in the table below.					
		Source	Gas	Included in SSC-CPA	Explanation	
	Baseline	The combustion of non-renewable biomass for cooking; Emission Factor for the combustion of fossil fuels for cooking	CO ₂	Yes	Major source of emissions from traditional cook stoves	
			CH ₄	No	Negligible source of emissions and therefore excluded.	
			N ₂ O	No	Negligible source of emissions and therefore excluded.	
	Project Activity	Combustion of non-renewable biomass for cooking, Emission Factor	CO ₂	Yes	Source of emissions	
			CH ₄	No	Negligible source of emissions and therefore excluded.	
			N ₂ O	No	Negligible source of emissions and therefore excluded.	
	Leakage	CO ₂ emissions from consumption of non-renewable woody biomass saved by project activity by non-project households who previously used renewable energy sources	CO ₂	Yes	Source of emissions in accordance with AMS-IIG (version 8.0)	
			CH ₄	No	Negligible source of emissions and therefore excluded.	
			N ₂ O	No	Negligible source of emissions and therefore excluded.	
	Findings	NA				
	Conclusion	The GHG emission reduction occurring within the project boundary is CO ₂ and no				

	other gases are involved during the project activity. The same has been verified during the course of validation. This has been validated in accordance with VVS V9
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B.3. Description of baseline scenario

Means of validation	<p>The assessment team has performed the following steps to assess the requirements for baseline identification:</p> <ul style="list-style-type: none"> • Initial desk review • Site visit • Background information/ knowledge from similar projects and/ or technologies • Baseline fuel (charcoal and woody biomass) survey report • f_{nrb} survey report <p>The baseline scenario is in accordance with para 14 of the applied methodology AMS-IIG, version 08 i.e.</p> <p><i>It is assumed that in the absence of the project activity, the baseline scenario would be the projected use of fossil fuels to meet similar thermal energy needs as those provided by the project devices.</i></p>
Findings	CL#06 was raised and closed satisfactorily.
Conclusion	<p>KBS confirms the following statements:</p> <ol style="list-style-type: none"> All the assumptions and data used by the project participants are listed in the PoA-DD, including their references and sources; All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PoA-DD; Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence, and can be deemed reasonable; Relevant national and/or sectoral policies and circumstances are considered and listed in the PoA-DD and CPA-DD; The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario, and the identified baseline scenario reasonably represents what would occur in the absence of the proposed CDM PoA. The PoA-DD provides a description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed project activity.

B.4. Demonstration of eligibility for a generic CPA

No.	Eligibility criteria for the generic CPA	Means for assessment of inclusion of CPA	Means of validation/Findings/Conclusion
1.	The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA	The PoA boundary corresponds to the boundaries of host country Madagascar. All distributed ICS in each CPA shall be located within geographical boundary of Madagascar.	The project boundary was validated by conducting the site visit and it was confirmed by the CME during the onsite interview that the CPAs will be distributed within the country.
2.	Conditions that avoid double counting of emission reductions like unique identification of product and end-user locations	A unique numbering system for ICS will be applied in each CPA, assigning a unique number to each ICS and allowing to clearly identify for each ICS to which CPA it belongs.	The unique numbering will be provided by the CME and the same would be recorded in the documentation of CME. Validation team visited the households where the ICS were distributed and found that each ICS is included a unique numbering plate and it is recorded in the agreement signed between the CME and end user and also recorded in the database of CME.
3.	The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications	CPAs under this PoA will consist in the distribution of ICS with a thermal efficiency of at least 20% to household users cooking with non-renewable biomass in the baseline scenario.	The thermal efficiency of the ICS distributed in each CPAs will have efficiency of more than 20% in compliance with the applied methodology. Validation team reviewed the efficiency test conducted by the third party national lab and found that the efficiency for the ICSs pertaining to the CPAs were higher than 20% threshold.
4.	Conditions to check the start date of the CPA through documentary evidence	Any CPA start date shall not be before the PoA starting date i.e. date when PoA DD is published for Global Stakeholder Comments on UNFCCC.	The CPA start date shall be after the start date of PoA i.e. 17/11/2016. Validation team reviewed the start date of CPA included with the PoA validation and found them in compliance with the eligibility criteria stipulated in the PoA DD.
5.	Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs	All CPA shall consist distribution of ICSs with efficiency improvements in thermal applications of non-renewable biomass; ICS shall have a thermal efficiency of at least 20%.	The criterion is in line with the requirement of applied methodology and standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4".
6.	The conditions that ensure that the CPA meets the requirements pertaining to the demonstration of additionality	The additionality of the project activity is demonstrated by a barrier analysis that is in line with para 11 c) of EB 83, Annex 14, "Demonstration of additionality of small-scale project activities" (version 10)	The additionality of the CPAs will be demonstrated in line barrier analysis that is in line with para 11 c) of EB 83, Annex 14, "Demonstration of additionality of small-scale project activities" (version 10). The criterion stipulated is in compliance with the standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4".

7.	The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis	The local stakeholder consultation will be conducted at the PoA level (Section F of the PoA-DD). Each CPA will be implemented in similar social economic situations. The key stakeholders of the program both at PoA and CPA level are the same. An environmental impact analysis is not required (section E.2 of the PoA-DD). No further actions needed at the CPA level to satisfy the eligibility criteria.	<p>The proof of local stakeholder meeting conducted at PoA level has been confirmed from the following documents:</p> <ul style="list-style-type: none"> a) Invitation letters to stakeholders via email / hand delivery/news paper publication b) Minutes of stakeholder consultation meeting c) Photographs of the meeting d) List of stakeholders attending the meeting <p>The EIA is not required to the PoA as confirmed by the local expert during the site visit. The same was also verified by Decree no.99-954 Compatibility of investments with the environment (MECIE) : (available online by tapping on google: "Decret MECIE Madagascar").</p>
8.	Conditions to provide an affirmation that funding from Annex I Parties, if any, does not result in a diversion of official development assistance	The CME and the CPA operator (in case of being different from the CME) shall confirm that in case of public funding, there is no diversion of Official Development Assistance.	The validation team has checked the letter to confirm no ODA funding and participation in other GHG schemes by 'Tandavanala' to confirm that no ODA or public funding will be used by the CPA implementer. Thus the validation team deems the applicability condition is appropriate.
9.	Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation)	Distribution mechanisms have been specified in the PoA-DD by means of the "General operating and implementing framework of PoA" at the PoA level. The distribution mechanism is the direct distribution of ICS through the CME or regional partners.	The distribution mechanism is appropriately defined in the PoA DD and it is categorically mentioned that the distribution mechanism is the direct distribution of ICS through the CME or regional partners. This was further confirmed during the site visit by the validation team by reviewing the data base maintained by the CME.
10.	Where applicable, the conditions related to sampling requirements for the PoA in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities"	Monitoring of all CPAs will adhere to all requirements related to sampling for a PoA in accordance with the sampling standard including all annexes and amendments till EB 86 Annex 03.	The criterion stipulated is in compliance with the standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4".
11.	Where applicable, the conditions that ensure that every CPA (in aggregate if it comprises of independent sub units) meets the small-scale or microscale threshold and remains within those thresholds throughout the	The CPA shall remain under the applicable SSC limits for each component, which is 80 GWh/annum thermal energy savings (threshold as per clarification request SSC_233) for all ICS distributed under the CPA.	The criterion stipulated is in compliance with the standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4".

	crediting period of the CPA		
12.	Where applicable, the requirements for the debundling check, in case the CPAs belongs to small-scale or microscale project categories.	If each of the independent subsystems/measures included in the CPA of a PoA is no larger than 1% of the small-scale thresholds defined by the methodologies applied, then the is exempted from performing de-bundling check (EB 83, Annex 13) 1% of SSC limits correspond to energy savings of 1.8 GWh	The criterion stipulated is in compliance with the standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4".
13.	Approval of CPA by CME	The CME approves each CPA to be included into its registered PoA.	The criterion stipulated is in compliance with the standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4".
14.	CER ownership	End users receiving ICSs under the specific CPA contractually cede their rights to claim and own emission reductions under the Clean Development Mechanism of the UNFCCC to the CME of the PoA.	The criterion stipulated is in compliance with the standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4".
15.	Awareness and agreement of those operating a CPA on PoA subscription	Contractual provisions to ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA.	The criterion stipulated is in compliance with the standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4".

