VERIFICATION REPORT FOR "INSTALLATION OF HIGH EFFICIENCY WOOD BURNING COOKSTOVES IN MALAWI – PROJECT 2"

Document Prepared by Earthood Services Private Limited

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Summary:

Introduction:

Earthood Services Private Limited (hereafter referred to as Earthood) has been contracted by C-Quest Capital Stove Asia Limited to conduct the verification of the project titled – "Installation of High Efficiency Wood Burning Cookstoves in Malawi - Project 2", VCS ID- 2372 with regards to the relevant requirements of VCS programme guidelines and standard (VCS standard version 4.2, &VCS programme guidelines version 4.1). Relevant Applicable requirements of the UNFCCC for CDM project activities, as well as criteria for consistent project operations, monitoring and reporting has been applied for verification.

The monitoring period covered under this verification is from 16/04/2021 to 15/10/2021.

The verification includes confirming the implementation of the monitoring plan registered in VCS PD and provided in the final MR (VCS ID 2372) and application of the monitoring methodology VMR0006: "Methodology for Installation of High Efficiency Firewood Cookstoves", version 1.1.

The project activity is about distribution and installation of high efficiency wood burning TLC stoves for household cooking purpose in Malawi. The installed stoves are called as TLC-CQC Rocket Stove. These high efficiency TLC-CQC Rocket Stoves (ICS) replaces the existing inefficient, conventional open fire stoves. These improved cookstoves will burn more efficiently as compared to the baseline stoves and thus will save the amount of wood burnt in cooking purpose and emissions associated with it. The project activity also reduces deforestation in host country and

minimises the health risks associated with indoor smoke pollution. The project activity further also reduces the time for collection of firewood for women and children.

A risk-based approach has been followed to perform this verification. In the course of verification, 02 Corrective Action requests (CARs), 00 Forward Action Request (FARs), and 02 Clarification request (CLs) were raised and successfully closed.

The review of the project description, monitoring report and additional documents related to baseline and monitoring methodology; the subsequent background investigation, telephonic interviews and stakeholders have provided Earthood with sufficient evidence to validate the fulfillment of the stated criteria.

Earthood confirms that the project is implemented in accordance with the registered VCS PD & applied baseline and monitoring methodology. The project implementation is in line with the information provided in the final MR. The monitoring system is in place and the emission reduction are calculated without material misstatements. Our opinion related to the project's GHG emissions, and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information seen and evaluated we confirm that the emission reductions from the project activity "Installation of High Efficiency Wood Burning Cookstoves in Malawi – Project 2" during the period 16/04/2021 to 15/10/2021 amounts to 267,407 tons of CO_2e.

1 INTRODUCTION

1.1 Objective

Earthood Services Private Limited has been contracted by C-Quest Capital Stove Asia Limited, to undertake the verification of the project titled 'Installation of High Efficiency Wood Burning Cookstoves in Malawi - Project 2' (VCS ID- 2372). The verifiers have reviewed the GHG data collection to date for the monitoring period from 16/04/2021 to 15/10/2021 covered in this verification.

The purpose of the verification is to review the monitoring results and verify that monitoring methodology was implemented according to monitoring plan and monitoring data, used to confirm the reductions in anthropogenic emissions by sources is sufficient, definitive and presented in a concise and transparent manner. In particular, monitoring plan, monitoring report and the project's compliance with relevant VCS, UNFCCC and host party criteria are verified in order to confirm that the project has been implemented in accordance with previously registered design and conservative assumptions, as documented. This verification is a thorough and independent assessment of registered project activities against the applicable VCS requirements by the VVB. The verification process shall determine whether the proposed project activity complies with the requirement of latest VCS guidelines, applicability conditions of the selected methodology, relevant host country regulations and guidance issued by the VCS Board.

1.2 Scope and Criteria

The scope of verification is to assess the claim and assumptions made in the VCS monitoring report[/2.2/] against the VCS criteria, including but not limited to, VCS standard version 4.2[/05/], applied methodology[/07/] and other relevant rules and requirement established for VCS project activities.

- To verify the project implementation and operation with respect to the registered VCS PD.
- To verify the implemented monitoring plan with the registered VCS PD and applied baseline and monitoring methodology.
- To verify that the actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan.
- To evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement.

- To verify that reported GHG emission data is sufficiently supported by evidence

The verification is not meant to provide any consultation towards the project proponent. However, stated request for clarification and/ or corrective actions request may have provided inputs for improvement of the project design. The verification shall ensure that the reported emission reductions are complete and accurate in order to be certified.

