



**Verification and certification report form for  
CDM programme of activities  
(Version 04.0)**

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

**BASIC INFORMATION**

<b>Title and UNFCCC reference number of the programme of activities (PoA)</b>	The Project of CCC program of Activities (PoA) for Distribution of Improved Cookstoves (ICS) in Developing South and Southeast Asia Countries (Myanmar) Ref. Number: 10471		
<b>Version number(s) of the PoA-DD(s) to which this report applies</b>	6.13		
<b>Version number of the verification and certification report</b>	2.0		
<b>Completion date of the verification and certification report</b>	14/09/2021		
<b>Monitoring period number and duration of this monitoring period</b>	First Monitoring Period Monitoring Duration- 31/08/2019 – 31/12/2020(inclusive of start & end date)		
<b>Number and version number of the monitoring report to which this report applies</b>	Monitoring Report Number: 2 Version of the Monitoring Report: 1.2		
<b>Coordinating/managing entity (CME)</b>	Climate Change Center		
<b>Host Parties</b>	Host Parties of the PoA	Is this a host Party to a CPA covered in this report? (yes/no)	
	The Republic of the Union of Myanmar	Yes	
<b>Applied methodologies and standardized baselines</b>	AMS-II.G Energy efficiency measures in thermal applications of non-renewable biomass, version 09		
<b>Mandatory sectoral scopes</b>	Sectoral Scope: 03		
<b>Conditional sectoral scopes, if applicable</b>	NA		
<b>Estimated amount of GHG emission reductions or GHG removals for this monitoring period in the included CPAs covered in this report</b>	1,529, 568 tCO <sub>2</sub> e		
<b>Certified amount of GHG emission reductions or GHG removals for this monitoring period for the included CPAs covered in this report</b>	Amount before 1 January 2013	Amount from 1 January 2013 until 31 December 2020	Amount from 1 January 2021
	0	735,072 tCO <sub>2</sub> e	0
<b>Name and UNFCCC reference number of the DOE</b>	Earthood Services Private Limited UNFCCC reference no.- E0066		

Name, position and signature of the  
approver of the verification and certification  
report

A handwritten signature in blue ink, appearing to read 'Kaviraj Singh', is written over a light yellow rectangular background.

Kaviraj Singh  
Managing Director

## SECTION A. Executive summary

The programme of activity titled “The Project of CCC program of Activities (PoA) for Distribution of Improved Cookstoves (ICS) in Developing South and Southeast Asia Countries (Myanmar)” aims at reducing the greenhouse gases emissions by distribution and installation of energy efficient Improved Cook Stoves (ICS) in the households of Republic of the Union of Myanmar (Myanmar).

The ICS aims to reduce the consumption of non-renewable biomass (i.e., fuel wood) during cooking and heating of water through the increment of heat transfer in the ICS. The PoA also aims to deliver other environmental and social benefits attached with the ICS. Therefore, the PoA results in reduction of GHG emissions than the pre-project scenario.

The verification of current monitoring period includes 10471-P1-0007-CP1 to 10471-P1-0054-CP1 which is part of this CDM registered PoA. Climate Change Center is the CME for the PoA /1,7/ and manages the distribution and management of this CPA.

### Scope of Verification:

The verification is an independent and objective review and ex-post determination of the monitored reductions in GHG emissions by the DOE. The verification includes the implementation and operation of the PoA as set out in the revised accepted PoA-DD/1/ & revised accepted/registered CPA-DDs/5/ in the monitoring period for the CPAs included i.e., 10471-P1-0007-CP1 to 10471-P1-0054-CP1. The verification tests the data and assertions set out in the monitoring report based on the following:

1. The approved methodology AMS II.G version 09 “: “Energy Efficiency Measures in Thermal Applications of Non-Renewable Biomass”/3/, applied in the revised accepted PoA-DD/1/ & revised accepted CPA-DDs/5/
2. The revised accepted PoA DD & revised accepted CPA-DDs and monitoring plan
3. UNFCCC criteria referred to in the Kyoto Protocol criteria and the CDM modalities and procedures as agreed in the Bonn Agreement and the Marrakech Accords
4. The CDM Validation and Verification Standard for PoA Version 2.0/20/
5. The CDM Project Standard for PoA Version 2.0/21/ and Project Cycle Procedure for PoA Version 2.0/22/
6. Relevant decisions, guidance and clarifications of the CMP and CDM Executive Board and any other information and references relevant to the project activity’s reported emission reductions.

The verification has considered both quantitative and qualitative aspects on stated/reported emission reductions. The monitoring report (all versions) and corresponding supporting documentation was assessed in accordance with the rules defined by UNFCCC, as appropriate to the PoA. The verification is not meant to provide any consulting or recommendations to the CME/others. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the monitoring activities.

### Verification Process:

The verification process is conducted as per internal CDM Quality Manual, which includes the following Steps. It is to be noted that the verification process was conducted within the renewed guidelines of the EB during the pandemic;

1. Contract/agreement between CME and CPA implementers/7/ and appointment of verification team and technical review team (refer Section B.1 and B.2 of this report)
2. Completeness check of Monitoring Report
3. Publication of Monitoring Report at UNFCCC website
4. Desk review (refer Section D.1 of this report) of Monitoring Report and corresponding ER sheet by verification team and planning of remote audit (including sampling approach (refer Section D.4 of this report) to be applied)
5. Remote site audit (refer Section D.2 of this report) (physical implementation and interview with relevant stakeholders) by verification team consistent of Team Leader and all Technical Experts, as a minimum
6. Follow up activities e.g., interviews (refer Section D.3 of this report)
7. Reporting and closure of findings (CARs/CLs/FARs) and preparation of draft verification report (refer Section D.5 of this report)

8. Independent technical review (refer Section F of this report) of the draft verification report and final/revised documentation (e.g., Monitoring Report, corresponding ER sheet and evidence)
9. Reporting and closure of TR comments/findings (refer Section D.5 of this report) (CARs/CLs/FARs) and final approval for the decision made (refer Section G and H of this report)
10. Issuance of final verification report to contracted CME (or authorized representatives) and submission of request for issuance, as appropriate.

**Verification Conclusion:**

Based on the outcome of the verification process of the registered PoA “The Project of CCC program of Activities (PoA) for Distribution of Improved Cookstoves (ICS) in Developing South and Southeast Asia Countries (Myanmar)” and its 10471-P1-0007-CP1 to 10471-P1-0054-CP1 for the monitoring period 31/08/2019 to 31/12/2020 (both days inclusive) we confirm that the implementation of referenced registered PoA and CPAs as stated in the Monitoring Report (final) Version 1.2 date 14/09/2021 is complying with applicable CDM rules and regulations. The GHG emission reductions were calculated correctly based on the applied methodologies and the monitoring plan contained in the revised accepted PoA-DD/1/.

Earthhood Services Private Limited was able to certify that the emission reductions from the registered CDM PoA UN#10471 “The Project of CCC program of Activities (PoA) for Distribution of Improved Cookstoves (ICS) in Developing South and Southeast Asia Countries (Myanmar)” during the period 31/08/2019 – 31/12/2020 (both days inclusive) amount to 735,072 tCO<sub>2</sub>e. Therefore, this is being submitted for request for issuance, as per UNFCCC procedures.

**SECTION B. Verification team, technical reviewer and approver**
**B.1. Verification 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/document review	On-site inspection*	Interview(s)	Verification findings
1.	Team Leader	IR	Mahala	Deepika	Central Office	Y	N	Y	Y
2.	Verifier	IR	Vatsa	Vaishali	Central Office	Y	N	Y	Y
3.	Technical Expert	IR	Mahala	Deepika	Central Office	Y	N	Y	Y
4.	Meth. Expert	IR	Mahala	Deepika	Central Office	Y	N	Y	Y
5.	Local Expert	EI	Thura	Ye	Central Office	Y	N	N	Y

\* Remote telephonic survey was conducted instead of physical on-site audit. Details for remote on-site survey have been discussed in detail in section D.2 of the report.

**B.2. Technical reviewer and approver of the verification and certification 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	Gautam	Ashok	Central Office
2.	TE to TR	IR	Gautam	Ashok	Central Office
3.	Approver	IR	Singh	Kaviraj	Central Office

## SECTION C. Application of materiality in conducting the verification

### C.1. Consideration of materiality in planning the verification

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	Erroneous transfer of information from documented records (conformity letter form etc.) to Distribution database	Low	CPAI contracted by CME enters the details in distribution database at the time of installation. CPAI also conduct an internal check to verify the accuracy of data entry.	On a sampling basis, the records are checked with the information from database and substantiated by evidence shared by CME. The familiarity of CPAI representatives with the database is also checked.
2.	Erroneous consideration of technical specifications of ICS	Low	The technical specifications are provided by manufacturer	Technical specifications of ICS model are checked against the document issued by manufacturer.

### C.2. Consideration of materiality in conducting the verification

In accordance with CDM VVS for PoAs, Version 02.0 the prescribed thresholds for materiality for CDM PoAs are as under;

Type of PoA	PoAs comprising large-scale CPAs			PoAs comprising only small-scale CPAs	PoAs comprising only micro-scale CPAs
Emission Reductions (tCO <sub>2</sub> e)/year	500,000 or more	300,001 to 499,999	300,000 or less		
Materiality Threshold (as per CDM VVS for PoAs Version 02.0, para 308)	0.5%	1.0%	2.0%	5.0%	10.0%

The applicable materiality threshold is 10% as PoA comprises only micro-scale CPAs.

Particulars / Monitoring Report	MR Version (Public)	MR Version (Revised/Final)
Emission Reductions Achieved (tCO <sub>2</sub> e) in this monitoring period	811,545 tCO <sub>2</sub> e	735,072 tCO <sub>2</sub> e*
Applicable Threshold (%) as per CDM VVS for PoAs Version 02.0	10%	10%

\* The verification team has identified the impact of errors observed and those have been corrected by CME during verification for all monitoring parameter at individual and aggregate level.

Monitored Parameter (Symbol / Description)	Reporting Frequency	Number of Discrete Data* (Total)  Total (100%)	Sample selected for verification Sample (100%)	Type of error identified	Impact on ERs	
					ERs impacted (Sample)	ERs impacted (Population based on extrapolation)
N <sub>y,i,j</sub>  Number of project devices of type i and batch j operating during year y.	At least once every two years	864,000 (project database) 123 samples surveyed for operational rate	864,000 The number of ICS was cross checked from CPA database. 11 samples/end users have been interviewed.	None	NA	NA
$\eta_{new,i,j}$	The value shall be	16 samples	16 (100%)	None	NA	NA

Efficiency of the device of each type i and batch j implemented as part of the project activity	applied the test result conducted by the third party					
By=1,new,i,j,survey  Quantity of woody biomass used by project devices in tonnes per device of type i.	Sample survey conducted during the first year of the introduction of the devices	145	11 samples/end users have been interviewed.	None	NA	NA
Life Span	The operating lifetime of the project device. The life span should be reported in cases where the PPs are opting to account the efficiency loss as per paragraph 27 of the applied methodology	1	1 (100%)	None	NA	NA
Date of commissioning of project device i  Actual date of commissioning of the project device	Fixed and recorded at the time of commissioning/distribution	48	48 (100%)	None	NA	NA
Date of commissioning of batch j  To establish the date of commissioning, the CPA Implementers may opt to group the devices in "batches" and the latest date of	Fixed and recorded at the time of commissioning/distribution	1	1	None	NA	NA

commissioning of a device within the batch shall be used as the date of commissioning for the entire batch						
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There were errors identified in the calculation of ER during the desk review of MR, ER Sheet and other supporting documents shared by CME. In response to that the CME has now correctly accounted for the ER from the start date of the crediting period of each of the CPAs which is after the start of the monitoring period which has led to a reduction in the total ERs significantly. CAR#01 was raised and resolved to address the issue.

Based on the above table it can be confirmed that the actual individual and aggregated material error is determined for the registered PoA as per CDM VVS for PoA/20/. The applicable threshold for materiality in accordance with CDM PoA VVS Version 2 para 308(d)/20/ is 10%.

## SECTION D. Means of verification

### D.1. Desk/document review

The desk review involves:

- A review of the data and information presented to verify their completeness.
- A review of the monitoring plan, the monitoring methodology including applicable tool(s) and, where applicable, the applied standardized baseline, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures.
- A review of calculations and assumptions made in determining the GHG data and emission reductions.
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

The list of documents reviewed during the verification is provided under appendix 3 of this report.

### D.2. On-site inspection

Duration of on-site inspection: NA				
No.	Activity performed on-site	Site location	Date	Team member
1.	NA	NA	NA	NA

\*No site visit was conducted for this batched issuance due to outbreak of global pandemic Covid-19 and increased risk of exposure and contraction due to travel.

Para 339 of VVS for PoA, version 2.0 /20/ says that it is mandatory for the DOE to conduct an on-site inspection at verification for the included CPA if:

- a) It is the first verification for the DOE with regard to this CPA;
- b) More than three years have elapsed since the last on-site inspection conducted for verification for the CPA; or
- c) The CPA has achieved more than 300,000 tCO<sub>2e</sub> of GHG emission reductions or net anthropogenic GHG removals since the last verification when an on-site inspection was conducted.

The site-visit for the current verification was mandatory, as no physical site visit has been conducted for any of the CPAs under the verification.

At the time of verification of the PoA, the country where DOE office is based, India, was witnessing the second highest number of COVID-19 infected people in the world, with the total number of infected cases reaching at 32.2 million /24/. Under such circumstances, the verification team has avoided the risk of exposure by not conducting the on-site visit due to outbreak of global pandemic Covid-19, increased risk of exposure and contact due to travel, as the affected cases in the country are spurring.

Also, it was duly assessed if the site visit can be postponed/25/. Communications on this topic were made with CME, and evidence was provided by CME that delay to the issuance would lead to delayed crediting of

CERs. This would result in a contractual breach of (and termination/rescission of) underlying Emissions Reductions Purchase Agreement and loss of future revenue for the CME as verified from ERPA/26/. On the basis of the above, the verification team decided to follow the UN EB 106 Para 26 decision and adopted an alternative approach in lieu of conducting on-site audit, which is discussed in the below paragraphs.