B.5. Estimation of emission reductions or net GHG removals by sinks of the generic CPA

B.5.1. Explanation of methodological choices

Means of validation	The parameters and equations presented in the CPA-DD& Spread sheet have been compared with the information and requirements presented in the PoA-DD, CPA-DD and the methodology. An equation comparison has been made to ensure consistency between all the formulae presented in the PoA-DD, CPA-DD, Spread sheets and methodology. The CPA-DD has to confirm to meet the procedures provided in the methodology and PoA-DD.
Findings	No Finding has been raised.
Conclusion	The assessment team confirms that (a) The baseline methodology and corresponding tool(s) have been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions; (b) All estimates of the baseline emissions can be replicated using the data and parameter values provided in the generic CPA DD.

B.5.2. Data and parameters fixed ex ante

Means of validation	The parameters that are determined ex-ante are: 1. $B_{old,i,j}$ - Annual quantity of woody biomass that would have been used in the
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	<p>absence of the project activity to generate useful thermal energy equivalent to that provided by the project device type i and batch j.</p> <ol style="list-style-type: none"> 2. $B_{old,C,p}$- Annual quantity of charcoal 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. η_{old}- Efficiency of the system being replaced (Traditional Cooking Stoves) 5. f_{NRB} – Fraction of biomass used in the absence of the project activity in year y that can be established as non-renewable biomass using nationally approved methods. 6. $NCV_{Biomass}$ - Net calorific value of the non-renewable biomass that is substituted. 7. $EF_{Projected Fossil Fuel}$ – Emission factor for the substitution of non-renewable woody biomass by similar consumers 8. Life span - The operating life time of the project device. 9. μ_y - Number of days of utilization of the ICS during the year 'y'.. 10. Ly - Net to gross adjustment factor to account for leakages . Project Participants have opted to use the default factor of 0.95 to account for any potential leakage, as prescribed by the methodology
Findings	Nil
Conclusion	<p>The assessment team confirms that</p> <p>(a) All assumptions and data used by the project participants are listed in the generic CPA DD, including their references and sources;</p> <p>(b) All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the generic CPA DD;</p> <p>(c) All values used in the generic CPA DD are considered reasonable in the context of the proposed CPA.</p>

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

Means of validation	Parameter	Value	Unit	Source/Justification
	$B_{old,i,j}$	To be included for each CPA	Tonnes/year	Historical data or survey of local usage will be conducted for each target consumer group included in a given CPA
	$B_{old,p}$	To be included for each CPA	Tonnes/person/year	Historical data or survey of local usage will be conducted for each target consumer group included in a given CPA
	$N_{p,HH}$	6.05	Number	Established ex-ante based on literature and/or field survey by a dedicated expert team.
	η_{old}	10	%	As per methodology AMSIIG, version 08.
	f_{NRB}	To be included for each CPA	%	Sub national survey report conducted by third party expert
	$NCV_{Biomass}$	0.015	TJ/tonne	Default value as per applied methodology AMS II.G version 08
	$EF_{projected_fossilfuel}$	81.6	tCO ₂ /TJ	Emission factor for the substitution of non-renewable woody biomass by similar consumers
	Ly	0.95	Fraction	Default value, AMS-IIG
	Life span	To be included for each CPA	ICS appliances	The value will taken from third party test report conducted for specific ICS type and will be fixed ex-ante. The loss in

				efficiency should be applied as default value 2% per year as per para 25 a) of AMS II.G version-08.
	μ_y	365	Number of days of utilization of the ICS during the year 'y'.	μ_y is set to 365, following the final response of the SSC-WG on request 713, stating that it may be set to 1 (365/365) if the number of days for which project stoves operation does not face any constraint. In the case where the efficient project stove was operated only for a part of the year due to logistics of the stove distribution during the initial phase of the project implementation, as also mentioned in final response of the SSC- WG on request 713.
Findings	Nil			
Conclusion	The assessment team confirms that all estimates of the baseline emissions, project emissions and Leakage emissions can be replicated using the data and parameter values provided in the generic CPA DD.			

B.6. Application of the monitoring methodology and description of the monitoring plan

Means of validation	<p>The operational and management structure has been clearly described in Section C under "Management System" of the PoA DD and B.7.2 of the generic CPA within the PoA DD and is in compliance with the envisioned situation. The responsibilities, roles and institutional arrangements for data capturing and archiving has been mentioned elaborately and found acceptable. The information provided in the PoA DD has been found in compliance during the site visit, while interviewing with the concerned people and the same was re-affirmed through the documentary evidence.</p> <p>The monitoring plan described in the CPA DD is in compliance with the applied methodology and PoA DD. The assessment team has reviewed all the parameters in the monitoring plan against the requirements of the applied methodology and confirmed that no deviation was observed. The procedures have been reviewed by the assessment team through document review and interviews with the respective department's personnel. The information provided has allowed the assessment team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the CME. Specifically, these points include the monitoring methodology, data management, and the quality assurance and quality control procedures to be implemented in the context of the project. Therefore, the CME will be able to implement the monitoring plan and the achieved emission reductions can be reported ex-post and verified.</p>
Findings	Nil
Conclusion	<p>The validation team confirms that:</p> <ol style="list-style-type: none"> all the values used from official sources and the authenticity of sources has been verified by the validation team and confirms that all relevant parameters to calculate the GHG emissions reductions of the project have been sufficiently considered and the value of the ex-ante fixed parameter used for emission reduction calculation has been determined conservatively and the estimation of ex-post parameters are reasonable. The validation team considers that the monitoring plan has complied with the requirements in the approved methodology. The monitoring plan based on the approved monitoring methodology, is included in the PoA-DD and is correctly applied to the CDM PoA. The monitoring plan has been found to be in compliance with the requirements of the applied methodology. The monitoring plan will give opportunity for real measurements of achieved emission reductions.

	<p>c) The validation team considers that monitoring arrangements described in the monitoring plan is feasible within the project design and the PP will be capable to implement the monitoring plan.</p> <p>d) The DOE by assessing EB86, Annex 04 (Guidelines for sampling and surveys for CDM project activities and programme of activities) and EB86, Annex 3 (Standard: Sampling and surveys for CDM project activities and programme of activities) confirms that the sampling plan is appropriate and plausible and is following the applicable requirements.</p> <p>e) Sampling objective, sampling size, sampling target, sampling frame, sampling method, field measurements, QA/QC procedures and implementation plan are deemed to be appropriate and plausible according to the sectoral expertise of the DOE and have been further confirmed and substantiated in on-site interviews with the CME.</p>
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B.6.1. Data and parameters to be monitored by the generic CPA

Means of validation	The parameters that are to be monitored ex-post are:		
	Parameter	Unit	Description and Source/Justification
	$N_{y,i,j}$	Number of project devices of type <i>i</i> and batch <i>j</i> operating during year <i>y</i>	Stove sales database and Survey records
	$\eta_{new,c,i,j}$	Efficiency of the device of each type <i>i</i> and batch <i>j</i> implemented as part of the project activity	Water Boiling Test report conducted by an independent third party during the annual ICS users' survey..
	Date of commissioning of batch <i>j</i>	date	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
	$N_{d,HH}$	Number	Number of project devices distributed per household
	<p><u>Sampling</u> The PoA-DD indicates a sampling plan as per the recommendation outlined in section 6 of EB 86, Annex 03 and contains amongst others information related to sampling design, data to be collected and implementation plan.</p> <p>Assessment team confirms that the sampling method (simple random sampling) is clearly described and is in line with the description of the population. The sampling plan transparently describes how the samples are selected and that the use of random number generators ensures a random selection.</p>		
Findings	No finding has been raised.		
Conclusion	<p>Assessment team confirms that -</p> <p>a) The parameters determined ex-post have been presented correctly according to the requirements in accordance with the applied methodology.</p> <p>b) The Assessment team by assessing Guidelines for sampling and surveys for CDM project activities and programme of activities and Standard: Sampling and surveys for CDM project activities and programme of activities confirms that the sampling plan is appropriate and plausible and is following the applicable requirements. The Assessment team used amongst others the recommended evaluation criteria indicated in section 8 of EB86, Annex 04 for the validation of the sampling plan. The Assessment team confirms that the evaluation criteria as per Section 8 of Guidelines for sampling and surveys for CDM project</p>		