1.3 Level of Assurance

☒ Reasonable Level of Assurance

☐ Limited Level of Assurance

The level of assurance of the verification report falls under reasonable assurance engagements. Reasonable assurance is high level of assurance regarding material misstatement, but not an absolute one.

Reasonable assurance includes the understanding that there is a remote likelihood that material misstatement will not be prevented or detected on a timely basis. To achieve reasonable assurance, the auditor needs to obtain sufficient appropriate audit evidence to reduce audit risk to an acceptable low level. This means that there is some uncertainty arising from the use of sampling, since it is possible that a material misstatement will be missed.

The evidence used to achieve a reasonable level of assurance is specified in section 2.3 and 2.4 of this report.

1.4 Summary Description of the Project

This is the second monitoring period for the project “Installation of High Efficiency Wood Burning Cookstoves in Malawi - Project 2”. The project activity is a grouped project activity for distribution and installation of high efficiency TLC wood burning stoves for household cooking purpose in Malawi. The project activity applies approved baseline and monitoring VCS methodology; VMR0006 version 1.1. The grouped project involves distribution of fuel-efficient improved cook stoves (ICS) in Malawi. As per the registered PD/01/ and validation report/04/, the project expects to disseminate 500,000 fuel efficient (ICS) TLC-CQC Rocket stove through 4 years.

The verification team has verified that the ICS distributed under the project is TLC-CQC rocket stove which will reduce the amount of non-renewable biomass used for cooking and emission released associated with the burning of wood. As the project activity is undergoing second verification, the description of the project activity was also verified during the details provided in previous verification and validation/04/. The new efficient ICS stoves will burn more efficiently and will not only help in saving fuel but also will help to prevent deforestation in the host country Malawi. Therefore, the project reduces greenhouse gas emissions and thereby contributes to sustainable development.

As per the registered PD, each ICS distributed is considered as project activity instance. The start date of the project activity is 05/07/2020, it is also the date on which first ICS was installed under the project activity. A total of 208,082 stoves were installed under the project by the end of current monitoring period. These project stoves replace the inefficient, conventional open fire stove in the baseline. The crediting period of the project is from 05/07/2020 to 04/07/2030 (fixed – 10 years). This is the second monitoring period of the project i.e., 16/04/2021 to 15/10/2021 and the total emission reductions achieved under this monitoring period are 267,407 tCO_2e.

Based on the assessment of the documents, the assessment team is able to confirm that the project activity is fully functional and implemented as described in the registered VCS PD/01/ & MR/2.2/.

2 VERIFICATION PROCESS

The registered VCS project is undergoing second verification under its 10 years fixed crediting period, the approach adopted to ensure the quality of emission reduction is described in the following sections.

2.1 Method and Criteria

The verification approach consists of two phases.

In the first phase, Earthood completed a strategic review and risk assessment of the project activities and processes in order to gain a full understanding of:

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant.
- Protocols used to estimate or measure GHG emissions from these sources.
- Collection and handling of data.
- Controls on the collection and handling of data.

- Means of verifying reported data.
- Compilation of the verification Report.

At the end of this phase, Earthood produces a verification checklist which is based on the risk assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan.

In the third phase using the verification checklist, Earthood verified the implementation of the monitoring plan and data presented in the VCS MR for the period in question. The involved telephonic interview of project proponent representative's and the desk review of the monitoring report. The verification report describes the finding of this assessment.

2.2 Document Review

The verification is performed as document review of the registered VCS PD/01/ & MR/2.2/, previous Validation and verification report/04/ and associated documents as stated in detail in appendix 1 of this document. The assessment is performed by a verification team as a protocol. The cross check between information provided in the monitoring report/2.2/, VCS PD/01/ and information from sources other than those used, if available, the team's sectoral or local expertise and, if necessary, independent background investigations.

2.3 Interviews

Due to the current situation with the global COVID-19 pandemic scenario and also its outbreak in Africa/12/ physical site inspection is not done for the current verification. Furthermore, as per the Section 4.1.2 of the VCS Standard, v4.2/05/, it is not mandatory to conduct the on-site visit by VVB for verification, as long as a reasonable level of assurance is met.