#### **UN EB decision on Mandatory DOE on-site visits:**

UN EB 106 report (Para 26) mentions the decision EB took on 20<sup>th</sup> March 2020, in relation to DOE on-site visit, applicable from 23<sup>rd</sup> March 2020 to 23<sup>rd</sup> June 2020/27/. The CDM Executive Board agreed on 23 June 2020, on an exceptional basis considering the COVID-19 pandemic, to extend the period during which CDM Designated Operational Entities (DOEs) may apply alternative measures of validation/verification to mandatory on-site inspections until 31 December 2020/27/ which was extended till 30/06/2021 in EB 108/28/. The Executive Board of the Clean Development Mechanism (CDM), at its 110<sup>th</sup> meeting, agreed to further extend the period in which DOEs may apply alternative measures of validation/verification to mandatory on-site inspections until 31 December 2021/29/.

Therefore, for reasons provided above, and in line with UN EB guidelines, the assessment team conducted the renewal of PoA period using alternative means as defined in the CDM VVS-PoA, ver. 2.0/20/. DOE verification team applied standard auditing techniques for the renewal of PoA period, as discussed below.

#### **Alternative means used by DOE:**

The alternative means used by DOE for the purpose of verification of project details are listed below:

1. Telephonic interviews (via calls through Skype) with site personnel.
2. Interviews with the CME representatives to discuss the implementation of programme of activity and monitoring procedures for various parameters.
3. Photographic evidence for the project activity site, where tags are captured along with the monitoring equipment, showing the calibration dates for the equipment installed at the site.
4. Review of documentary evidence and supporting documents including technical manufacturer specifications, WBT sheets, CPA distribution database, training records, monitoring survey forms, monitoring survey sheet, sample size calculation sheet and calibration certificates and agreements between CME and other stakeholders. The entire list of documents reviewed for purpose of verification is available in Appendix 3 of this report.

#### **D.3. Interviews**

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Maw	Aung Cho	Climate Change Centre	24/06/2021-25/06/2021	Sampling Surveys	Deepika Mahala, Vaishali Vatsa
2.	Oh	Cio	SK Telecom	24/06/2021-25/06/2021	Implementation	Deepika Mahala, Vaishali Vatsa
3.	Heo	Seojoon	Climate Change Centre	24/06/2021-25/06/2021	Implementation, Sales records	Deepika Mahala, Vaishali Vatsa
4.	NNK	Inzaly	Climate Change Centre	24/06/2021-25/06/2021	Database management	Deepika Mahala, Vaishali Vatsa
5.	Jun	Seohee	Climate Change Centre	24/06/2021-25/06/2021	Monitoring Report, Sampling methodology, ER calculations	Deepika Mahala, Vaishali Vatsa
6.	Park	Hyein	Climate Change Centre	24/06/2021-25/06/2021	Monitoring Report, Sampling methodology, ER calculations	Deepika Mahala, Vaishali Vatsa
7.	Swe	Myo	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
8.	Oo	Man Kyaw Zin	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa



9.	Oo	Tun Tun	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
10.	Nay	Jaw	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
11.	Au	Daw Poe	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
12.	Soe	Shwe	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
13.	Moe	Hla	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
14.	Thwel	Daw Mya	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
15.	Naing	Myo	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
16.	Win	Htay	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
17.	Myint	Daw Than	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
18.	Aye	Thein	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
19.	Khine	Thet	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
20.	Kyi	Win	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
21.	Oo	Than	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
22.	Oo	Win Soe	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
23.	Sayy	Thar	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
24.	Thein	Chit	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
25.	Oo	Win Zaw	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
26.	Phwar	Nin	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
27.	Kaing	Phyar	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa
28.	Lin	San	End-user	24/06/2021	DOE Field Survey	Deepika Mahala, Vaishali Vatsa

#### D.4. Sampling approach

##### CME Sampling Approach

For the purpose of sampling, CME has followed the CDM guidelines for Sampling and surveys for CDM project activities and programme of activities version 4.0/18/ and Standard for Sampling and surveys for CDM project activities and programmes of activities, Version 8.0/19/ which is in-line with the revised accepted PoA DD/1/. The CME has applied Stratified Random Sampling for across all the CPAs for different monitoring parameters as per validated revised accepted PoA DD/1/and revised accepted CPA DDs/5/. 95/10 confidence precision was applied by CME in the sampling which is appropriate as per the single sampling covering all the CPAs which are part of this batch under issuance.

##### DOE's Sampling Approach

In order to meet the requirements of Standard for Sampling and surveys for CDM project activities and programmes of activities version 9.0/33/, the verification team applied acceptance sampling in the verification (in accordance with para 28). The verification team selected random samples of CME's sampled records, checked the acceptability (or otherwise) of the data for each such record with CME's sample records, and then based on the number of records where there is agreement, determined if the CME's sample records meet the requirements.

The verification team determined the sample size for acceptance sampling by evaluating the following, using its own professional judgement and guidance in the Standard 'Sampling and Surveys for CDM project activities and programme of Activities' version 9.0 /33/:

- The proportion of discrepancies between the CME's data and verification team's (field or onsite inspection results) data that can be considered acceptable. This is referred to as the AQL (Acceptable Quality Level): 0.5% was considered in this verification.
- The proportion of discrepancies between the CME's data and verification team's (field or onsite inspection results) data that would be considered unacceptable. This is the UQL (Unacceptable Quality Level): 20% was considered in this verification.
- The producer risk: 10% was considered.
- The consumer risk: 10% was considered.

The CME has monitored 3 parameters through sampling:

1.  $N_{y,i,j}$
2.  $B_{y=1,new,i,j,survey}$
3.  $n_{new,i,j}$

For  $n_{new,i,j}$ , the verification team has conducted no sampling and checked all 15 WBT sheets. However, for  $N_{y,i,j}$  and  $B_{y=1,new,i,j,survey}$ , the verification has applied acceptance sampling.

Since, the CME had conducting two separate sampling surveys to determine these two parameters, the verification team has picked up a sample size of 11 (for each parameter/sampling survey) from Table (Sample size and acceptance number based on AQL, UQL, and producer and consumer risks) in the referred Standard /33/.

Accordingly, acceptance number (c) thus determined for the sample size is 0. A sample size of 11 meets the criteria. The samples to be surveyed by DOE were randomly selected from the list of monitored samples using the random sample generator on Microsoft excel.

The current verification is for 10471-P1-0007-CP1 to 10471-P1-0054-CP1, which is the first monitoring period of the PoA.

Accordingly, the verification team together has verified 11 samples for parameter  $B_{y=1,new}$  and 11 samples for  $N_{y,i,j}$  i.e, 22 samples collectively during the remote site visit and observed that the sampling survey results of the CME checked were found to be consistent with DOE's remote survey results. The sampling method used is in-line with the Standard: Sampling and surveys for CDM project activities and programme of activities /33/ and Guideline: Sampling and surveys for CDM project activities and programme of activities /18/. In all, the verification team remotely visited 22 households (11 for each parameter).

#### **D.5. Clarification requests, corrective action requests and forward action requests raised**

<b>Areas of verification findings</b>	<b>No. of CL</b>	<b>No. of CAR</b>	<b>No. of FAR</b>
<b>General</b>	-	-	-
Compliance of the monitoring report with the monitoring report form	-	CAR#01	-
Remaining forward action requests from validation and/or previous verifications	-	-	-
CPAs considered for verification and covered in this report	-	-	-
<b>Programme of activities</b>	-	-	-
Compliance of the programme implementation with the registered PoA-DD	-	CAR#04	-
Implementation and operation of the management system	-	-	-
Post-registration changes	-	-	-
• Corrections	-	CAR#01	-
• Inclusion of a monitoring plan	-	-	-
• Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized	-	-	-

baselines, or other methodological regulatory documents <sup>1</sup>			
• Changes to the programme design	-	-	-
• Addition of CPA inclusion template	-	-	-
• Change of coordinating/managing entity	-	-	-
• Changes specific to afforestation and reforestation activities	-	-	-
<b>Component project activities</b>	-	-	-
Compliance of the CPA implementation with the included CPA design document	-	CAR#02	-
Post-registration changes	-	-	-
• Temporary deviations from registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents	-	-	-
• Corrections	-	-	-
• Changes to the start date-of the crediting period	-	-	-
• Inclusion of a monitoring plan	-	-	-
• Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents	-	-	-
• Changes to the project design	-	-	-
• Changes specific to afforestation and reforestation activities	-	-	-
Compliance of the registered monitoring plan with applied methodologies and standardized baselines	-	-	-
Compliance of monitoring activities with the registered monitoring plan	-	-	-
• Data and parameters fixed ex ante or at renewal of crediting period	-	-	-
• Data and parameters monitored	CL#01 CL#02	CAR#04	-
• Implementation of sampling plan	-	CAR#03 CAR#06	-
Compliance with the calibration frequency requirements for measuring instruments	-	-	-
Assessment of data and calculation of emission reductions or net removals	-	-	-
• Calculation of baseline GHG emissions or baseline net GHG removals by sinks	-	-	-
• Calculation of project GHG emissions or actual net GHG removals by sinks	-	CAR#02	-
• Calculation of leakage GHG emissions	-	-	-
• Summary of calculation of GHG emission reductions or net GHG removals by sinks	-	CAR#05	-
• Comparison of actual GHG emission reductions or net GHG removals by sinks with estimates in included CPA	-	CAR#01 CAR#05	-
• Remarks on difference from estimated value in included CPA	-	-	-
Assessment of reported sustainable development co-benefits	-	-	-
Global stakeholder consultation	-	-	-
Others (please specify)	-	-	-

<sup>1</sup> Other standards, methodologies, methodological tools and guidelines (to be) applied in accordance with the applied(selected) methodologies are collectively referred to as the other (applied) methodological regulatory documents).

Total	02	06	00
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## SECTION E. Verification findings

### E.1. General

#### E.1.1. Compliance of the monitoring report with the monitoring report form

<b>Means of verification</b>	The verification team has compared the final monitoring report /4/ with the applicable and latest monitoring report form, i.e., CDM-PoA-MR-FORM /6/.
<b>Findings</b>	CAR#01 was raised and resolved.
<b>Conclusion</b>	The final Monitoring Report was prepared using the latest and correct template i.e., CDM-PoA-MR-FORM Version 04.0. The verification team confirms that the monitoring report has been appropriately prepared using the applicable monitoring report form, and that all sections are completed inline to the guidelines.

#### E.1.2. Remaining forward action requests from validation and/or previous verifications

No FAR was found to be raised during the validation of inclusion of CPAs/34/, /35/, /36/ or from the validation of the PoA/2/. Also, this is the first verification of the PoA so no FAR is raised in the previous verification.

#### E.1.3. CPAs considered for verification and covered in this report

Title and UNFCCC reference number of the CPA included in the PoA as of the end of this monitoring period	Is the CPA considered for this verification? (yes/no)	The date when the CPA was included	Version of the PoA-DD	Confirmation that a request for issuance including the CPA has been published for the previous monitoring period (Y/N)
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 001 10471-P1-0001-CP1	No	27/08/2019	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 002 10471-P1-0002-CP1	No	27/08/2019	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 003 10471-P1-0003-CP1	No	27/08/2019	6.13	NA

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 004  10471-P1-0004-CP1	No	27/08/2019	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 005  10471-P1-0005-CP1	No	27/08/2019	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 006  10471-P1-0006-CP1	No	27/08/2019	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 011  10471-P1-0007-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 012  10471-P1-0008-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 013  10471-P1-0009-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 014  10471-P1-0010-CP1	Yes	14/04/2020	6.13	NA

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 015 10471-P1-0011-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 016 10471-P1-0012-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 017 10471-P1-0013-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 018 10471-P1-0014-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 019 10471-P1-0015-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 020 10471-P1-0016-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 021 10471-P1-0017-CP1	Yes	14/04/2020	6.13	NA

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 022  10471-P1-0018-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 023  10471-P1-0019-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 024  10471-P1-0020-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 025  10471-P1-0021-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 026  10471-P1-0022-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 027  10471-P1-0023-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 028  10471-P1-0024-CP1	Yes	14/04/2020	6.13	NA

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 029  10471-P1-0025-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 030  10471-P1-0026-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 031  10471-P1-0027-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 032  10471-P1-0028-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 033  10471-P1-0029-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 034  10471-P1-0030-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 035  10471-P1-0031-CP1	Yes	14/04/2020	6.13	NA



CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 036  10471-P1-0032-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 037  10471-P1-0033-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 038  10471-P1-0034-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 039  10471-P1-0035-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 040  10471-P1-0036-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 041  10471-P1-0037-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 042  10471-P1-0038-CP1	Yes	14/04/2020	6.13	NA

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 043 10471-P1-0039-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 044 10471-P1-0040-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 045 10471-P1-0041-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 046 10471-P1-0042-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 047 10471-P1-0043-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 048 10471-P1-0044-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 049 10471-P1-0045-CP1	Yes	14/04/2020	6.13	NA

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 050  10471-P1-0046-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 051  10471-P1-0047-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 052  10471-P1-0048-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 053  10471-P1-0049-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 054  10471-P1-0050-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 055  10471-P1-0051-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 056  10471-P1-0052-CP1	Yes	14/04/2020	6.13	NA

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 057  10471-P1-0053-CP1	Yes	14/04/2020	6.13	NA
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 058  10471-P1-0054-CP1	Yes	14/04/2020	6.13	NA