	<p>activities and programme of activities/21/ can be satisfactorily responded when assessing the sampling plan.</p> <p>c) Sampling objective, sampling size, sampling target, sampling frame, sampling method, field measurements, QA/QC procedures and implementation plan are deemed to be appropriate and plausible according to the sectoral expertise of the DOE and have been further confirmed and substantiated in on-site interviews with the CPA Implementers.</p>
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B.6.2. Description of the monitoring plan for the generic CPA

Means of validation	<p>The monitoring plan described in the generic CPA DD is in compliance with the applied methodology. The assessment team has reviewed all the parameters in the monitoring plan against the requirements of the applied methodology and confirmed that no deviation was observed. The procedures have been reviewed by the assessment team through document review and interviews with the respective department's personnel. The information provided has allowed the assessment team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the CME and CPA implementer. Specifically, these points include the monitoring methodology, data management, and the quality assurance and quality control procedures to be implemented in the context of the project. Therefore, the CME will be able to implement the monitoring plan and the achieved emission reductions can be reported ex-post and verified.</p> <p><u>Quality Assurance/Quality Control</u></p> <p>The CME will ensure that field personnel have reviewed, understood and have agreed to follow the monitoring plan procedures, including provisions for maximizing response rates, documenting out of- population cases, refusals and other sources of non-response. A quality control and assurance strategy will be documented. Quality control and assurance strategies include addressing non-sampling errors, such as non-response or bias from interviewer. The CME or a competent third party designated by the CME with the proper skills will train the monitoring personnel on how to properly survey end users to prevent bias from interviewer. In the case an end user refuses to participate, another user will be chosen at random. To reduce interviewer bias, good questionnaire design and well-tested questionnaires will be used.</p> <p><u>Data archiving and Analysis</u></p> <p>Data will be kept in electronic storage (mobile phone based data collection) locally and the database will have a back-up in the cloud. Original stove purchase contracts, information collected from the Registration Card or other means of acceptance by the users will be stored in the CME's main office. A back-up of the project database will also be stored on an electronic medium by the CME.</p> <p><u>Implementation plan</u></p> <p>Sampling of the aforementioned parameters, emission reduction calculation and elaboration of the monitoring report will occur at the end of each monitoring period. The maximum length of one monitoring period will be two years (duration, not calendar years), as AMS-II.G., version 8, provides the option for annual or biennial monitoring.</p> <p>The criteria in 'Guidelines for sampling and surveys for CDM project activities and programme of activities, paragraph 40 (a), (f) and (g) have been evaluated and the DOE confirms that sufficient provisions are established in order to obtain unbiased, reliable estimates of the variables during data collection/measurement and in order to minimize non-sampling errors. The objective and reliability requirements are complete and are in line with Standard for sampling and surveys for CDM project activities and PoAs and the applied methodology AMS-II.G, version 08 and there is no reason to suspect that the sampling results from the activity will be biased. Mechanisms will be established in order to avoid bias in the answers. Personnel to be engaged to conduct sampling will be adequately trained and qualified and the</p>
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	credentials and/or training materials for the sampling personnel can be checked by the verifying DOE at verification stage. Thus, it will be ensured that the evaluation criterion in Guidelines for sampling and surveys for CDM project activities and programme of activities will be complied with. Adequate archiving of the sampling documents will be guaranteed by the CME
Findings	No Findings has been raised.
Conclusion	<p>The assessment team confirms that:</p> <ol style="list-style-type: none"> The monitoring plan based on the approved monitoring methodology, AMS-II.G., Version 08 is included in the PoA-DD and generic CPA DD. The monitoring plan has been found to be in compliance with the requirements of the applied methodology. The monitoring plan will give opportunity for real measurements of achieved emission reductions. The assessment team considers that monitoring arrangements described in the monitoring plan is feasible within the project design and the PP will be capable to implement the monitoring plan. The assessment team by assessing Guidelines for sampling and surveys for CDM project activities and programme of activities and Standard: Sampling and surveys for CDM project activities and programme of activities confirms that the sampling plan is appropriate and plausible and is following the applicable requirements. The DOE used amongst others the recommended evaluation criteria indicated in section 8 of EB86, Annex 04 for the validation of the sampling plan. The DOE confirms that the evaluation criteria as per Section 8 of EB86, Annex 04 can be satisfactorily responded when assessing the sampling plan.

PART III. Generic component project activity(ies) (For Charcol based ICS)

SECTION A. General description of generic CPA

Means of validation	The validation team validated that the project design document is based on the currently valid CDM-SSC-PoA-DD template, version 5 and is correctly applied in accordance with the guidelines given in the form.		
	Key revisions between the first PoA DD against the final version PoA DD		
	POA DD Section no.	Brief description of the changes	Relevant Findings
	A.1	General description is elaborated.	CAR#07
	E.2	The reference of local regulation for the exemption of EIA is included.	CAR#06
Findings	Nil		
Conclusion	The validation team confirms that the proposed project activity meets the requirement of § 69 of VVS V9 and the PoA DD is completed using the latest version of the PDD form appropriate to the type of project activity.		

SECTION B. Application of a baseline and monitoring methodology and standardized baseline

B.1. Applicability of selected methodology(ies) and/or standardized baseline

Means of validation	Applicability criteria for the applied methodology in the PoA-DD against these criteria are assessed by the validation team by means of document review and interviews. Thus, the validation team confirms that the PoA participant has correctly applied the approved methodology for the proposed PoA and that the selected version of the methodology is valid at the time of submission of the proposed project activity for registration.
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	Small scale CPA applies following methodology and tools: Methodology: AMS-II.G. "Energy Efficiency Measures in Thermal Applications of Non-Renewable Biomass", Version 08.0, is correctly mentioned in the relevant section of generic CPA DD. CME has correctly referred the latest version of methodology.
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B.1.1. Deviation from methodology

Means of validation	No deviation is applied/sought.
Findings	Nil
Conclusion	NA

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

Means of validation	No clarification sought/applied.
Findings	Nil
Conclusion	NA

B.2. Sources and GHGs

Means of validation	The validation team was able to confirm that all the identified emission sources which are impacted by the project activity are addressed by the approved methodology /B02/ and can be seen in the table below.					
		Source	Gas	Included in SSC-CPA	Explanation	
	Baseline	The combustion of non-renewable biomass for cooking; Emission Factor for the combustion of fossil fuels for cooking	CO ₂	Yes	Major source of emissions from traditional cook stoves	
			CH ₄	No	Negligible source of emissions and therefore excluded.	
			N ₂ O	No	Negligible source of emissions and therefore excluded.	
	Project Activity	Combustion of non-renewable biomass for cooking, Emission Factor	CO ₂	Yes	Source of emissions	
			CH ₄	No	Negligible source of emissions and therefore excluded.	
			N ₂ O	No	Negligible source of emissions and therefore excluded.	
	Leakage	CO ₂ emissions from consumption of non-renewable woody biomass saved by project activity by non-project households who previously used renewable energy sources	CO ₂	Yes	Source of emissions. in accordance with AMS-IIG (version 8.0)	
			CH ₄	No	Negligible source of emissions and therefore excluded.	
			N ₂ O	No	Negligible source of emissions and therefore excluded.	
	Findings	NA				
	Conclusion	The GHG emission reduction occurring within the project boundary is CO ₂ and no other gases are involved during the project activity. The same has been verified during the course of validation. This has been validated in accordance with VVS V9.				

B.3. Description of baseline scenario

Means of validation	<p>The assessment team has performed the following steps to assess the requirements for baseline identification:</p> <ul style="list-style-type: none"> • Initial desk review • Site visit • Background information/ knowledge from similar projects and/ or technologies • Baseline fuel (charcoal and woody biomass) survey report <p>The baseline scenario is substantiated by the baseline fuel use surveys and additional documents mentioned in the following which all of them were verified by the validation team</p>
Findings	CL#06 was raised and closed satisfactorily.
Conclusion	<p>KBS confirms the following statements:</p> <ol style="list-style-type: none"> a) All the assumptions and data used by the project participants are listed in the PoA-DD, including their references and sources; b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PoA-DD; c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence, and can be deemed reasonable; d) Relevant national and/or sectoral policies and circumstances are considered and listed in the PoA-DD and CPA-DD; e) The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario, and the identified baseline scenario reasonably represents what would occur in the absence of the proposed CDM PoA. f) The PoA-DD provides a description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed project activity.

B.4. Demonstration of eligibility for a generic CPA

No.	Eligibility criteria for the generic CPA	Means for assessment of inclusion of CPA	Means of validation/Findings/Conclusion
1.	The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA	The PoA boundary corresponds to the boundaries of host country Madagascar. All distributed ICS in each CPA shall be located within geographical boundary of Madagascar.	The project boundary was validated by conducting the site visit and it was confirmed by the CME during the onsite interview that the CPAs will be distributed within the country.
2.	Conditions that avoid double counting of emission reductions like unique identification of product and end-user locations	A unique numbering system for ICS will be applied in each CPA, assigning a unique number to each ICS and allowing to clearly identify for each ICS to which CPA it belongs.	The unique numbering will be provided by the CME and the same would be recorded in the documentation of CME. Validation team visited the households where the ICS were distributed and found that each ICS is included a unique numbering plate and it is recorded in the agreement signed between the CME and end user and also recorded in the database of CME.
3.	The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications	CPAs under this PoA will consist in the distribution of ICS with a thermal efficiency of at least 20% to household users cooking with charcoal in the baseline scenario. The CPA consists of replacement of conventional charcoal cook-stoves for charcoal fired ICS as defined in the PoA-DD. However as charcoal is mainly produced in host country from non-renewable biomass, hence will lead in saving of NRB. Stove types replaced and implemented will be defined in the CPA-DD, and hence appliances involving the efficiency improvements in the thermal applications of non-renewable biomass as per AMS II. G.	The thermal efficiency of the ICS distributed in each CPAs will have efficiency of more than 20% in compliance with the applied methodology. Validation team reviewed the efficiency test conducted by the third party national lab/9/10/ and found that the efficiency for the ICSs pertaining to the CPAs were higher than 20% threshold/9/10/.
4.	Conditions to check the start date of the CPA through documentary evidence	Any CPA start date shall not be before the PoA starting date i.e. date when PoA DD is published for Global Stakeholder Comments on UNFCCC.	The CPA start date shall be after the start date of PoA i.e. 17/11/2016. Validation team reviewed the start date of CPA included with the PoA validation and found them in compliance with the eligibility criteria stipulated in the PoA DD.

5.	Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs	All CPA shall consist distribution of ICSs with efficiency improvements in thermal applications of non-renewable biomass; ICS shall have a thermal efficiency of at least 20%.	The criteria is in line with the requirement of applied methodology and standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4".
6.	The conditions that ensure that the CPA meets the requirements pertaining to the demonstration of additionality	The additionality of the project activity is demonstrated by a barrier analysis that is in line with para 11 c) of EB 83, Annex 14, "Demonstration of additionality of small-scale project activities" (version 10)	The additionality of the CPAs will be demonstrated in line barrier analysis that is in line with para 11 c) of EB 83, Annex 14, "Demonstration of additionality of small-scale project activities" (version 10). The criterion stipulated is in compliance with the standard "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4".
7.	The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis	The local stakeholder consultation will be conducted at the PoA level (Section F of the PoA-DD). Each CPA will be implemented in similar social economic situations. The key stakeholders of the program both at PoA and CPA level are the same. An environmental impact analysis is not required (section E.2 of the PoA-DD). No further actions needed at the CPA level to satisfy the eligibility criteria.	<p>The proof of local stakeholder meeting conducted at PoA level has been confirmed from the following documents:</p> <ul style="list-style-type: none"> • Invitation letters to stakeholders via email / hand delivery/news paper publication • Minutes of stakeholder consultation meeting • Photographs of the meeting • List of stakeholders attending the meeting <p>The EIA is not required to the PoA as confirmed by the local expert during the site visit. The same was also verified by Decree no.99-954 Compatibility of investments with the environment (MECIE) : (available online by taping on google: "Decret MECIE Madagascar").</p>
8.	Conditions to provide an affirmation that funding from Annex I Parties, if any, does not result in a diversion of official development assistance	The CME and the CPA operator (in case of being different from the CME) shall confirm that in case of public funding, there is no diversion of Official Development Assistance.	The validation team has checked the letter to confirm no ODA funding and participation in other GHG schemes by 'Tandavanala' to confirm that no ODA or public funding will be used by the CPA implementer. Thus the validation team deems the applicability condition is appropriate.
9.	Where applicable, target group (e.g. domestic/commercial/industry I, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation)	Distribution mechanisms have been specified in the PoA-DD by means of the "General operating and implementing framework of PoA" at the PoA level. The distribution mechanism is the direct	The distribution mechanism is appropriately defined in the PoA DD and it is categorically mentioned that the distribution mechanism is the direct distribution of ICS through the CME or regional partners. This was further confirmed during the site visit by the

		distribution of ICS through the CME or regional partners.	validation team by reviewing the data base maintained by the CME.
10.	Where applicable, the conditions related to sampling requirements for the PoA in accordance with the “Standard for sampling and surveys for CDM project activities and programme of activities”	Monitoring of all CPAs will adhere to all requirements related to sampling for a PoA in accordance with the sampling standard including all annexes and amendments till EB 86 Annex 03.	The criterion stipulated is in compliance with the standard “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4”.
11.	Where applicable, the conditions that ensure that every CPA (in aggregate if it comprises of independent sub units) meets the small-scale or microscale threshold and remains within those thresholds throughout the crediting period of the CPA	The CPA shall remain under the applicable SSC limits for each component, which is 80 GWh/annum thermal energy savings (threshold as per clarification request SSC_233) for all ICS distributed under the CPA.	The criterion stipulated is in compliance with the standard “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4”.
12.	Where applicable, the requirements for the debundling check, in case the CPAs belongs to small-scale or microscale project categories.	If each of the independent subsystems/measures included in the CPA of a PoA is no larger than 1% of the small-scale thresholds defined by the methodologies applied, then the is exempted from performing de-bundling check (EB 83, Annex 13) 1% of SSC limits correspond to energy savings of 1.8 GWh	The criterion stipulated is in compliance with the standard “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4”.
13.	Approval of CPA by CME	The CME approves each CPA to be included into its registered PoA.	The criterion stipulated is in compliance with the standard “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4”.
14.	CER ownership	End users receiving ICSs under the specific CPA contractually cede their rights to claim and own emission reductions under the Clean Development Mechanism of the UNFCCC to the CME of the PoA.	The criterion stipulated is in compliance with the standard “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4”.
15.	Awareness and agreement of those operating a CPA on PoA subscription	Contractual provisions to ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA.	The criterion stipulated is in compliance with the standard “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 4”.

B.5. Estimation of emission reductions or net GHG removals by sinks of the generic CPA

B.5.1. Explanation of methodological choices

Means of validation	The parameters and equations presented in the CPA-DD& Spread sheet have been compared with the information and requirements presented in the PoA-DD, CPA-DD and the methodology. An equation comparison has been made to ensure consistency between all the formulae presented in the PoA-DD, CPA-DD, Spread sheets and methodology. The CPA-DD has to confirm to meet the procedures provided in the methodology and PoA-DD.
Findings	No Finding has been raised.
Conclusion	The assessment team confirms that (a) The baseline methodology and corresponding tool(s) have been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions; (b) All estimates of the baseline emissions can be replicated using the data and parameter values provided in the generic CPA DD.