## E.2. Programme of activities

### E.2.1. Compliance of the programme implementation with the registered programme design document

<b>Means of verification</b>	<p>The programme of activity titled “The Project of CCC program of Activities (PoA) for Distribution of Improved Cookstoves (ICS) in Developing South and Southeast Asia Countries (Myanmar)” under this verification involves the reduction of greenhouse gases emissions by distribution and installation of energy efficient Improved Cook Stoves (ICS) for households in the Republic of the Union of Myanmar (Myanmar). The ICS aims to reduce the consumption of non-renewable biomass (i.e., fuel wood) during cooking and heating of water. The PoA also aims to deliver other environmental and social benefits attached with the ICS. Therefore, the PoA results in reduction of GHG emissions than the pre-project scenario.</p> <p>The verification of current monitoring period includes 10471-P1-0007-CP1 to 10471-P1-0054-CP1 which is part of this CDM registered PoA. Climate Change Centre is the CME for the PoA /7/ and manages the distribution and management of this CPA.</p> <p>The implementation of the 10471-P1-0007-CP1 to 10471-P1-0054-CP1 is within the geographical boundary of the PoA-DD that is the country Myanmar. The assessment team confirms that the distribution of cookstoves has been done only in Myanmar and therefore the geographical boundaries of the implemented PoA are in line to the revised accepted PoA-DD /1/.</p> <p>The technical specifications of the E-FREE cookstoves which have been confirmed from the manufacturer specification document/9/ are as follows:</p> <ul style="list-style-type: none"> <li>• Dimension Height 10”x Diameters 11”&amp; 8”</li> <li>• Material Clay and metal</li> <li>• Fuel type Firewood</li> <li>• Efficiency 28%</li> </ul> <p>Further, based on the review of records of distribution by CME/11/, remote observations and interview conducted during the remote site visit, the verification team confirms that:</p> <ul style="list-style-type: none"> <li>• The CPAs is implemented within the boundary of the PoA as described in the revised accepted PoA-DD/1/.</li> <li>• The CME is the same as that mentioned in the revised accepted PoA-DD/1/.</li> <li>• The implementation and operation of the project activity has been conducted in accordance with the description contained in the revised accepted PoA-DD/1/ and revised accepted CPA-DDs/5/.</li> <li>• All physical features of the CPAs proposed in the revised accepted CPA-</li> </ul>
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	<p>DDs/5/ are in place.</p> <p>The project participants/CPA implementer has operated the CPAs as per the revised accepted CPA-DDs/5/.</p> <p>The information (including data and variables) as mentioned in the MR/4/ is found to be in line with the details provided in the revised accepted PoA-DD/1/.</p> <p>The verification team found the project description contained in MR to be complete and accurate and was found to be in-line with the revised accepted PoA-DD/01/.</p>
<b>Findings</b>	CAR#04 was raised and resolved
<b>Conclusion</b>	<p>In view of the information's verified through the remote audit survey and interviews, the verification team is able to confirm that all physical features (technology, project equipment (as applicable), and monitoring and metering equipment) of the registered CDM program of activities were in place and that the CME has operated the project activity as per the registered PoA-DD/1/ during the concerned monitoring period.</p> <p>The emission reductions achieved during the current monitoring period are 735,072 tCO<sub>2</sub>e. Justification for this has been assessed in further sections of the report.</p>

### E.2.2. Implementation and operation of the management system

<b>Means of verification</b>	<p>Based on the review of records, interview of CME representatives and monitoring team, during the remote site visit, it is confirmed that the CME has implemented appropriate management and operational system for monitoring and reporting of emissions.</p> <p>The CME Climate Change Centre managed the relevant activities prior to and post registration of the PoA.</p> <p>The CME maintains a user manual wherein all CPA inclusions are listed, and training records are also maintained/12/.</p> <p>The CME has designed the management system in accordance with the CDM Project Standard for programmes of Activities (version 2.0) section 7.3.</p> <p>There is a clear definition of roles and responsibilities of personnel involved in the process of inclusion including a review of their competence. As discussed earlier that the CME maintains records of all CPAs. The end users to whom the ICS has been distributed are identified and recorded using key information:</p> <ul style="list-style-type: none"> <li>• Name of the user;</li> <li>• Installation date</li> <li>• Number of people in the household</li> <li>• Age and Gender</li> <li>• Address and contact number;</li> <li>• Serial number of the E-FREE cookstoves; and</li> <li>• Records for stove usage</li> </ul> <p>With this there is a procedure of technical review of inclusion of CPAs under the PoA, Procedure to avoid double counting of ICS.CPAs under the PoA, Records and documentation control process for each CPA under the PoA. The CME also makes sure that the CPA included in the PoA is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity and provides provisions ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA and Measures for continuous improvements of the PoA management system.</p> <p>Original copies of completed survey forms/13/ and WBT reports /10/ are retained by the CPA implementers. The organizational structure and roles and responsibilities for monitoring are in line with the situation on the ground as confirmed through CME representative's interview during the remote site visit, and the structure is</p>
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	considered appropriate.
<b>Findings</b>	None
<b>Conclusion</b>	The verification team from the desk review and remote survey assessment confirms that the monitoring management system of the PoA is in place with the responsibilities properly identified and established.

### E.2.3. Post-registration changes

#### E.2.3.1. Corrections

CME requested for a post-registration change to update the fNRB value from 0.3 to 0.615 in-line to the newly approved Myanmar national default value which was approved by Board on 23 December 2020 (ASB0049-2020). The changes are reflected at <https://cdm.unfccc.int/PRCCContainer/DB/prcp723267294/view> in PoA-DD version 06.13 dated 25/01/2021 approved on 29/03/2021/30/.

#### E.2.3.2. Inclusion of a monitoring plan

NA

#### E.2.3.3. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents

NA

#### E.2.3.4. Changes to the programme design

NA

#### E.2.3.5. Addition of CPA inclusion template

NA

#### E.2.3.6. Change of coordination/managing entity

NA

#### E.2.3.7. Changes specific to afforestation and reforestation activities

NA

### E.3. Component project activities

#### E.3.1. Compliance of the CPA implementation with the included CPA design document

<b>Means of verification</b>	<p>The programme of activity titled "The Project of CCC program of Activities (PoA) for Distribution of Improved Cookstoves (ICS) in Developing South and Southeast Asia Countries (Myanmar)" under this verification involves the reduction of greenhouse gases emissions by distribution and installation of energy efficient Improved Cook Stoves (ICS) for households in the Republic of the Union of Myanmar (Myanmar). The ICS aims to reduce the consumption of non-renewable biomass (i.e., fuel wood) during cooking and heating of water. The PoA also aims to deliver other environmental and social benefits attached to the ICS. Therefore, the PoA results in reduction of GHG emissions than the pre-project scenario.</p> <p>This monitoring report includes the implementation and monitoring of 48 CPAs- CPA 10471-P1-0007-CP1 to 10471-P1-0054-CP1. Climate Change Centre is the CME for the PoA /7/ and manages the distribution and management of this CPA. The Ministry of Agriculture, Livestock and Irrigation (MOALI)/7/ act as the CPA implementer of the project and their role involves distribution and monitoring the use of ICS as checked from the CPA and CPA Implementer</p>
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Agreement/7/.

The implementation of the 10471-P1-0007-CP1 to 10471-P1-0054-CP1 is within the geographical boundary of the PoA-DD that is the country Myanmar. The assessment team confirms that the distribution of cookstoves has been done only in Myanmar and therefore the geographical boundaries of the implemented PoA are in line with the revised accepted PoA-DD /1/.

The technical specifications/9/ of the E-FREE cookstoves are as follows:

- Dimension Height 10"x Diameters 11" & 8"
- Material Clay and metal
- Fuel type Firewood
- Efficiency 28%

Further, based on the review of records of distribution by CME/11/, remote observations and interview conducted during the remote site visit, the verification team confirms that:

- The CPAs are implemented within the boundary of the PoA as described in the revised accepted PoA-DD/1/.
- The CME is the same as that mentioned in the revised accepted PoA-DD/1/.
- Ministry of Agriculture, Livestock and Irrigation (MOALI) is the CPA-Implementer of the PoA/7/.
- The implementation and operation of the project activity has been conducted in accordance with the description contained in the revised accepted PoA-DD/1/ and revised accepted CPA-DDs/5/.
- All physical features of the CPA proposed in the revised accepted CPA-DDs/5/ are in place.

The project participants/CPA implementer has operated the CPA as per the revised accepted CPA-DDs/5/. The monitoring period in this monitoring report is from 31/08/2019 to 31/12/2020. The details of each CPA are as follows:

CPA Ref#	First ICS Installation date	Crediting period	No. of units (installed)	ERs Estimated (tCO <sub>2</sub> e)	ERs achieved (tCO <sub>2</sub> e)
10471-P1-0007-CP1	17/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
10471-P1-0008-CP1	15/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
10471-P1-0009-CP1	10/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
10471-P1-0010-CP1	15/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
10471-P1-0011-CP1	15/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
10471-P1-0012-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
10471-P1-0013-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
10471-P1-0014-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
10471-P1-0015-CP1	04/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314

	10471-P1-0016-CP1	02/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0017-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0018-CP1	02/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0019-CP1	05/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0020-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0021-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0022-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0023-CP1	03/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0024-CP1	02/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0025-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0026-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0027-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0028-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0029-CP1	05/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0030-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0031-CP1	08/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0032-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0033-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0034-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0035-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314
	10471-P1-0036-CP1	13/02/2020	14/04/2020 -	18,000	31,866	15,314



			13/04/2027			
10471-P1-0037-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0038-CP1	05/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0039-CP1	08/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0040-CP1	05/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0041-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0042-CP1	11/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0043-CP1	07/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0044-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0045-CP1	14/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0046-CP1	12/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0047-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0048-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0049-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0050-CP1	02/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0051-CP1	04/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0052-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0053-CP1	18/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
10471-P1-0054-CP1	01/02/2020	14/04/2020 - 13/04/2027	18,000	31,866	15,314	
	As checked from the conformity letters/23/	Checked from the UN website /31/	Check- ed from CPA distribution database/11/	Checked from ER sheet/16/	Checked from ER sheet/16/	
The start date of crediting period, inclusion dates of the CPAs were checked from the UN website /31/. The First ICS Installation dates were checked from the screenshots of conformity						

	letters/23/. It has been checked by the verification team that all the cookstove units installed under these 48 CPAs are micro-scale CDM units and are of no larger than 1 % of the threshold of 180 GWh/year (thermal) for Type II.
<b>Findings</b>	CAR#02 was raised and resolved
<b>Conclusion</b>	<ul style="list-style-type: none"> <li>The verification team confirms that physical features of the CPAs have been implemented in accordance with the revised accepted CPA-DDs/5/.</li> <li>It is also confirmed, through the review of the supporting documentation that physical features of the component CPAs have been implemented in accordance with the revised accepted CPA-DDs/5/.</li> <li>The CPAs were also found to be completely operational in line with the revised accepted CPA-DDs/5/.</li> <li>The information provided in the relevant sections of the monitoring report appropriately describe the implementation and operational status of the PoA.</li> </ul>

### E.3.2. Post-registration changes

#### E.3.2.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents

NA

#### E.3.2.2. Corrections

CME requested a post-registration change to update the fNRB value from 0.3 to 0.615 in-line to the newly approved Myanmar national default value which was approved by the Board on 23 December 2020 (ASB0049-2020). The changes are reflected in the following versions of CPA-DDs:

CPA no.	PRC-Reference Number	Revised CPA-DD Version	Approval date
10471-P1-0007-CP1	PRC-10471-008	01.4	12/04/2021
10471-P1-0008-CP1	PRC-10471-009	01.4	12/04/2021
10471-P1-0009-CP1	PRC-10471-010	01.4	12/04/2021
10471-P1-0010-CP1	PRC-10471-011	01.4	12/04/2021
10471-P1-0011-CP1	PRC-10471-012	01.4	12/04/2021
10471-P1-0012-CP1	PRC-10471-013	01.4	12/04/2021
10471-P1-0013-CP1	PRC-10471-014	01.4	12/04/2021
10471-P1-0014-CP1	PRC-10471-015	01.4	12/04/2021
10471-P1-0015-CP1	PRC-10471-016	01.4	12/04/2021
10471-P1-0016-CP1	PRC-10471-017	01.4	12/04/2021
10471-P1-0017-CP1	PRC-10471-018	01.4	12/04/2021
10471-P1-0018-CP1	PRC-10471-019	01.4	12/04/2021
10471-P1-0019-CP1	PRC-10471-020	01.4	18/04/2021
10471-P1-0020-CP1	PRC-10471-021	01.4	12/04/2021
10471-P1-0021-CP1	PRC-10471-022	01.4	12/04/2021
10471-P1-0022-CP1	PRC-10471-023	01.4	12/04/2021
10471-P1-0023-CP1	PRC-10471-024	01.4	12/04/2021
10471-P1-0024-CP1	PRC-10471-025	01.4	12/04/2021
10471-P1-0025-CP1	PRC-10471-026	01.4	12/04/2021
10471-P1-0026-CP1	PRC-10471-027	01.4	12/04/2021
10471-P1-0027-CP1	PRC-10471-028	01.4	12/04/2021
10471-P1-0028-CP1	PRC-10471-029	01.4	12/04/2021
10471-P1-0029-CP1	PRC-10471-030	01.4	12/04/2021
10471-P1-0030-CP1	PRC-10471-031	01.4	12/04/2021
10471-P1-0031-CP1	PRC-10471-032	01.4	12/04/2021
10471-P1-0032-CP1	PRC-10471-033	01.4	12/04/2021
10471-P1-0033-CP1	PRC-10471-034	01.4	12/04/2021
10471-P1-0034-CP1	PRC-10471-035	01.4	12/04/2021
10471-P1-0035-CP1	PRC-10471-036	01.4	12/04/2021
10471-P1-0036-CP1	PRC-10471-037	01.4	12/04/2021
10471-P1-0037-CP1	PRC-10471-038	01.4	12/04/2021
10471-P1-0038-CP1	PRC-10471-039	01.4	12/04/2021
10471-P1-0039-CP1	PRC-10471-040	01.4	12/04/2021

10471-P1-0040-CP1	PRC-10471-041	01.4	12/04/2021
10471-P1-0041-CP1	PRC-10471-042	01.4	12/04/2021
10471-P1-0042-CP1	PRC-10471-043	01.4	12/04/2021
10471-P1-0043-CP1	PRC-10471-044	01.4	12/04/2021
10471-P1-0044-CP1	PRC-10471-045	01.4	12/04/2021
10471-P1-0045-CP1	PRC-10471-046	01.4	12/04/2021
10471-P1-0046-CP1	PRC-10471-047	01.4	12/04/2021
10471-P1-0047-CP1	PRC-10471-048	01.4	12/04/2021
10471-P1-0048-CP1	PRC-10471-049	01.4	12/04/2021
10471-P1-0049-CP1	PRC-10471-050	01.4	12/04/2021
10471-P1-0050-CP1	PRC-10471-051	01.4	12/04/2021
10471-P1-0051-CP1	PRC-10471-052	01.4	12/04/2021
10471-P1-0052-CP1	PRC-10471-053	01.4	12/04/2021
10471-P1-0053-CP1	PRC-10471-054	01.4	12/04/2021
10471-P1-0054-CP1	PRC-10471-055	01.4	12/04/2021

**E.3.2.3. Changes to the start-date of the crediting period**

NA

**E.3.2.4. Inclusion of a monitoring plan**

NA

**E.3.2.5. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents**

NA

**E.3.2.6. Changes to the project design**

NA

**E.3.2.7. Changes specific to afforestation and reforestation activities**

NA

**E.3.3. Compliance of the registered monitoring plan with applied methodologies and standardized baselines**

<b>Means of verification</b>	The monitoring plan as contained in the revised accepted CPA DDs/5/ were reviewed against the monitoring requirements of the applied methodology AMS-II.G version 09 /3/ as well as revised accepted PoA-DD/1/ with reference to the technology involved. Based on this review it was found that the monitoring plan contained in the revised accepted CPA DDs/5/ includes all the required parameters to be monitored in the context of the CPA design and description and allows proper determination of emission reductions in accordance with the revised accepted PoA DD/1/ and applied methodology AMS-II.G version 09 /3/.
<b>Findings</b>	None
<b>Conclusion</b>	The monitoring plan is in accordance with the approved methodology, AMS-II.G version 09 /3/, that is included in revised accepted CPA DDs/5/.