B.5.2. Data and parameters fixed ex ante

Means of validation	<p>The parameters that are determined ex-ante are:</p> <ol style="list-style-type: none"> 1. 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. 2. B_{old,C,p}- Annual quantity of charcol 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. η_{old}- Efficiency of the system being replaced (Traditional Cooking Stoves) 5. f_{NRB} – Fraction of biomass used in the absence of the project activity in year y that can be established as non-renewable biomass using nationally approved methods. 6. NCV_{Biomass} - Net calorific value of the non-renewable biomass that is substituted. 7. EF_{Projected Fossil Fuel}– Emission factor for the substitution of non-renewable woody biomass by similar consumers 8. Life span - The operating life time of the project device. 9. μ_y - Number of days of utilization of the ICS during the year 'y'.. 10. Ly - Net to gross adjustment factor to account for leakages . Project Participants have opted to use the default factor of 0.95 to account for any potential leakage, as prescribed by the methodology
Findings	Nil
Conclusion	<p>The assessment team confirms that</p> <p>(a) All assumptions and data used by the project participants are listed in the generic CPA DD, including their references and sources;</p> <p>(b) All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the generic CPA DD;</p> <p>(c) All values used in the generic CPA DD are considered reasonable in the context of the proposed CPA.</p>

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

Means of validation	Parameter	Value	Unit	Source/Justification
	$B_{old,i,j}$	To be included for each CPA	Tonnes/year	Historical data or survey of local usage will be conducted for each target consumer group included in a given CPA
	$B_{old,p}$	To be included for each CPA	Tonnes/person/year	Historical data or survey of local usage will be conducted for each target consumer group included in a given CPA
	$N_{P,HH}$	0.015	Number	Established ex-ante based on literature and/or field survey by a dedicated expert team.
	η_{old}	20	%	Third party test report submitted by 'National Industrial and Technological Research Centre' under Ministry of 'Higher Education and Scientific Research'. The report measured the efficiency of baseline stove as 19.89% however CME has considered 20% being on conservative.
	f_{NRB}	To be included for each CPA	%	Sub national survey report conducted by third party expert
	$NCV_{Biomass}$	0.015	TJ/tonne	Default value as per applied methodology AMS II.G version 08
	$EF_{projected_fossilfuel}$	81.6	tCO ₂ /TJ	Emission factor for the substitution of non-renewable woody biomass by similar consumers
	Ly	0.95	Fraction	Default value, AMS-IIG
	Life span	To be included for each CPA	ICS appliances	The value will taken from third party test report conducted for specific ICS type and will be fixed ex-ante. The loss in efficiency should be applied as default value 2% per year as per para 25 a) of AMS II.G version-08.

	μ_y	365	Number of days of utilization of the ICS during the year 'y'.	μ_y is set to 365, following the final response of the SSC-WG on request 713, stating that it may be set to 1 (365/365) if the number of days for which project stoves operation does not face any constraint. In the case where the efficient project stove was operated only for a part of the year due to logistics of the stove distribution during the initial phase of the project implementation, as also mentioned in final response of the SSC- WG on request 713
Findings	Nil			
Conclusion	The assessment team confirms that all estimates of the baseline emissions, project emissions and Leakage emissions can be replicated using the data and parameter values provided in the generic CPA DD..			

B.6. Application of the monitoring methodology and description of the monitoring plan

Means of validation	<p>The operational and management structure has been clearly described in Section C under "Management System" of the PoA DD and B.7.2 of the generic CPA within the PoA DD and is in compliance with the envisioned situation. The responsibilities, roles and institutional arrangements for data capturing and archiving has been mentioned elaborately and found acceptable. The information provided in the PoA DD has been found in compliance during the site visit, while interviewing with the concerned people and the same was re-affirmed through the documentary evidence.</p> <p>The monitoring plan described in the generic CPA DD is in compliance with the applied methodology. The assessment team has reviewed all the parameters in the monitoring plan against the requirements of the applied methodology and confirmed that no deviation was observed. The procedures have been reviewed by the assessment team through document review and interviews with the respective department's personnel. The information provided has allowed the assessment team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the CME. Specifically, these points include the monitoring methodology, data management, and the quality assurance and quality control procedures to be implemented in the context of the project. Therefore, the CME will be able to implement the monitoring plan and the achieved emission reductions can be reported ex-post and verified.</p>
Findings	Nil
Conclusion	<p>The validation team confirms that:</p> <ol style="list-style-type: none"> all the values used from official sources and the authenticity of sources has been verified by the validation team and confirms that all relevant parameters to calculate the GHG emissions reductions of the project have been sufficiently considered and the value of the ex-ante fixed parameter used for emission reduction calculation has been determined conservatively and the estimation of ex-post parameters are reasonable. The validation team considers that the monitoring plan has complied with the requirements in the approved methodology. The monitoring plan based on the approved monitoring methodology, is included in the PoA-DD and is correctly applied to the CDM PoA. The monitoring plan has been found to be in compliance with the requirements of the applied methodology. The monitoring plan will give opportunity for real measurements of achieved emission reductions. The validation team considers that monitoring arrangements described in the monitoring plan is feasible within the project design and the PP will be capable

	<p>to implement the monitoring plan.</p> <p>d) The DOE by assessing EB86, Annex 04 (Guidelines for sampling and surveys for CDM project activities and programme of activities) and EB86, Annex 3 (Standard: Sampling and surveys for CDM project activities and programme of activities) confirms that the sampling plan is appropriate and plausible and is following the applicable requirements.</p> <p>Sampling objective, sampling size, sampling target, sampling frame, sampling method, field measurements, QA/QC procedures and implementation plan are deemed to be appropriate and plausible according to the sectoral expertise of the DOE and have been further confirmed and substantiated in on-site interviews with the CME.</p>
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B.6.1. Data and parameters to be monitored by the generic CPA

Means of validation	The parameters that are to be monitored ex-post are:		
	Parameter	Unit	Description and Source/Justification
	$N_{y,i,j}$	Number of project devices of type <i>i</i> and batch <i>j</i> operating during year <i>y</i>	Stove sales database and Survey records
	$\eta_{new,c,i,j}$	Efficiency of the device of each type <i>i</i> and batch <i>j</i> implemented as part of the project activity	Water Boiling Test report conducted by an independent third party during the annual ICS users' survey
	Date of commissioning of batch <i>j</i>	date	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
	$N_{d,HH}$	Number	Number of project devices distributed per household
	<p>Sampling</p> <p>The CPA-DD indicates a sampling plan as per the recommendation outlined in section 6 of EB 86, Annex 03 and contains amongst others information related to sampling design, data to be collected and implementation plan.</p> <p>Assessment team confirms that the sampling method (simple random sampling) is clearly described and is in line with the description of the population. The sampling plan transparently describes how the samples are selected and that the use of random number generators ensures a random selection.</p> <p>The sampling plan applied for the CPA is in line with the registered PoA-DD and generic CPA-DDs.</p>		
Findings	No finding has been raised.		
Conclusion	<p>Assessment team confirms that -</p> <p>d) The parameters determined ex-post have been presented correctly according to the requirements in accordance with the applied methodology.</p> <p>e) The Assessment team by assessing Guidelines for sampling and surveys for CDM project activities and programme of activities and Standard: Sampling and surveys for CDM project activities and programme of activities confirms that the sampling plan is appropriate and plausible and is following the applicable requirements. The Assessment team used amongst others the recommended evaluation criteria indicated in section 8 of EB86, Annex 03 for the validation of the sampling plan. The Assessment team confirms that the evaluation criteria</p>		

	<p>as per Section 8 of Guidelines for sampling and surveys for CDM project activities and programme of activities^{/24/} can be satisfactorily responded when assessing the sampling plan.</p> <p>f) Sampling objective, sampling size, sampling target, sampling frame, sampling method, field measurements, QA/QC procedures and implementation plan are deemed to be appropriate and plausible according to the sectoral expertise of the DOE and have been further confirmed and substantiated in on-site interviews with the CPA Implementers.</p>
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B.6.2. Description of the monitoring plan for the generic CPA

Means of validation	<p>The monitoring plan described in the generic CPA DD is in compliance with the applied methodology. The assessment team has reviewed all the parameters in the monitoring plan against the requirements of the applied methodology and confirmed that no deviation was observed. The procedures have been reviewed by the assessment team through document review and interviews with the respective department's personnel. The information provided has allowed the assessment team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the CME and CPA implementer. Specifically, these points include the monitoring methodology, data management, and the quality assurance and quality control procedures to be implemented in the context of the project. Therefore, the CME will be able to implement the monitoring plan and the achieved emission reductions can be reported ex-post and verified.</p> <p><u>Quality Assurance/Quality Control</u></p> <p>The CME will ensure that field personnel have reviewed, understood and have agreed to follow the monitoring plan procedures, including provisions for maximizing response rates, documenting out-of-population cases, refusals and other sources of non-response. A quality control and assurance strategy will be documented. Quality control and assurance strategies include addressing non-sampling errors, such as non-response or bias from interviewer. The CME or a competent third party designated by the CME with the proper skills will train the monitoring personnel on how to properly survey end users to prevent bias from interviewer. In the case an end user refuses to participate, another user will be chosen at random. To reduce interviewer bias, good questionnaire design and well-tested questionnaires will be used.</p> <p><u>Data archiving and Analysis</u></p> <p>Data will be kept in electronic storage (mobile phone based data collection) locally and the database will have a back-up in the cloud. Original stove purchase contracts, information collected from the Registration Card or other means of acceptance by the users will be stored in the CME's main office. A back-up of the project database will also be stored on an electronic medium by the CME.</p> <p><u>Implementation plan</u></p> <p>Sampling of the aforementioned parameters, emission reduction calculation and elaboration of the monitoring report will occur at the end of each monitoring period. The maximum length of one monitoring period will be two years (duration, not calendar years), as AMS-II.G., version 8, provides the option for annual or biennial monitoring.</p> <p>The criteria in 'Guidelines for sampling and surveys for CDM project activities and programme of activities', paragraph 41 (a), (f) and (g) have been evaluated and the DOE confirms that sufficient provisions are established in order to obtain unbiased, reliable estimates of the variables during data collection/measurement and in order to minimize non-sampling errors. The objective and reliability requirements are complete and are in line with Standard for sampling and surveys for CDM project activities and PoAs and the applied methodology AMS-II.G, version 08 and there is no reason to suspect that the sampling results from the activity will be biased. Mechanisms will be established in order to avoid bias in the answers. Personnel to</p>
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	be engaged to conduct sampling will be adequately trained and qualified and the credentials and/or training materials for the sampling personnel can be checked by the verifying DOE at verification stage. Thus, it will be ensured that the evaluation criterion in Guidelines for sampling and surveys for CDM project activities and programme of activities will be complied with. Adequate archiving of the sampling documents will be guaranteed by the CME.
Findings	No Findings has been raised.
Conclusion	<p>The assessment team confirms that:</p> <ul style="list-style-type: none"> a) The monitoring plan based on the approved monitoring methodology, AMS-II.G., Version 08 is included in the PoA-DD and generic CPA DD. The monitoring plan has been found to be in compliance with the requirements of the applied methodology. The monitoring plan will give opportunity for real measurements of achieved emission reductions. b) The assessment team considers that monitoring arrangements described in the monitoring plan is feasible within the project design and the PP will be capable to implement the monitoring plan. c) The assessment team by assessing Guidelines for sampling and surveys for CDM project activities and programme of activities and Standard: Sampling and surveys for CDM project activities and programme of activities confirms that the sampling plan is appropriate and plausible and is following the applicable requirements. The DOE used amongst others the recommended evaluation criteria indicated in section 8 of EB86, Annex 04 for the validation of the sampling plan. The DOE confirms that the evaluation criteria as per Section 8 of EB86, Annex 04 can be satisfactorily responded when assessing the sampling plan.

Appendix 1. Abbreviations

Abbreviations	Full Texts
AMS	Approved Methodology for Small-scale
BE	Baseline Emissions
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CHAPOSA	Charcoal Potential for Southern Africa
CL	Clarification request
COP	Conference of Parties
CPA	Component Project Activity
CME	Coordinating/Managing Entity
DD	Design Document
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
DRB	Demonstrably renewable woody biomass
EB	Executive Board
EF	Emission Factor
EIA	Environmental Impact Assessment
ERs	Emission Reductions
FAR	Forward Action Request
FSR	Feasibility Study Report
GERES	Group for the Environment, Renewable Energy and Solidarity
GHG	Greenhouse gas(es)
GSC	Global Stakeholder Consultation
HCA	Host Country Approval
ICS	Improved Cook Stove
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
LSC	Local Stakeholder Consultation
LE	Leakage Emissions
LoA	Letter of Approval/Authorization
LPG	Liquefied Petroleum Gas
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
MOP	Meeting of Parties
MoC	Modalities of Communication
MoV	Means of Verification
MP	Monitoring Plan
MW	Mega Watt
NCV	Net Calorific Value
NGO	Non-Governmental Organisation
NRB	Non-renewable Woody Biomass
ODA	Official Development Assistance
ODK	Open Data Kit
PoA	Programme of Activities
PE	PoA Emissions
PLF	Plant Load Factor
PO	Purchase Order
PPA	Power Purchase Agreement
PSU	Primary Sampling Units
QA/QC	Quality Assurance/Quality Control
RfR	Request for Registration
SD	Sustainable Development
SME	Small and Medium Enterprise
T&C	Technical & Certification

TJ	Tera Joule
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation & Verification Standard
WBT	Water Boiling Test

Appendix 2. Competence of team member and technical reviewer(s)

Personnel Name:		Sanjay Kandari	
Qualified to work as:			
Team Leader	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>
Validator/Verifier	<input checked="" type="checkbox"/>	Financial Expert	<input checked="" type="checkbox"/>
Technical Reviewer	<input checked="" type="checkbox"/>	Local Expert (India)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope	Technical Area		
Energy Industries (renewable/non-renewable sources)	TA 1.1: Thermal energy generation from fossil fuels and biomass including thermal electricity from solar		
Energy industries (renewable/non-renewable sources)	TA 1.2: Energy generation from renewable energy sources		
Energy demand	TA 3.1. Energy Demand		
Waste Handling and Disposal	TA 13.1 Waste Handling and Disposal TA 13.2 Manure		
Approved by (Manager C & T)	Akhilesh Joshi		
Approval date:	11/12/2015		

Personnel Name:		ANDRIANARIVELO Ny Aina	
Qualified to work as:			
Team Leader	<input type="checkbox"/>	Technical Expert	<input type="checkbox"/>
Validator/Verifier	<input type="checkbox"/>	Financial Expert	<input type="checkbox"/>
Technical Reviewer	<input type="checkbox"/>	Local Expert (Madagascar)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope	Technical Area		
NA	NA		
Approved by (Manager C & T)	Sanjay Kandari		
Approval date:	17/11/2016		

Personnel Name:		Chetan Swaroop Sharma	
Qualified to work as:			

Team Leader	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>
Validator/Verifier	<input checked="" type="checkbox"/>	Financial Expert	<input checked="" type="checkbox"/>
Technical Reviewer	<input checked="" type="checkbox"/>	Local Expert (India)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope	Technical Area		
Energy industries (renewable/non-renewable sources)	TA 1.2: Energy generation from renewable energy sources		
	TA 1.1: Thermal energy generation from fossil fuels and biomass including thermal electricity from solar		
Approved by (Manager C & T)	Gagandeep Kakkar		
Approval date:	09/10/2015		

Personnel Name:	M.P. Kanal		
Qualified to work as:			
Team Leader	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>
Validator/Verifier	<input checked="" type="checkbox"/>	Financial Expert	<input type="checkbox"/>
Technical Reviewer	<input checked="" type="checkbox"/>	Local Expert (India)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope	Technical Area		
Energy industries (renewable/non-renewable sources)	TA 1.2: Energy generation from renewable energy sources		
Energy demand	TA 3.1. Energy Demand		
Waste Handling and Disposal	TA 13.1 Waste Handling and Disposal		
Agriculture	TA 15.1 Agriculture		
Approved by (Manager C & T)	Gagandeep Kakkar		
Approval date:	03/11/2015		