## E.3.4. Compliance of monitoring activities with the registered monitoring plan

## E.3.4.1. Data and parameters fixed ex ante or at renewal of crediting period

Efficiency of pre-project device, which is a three-stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney,  $\eta_{old,ij}$ , Fraction

Means of verification	The value of this parameter is a default value of 0.1 in line with the applied methodology/3/. This was checked with the revised accepted PoA-DD/1/ and revised accepted CPA-DDs/5/.
Findings	None
Conclusion	The values in the Monitoring Report /4/ and corresponding Emission Reduction Spreadsheet /16/ are consistent with the revised accepted PoA-DD/1/ and revised accepted CPADDs/5/. The applied values are correct and justified.

Adjustment to account for any continued use of pre-project devices during the year y,  $\mu_y$ , Fraction

Means of verification	The value of this parameter is 1.0 which is a default value sourced from applied methodology/3/. This was checked with the revised accepted PoA-DD/1/ and revised accepted CPA-DDs/5/.
Findings	None
Conclusion	The values in the Monitoring Report /4/ and corresponding Emission Reduction Spreadsheet /16/ are consistent with the revised accepted PoA-DD/1/ and revised accepted CPADDs/5/. The applied values are correct and justified.

Fraction of woody biomass saved by the project activity in year y that can be established as non-renewable biomass,  $f_{NRB,y}$ , Fraction

Means of verification	The value of this parameter is considered 0.615 which is a default value endorsed by designated national authorities and approved by the Board/32/. This was checked with the revised accepted PoA-DD/1/ and revised accepted CPA-DDs/5/.
Findings	None
Conclusion	The values in the Monitoring Report /4/ and corresponding Emission Reduction Spreadsheet /16/ are consistent with the revised accepted PoA-DD/1/ and revised accepted CPADDs/5/. The applied values are correct and justified.

Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.0156 TJ/tonne, based on the gross weight of the wood that is 'air-dried'),  $NCV_{biomass}$ , TJ/tonne

Means of verification	The value of this parameter is considered as 0.0156 sourced from the applied methodology/3/. This was checked with the revised accepted PoA-DD/1/ and revised accepted CPA-DDs/5/.
Findings	None
Conclusion	The values in the Monitoring Report /4/ and corresponding Emission Reduction Spreadsheet /16/ are consistent with the revised accepted PoA-DD/1/ and revised accepted CPADDs/5/. The applied values are correct and justified.

Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumer. Use a value of 63.7 tCO<sub>2</sub>/TJ,  $EF_{projected\ fossil\ fuel}$ , tCO<sub>2</sub>/TJ

Means of verification	The value of this parameter is considered 63.7 tCO <sub>2</sub> /TJ which is a default value sourced from applied methodology/3/. This was checked with the revised accepted PoA-DD/1/ and revised accepted CPA-DDs/5/.
Findings	None
Conclusion	The values in the Monitoring Report /4/ and corresponding Emission Reduction Spreadsheet /16/ are consistent with the revised accepted PoA-DD/1/ and revised accepted CPADDs/5/. The applied values are correct and justified.

Use of non-renewable woody biomass saved under the project activity to justify the baseline of other CDM project activities can also be a potential source of leakage. Increase in the use of non-renewable woody biomass outside the project boundary to create non-renewable woody biomass baselines can also be potential source of leakage. As an alternative to previous mentioned  $B_{y,savings,i,j}$  can be multiplied by a net to gross adjustment factor of 0.95 to account for both leakage, Leakage, Fraction

<b>Means of verification</b>	The value of this parameter is considered 0.95 which is a default value sourced from applied methodology/3/. This was checked with the revised accepted PoA-DD/1/ and revised accepted CPA-DDs/5/.
<b>Findings</b>	None
<b>Conclusion</b>	The values in the Monitoring Report /4/ and corresponding Emission Reduction Spreadsheet /11/ are consistent with the revised accepted PoA-DD/1/ and revised accepted CPADDs/5/. The applied values are correct and justified.

#### E.3.4.2. Data and parameters monitored

Number of project devices of type i and batch j operating during year y,  $N_{y,i,j}$ , Number of units

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	The number of stoves still operating has been monitored based on the sampling survey conducted at least once every two years.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes
	Monitoring equipment	Not applicable. This number of units are monitored via CPA distribution record and the operational rate is monitored with a sampling survey.
	Calibration frequency /interval:	Not applicable
	How were the values in the monitoring report verified?	<p>The values reported in the final MR /4/ (and corresponding ER sheet /16/) were verified through the survey sheets/14/ loaded into CPA database /11/. This data base records the unique ID of the ICS, name of the end user with its address, phone number and geocoordinates. All ICS sold till the end of the current monitoring period are included in the corresponding ER sheet of the CPA. The total number of ICS sold in each of the 48 CPAs is 18,000.</p> <p>The CME has monitored the operational rate of the stoves through sampling surveys. The sampling plan has been applied to the total number of stoves installed in this CPA database/11/. Stratified random sampling was applied by the CME for selection of the monitoring samples with 95/10 confidence/precision level which is in accordance with the revised accepted PoA-DD/1/ and CPA-DDs/5/. All of the samples monitored by CME were found to be operational current monitoring period. This number of ICS in operation was verified from sampling results and found in order/15/.</p> <p>The verification team applied acceptance sampling and interviewed 11 samples out of 123. All 11 samples reported to be operational. Thus, it was confirmed based on the remote site inspection interviews and review of documented procedure that the selected survey and data collection method is correctly applied.</p>

		The value calculated for the ICS in operation has been correctly reported in the monitoring report/4/ and ER sheet/16/ and monitoring methods were also found in-line with the monitoring plan of revised accepted CPA-DDs/5/.
	If applicable, has the reported data been cross-checked with other available data?	The number of ICS in operation reported in CPA Database /11/ were randomly cross checked during the remote site visit through interview of the household owner and found consistent.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes. The QA/QC procedure are in place, internal checks have been done by the CPA implementer and established during the onsite assessment. During the telephonic interview, the assessment team has duly verified the CME's QA/QC procedures in which the data transfer from hard copies to excel sheets were cross checked by the senior management from the hard copies to ascertain the reliability and correctness of the entered data in the excel sheet
	In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?	No such issues
<b>Findings</b>	None	
<b>Conclusion</b>	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

Efficiency of the device of each type i and batch j implemented as part of the project activity,  $\eta_{new,i,j}$ , fraction

Means of verification	Criteria/Requirements	Assessment/Observation								
	Measuring /Reading /Recording frequency	The parameter is measured annually.								
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes								
	Monitoring equipment	Scales, thermometer, Moisture meter, thermocouple are used as the monitoring equipment.								
	Calibration frequency /interval:	The name and calibration details of the equipment/17/ used while the WBT were conducted are given below: <table><tr><td>Type</td><td>Thermometer</td></tr><tr><td>Model Name</td><td>Center 375/376</td></tr><tr><td>Accuracy</td><td>at (23±5°C) ±(0.05% reading + 0.1°C)</td></tr><tr><td>Serial Number</td><td>210607821, 210204626, 210607791, 210204625.</td></tr></table>	Type	Thermometer	Model Name	Center 375/376	Accuracy	at (23±5°C) ±(0.05% reading + 0.1°C)	Serial Number	210607821, 210204626, 210607791, 210204625.
	Type	Thermometer								
Model Name	Center 375/376									
Accuracy	at (23±5°C) ±(0.05% reading + 0.1°C)									
Serial Number	210607821, 210204626, 210607791, 210204625.									

	190313802, 190313804, 190313826, 190313795
Calibration Frequency	Annual
Last Calibration	27/08/2020
Validity	26/08/2021

  

Type	Probe(thermocouple)
Model Name	TP-R04(with Centre 375/376)
Accuracy	IEC751, class A $\pm 0.15^{\circ}\text{C} \pm 0.002t$ (t: measurement temperature)
Serial Number	210607880, 210204629, 210607879, 210204628, 191313905, 190313892, 190313930, 190313878
Calibration Frequency	Annual
Last Calibration	27/08/2020
Validity	26/08/2021

  

Type	Scale
Model Name	Ohaus V500P6KR
Accuracy	d=1g, e=1g
Serial Number	8120420010
Calibration Frequency	Annual
Last Calibration	27/08/2020
Validity	26/08/2021

  

Type	Moisture meter for wood
Model Name	Testo 606-1
Accuracy	(nominal temperature 25°C, $\pm 1$ Digit) Conductivity measurement $\pm 1\%$
Serial Number	59008018
Calibration Frequency	Annual
Last Calibration	27/08/2020
Validity	26/08/2021

  

How were the values in the monitoring report verified?	The value of 25.1% was reported in the final MR /4/ (and corresponding ER sheet /16/) and was verified through the WBT test results/10/ and survey sheets/14/. The monitoring of this parameter has been calculated based on the result of the sampling survey. The sampling plan has
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	<p>been applied to the total number of stoves installed in CPA database. Stratified random sampling was applied by the CME for selection of the monitoring samples with 95/10 confidence/precision level which is in accordance with the revised accepted PoA-DD/1/ and revised accepted CPA-DDs/5/. There were 16 samples taken and the average value from them was finally assigned as the efficiency of the stoves. The values of individual samples are as follows:</p> <table border="1"> <tr> <th>Stove 1</th><th>Stove 2</th><th>Stove 3</th><th>Stove 4</th></tr> <tr> <td>24.3%</td><td>25.0%</td><td>26.8%</td><td>25.7%</td></tr> <tr> <th>Stove 5</th><th>Stove 6</th><th>Stove 7</th><th>Stove 8</th></tr> <tr> <td>26.3%</td><td>24.6%</td><td>23.8%</td><td>24.5%</td></tr> <tr> <th>Stove 9</th><th>Stove 10</th><th>Stove 11</th><th>Stove 12</th></tr> <tr> <td>24.4%</td><td>24.6%</td><td>25.3%</td><td>24.5%</td></tr> <tr> <th>Stove 13</th><th>Stove 14</th><th>Stove 15</th><th>Stove 16</th></tr> <tr> <td>25.1%</td><td>25.0%</td><td>26.1%</td><td>25.3%</td></tr> </table> <p>The value has been checked in the monitoring report/4/ and ER sheet/16/ and found correctly reported and monitored in accordance with the monitoring plan of revised accepted PoA-DD/1/.</p>	Stove 1	Stove 2	Stove 3	Stove 4	24.3%	25.0%	26.8%	25.7%	Stove 5	Stove 6	Stove 7	Stove 8	26.3%	24.6%	23.8%	24.5%	Stove 9	Stove 10	Stove 11	Stove 12	24.4%	24.6%	25.3%	24.5%	Stove 13	Stove 14	Stove 15	Stove 16	25.1%	25.0%	26.1%	25.3%
Stove 1	Stove 2	Stove 3	Stove 4																														
24.3%	25.0%	26.8%	25.7%																														
Stove 5	Stove 6	Stove 7	Stove 8																														
26.3%	24.6%	23.8%	24.5%																														
Stove 9	Stove 10	Stove 11	Stove 12																														
24.4%	24.6%	25.3%	24.5%																														
Stove 13	Stove 14	Stove 15	Stove 16																														
25.1%	25.0%	26.1%	25.3%																														
	<p>If applicable, has the reported data been cross-checked with other available data?</p> <p>Yes. The reliability of WBT sample conducted by CME were randomly cross checked, by interviewing the end user if WBT was conducted at their household, during the remote site visit by the assessment team and found consistent with the results reported.</p>																																
	<p>Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?</p> <p>Yes. The QA/QC procedure is in place, internal checks have been done by the CPA implementer and established during the onsite assessment. During the telephonic interview, the assessment team has duly verified the CME's QA/QC procedures in which the data transfer from hard copies to excel sheets were cross checked by the senior management from the hard copies to ascertain the reliability and correctness of the entered data in the excel sheet</p>																																
	<p>In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?</p> <p>No such issues</p>																																
<b>Findings</b>	CL#02 was raised and resolved.																																
<b>Conclusion</b>	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.																																

Quantity of woody biomass used by project devices in tonnes per device of type i.,  
By=1,new,i,j,survey, Tonnes

Means of	Criteria/Requirements	Assessment/Observation
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verification	Measuring /Reading /Recording frequency	This is a measured parameter determined through a sample survey conducted during the first year from the time stove distribution is completed.														
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes														
	Monitoring equipment	Electronic weighting scales														
		<table border="1"> <tr> <th>Type</th> <th>Scale</th> </tr> <tr> <td>Model Name</td> <td>DRETEC KS-514</td> </tr> <tr> <td>Accuracy</td> <td>d=1g, e=1g</td> </tr> <tr> <td>Serial Number</td> <td>19E21825</td> </tr> <tr> <td>Calibration Frequency</td> <td>Annual</td> </tr> <tr> <td>Last Calibration</td> <td>27/08/2020</td> </tr> <tr> <td>Validity</td> <td>26/08/2021</td> </tr> </table>	Type	Scale	Model Name	DRETEC KS-514	Accuracy	d=1g, e=1g	Serial Number	19E21825	Calibration Frequency	Annual	Last Calibration	27/08/2020	Validity	26/08/2021
	Type	Scale														
Model Name	DRETEC KS-514															
Accuracy	d=1g, e=1g															
Serial Number	19E21825															
Calibration Frequency	Annual															
Last Calibration	27/08/2020															
Validity	26/08/2021															
Calibration frequency /interval:	Annual															
How were the values in the monitoring report verified?	<p>The parameter has been determined through sampling surveys. The sampling has been conducted in line with Standard for Sampling and surveys for CDM project activities and programmes of activities/19/ and CDM guidelines for Sampling and surveys for CDM project activities and programmes of activities/18/. The value derived from the survey results/14/ is:</p> <table border="1"> <tr> <td><math>B_{y=1,new,i,j,survey}</math></td> <td>kg/day</td> <td>3.705</td> </tr> <tr> <td><math>B_{y=1,new,i,j,survey}</math></td> <td>ton/year</td> <td>1.352</td> </tr> </table> <p>The value has been checked from the monitoring survey sheet/14/.</p> <p>The value has been checked in the monitoring report/4/ and ER sheet/16/ and found to be consistently reported.</p> <p>There is no default value for this parameter in the applied methodology/3/.</p> <p>The default value of 3.29 for <math>B_{old,p}</math> was sourced from SSC WG 33, Annex 8 at the time of CPA inclusion. This value of <math>B_{old}</math> yielded a value of 1.18tonnes/year for <math>B_{y=1,new}</math>. It was noted that the value used was not country specific but applicable to entire Asia. The value(1.352tonnes/years) derived from the survey conducted at the time of first verification was specifically determined for Myanmar. The applied methodology/3/ and the registered PoA DD/1/, CPA DDs/5/ also require the parameter to be determined at the time of first verification.</p> <p>The CME has followed the requirements of PoA DD/1/, CPA DDs/5/ and applied methodology/3/ and determined the value meeting the sampling standard requirement. Moreover, the registered CPA DDs/5/ page 13 clearly stated that the value is just being used to calculate estimated emission</p>		$B_{y=1,new,i,j,survey}$	kg/day	3.705	$B_{y=1,new,i,j,survey}$	ton/year	1.352								
$B_{y=1,new,i,j,survey}$	kg/day	3.705														
$B_{y=1,new,i,j,survey}$	ton/year	1.352														

		<p>reductions and the actual value will be calculated at the time of first verification. The increase of monitored value as compared to assumed value was found to be acceptable.</p> <p>The survey results met the required reliability requirement. The survey results were verified through acceptance sampling by interviewing 11 samples. No discrepancy was observed, and applied value was confirmed.</p>
	If applicable, has the reported data been cross-checked with other available data?	Yes. The monitoring sheet was cross checked with the monitoring forms/13/ for 11 sampled end users.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes. The QA/QC procedure is in place, internal checks have been done by the CPA implementer and established during the onsite assessment. During the telephonic interview, the assessment team has duly verified the CME's QA/QC procedures in which the data transfer from hard copies to excel sheets were cross checked by the senior management from the hard copies to ascertain the reliability and correctness of the entered data in the excel sheet
	In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?	No such issues
<b>Findings</b>	None	
<b>Conclusion</b>	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

**The operating life time of the project device. The life span should be reported in cases where the PPs are opting to account the efficiency loss as per paragraph 27 of the applied methodology, Life Span, Number of years**

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	Measured
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Not applicable. The life span of the project device is monitored via a CPA distribution record.
	Monitoring equipment	Not applicable
	Calibration frequency /interval:	Not applicable
	How were the values in the monitoring report verified?	The life span of the project device stove is estimated to be 2 years according to the device manufacturer/9/ and in order to maintain high performance and efficiency of the devices, they will be replaced every two years throughout the crediting period of the CPA regardless of the devices' operation condition.

		The life span of the project device was determined based on the date of the conformity letter in each CPAs/23/. The ICS users signed the letter at the time of ICS handover. For measuring a life span of the stoves included in this report, the CME considers all stoves as a single batch. As a batch, the date of the last cook stove delivered was the start date for forming a vintage of stoves.
	If applicable, has the reported data been cross-checked with other available data?	Not applicable
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Not applicable
	In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?	No such issues
<b>Findings</b>	None	
<b>Conclusion</b>	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

**Actual date of commissioning of the project device, Date of commissioning of project device i, date**

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	Fixed and recorded at the time of commissioning/distribution
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes
	Monitoring equipment	Not applicable
	Calibration frequency /interval:	Not applicable
	How were the values in the monitoring report verified?	The date of each CPA was determined based on the first stove distribution date, and this was checked through the Conformity letter signed between CME and End-user/23/. The first date of distribution for each CPA was found to be mentioned in the ER sheet (Tab: Monitoring Report, Cell: B15 onwards) which was confirmed from the distribution database/11/. Kindly refer to the ER sheet (Tab: Monitoring Report, Cell: G15 onwards ) for the comissioning date of each CPAs.
	If applicable, has the reported data been cross-	NA

	checked with other available data?	
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	NA
	In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?	No such issues
<b>Findings</b>	CAR#04 and CAR#06 was raised and resolved	
<b>Conclusion</b>	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

**To establish the date of commissioning, the CPA Implementers 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, Date of commissioning of batch j, date**

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	Fixed and recorded at the time of commissioning/distribution
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes
	Monitoring equipment	Not applicable
	Calibration frequency /interval:	Not applicable
	How were the values in the monitoring report verified?	The commissioning date of the batch is 29/02/2020 which is the last date of the commissioning of the device within the batch. This was checked from the ER Calculation Sheet/16/ and the date of the last stove was confirmed from the conformity letters/23/.
	If applicable, has the reported data been cross-checked with other available data?	NA
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	NA

	In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?	No such issues
<b>Findings</b>	CAR#06 was raised and resolved.	
<b>Conclusion</b>	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

### E.3.4.3. Implementation of sampling plan

<b>Means of verification</b>	<p>The CME has followed the CDM guidelines for Sampling and surveys for CDM project activities and programmes of activities version 4.0/18/ which is in-line to the registered PoA DD/1/.</p> <p>The assessment of CME's sampling is discussed below: The CME has applied stratified random sampling. The PoA envisaged to distribute different types of stoves. However, only one kind of stove could be disseminated during the actual distribution. Thus, strata has been considered as 1. Since all the CPAs have only kind of stove disseminated, entire population has been considered as one strata. According to Sampling and Survey standards, version 8.0/19/, the sampling plan applied by the CME for the following CPAs are found to be appropriate. As per the sampling plan stated in the PoA DD/1/, a minimum 95% confidence interval and a 10% margin of error requirement is achieved for the sampled parameters. Since the sampling has been done across the CPAs all the CPAs have microscale CDM units, the CME has taken 95/10 as the confidence precision levels which is found to be in line with the registered monitoring plan/1,5/.</p> <p><b>Target Population-</b> CME has considered all the stoves distributed within the monitoring period as the target population.</p> <p><b>Sampling Method-</b> The method used in sampling was Stratified random sampling.</p> <p><b>Sample Size for Parameter of Interest:</b> The sampling is applied to the following monitoring parameters:</p> <ol style="list-style-type: none"> <li>1. <math>N_{y,i,j}</math></li> <li>2. <math>n_{new,i,j}</math></li> <li>3. <math>B_{y=1,new,i,j,survey}</math></li> </ol> <p>The sample size is chosen using the equation inline to CDM guidelines for Sampling and surveys for CDM project activities and programmes of activities/18/.</p> <p>In this regard, sample size calculation spreadsheet /15/ was checked and found correct as per the registered monitoring plan. The complete details are given in E.3 section of Monitoring Report/4/.</p> <p><b>Implementation of Sampling Survey and Field Test Records:</b> The team leader through the interviews of the CME representative and monitoring personnel via skype call during remote survey confirmed that in addition to simply asking the survey questions to the end users, the surveyors were also trained to evaluate the results of sampling. Therefore, the implementation of surveys and tests was considered reliable.</p> <p><b>Monitoring survey (by CME) duration:</b> The monitoring survey (field survey / tests) was carried out by CME representatives</p>
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	between following duration for the current monitoring period.			
	<b>CPA Ref.No.</b>	<b>Technology</b>	<b>From</b>	<b>To</b>
	10471-P1-0007-CP1 to 10471-P1-0054-CP1	E-free Cookstove	01/11/2020	31/12/2020
	<p><b>Reliability and precision calculation:</b></p> <p>The verification team has verified the ER calculation spreadsheet /16/ with the monitored data, where the actual achieved precision is calculated against the Guidelines outlined under “Guideline for sampling and surveys for CDM project activities and Programme of Activities” Version 4.0 /18/ and confirms that the calculation of achieved reliability was done correctly.</p> <p>All parameters of interest are included in the ER spreadsheet/16/ for the included CPAs. These were checked for the input values as well as formula applied and were found consistent. The reliability (demonstration of precision achieved after the survey results) is depicted in the ER calculation sheets /16/ corresponding to final Monitoring Report /4/, which were also found correct.</p> <p>Following reliability calculation performed by CME has been reviewed by the assessment team and found correct. Sample estimates of all three parameters are within the required reliability precision. It is also confirmed that reliability and precision check is carried out and lower/upper bound limit is applied conservatively, wherever the required precision is not achieved.</p>			
	Parameter	Responded Samples	Value of parameter obtained	Precision achieved
	$N_{y,i,j}$	123	864,000	10%
	$n_{new,i,j}$	16	25.1%	10%
	$B_{y=1,new,i,j,survey}$	145	1.352	10%
	<p>The verification team has verified the ER calculation spreadsheets /16/ with the monitored data, where the actual achieved precision is calculated against the Guidelines outlined under “Guidelines for sampling and surveys for CDM project activities and programme of activities”/18/ and can confirm that the calculation of achieved reliability was done correctly.</p>			
<b>Findings</b>	CAR#03 and CAR#06 was raised and resolved			
<b>Conclusion</b>	The verification team confirmed that the sampling plan and the parameter values are in accordance with the monitoring plan provided in PoA DD /1/.			

### E.3.5. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	The registered monitoring plan (of respective CPA DDs/5/ and PoA DD/1/) does not state the calibration requirements for any of the parameter. Though the calibration details of the WBT equipment have been checked. The following information was verified with the calibration certificates/17/;					
	Equipment	Serial Number	Calibration Date	Valid Till	Frequency	Valid during current MP
	Electronic Weighing Scale	19E21825	27/08/2020	26/08/2021	Annual	Yes
	Thermometer	210607821, 210204626, 210607791, 210204625, 190313802, 190313804, 190313826,	27/08/2020	26/08/2021	Annual	Yes

		190313795				
	<b>Thermocouple</b>	210607880, 210204629, 210607879, 210204628, 191313905, 190313892, 190313930, 190313878	27/08/2020	26/08/2021	Annual	Yes
	<b>Scale</b>	8120420010	27/08/2020	26/08/2021	Annual	Yes
	<b>Moisture Meter</b>	59008018	27/08/2020	26/08/2021	Annual	Yes
All field tests were carried out only after calibration was conducted as verified from the monitoring survey sheets/14/provided by the CME. It is noteworthy that registered monitoring plan/1/ does not specify any calibration frequency, however, CME has maintained an annual frequency.						
<b>Findings</b>	None					
<b>Conclusion</b>	The verification team confirms that CME applied good practices while using the monitoring equipment and these were under the state of calibration/17/. There is no specific requirement prescribed in this regard in the registered monitoring plan/1/ and in the monitoring methodology/3/. The monitoring devices were found to be calibrated during the field test/17/.					

### E.3.6. Assessment of data and calculation of emission reductions or net removals

#### E.3.6.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

<b>Means of verification</b>	<p>The equations used were found consistent with the revised accepted PoA DD/1/, revised accepted CPA DDs/5/ and the applied methodologies AMS-II.G., version 09.</p> <p>According to paragraph 17 of methodology AMS-II.G version 09, emission reductions shall be calculated as:</p> $ER_y = \sum_i \sum_j ER_{y,i,j} - LE_y$ <p>Where,</p> <p><math>i</math> = Indices for the situation where more than one type of project device is introduced to replace the pre-project devices</p> <p><math>j</math> = Indices for the situation where there is more than one batch of project device</p> <p><math>ER_y</math> = Emission reductions during year <math>y</math> in t</p> <p><math>ER_{y,i,j}</math> = Emission reductions by project device of type <math>i</math> and batch <math>j</math> during year <math>y</math> in t CO<sub>2</sub>e</p> <p><math>LE_y</math> = Leakage emissions in the year <math>y</math></p> <p>So, now</p> $ER_{y,i,j} = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected\ fossil\ fuels} \times LAF$ <p>Where,</p> <p><math>B_{y,savings}</math> = Quantity of woody biomass that is saved in tonnes per cookstove device of type <math>i</math> and batch <math>j</math> during year <math>y</math></p> <p><math>N_{y,i,j}</math> = Number of project devices of type <math>i</math> and batch <math>j</math> operating during year <math>y</math></p>
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	<p> <math>\mu_y</math> = Adjustment to account for any continued use of pre-project devices during the year y  <math>f_{NRB,y}</math> = Fraction of woody biomass that can be established as non-renewable biomass  <math>NCV_{biomass}</math> = Net calorific value of the non-renewable woody biomass, briquettes or charcoal used in project devices  <math>EF_{projected\_fossil\ fuel}</math> = Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers  <math>LAF</math> = Leakage adjustment factor </p> <p>In line with the applied methodology AMS-II.G version 09.0, Water Boiling Test (WBT) has been chosen to determine <math>B_{y,savings,i,j}</math> with the equations given below,</p> $B_{y,savings,i,j} = B_{y=1,new,i,j,survey} \times \left( \frac{\eta_{new,i,j}}{\eta_{old,i,j}} - 1 \right)$ <p>Where,</p> <p> <math>B_{y=1,new,i,j,survey}</math> = Quantity of woody biomass used by project devices in tonnes per device of type i  <math>\eta_{new,i,j}</math> = Efficiency of the device of each type i and batch j implemented as part of the project activity  <math>\eta_{old,i,j}</math> = Efficiency of pre-project device, which is a three-stone fire using firewood </p> <p>Detailed assessment of all the parameters used to calculate emission reductions is provided under section E.3.4.2.</p> <p>The calculations presented in the monitoring report /4/ and the corresponding ER sheet /16/ were found appropriate and complying with provisions prescribed in the registered monitoring plan/1/ of the respective revised accepted CPA-DDs/5/, PoA-DD/1/ and applied methodology/3/.</p> <p>The verification team affirms that an audit trail that contains the evidence and records that validated the stated figures were checked and found legitimate.</p>
<b>Findings</b>	None
<b>Conclusion</b>	<p>The verification team verified that</p> <ol style="list-style-type: none"> <li>A complete set of data for the monitoring period was available for the monitoring period and the verification of each monitoring parameter is elaborated under Section E.3 of this report. The complete monitoring data is also presented in the corresponding ER calculations sheet /16/ of final Monitoring Report /4/.</li> <li>The information provided in the monitoring report was cross checked with other sources, wherever appropriate and available, and such information is also included under Section E.3 of this report.</li> <li>The calculations of baseline emissions as presented in the corresponding ER calculations sheet /16/ of final Monitoring Report /4/ were checked and found to be consistent with the formulae and methods described in the registered monitoring plan of each relevant CPA DDs/5/, revised accepted PoA DD/1/ and the applied methodology/3/.</li> <li>All assumptions used in the emission calculations were found appropriate and therefore justified</li> <li>Appropriate emission factors, IPCC default factors and other reference values have been correctly applied. This has also been elaborated under Section E.3.4.1 of this report.</li> <li>No standardized baseline was prescribed in the revised accepted PoA DD/1/ and therefore it has not been applied.</li> <li>There is no pro-rata approach was applied in the current monitoring period as entire monitoring period falls into period that is after the end of first</li> </ol>



	commitment period of Kyoto Protocol.
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**E.3.6.2. Calculation of project GHG emissions or actual net GHG removals by sinks**

<b>Means of verification</b>	The PoA- DD/1/, revised accepted CPA-DDs/5/and applied monitoring methodology/3/ does not prescribe any project emissions to be considered. The project emissions are already accounted for in the equation referred for calculation of emission reductions. The remote site visit and project design also did not reveal any potential source to be considered in this regard.
<b>Findings</b>	CAR#02 was raised and resolved
<b>Conclusion</b>	No project emissions were calculated, and the approach used is found to be correct.