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1.	Tandavanala	PoA DD [for global stakeholder commenting]	version 01 dated 14/11/2016	Tandavanala
2.	Tandavanala	PoA DD [Intermediate], PoA DD [Final],	version 02 – dated 07/01/2017 Version 03- dated 03/03/2017	Tandavanala
3.	a) Tandavanala and DNA of Madagascar b) Norwegian Ministry of Climate and Environment	a) Letter of Approval from Host country b) Letter of Approval from Annex 1 Country (Norway)	a) Letter No: 26-17/MEEF/SG/BNCCC/ AND Dated 30/01/2017 b) Ref. No 2013/3678 Dated 02/03/2017	Tandavanala
4.	Tandavanala & Norwegian	a) Modalities of Communication	02/03/2017	Tandavanala

	Ministry of Climate and Environment	Personal identity and employment status of the focal point (s) as mentioned in the MoC statement. b) Corporate identity card of Mr. Manantsoa		
5.	KBS	Validation contract in between KBS Certification Services Pvt. Ltd. and Tandavanala –	19/10/2016	KBS
6.	UNFCCC website	Proof of start date: a) PoA – Date of publication of PoA-DD for global stakeholder consultation dated 17/11/2016 b) CPA – Date of earliest real action for CPA after the start date of PoA	-	-
7.	Tandavanala	Spread sheets for Emission Reduction calculations and Grid Emission Factor <ul style="list-style-type: none"> Version 01 corresponding to webhosted version of PoA DD Version 02 corresponding to final version of PoA DD 	version 01 dated 14/11/2016 version 02 – dated 07/02/2017	Tandavanala
8.	Regional Centre of Documentation & Information in Fiananrantsoa	Baseline survey report	Dated November 2016	Tandavanala
9.	National Industrial and Technological Research Centre' under Ministry of 'Higher Education and Scientific Research'	Efficiency test report for woody biomass based ICS	Dated 14/11/2016	Tandavanala
10.	National Industrial and Technological Research Centre' under Ministry of 'Higher Education and Scientific Research'	<ul style="list-style-type: none"> Efficiency test report for 'Charcol' based ICS Efficiency test report of charcol based baseline stoves 	Dated 14/11/2016 Dated 07/11/2016	Tandavanala
11.	Tandavanala	Relevant proofs of local stakeholder consultation process e.g. press release, MoM, Photographs, attendance sheet etc.	Dated 31/10/2016	Tandavanala
12.	Tandavanala	<ul style="list-style-type: none"> Organizational chart showing 	-	Tandavanala

		operational and management structure of the proposed PoA <ul style="list-style-type: none"> • Sample agreement between CME and end users of cook stoves. 		
13.	Tandavanala	Technical specifications of the ICSSs	-	Tandavanala
14.	UNFCCC and DNA Emails	Prior consideration notification to DNA and UNFCCC	Dated 19/10/2016	Tandavanala
15.	UNFCCC	CDM VVS	Version 09	UNFCCC Website
16.	UNFCCC	CDM PS	Version 09	UNFCCC Website
17.	UNFCCC	CDM PCP	Version 09	UNFCCC Website
18.	UNFCCC	AMS II. G “Energy efficiency measures in thermal applications of non-renewable biomass”	Version 08	UNFCCC Website
19.	UNFCCC	Instruction to fill the PoA design document for small scale project activity	Version 05	UNFCCC Website
20.	UNFCCC	Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for program of activities	Version 04	UNFCCC Website
21.	UNFCCC	Guidance for sampling and surveys for CDM project activities and programmes of activities	Version 04	UNFCCC Website
22.	UNFCCC	Too for demonstration of additionality of small-scale project activities	Version 10	UNFCCC Website
23.	UNFCCC	Tool for assessment of de-bundling for SSC project activities	Version 04	UNFCCC Website
24.	UNFCCC	IPCC Guidelines for National Greenhouse Gas Inventories	2006	IPCC Website
25.	UNFCCC	Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities	Version 04	IPCC Website

26.	UNFCCC	Glossary of CDM terms		UNFCCC Website
27.	Ministry of Environment, Madagascar	Decree no.99-954 Compatibility of investments with the environment (MECIE) along with the letter to CME	-	CME

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

Table 1. CL from this validation CL from this validation

CL ID	01	Section no.	B.2	Date:	28/12/2016
Description of CL					
For the eligibility criteria no 2 mentioned in the section B.2 of submitted PoA DD:					
a) Submit the evidences of implementation of unique identification number for the already distributed ICS?					
b) How the CME will differentiate the each type of ICS distributed i.e. charcoal based and woody biomass? The provisions in this regard are not explicitly mentioned in the eligibility criteria.					
CME response					Date: 07/01/2017
a) The evidence of unique identification of individual ICS is attached herewith; please note these are randomly selected.					
b) The woody based improved cook stove and charcoal based improved cookstove as different numbering as mentioned below					
For example,					
16THW1-00001					
16THC2-00001					
16 : Year 2016					
THW : TsinjoHarena Wood					
THC : TsinjoHarena Charcoal					
1- : CPA 1					
2- : CPA2					
00001 : Number					
The same has been also corrected in revised PoA DD.					
Documentation provided by CME					
<i>PoA DD version-02</i>					
DOE assessment					Date: 21/01/2017
a) The evidences of few of the implemented/distributed ICS records are submitted by the CME and the same were also confirmed from the distributed ICS during the site visit by the validation team. The information provided therein is in accordance with the eligibility criteria stipulated in PoA DD, version 02. CL is closed.					
b) The revised PoA DD, version 02 is updated by the CME and the explicit differentiation criteria between the ICS distributed for each type of fuel i.e. charcoal and woody biomass is incorporated. CL is closed.					

CL ID	02	Section no.	B.2	Date:	28/12/2016
Description of CL					
For the eligibility criteria no 7 mentioned in the section B.2 of submitted PoA DD the evidence of LSC conducted at the PoA level are not submitted to validation team.					
CME response					Date: 07/01/2017
<i>The supportive for local stakeholder meeting is attached herewith.</i>					

Documentation provided by CME	
1. Minutes of Meeting 2. Attendance sheet 3. Stakeholder notice published in Newspaper 4. Photographs of LSC meeting	
DOE assessment	Date: 21/01/2017
The above referred documents submitted by the CME are verified to confirm the LSC meeting at POA level. Moreover some of the attendees of LSC meetings were interviewed during the site visit to confirm the information provided in the PoA DD. The LSC complies with the requirement of para 78 of PS, version 09 and other requirements of VVS version 09. CL is closed.	

CL#03	03	Section no.	B.1 (Section B)	Date: 28/12/2016
Description of CL				
a) For the criteria laid down to justify the applicability criteria 1 of the applied methodology is the recording of baseline stoves. Provide such records for already distributed ICS to validate the actual implementation. b) For the criteria laid down to justify the applicability criteria 2 of the applied methodology is the efficient test of ICS in third part labs. Provide the evidence for already implemented ICS?				
CME response				Date: 07/01/2017
a) The distribution record of woody biomass based ICS is attached herewith, however distribution of charcoal based ICS is yet to start same will be provided once started. b) The third party test report of both type of ICS i.e. woody biomass and charcoal based ICS is attached herewith.				
Documentation provided by CME				
<i>Efficiency test report</i>				
DOE assessment				Date: 21/01/2017
a) The sale record of distributed ICS is submitted as an evidence moreover the sales records were verified during the site visit at the office of CME and found to be in line with the information provided in PoA/CPA DD. b) The third party lab test reports conducted by the government agency i.e. "National Industrial and Technological Research Centre" under Ministry of 'Higher Education and Scientific Research' submitted to validation team. The submitted report describes the details methodology of 'Water boiling test' and the results. The results are as: <ul style="list-style-type: none"> For charcoal based ICS the average efficiency is 45% and lifetime 5.5 years. For woody biomass based ICS the average efficiency is 31.1% and lifetime 5.5 years. The detail validation approach is described in main section of validation report. CL is closed.				