**E.3.6.3. Calculation of leakage GHG emissions**

<b>Means of verification</b>	The revised accepted PoA-DD/1/, revised accepted CPA-DDs/5/ and applied monitoring methodologies does not prescribe any leakage emissions to be considered. The review of the project design and interview of the CME representative during the remote site visit also did not reveal any potential source to be considered in this regard. However, the leakage factor of 0.95 has been considered for the calculation of baseline emissions and Bold has been multiplied by a net to gross adjustment factor to account for leakages.
<b>Findings</b>	None
<b>Conclusion</b>	No additional leakage emissions (other than what is already considered in baseline calculations) were required in accordance with the methodologies.

**E.3.6.4. Summary of calculation of GHG emission reductions or net GHG removals by sinks**

<b>Means of verification</b>	As discussed in the above sections, the entire emission reductions from the PoA were based on baseline emissions. The calculations presented in this regard in the final monitoring report and corresponding ER calculations sheet were found appropriate and comply with the provisions prescribed in the registered monitoring plan of revised accepted CPA DDs/5/, PoA DD/1/ and applied methodology/3/. The verification team confirms that an audit trail that contains the evidence and records that validated the stated figures were checked and found acceptable.
<b>Findings</b>	CAR#05 was raised and resolved.
<b>Conclusion</b>	<p>The verification team confirms that:</p> <ul style="list-style-type: none"> <li>a) The complete data was available and is duly reported.</li> <li>b) As indicated above, the description with regard to cross-check of reported data is included under respective parameter (refer Section E.3.4.2 of this report);</li> <li>c) Appropriate methods and formulae for calculating baseline GHG emissions or baseline net GHG removals, project emissions and leakage emissions were followed.</li> <li>d) Appropriate emission factors, IPCC default factors and other reference values were correctly applied.</li> <li>e) There is no pro-rata approach was applied in the current monitoring period as the entire monitoring period falls into a period that is after the end of first commitment period of Kyoto Protocol.</li> </ul> <p>The total number of ERs achieved during the current monitoring period is 735,072 tCO<sub>2</sub>e.</p>

Title and UNFCCC reference number of the CPA	Baseline emissions or baseline net GHG removals by sinks (tCO <sub>2</sub> e)	Project emissions or actual net GHG removals by sinks (tCO <sub>2</sub> e)	Leakage (tCO <sub>2</sub> e)	GHG emission reductions or net GHG removals by sinks (tCO <sub>2</sub> e)		
				Amount achieved before 1 January 2013	Amount achieved from 1 January 2013	Amount achieved in the entire monitoring period
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 011  10471-P1-0007-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 012  10471-P1-0008-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 013  10471-P1-0009-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 014  10471-P1-0010-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 015  10471-P1-0011-CP1	15,314	0	0	0	15,314	0

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 016  10471-P1-0012-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 017  10471-P1-0013-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 018  10471-P1-0014-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 019  10471-P1-0015-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 020  10471-P1-0016-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 021  10471-P1-0017-CP1	15,314	0	0	0	15,314	0

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 022  10471-P1-0018-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 023  10471-P1-0019-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 024  10471-P1-0020-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 025  10471-P1-0021-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 026  10471-P1-0022-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 027  10471-P1-0023-CP1	15,314	0	0	0	15,314	0

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 028  10471-P1-0024-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 029  10471-P1-0025-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 030  10471-P1-0026-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 031  10471-P1-0027-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 032  10471-P1-0028-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 033  10471-P1-0029-CP1	15,314	0	0	0	15,314	0

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 034  10471-P1-0030-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 035  10471-P1-0031-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 036  10471-P1-0032-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 037  10471-P1-0033-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 038  10471-P1-0034-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 039  10471-P1-0035-CP1	15,314	0	0	0	15,314	0

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 040  10471-P1-0036-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 041  10471-P1-0037-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 042  10471-P1-0038-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 043  10471-P1-0039-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 044  10471-P1-0040-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 045  10471-P1-0041-CP1	15,314	0	0	0	15,314	0

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 046  10471-P1-0042-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 047  10471-P1-0043-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 048  10471-P1-0044-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 049  10471-P1-0045-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 050  10471-P1-0046-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 051  10471-P1-0047-CP1	15,314	0	0	0	15,314	0



CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 052  10471-P1-0048-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 053  10471-P1-0049-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 054  10471-P1-0050-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 055  10471-P1-0051-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 056  10471-P1-0052-CP1	15,314	0	0	0	15,314	0
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 057  10471-P1-0053-CP1	15,314	0	0	0	15,314	0

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 058  10471-P1-0054-CP1	15,314	0	0	0	15,314	0
<b>Total</b>	735,072	0	0	0	735,072	0

### E.3.6.5. Comparison of actual GHG emission reductions or net GHG removals by sinks with estimates in included CPA

<b>Means of verification</b>	As verified and evident from the final Monitoring Report/4/ and corresponding ER calculations sheet/16/, the actual emission reductions achieved by CPAs included in the current monitoring period were less than estimated for all the CPAs. The estimated ERs were checked with the respective CPA DDs/5/ for the comparable period. Considering there is no increase in ERs, no further verification effort was put in. The quantitative details of actual values of achieved ERs for the all CPAs and value estimated in the specific CPA DDs/5/ is presented in the next table.
<b>Findings</b>	CAR#01 and CAR#05 was raised and resolved
<b>Conclusion</b>	The actual ERs achieved in included CPAs are not higher than the estimated quantity of ERs in the CPA-DDs/5/. Accordingly, it was accepted by verification team.

Title and UNFCCC reference number of the CPA	Actual values achieved by the CPAs during this monitoring period	Value estimated in ex ante calculation in the included CPA-DD(s)
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 011  10471-P1-0007-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 012  10471-P1-0008-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 013  10471-P1-0009-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 014  10471-P1-0010-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 015  10471-P1-0011-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 016  10471-P1-0012-CP1	15,314	31,866

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 017  10471-P1-0013-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 018  10471-P1-0014-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 019  10471-P1-0015-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 020  10471-P1-0016-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 021  10471-P1-0017-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 022  10471-P1-0018-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 023  10471-P1-0019-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 024  10471-P1-0020-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 025  10471-P1-0021-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 026  10471-P1-0022-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 027  10471-P1-0023-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 028  10471-P1-0024-CP1	15,314	31,866

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 029  10471-P1-0025-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 030  10471-P1-0026-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 031  10471-P1-0027-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 032  10471-P1-0028-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 033  10471-P1-0029-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 034  10471-P1-0030-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 035  10471-P1-0031-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 036  10471-P1-0032-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 037  10471-P1-0033-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 038  10471-P1-0034-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 039  10471-P1-0035-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 040  10471-P1-0036-CP1	15,314	31,866

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 041  10471-P1-0037-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 042  10471-P1-0038-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 043  10471-P1-0039-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 044  10471-P1-0040-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 045  10471-P1-0041-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 046  10471-P1-0042-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 047  10471-P1-0043-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 048  10471-P1-0044-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 049  10471-P1-0045-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 050  10471-P1-0046-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 051  10471-P1-0047-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 052  10471-P1-0048-CP1	15,314	31,866

CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 053 10471-P1-0049-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 054 10471-P1-0050-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 055 10471-P1-0051-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 056 10471-P1-0052-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 057 10471-P1-0053-CP1	15,314	31,866
CCC PoA for distribution of ICS in developing countries (Myanmar): CPA 058 10471-P1-0054-CP1	15,314	31,866
<b>Total</b>	735,072	1,529,568

**E.3.6.6. Remarks on difference from estimated value in included CPA**

<b>Means of verification</b>	As verified and evident from the Monitoring Report /4/ and corresponding ER calculations sheet /16/, the actual emission reductions achieved for project ICSs for the CPAs under this verification in the current monitoring period were found less than the estimated quantity in the CPA-DDs/5/ for the comparable period.  Considering there is no increase in ERs no further justification was sought. The quantitative details of actual values of achieved ERs for the CPA and value estimated in the CPA-DDs/5/ is presented in the next table.
<b>Findings</b>	No findings were raised
<b>Conclusion</b>	The actual emission reductions achieved in any of specific CPAs are not higher than the estimated quantity of ERs in the CPA-DDs/5/. Accordingly, it was accepted by the verification team.

**E.3.7. Assessment of reported sustainable development co-benefits**

<b>Means of verification</b>	This section was not applicable as no such document was found to be developed and published on the UNFCCC CDM website by the CME. Thus, in-line to para 361(a) of the VVS for PoA Version 2.0 /20/ PP had not monitored the sustainable development co-benefits.
<b>Findings</b>	None
<b>Conclusion</b>	Not applicable as it was not monitored by CME.

**E.3.8. Global stakeholder consultation**

<b>Means of verification</b>	The monitoring report for the current monitoring period was published on 31/05/2021 for comment period 01/06/2021-15/06/2021. No comments were received during this period.
<b>Findings</b>	None
<b>Conclusion</b>	No comments were received during the comment period as checked from the

## SECTION F. Internal quality control

A draft verification report prepared by verification team is reviewed by an independent technical review team (one or more members) to confirm whether all the internal procedures established and implemented by ESPL were duly complied with and such opinion/conclusion were reached in an objective manner that complies with the applicable CDM rules/requirements. The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team are independent of the verification team. During the technical review process, additional findings may be identified, or the closed findings may be opened, which needs to be satisfactorily resolved before the request for issuance is submitted to UNFCCC.

The independent technical reviewer may either approve the report as such or reject/return the same in such case providing the comments/findings/issues that needs to be resolved by the verification team. The decision taken by the Technical Reviewer is final and is authorized by the Managing Director on behalf of Earthood Services Private Limited.

## SECTION G. Verification opinion

Earthood Services Private Limited (ESPL), contracted by Climate Change Center (the CME for the PoA), has performed the first independent verification of the emission reductions for the registered CDM PoA "The Project of CCC program of Activities (PoA) for Distribution of Improved Cookstoves (ICS) in Developing South and Southeast Asia Countries (Myanmar)" for the first monitoring period 31/08/2019 to 31/12/2020 (both days inclusive) as reported in the Monitoring Report (public) Version 01 dated 30/04/2021. The CME is responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the project activity. This verification report is for the 10471-P1-0007-CP1 to 10471-P1-0054-CP1 which were included at the UNFCCC webpage at the end of the current monitoring period.

ESPL confirms that the monitoring system is in place and the emission reductions are calculated without material misstatements. This verification report has been prepared using the latest available template specified by UNFCCC and complies with the instructions to follow of CDM VVS-PoA Version 02. steps indicated under Section A of this report. The verification process has resulted in conclusion that the included CPA confirm to the revised accepted PoA DD as well as comply with applicable CDM rules and regulations and in accordance with applied monitoring methodologies, AMS II.G Version 09. As a result, it is confirmed that the emission reductions from the CDM PoA 10471 "The Project of CCC program of Activities (PoA) for Distribution of Improved Cookstoves (ICS) in Developing South and Southeast Asia Countries (Myanmar)" are correctly reported in the Monitoring Report (final) Version 1.2 dated 14/09/2021 and corresponding ER sheets for the monitoring period 31/08/2019 to 31/12/2020 (both days inclusive) amount as 735,072 tCO<sub>2e</sub>. Therefore, this will be submitted as part of request for issuance as per CDM PCP Version 02.

## SECTION H. Certification statement

The verification approach is based on the understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these. ESPL planned and performed the verification by obtaining evidence and other information and explanations that ESPL considered necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

In our opinion the GHG emissions reductions reported for the PoA for the monitoring period 31/08/2019 to 31/12/2020 (both days inclusive) are fairly stated in the Monitoring Report (final) Version 1.2 dated 14/09/2021.

ESPL, based on outcome of verification activities, certify in writing that, during the monitoring period 31/08/2019 to 31/12/2020 (both days inclusive), the registered CDM PoA "The Project of CCC program of Activities (PoA) for Distribution of Improved Cookstoves (ICS) in Developing South and Southeast Asia Countries (Myanmar)" and the included 10471-P1-0007-CP1 to 10471-P1-0054-CP1 in the registered CDM PoA achieved the verified amount of 735,072 tCO<sub>2e</sub> reductions in anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the CPA.

The verified amount of emission reductions is stated below as per CPA and as per commitment period;

Emission Reductions (Amount) in this monitoring period (in tCO <sub>2e</sub> )
--

CPA (included in this request)	Up to 31/12/2012 (1st commitment period)	01/01/2013 onwards	01/01/2021 Onwards
10471-P1-0007-CP1	-	15,314	-
10471-P1-0008-CP1	-	15,314	-
10471-P1-0009-CP1	-	15,314	-
10471-P1-0010-CP1	-	15,314	-
10471-P1-0011-CP1	-	15,314	-
10471-P1-0012-CP1	-	15,314	-
10471-P1-0013-CP1	-	15,314	-
10471-P1-0014-CP1	-	15,314	-
10471-P1-0015-CP1	-	15,314	-
10471-P1-0016-CP1	-	15,314	-
10471-P1-0017-CP1	-	15,314	-
10471-P1-0018-CP1	-	15,314	-
10471-P1-0019-CP1	-	15,314	-
10471-P1-0020-CP1	-	15,314	-
10471-P1-0021-CP1	-	15,314	-
10471-P1-0022-CP1	-	15,314	-
10471-P1-0023-CP1	-	15,314	-
10471-P1-0024-CP1	-	15,314	-
10471-P1-0025-CP1	-	15,314	-
10471-P1-0026-CP1	-	15,314	-
10471-P1-0027-CP1	-	15,314	-
10471-P1-0028-CP1	-	15,314	-
10471-P1-0029-CP1	-	15,314	-
10471-P1-0030-CP1	-	15,314	-
10471-P1-0031-CP1	-	15,314	-
10471-P1-0032-CP1	-	15,314	-
10471-P1-0033-CP1	-	15,314	-
10471-P1-0034-CP1	-	15,314	-
10471-P1-0035-CP1	-	15,314	-
10471-P1-0036-CP1	-	15,314	-
10471-P1-0037-CP1	-	15,314	-
10471-P1-0038-CP1	-	15,314	-
10471-P1-0039-CP1	-	15,314	-
10471-P1-0040-CP1	-	15,314	-
10471-P1-0041-CP1	-	15,314	-
10471-P1-0042-CP1	-	15,314	-
10471-P1-0043-CP1	-	15,314	-
10471-P1-0044-CP1	-	15,314	-
10471-P1-0045-CP1	-	15,314	-
10471-P1-0046-CP1	-	15,314	-
10471-P1-0047-CP1	-	15,314	-
10471-P1-0048-CP1	-	15,314	-
10471-P1-0049-CP1	-	15,314	-
10471-P1-0050-CP1	-	15,314	-
10471-P1-0051-CP1	-	15,314	-
10471-P1-0052-CP1	-	15,314	-
10471-P1-0053-CP1	-	15,314	-
10471-P1-0054-CP1	-	15,314	-
<b>Total</b>	-	<b>735, 072 tCO<sub>2</sub>e</b>	-



## Appendix 1. Abbreviations

Abbreviations	Full texts
AQL	Acceptable Quality Level
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM PCP	Clean Development Mechanism Project Cycle Procedure
CDM PS	Clean Development Mechanism Project Standard
CDM VVS	Clean Development Mechanism Validation and Verification Standard
CER	Certified Emission Reduction
CL	Clarification Request
CME	Coordinating or Managing Entity
CPA	Component Project Activity
CP	Crediting period
DOE	Designated Operational Entity
DNA	Designated National Authority
EB	Executive Board
ESPL	Earthood Services Private Limited
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
ICS	Improved Cook Stove
IPCC	Intergovernmental Panel on Climate Change
POA	Programme of Activity
PO	Partner Organization
PSU	Primary Sampling Unit
RMP	Registered Monitoring Plan
TA	Technical Area (with in Sectoral Scope)
TR	Technical Reviewer
VVS	Validation and Verification Standard
UNFCCC	United Nations Framework Convention on Climate Change
UQL	Unacceptable Quality Level
WBT	Water Boiling Test

## Appendix 2. Competence of team members and technical reviewers

Competence Statement	
<b>Name</b>	Deepika Mahala
<b>Country</b>	India
<b>Education</b>	M. Sc. (Environment Management), GGSIP University B.Sc. Hons. (Chemistry), Sri Venkateshwar College, DU
<b>Experience</b>	5 Years +
<b>Field</b>	Climate Change
Approved Roles	
<b>Team Leader</b>	YES
<b>Validator</b>	YES
<b>Verifier</b>	YES

<b>Methodology Expert</b>	ACM0002, AMS.I.D., AMS.I.A, AMS.III.AV, AMS.II.G		
<b>Local expert</b>	YES (India)		
<b>Financial Expert</b>	NO		
<b>Technical Reviewer</b>	YES		
<b>TA Expert</b>	YES (TA 1.2 & TA 3.1)		
<b>Reviewed by</b>	Shreya Garg	<b>Date</b>	15/04/2021
<b>Approved by</b>	Anshika Gupta	<b>Date</b>	15/04/2021

Competence Statement			
Name	Vaishali Vatsa		
Education	M.Sc. (Environmental Studies and Resource Management), TERI University		
Experience	4 months		
Field	Climate Change		
Approved Roles			
Team Leader	NO		
Validator	Yes		
Verifier	Yes		
Methodology Expert	NO		
Local expert	NO		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert (X.X)	NO		
Trainee	NO		
Reviewed by	Shreya Garg	Date	30/12/2019
Approved by	Anshika Gupta	Date	02/01/2020

Competence Statement			
Name	Ye Thura		
Country	Myanmar		
Education	Bachelor's in Agricultural Science		
Experience	17+ years		
Field	Fertilizers Industry		
Approved Roles			
Team Leader	No		
Validator	No		
Verifier	No		
Methodology Expert	No		
Local expert	Yes (Myanmar)		
Financial Expert	No		
Technical Reviewer	No		
TA Expert	No		
Reviewed by	Shreya Garg	Date	14/08/2018
Approved by	Anshika Gupta	Date	14/08/2018

Competence Statement			
<b>Name</b>	Ashok Gautam		
<b>Country</b>	India		
<b>Education</b>	M. Sc. (Environmental Sciences) M. Tech. (Energy & Environmental Management)		
<b>Experience</b>	16 Years +		
<b>Field</b>	Energy, Climate Change & Environment		
Approved Roles			
<b>Team Leader</b>	YES		
<b>Validator</b>	YES		
<b>Verifier</b>	YES		
<b>Methodology Expert</b>	AMS-I.D., AMS-I.A., AMS-I.C., AMS-I.E, AMS-II.D., AMS-II.G., AMS-III.E., AMS-III.H., AMS-III.Q, AMS-III.Z., AMS-III.AV., AMS III.AR, AM0029, AM0025, AM0056, ACM0001, ACM0002, ACM0004, ACM0012, ACM0006, AM0018, ACM0009, AM0034, AMS.I.B, ACM0003		
<b>Local expert</b>	YES (India)		
<b>Financial Expert</b>	YES		
<b>Technical Reviewer</b>	YES		
<b>TA Expert</b>	YES (TA 1.1, TA 1.2, TA 3.1, TA 13.1)		
<b>Reviewed by</b>	Shreya Garg	<b>Date</b>	15/04/2021
<b>Approved by</b>	Anshika Gupta	<b>Date</b>	15/04/2021

### Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	Climate change Centre	Revised accepted PoA-DD	Version: 06.13 Dated: 25/01/2021	Others
2	Climate change Centre	Validation report for registered PoA DD	Version: 3.2 Dated: 03/05/2019	Others
3	UNFCCC	AMS-II.G. Energy efficiency measures in thermal applications of non-renewable biomass	Version 9.0	Others
4	Climate change Centre	Monitoring Report (final)	Version 1.2 Dated 14/09/2021	CME
5	UNFCCC	Revised accepted: CPA-DD (10471-P1-0007-CP1) CPA-DD (10471-P1-0008-CP1) CPA-DD (10471-P1-0009-CP1) CPA-DD (10471-P1-0010-CP1) CPA-DD (10471-P1-0011-CP1) CPA-DD (10471-P1-0012-CP1) CPA-DD (10471-P1-0013-CP1) CPA-DD (10471-P1-0014-CP1) CPA-DD (10471-P1-0015-CP1) CPA-DD (10471-P1-0016-CP1) CPA-DD (10471-P1-0017-CP1)	Version: 01.4 Version: 01.4 Version: 01.4 Version: 01.4 Version: 01.4 Version: 01.4 Version: 01.4 Version: 01.4 Version: 01.4 Version: 01.4 Version: 01.4	Others

		CPA-DD (10471-P1-0018-CP1) CPA-DD (10471-P1-0019-CP1) CPA-DD (10471-P1-0020-CP1) CPA-DD (10471-P1-0021-CP1) CPA-DD (10471-P1-0022-CP1) CPA-DD (10471-P1-0023-CP1) CPA-DD (10471-P1-0024-CP1) CPA-DD (10471-P1-0025-CP1) CPA-DD (10471-P1-0026-CP1) CPA-DD (10471-P1-0027-CP1) CPA-DD (10471-P1-0028-CP1) CPA-DD (10471-P1-0029-CP1) CPA-DD (10471-P1-0030-CP1) CPA-DD (10471-P1-0031-CP1) CPA-DD (10471-P1-0032-CP1) CPA-DD (10471-P1-0033-CP1) CPA-DD (10471-P1-0034-CP1) CPA-DD (10471-P1-0035-CP1) CPA-DD (10471-P1-0036-CP1) CPA-DD (10471-P1-0037-CP1) CPA-DD (10471-P1-0038-CP1) CPA-DD (10471-P1-0039-CP1) CPA-DD (10471-P1-0040-CP1) CPA-DD (10471-P1-0041-CP1) CPA-DD (10471-P1-0042-CP1) CPA-DD (10471-P1-0043-CP1) CPA-DD (10471-P1-0044-CP1) CPA-DD (10471-P1-0045-CP1) CPA-DD (10471-P1-0046-CP1) CPA-DD (10471-P1-0047-CP1) CPA-DD (10471-P1-0048-CP1) CPA-DD (10471-P1-0049-CP1) CPA-DD (10471-P1-0050-CP1) CPA-DD (10471-P1-0051-CP1) CPA-DD (10471-P1-0052-CP1) CPA-DD (10471-P1-0053-CP1) CPA-DD (10471-P1-0054-CP1)	Version: 01.4 Version: 01.4	
6	UNFCCC	CDM-PoA-MR-FORM	Version 4.0	Others
7	Climate change Centre	Agreement between CME and CPA-implementer (Ministry of Agriculture, Livestock and Irrigation (MOALI) which will act as CPA implementer)	22/06/2020	CME
8	Climate change Centre	Agreement with Myanmar ceramic Society to confirm the responsibility of the local stove manufacturer	25/04/2018	CME
9	Myanmar Ceramic Society	Technical manufacturer specification of E-free cookstoves	-	CME
10	Climate change Centre	WBT Sheets	February, 2021	CME
11	Climate change Centre	CPA Distribution Database 10471-P1-0007-CP1 10471-P1-0008-CP1 10471-P1-0009-CP1 10471-P1-0010-CP1 10471-P1-0011-CP1 10471-P1-0012-CP1 10471-P1-0013-CP1 10471-P1-0014-CP1 10471-P1-0015-CP1 10471-P1-0016-CP1	Various	CME

		10471-P1-0017-CP1 10471-P1-0018-CP1 10471-P1-0019-CP1 10471-P1-0020-CP1 10471-P1-0021-CP1 10471-P1-0022-CP1 10471-P1-0023-CP1 10471-P1-0024-CP1 10471-P1-0025-CP1 10471-P1-0026-CP1 10471-P1-0027-CP1 10471-P1-0028-CP1 10471-P1-0029-CP1 10471-P1-0030-CP1 10471-P1-0031-CP1 10471-P1-0032-CP1 10471-P1-0033-CP1 10471-P1-0034-CP1 10471-P1-0035-CP1 10471-P1-0036-CP1 10471-P1-0037-CP1 10471-P1-0038-CP1 10471-P1-0039-CP1 10471-P1-0040-CP1 10471-P1-0041-CP1 10471-P1-0042-CP1 10471-P1-0043-CP1 10471-P1-0044-CP1 10471-P1-0045-CP1 10471-P1-0046-CP1 10471-P1-0047-CP1 10471-P1-0048-CP1 10471-P1-0049-CP1 10471-P1-0050-CP1 10471-P1-0051-CP1 10471-P1-0052-CP1 10471-P1-0053-CP1 10471-P1-0054-CP1		
12	Climate change Centre	Training Records	Various	CME
13	Climate change Centre	Monitoring Survey forms	01/11/2020-31/12/2020	CME
14	Climate change Centre	Monitoring Survey Sheet	01/11/2020-31/12/2020	CME
15	Climate change Centre	Sample Size calculation sheet	-	CME
16	Climate change Centre	ER Calculation Sheet	Version 1.2 Dated: 16/07/2021	CME
17	OTS Private Limited	Calibration Certificates - Thermometer - Thermocouple - Scale - Moisture meter	Dated: 27/08/2020	CME
18	UNFCCC	CDM guidelines for Sampling and surveys for CDM project activities and programmes of activities	Version 4.0	Others
19	UNFCCC	Standard for Sampling and surveys for	Version 8.0	Others