CL ID	04	Section no.	A
Description of CL			
Submit the documents referred in the footnotes of the published PoA DD to validate the referred requirements in various section of PoA DD.			
CME response			
<i>All the referenced supportive is being provided along with this response referred in CAR/CL responses.</i>			
Documentation provided by CME			
<i>Documents pertaining to foot notes.</i>			
DOE assessment			Date: 21/01/2017
The documents mentioned in the foot notes are now submitted to validation team and the information provided therein was validated with the PoA DD and found adequate. CL is closed.			

CL ID	05	Section no.	F
Description of CL			

CDM-PoA-VAL-FORM

The documents related to the local stakeholder consultation process such as copy of invitation, attendance sheet, MoM etc. are to be furnished to validate the requirements of VVS, version 09, section 7.15.	
CME response	
<i>The supportive for local stakeholder consultation is attached herewith.</i>	
Documentation provided by CME	
<ol style="list-style-type: none"> 1. Minutes of Meeting 2. Attendance sheet 3. Stakeholder notice published in Newspaper 4. Photographs of LSC meeting 	
DOE assessment	Date: 21/01/2017
The above referred documents submitted by the CME are verified to confirm the LSC meeting at POA level. Moreover some of the attendees of LSC meetings were interviewed during the site visit to confirm the information provided in the PoA DD. The LSC complies with the requirement of para 78 of PS, version 09 and other requirements of VVS version 09. CL is closed.	

CL ID	06	Section no.	B.3
Description of CL			
The copy of baseline survey report is not submitted to validate the requirements of baseline data.			
CME response			
<i>The baseline survey report is attached with this response.</i>			
Documentation provided by CME			
<i>Baseline survey report</i>			
DOE assessment			Date: 21/01/2017
Baseline survey report prepared by CME with the technical support from the third party ' Regional Centre of Documentation & Information in Fianarantsoa ' submitted to validation team. The detailed report describes the methodology and approach for conducting the baseline survey and conclusion. The report was found adequate and the information provided therein was also validated by interviewing the end users during the site visit. CL is closed.			

Table 2. CAR from this validation

CAR ID	01	Section no.	G	Date: 28/12/2016
Description of CAR				
The host country approval from the DNA of 'Republic of Madagascar' is not submitted to validate the requirement of VVS, version 09, section 7.5 to 7.7.				
CME response				Date: 07/01/2017
The host country approval from DNA is attached.				
Documentation provided by CME				
LoA				
DOE assessment				Date: 13/02/2017
LoA dated 30/01/2017 is now submitted to assessment team, LoA comply all the requirements of VVS. The detail validation is described in main section of validation report. CAR is closed.				

CAR ID	02	Section no.	J	Date: 28/12/2016
Description of CAR				
Modality of communication duly signed from the signatories of CME is not submitted to validate the requirements of section 7.8 of VVS, version 09.				
CME response				Date: 30/01/2017
MoC is provided along with HCA.				
Documentation provided by CME				
MoC				
DOE assessment				Date: 13/02/2017
MoC dated 27/01/2017 is now submitted to assessment team, MoC is filled in latest available template and comply all requirements of VVS. CAR is closed.				

CAR ID	03	Section no.	B.2	Date: 28/12/2016
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Description of CL	
For the eligibility criteria no 6 mentioned in the section B.2 of submitted PoA DD the referred para of EB 83, Annex 14 are incorrectly referred i.e. para 10 is related to barrier, para 11 pertains to the positive list.	
CME response	Date: 07/01/2017
<i>As per tool Demonstration of additionality of small scale project, EB83 Annex-14, para 10 describes types of barrier can be demonstrated for proving additionality of projects, however para 11 c) of EB83 Annex-14 says that the project falling into positive list does not require to documents barrier mentioned in para 10 of the tool for "Project activities solely composed of isolated units where the users of the technology/measure are households or communities or Small and Medium Enterprises (SMEs) and where the size of each unit is no larger than 5% of the small-scale CDM thresholds;". As the proposed PoA will install large number of Improved Cook Stove in each CPA and each ICS having installed capacity less than 5% of CPA threshold i.e. 180GWh, hence the additionality of the proposed PoA is demonstrated using para 11 c) of EB 83 Annex-14.</i>	
Documentation provided by CME	
PoA DD version-02	
DOE assessment	Date: 21/01/2017
The justification provided by the CME is accepted. CAR is closed.	

CAR ID	04	Section no.	B.2	Date: 28/12/2016
Description of CL				
Copy of notification to UNFCCC and DNA regarding prior consideration of PoA is not submitted.				
CME response				Date: 07/01/2017
<i>Copy of email notification to DNA and UNFCCC is provided along with this response.</i>				
Documentation provided by CME				
<i>Email notification to DNA and UNFCCC for prior intimation of PoA</i>				
DOE assessment				Date: 21/01/2017
Copy of email notification and acknowledgement for the prior consideration of CDM is submitted to validation team which has been sent to UNFCCC and DNA of host country. The same was also validated from the UNFCCC website. The requirement of VVS para 279 of VVS complies, the start date is after the prior intimation submitted to UNFCCC and DNA. CAR is closed.				

CAR ID	05	Section no.	B.1 (Section B)	Date: 28/12/2016
Description of CL				
The start date of the PoA mentioned in section D.1 of the published PoA DD is incorrect as the PoA DD is published on the UNFCCC website on 17/11/2016.				
CME response				Date: 07/01/2017
<i>The start date is corrected in revised PoA DD as 17/11/2016.</i>				
Documentation provided by CME				
<i>PoA DD version-02</i>				
DOE assessment				Date: 21/01/2017
The start date is amended and made in line with the date of PoA DD publication on UNFCCC website. CAR is closed.				

CAR ID	06	Section no.	Section E	Date: 28/12/2016
Description of CL				
a) Section E.1 of the submitted PoA DD is not supported with the evidences. Please refer the guidance appended in the PoA DD form to fill the section. The supporting documents shall be furnished to validate the requirement of environmental impacts. b) Section E.2 of the published PoA DD mentions that EIA is not required to the PoA however the statement is not supported with the evidences.				
CME response				Date: 07/01/2017
a) The proposed PoA is distribution of efficient cook stove to individual household, which will result in fuel saving, thereby results in saving of money and time. Given less fuel burning the it also helps in reduced smoke and results a positive impact on health. There is no negative impact of the project. b) The EIA is not required for the proposed PoA as per host country regulation, the reference to host country regulation on EIA is provided in PoA DD and hard copy is attached herewith.				
Documentation provided by CME				
<i>PoA DD version-02</i>				
DOE assessment				Date: 21/01/2017

- a) The section E.1 is now revised by the CME and the reference of the same is included in the section E.2 of the revised PoA DD. CAR is closed.
- b) The reference has been provided by the CME and incorporated in section E.2 of revised PoA DD. The submitted evidence reveals that EIA is not required for the PoA and same was also confirmed by the local expert in the validation team during the site visit. CAR is closed.

CAR ID	07	Section no.	All section	Date: 28/12/2016
Description of CL				
The generic CPA DD is not filled in accordance with the guidance appended in the form.				
CME response				Date: 07/01/2017
<i>The revised generic CPA detail is filled in accordance with guidance appended in form.</i>				
Documentation provided by CME				
<i>PoA DD version-02</i>				
DOE assessment				Date: 21/01/2017
The generic PoA DD is now filled in accordance with the guidelines appended in the PoA DD template. CAR is closed.				

Table 3. FAR from this validation

No FAR raised during validation.

FAR ID	Xx	Section no.		Date: DD/MM/YYYY
Description of FAR				
CME response				Date: DD/MM/YYYY
Documentation provided by CME				
DOE assessment				Date: DD/MM/YYYY

Document information

Version	Date	Description
01.0	4 May 2015	Initial publication.
Decision Class: Regulatory		
Document Type: Form		
Business Function: Registration		
Keywords: programme of activities, validation report		