		CDM project activities and programmes of activities		
20	UNFCCC	VVS for PoA	Version 2.0	Others
21	UNFCCC	PS for PoA	Version 2.0	Others
22	UNFCCC	PCP for PoA	Version 2.0	Others
23	Climate change Centre	Conformity letters for CPAs	Various	CME
24	Worldometer	<a href="https://www.worldometers.info/coronavirus/countries-where-coronavirus-has-spread/">https://www.worldometers.info/coronavirus/countries-where-coronavirus-has-spread/</a>	15/08/2021	Others
25	ESPL	OSV Exemption Form	Dated: 21/06/2021	Others
26	Climate change centre	ERPA	Dated: June,2018	CME
27	UNFCCC	EB announcement <a href="https://cdm.unfccc.int/newsroom/latest-news/releases/2020/01041_index.html">https://cdm.unfccc.int/newsroom/latest-news/releases/2020/01041_index.html</a>	23/06/2020	Other
28	UNFCCC	EB-108 Meeting report Link: <a href="https://cdm.unfccc.int/filestorage/X/B/L/XBL3H024J87AVRZP19YUO6IGEDSMQT/eb108%20meeting%20report.pdf?t=OE98cW5hMXJvDC4g05i0cKrSB7AoSVcati0">https://cdm.unfccc.int/filestorage/X/B/L/XBL3H024J87AVRZP19YUO6IGEDSMQT/eb108%20meeting%20report.pdf?t=OE98cW5hMXJvDC4g05i0cKrSB7AoSVcati0</a>	-	Others
29	UNFCCC	<a href="https://cdm.unfccc.int/newsroom/latest-news/releases/2020/01041_index.html">https://cdm.unfccc.int/newsroom/latest-news/releases/2020/01041_index.html</a>	-	Other
30	UNFCCC	PRC-10471-001 Link: <a href="https://cdm.unfccc.int/PRCContainer/DB/prcp723267294/view">https://cdm.unfccc.int/PRCContainer/DB/prcp723267294/view</a>	-	Other
31	UNFCCC	PoA-webpage: <a href="https://cdm.unfccc.int/ProgrammeOfActivities/poa_db/LGABR9Q0JYH68VN5WI7MUXTEKDCSOP/view">https://cdm.unfccc.int/ProgrammeOfActivities/poa_db/LGABR9Q0JYH68VN5WI7MUXTEKDCSOP/view</a>	-	Other
32	UNFCCC	ASB0049 Link: <a href="https://cdm.unfccc.int/filestorage/e/x/t/extfile-20201224094626177-ASB0049-2020_TSB0015.pdf/ASB0049-2020_TSB0015.pdf?t=enZ8cXk0aHF3fDB94vMHZqXDAWn06RIgFC38">https://cdm.unfccc.int/filestorage/e/x/t/extfile-20201224094626177-ASB0049-2020_TSB0015.pdf/ASB0049-2020_TSB0015.pdf?t=enZ8cXk0aHF3fDB94vMHZqXDAWn06RIgFC38</a>	Version 1.0	Other
33	UNFCCC	Standard for Sampling and surveys for CDM project activities and programmes of activities	Version 9.0	Others
34	UNFCCC	Validation report of CPA 10471-P1-0001-CP1	Dated: 26/08/2019	Others
35	UNFCCC	Validation report of CPA 10471-P1-0002-CP1 to CPA-P1-0006-CP1	Dated: 26/08/2019	Others
36	UNFCCC	Validation report of CPA 10471-P1-0007-CP1 to CPA-P1-0054-CP1	Dated: 08/04/2020	Others

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

Table 1. Remaining FAR from validation and/or previous verification

<b>FAR ID</b>	01	<b>Section no.</b>	E.2	<b>Date : DD/MM/YYYY</b>
<b>Description of FAR</b>				
NA				
<b>CME response</b>				<b>Date : DD/MM/YYYY</b>
NA				
<b>Documentation provided by CME</b>				
NA				
<b>DOE assessment</b>				<b>Date: DD/MM/YYYY</b>
NA				

Table 2. CL from this verification

<b>CL ID</b>	01	<b>Section no.</b>	E.3.4.2.	<b>Date : 28/06/2021</b>
<b>Description of CL</b>				
For parameter $N_{y,l,j}$ , CME shall explain how vintage of different stoves have been taken under consideration.				
<b>CME response</b>				<b>Date : 16/07/2021</b>
All cookstoves included in this monitoring report have been considered as a batch as commissioned during the calendar year 2020 (per definitions under AMS.II.G Para 14.a), thus all have the same vintage according to the methodology we applied. Since one year had not yet passed during the monitoring period from the time of first distribution of the cook stove, only the vintage of year 1 was considered.				
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				<b>Date: 25/08/2021</b>
CME has considered all the stoves distributed between 01/02/2020 to 29/02/2020 as one batch. The consideration of only vintage year 1 of the batch was found to be acceptable as the last stove was distributed on 29/02/2020 and the Sampling was conducted in November, 2020. The first and last date of stove distribution was confirmed from the conformity letters provided by the CME.				
Thus, CL#01 stands closed.				

<b>CL ID</b>	02	<b>Section no.</b>	E.3.4.2.	<b>Date : 08/09/2021</b>
<b>Description of CL</b>				
1. The energy requirements have been reduced to 25% as compared to what would have happened in the baseline. This is significantly high savings considering the baseline stoves had efficiency of 0.1 and the stoves have designed efficiency of 0.28. CME shall clarify how the energy requirements have been reduced by 25% when compared to the baseline.				
<b>CME response</b>				<b>Date : 09/09/2021</b>
1. Energy Saving tab proves that the cook stove distributed in this monitoring report does not exceed the SSC standard, so the content indicated in comment 2 is not true. To prevent confusion of communication, the existing tab ('Energy saving' sheet in the ER calculation sheet) was deleted and a new SSC threshold tab was created to prove that it was suitable for the SSC standard.				
<b>Documentation provided by CME</b>				
-				
<b>DOE assessment</b>				<b>Date: 09/09/2021</b>
1. CME has now clearly demonstrated in-line to equation 7 of the applied methodology that each of the cookstoves distributed under the PoA does not exceed the 1% of SSC limit and all stoves qualify as CDM microscale units. The calculation for energy saving by each ICS unit is transparently shown in the ER sheet which was found to be correct. Thus, CL#02 stands closed.				

Table 3. CAR from this verification

<b>CAR ID</b>	01	<b>Section no.</b>	E.1.1., E.3.6.5	<b>Date : 28/06/2021</b>
<b>Description of CAR</b>				

1. The MR mentions two different MP start date. Also, the ER sheet (Tab:ER calculation, Cell:C3) mentions the MP start date as 01/03/2020. However, the MR on page 1 mentions the MP start date as 31/08/2019. CME shall clarify the same.
2. As per the template guideline, indicate whether a sampling approach was applied for monitoring of a group of CPAs or each CPA covered in this monitoring report under section B.1. of the MR
3. The ER has been accounted for each of the CPAs from 01/03/2020. However, the start date of the MP is 31/08/2019. CME shall clarify why the ER has been accounted from different date when the start date of the MP is 31/08/2019.

<b>CME response</b>	<b>Date : 16/07/2021</b>
<ol style="list-style-type: none"> <li>1. We corrected the start date of MR in the report based on the date on page 1</li> <li>2. We inserted the sentence which stated a sampling approach was applied for monitoring of a group of CPAs not each CPA</li> <li>3. The first monitoring period started in August 2019. During the monitoring period, the CPAs included in the current monitoring report was included in April 2020. Since ERs can be calculated only from the start date of the crediting period, we counted ER after 14 April 2020.</li> </ol>	
<b>Documentation provided by CME</b>	
<b>DOE assessment</b>	<b>Date: 25/08/2021</b>
<ol style="list-style-type: none"> <li>1. The correct MP is 31/08/2019 to 31/12/2020. The same has been corrected by the CME throughout the MR.</li> <li>2. CME has now included the information related to sampling approach was applied for monitoring of a group of CPAs under section B.1 of the MR.</li> <li>3. All the CPAs under current verification have been included in the PoA on 14/04/2020. Thus, the ERs for each of these CPAs were accounted from 14/04/2020 and the same has been rectified both in the MR (version 1.1) and ER sheet (version 1.2).</li> </ol>	
Thus, CAR#01 stands closed.	

CAR ID	02	Section no.	E.3.6.2.	Date : 28/06/2021
Description of CAR				
As per section F.2 of the MR project emissions are not calculated separately. However, section F.4 lists project emissions for each of the CPAs. CME shall clarify how is it in-line to the applied methodology which says project emissions are not taken separately.				
CME response				Date : 16/07/2021
We corrected this part based on the methodology. We deleted emission under the project emissions				
Documentation provided by CME				
DOE assessment				Date: 25/08/2021
The project emissions mentioned for each CPAs under section F.4 of the MR has now been removed and was made in-line to the applied methodology.				
Thus, CAR#02 stands closed.				

CAR ID	03	Section no.	E.1.1, E.3.4.3	Date : 28/06/2021
Description of CAR				
<div>1. Few of the info. in the parameter tables have been filled incorrectly. Please see the comments in the MR section E.2.</div> <div>2. CME shall add monitoring survey date under section E.3. of the MR</div>				
CME response				Date : 16/07/2021
<div>1. We updated the tables based on the feedback</div> <div>2. We added monitoring survey date under the E.3 of the report</div>				
Documentation provided by CME				
DOE assessment				Date: 25/08/2021
<div>1. The parameter table under section E.2 of the MR was found to be correctly filled as per the template guidelines.</div> <div>2. The monitoring survey dates were found to be mentioned under section E.3 of the MR (Version 1.2).</div>				
Thus, CAR#03 stands closed.				



<b>CAR ID</b>	04	<b>Section no.</b>	E.3.4.2.	<b>Date :</b> 28/06/2021
<b>Description of CAR</b>				
CME shall determine the date of commissioning of project device and date of commissioning of batches in line with the registered CPA DD and mention under section E.2. CME shall also provide conformity to confirm the dates.				
<b>CME response</b>				<b>Date :</b> 16/07/2021
We determined the date of commissioning of project device and batches in line with the registered CPA DD. The date on Conformity letter received from users when distributing the stove became the commissioning date of the project device, and the batch was defined based on the commissioning date of the all CPAs included in the monitoring report according to the methodology.				
<b>Documentation provided by CME</b>				
Sample conformity letter for each CPA				
<b>DOE assessment</b>				<b>Date:</b> 25/08/2021
As there has been one batch formed by the PP thus in-line to the clarification SSC 759, as there is just one batch in the current MP thus the ERs for this batch has been calculated by the PP in-line to the applied methodology. Thus, CAR#04 stands closed.				

<b>CAR ID</b>	05	<b>Section no.</b>	E.3.6.5.	<b>Date :</b> 28/06/2021
<b>Description of CAR</b>				
Section F.6 of MR states that the reason for increase in achieved ERs is the value of $n_{new,i,j}$ assumed in ex-ante calculation.  However, it is not clear what was the value applied for $n_{new,i,j}$ and on what basis this value was considered or assumed.				
<b>CME response</b>				<b>Date :</b>
We deleted section F.6 since ex-post ER calculation for this monitoring report is less than the ex-ante determined ER calculation for the same monitoring period.  For the above clarification requested by DOE, when calculating ex-ante, 0.28 was applied for $n_{new,i,j}$ which was the standard efficiency of the project device as per the CPA-DD. Based on the methodology that we applied, $n_{new,i,j}$ value was determined after the water boiling test and it was determined to be 0.251 and applied to this monitoring report. Since the revised $n_{new,i,j}$ value was applied, there is a decrease against the ex-ante value we submitted.				
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				<b>Date:</b> 25/08/2021
The value for parameter $n_{new,i,j}$ was considered as 0.28 while calculating the ex-ante ERs. The applied value was acceptable as this was the standard value mentioned in the CPA-DD and the value of 0.251 which was applied for the calculation of achieved ERs were determined through actual monitoring. The increase in the ex-ante ERs were found to be because of the difference in the efficiency value.  Thus, CAR#05 stands closed.				

<b>CAR ID</b>	06	<b>Section no.</b>	E.3.4.3.	<b>Date :</b> 08/09/2021
<b>Description of CAR</b>				
<ol style="list-style-type: none"> <li>1. Why the date of commissioning has been pushed to a future date when compared with actual date of commissioning of these stoves. What it has to do with date of inclusion of CPA? The parameter explicitly indicates actual date.</li> <li>2. For parameter "To establish the date of commissioning, the CPA Implementers 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, Date of commissioning of batch j, date", What is</li> </ol>				

the total period i.e., actual date of commissioning and this date.

3. There are So many thermometers/thermocouples and just one scale and moisture meter? PP shall explain the reason.

<b>CME response</b>	<b>Date :</b> 08/09/2021
<p>2&amp;3. I wrote it separately from the commissioning date and start date of ER accounting. Please check the 'ER calculation' sheet and 'Monitoring report' sheet in the ER calculation excel sheet. Because the start date of ER accounting is later than the commissioning date on every CPA. The commissioning date is followed as same as the last distribution date of each CPA. And the start date of ER accounting is the CPA inclusion date.</p> <p>4. I wrote a reason on the MR. These tests were conducted by MCS(Manufacturer). So, I asked them why they use equipment like this. As you can see the WBT result sheet I submitted before, they started 3 stoves' test on the almost same time during the test. Therefore, they need multiple equipment to measure the value, because they measure the temperature on the multiple pots at a similar time. And this is the same case on the below equipment. But they said that the scale and wood moisture meter didn't need more than one.</p>	
<b>Documentation provided by CME</b>	
-	
<b>DOE assessment</b>	<b>Date:</b> 09/09/2021
<p>1. CME has now correctly mentioned the actual distribution date as the commissioning date of each of the CPA. The ER sheet (Tab: Monitoring Report, Cell: G15 onwards) clearly mentions the commissioning date for each of the CPAs considered for current verification.</p> <p>2. CME has determined the latest date of distribution as the commissioning date of the batch. This was found to be appropriate as during current verification only single batch has been considered and the latest date of all was found to be 29/02/2020 as the distribution dates ranged from 27/02/2020-29/02/2020.</p> <p>3. Multiple thermometer and thermocouples were required as WBT was conducted for three stoves at the same time. Thus, for measuring the temperature for all the three stoves almost at the same time CME opted multiple thermometers and thermocouples.</p> <p>Thus, CAR#06 stands closed.</p>	

**Table 4. FAR from this verification**

<b>FAR ID</b>	07	<b>Section No.</b>		<b>Date :</b> DD/MM/YYYY
<b>Description of FAR</b>				
<b>Project participant response</b>				<b>Date :</b> DD/MM/YYYY
<b>Documentation provided by project participant</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

e.g., there is no FAR from this verification.

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## Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
04.0	6 April 2021	Revision to: <ul style="list-style-type: none"> <li>• Reflect the “Clarification: Regulatory requirements under temporary measures for post-2020 cases” (CDM-EB109-A01-CLAR).</li> </ul>
03.0	31 May 2019	Revision to: <ul style="list-style-type: none"> <li>• Ensure consistency with version 02.0 of the “CDM validation and verification standard for programmes of activities” (CDM-EB93-A08-STAN);</li> <li>• Make structural and editorial improvements.</li> </ul>
02.0	29 December 2017	Revision to align with the requirements of the “CDM validation and verification standard for programme of activities” (version 01.0).
01.0	5 June 2015	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Issuance Keywords: programme of activities, verifying and certifying		