However, alternative means were selected to verify the project implementation and operation during the monitoring period. Along with alternative approach, remote interviews via video call with the end users, PP representatives and field personnel were conducted to discuss the aspects of project implementation such as monitoring plan, the operation of ICS, survey data, and other details like beneficiaries' feedback, actual implementation on site used during the current monitoring period. The required documents and details for the verification of the project activity implementation were collected from PP.

The remote site audit and interviews for the project location, by the assessment team, was conducted on 24/05/2022 and the following stakeholders were interviewed/8.1/.

Interviews with the representatives of Project Proponent:

S. No.	Name	Organisation	Date	Topic Covered	Team Member
1.	Vineet Kumar Garg	Representative of C-Quest Capital Stoves Asia Limited	24/05/2022	Project Design and implementation status, Start Date and Location Monitoring system, roles and responsibility, Documentation Process and method used for monitoring Survey, QA/QC procedures, Baseline scenario Criteria and compliance of new instances added during MP Ongoing LSC process, Compliance with relevant laws, Social and Environmental impacts of the project	Harsh Raval Mihika Saxena Shreya Garg
2.	Chandan Kumar Sah				

For cross-checking of the monitoring survey results, in line with standard for 'Sampling and Surveys for CDM Project Activities and Programmes of Activities' v09.0[/10/], the assessment team has interviewed 11 end user households in Malawi by the means of video calling. The interviews have been conducted with help of translator/interpreter to overcome the language barrier and are video recorded for audit trail purpose. The information of the end users interviewed, and the topics covered during the remote audit are given in the table below:

Interviews with the ICS End Users:

S. No.	Name of the end user	Date of interview	Topic covered	Team Member
1.	Rashide Mwanyahele (Stove 1 I.D.- CQCVMW0378954 Stove 2 I.D - CQCVMW0378953)	24/05/2022	Verification of the participation in monitoring survey Verification of the survey answers and results provided by PP	Harsh Raval Mihika Saxena Shreya Garg
2.	Medina Ganizani (Stove 1 I.D.-	24/05/2022		Harsh Raval Mihika Saxena

	CQCVMW0208183 Stove 2 I.D - CQCVMW0208184)		Operation and usage pattern of stoves to check the number of stoves operational during the year, $N_{y,j,i}$ Feedback on the ICS installed and ongoing LSC activities by PP Training and Ongoing support provided by PP for operation of stoves Social and Environmental Benefits from the project activity Cooking practice prior to the installation of project activity stoves (i.e. baseline usage)	Shreya Garg
3.	Sofia Filipo (Stove 1 I.D.- CQCVMW0345741 Stove 2 I.D - CQCVMW0345987)	24/05/2022		Harsh Raval Mihika Saxena Shreya Garg
4.	Dalitso Pesani (Stove 1 I.D.- CQCVMW0419956 Stove 2 I.D - CQCVMW0419957)	24/05/2022		Harsh Raval Mihika Saxena Shreya Garg
5.	Zeres Reuben (Stove 1 I.D.- CQCVMW0203028 Stove 2 I.D - CQCVMW0203029)	24/05/2022		Harsh Raval Mihika Saxena Shreya Garg
6.	Lekisina Piliyano (Stove 1 I.D.- CQCVMW0220912 Stove 2 I.D - CQCVMW0220911)	24/05/2022		Harsh Raval Mihika Saxena Shreya Garg
7.	Stella James (Stove 1 I.D.- CQCVMW0160887 Stove 2 I.D - CQCVMW0160888)	24/05/2022	Verification of the participation in monitoring survey Verification of the survey answers and results provided by PP Operation and usage pattern of stoves to check the number of stoves operational during the year, $N_{y,j,i}$ Feedback on the ICS installed and ongoing LSC activities by PP Training and Ongoing support provided by PP for operation of stoves	Harsh Raval Mihika Saxena Shreya Garg
8.	Mulitani Ganizani (Stove 1 I.D.- CQCVMW0304428 Stove 2 I.D - CQCVMW0304427)	24/05/2022		Harsh Raval Mihika Saxena Shreya Garg
9.	Riness Kadzamira (Stove 1 I.D.- CQCVMW0393928 Stove 2 I.D - CQCVMW0393927)	24/05/2022		Harsh Raval Mihika Saxena Shreya Garg
10.	Thokozile Ntchepa (Stove 1 I.D.- CQCVMW0323892 Stove 2 I.D - CQCVMW0323904)	24/05/2022		Harsh Raval Mihika Saxena Shreya Garg

11.	Belita Yotamu (Stove 1 I.D.- CQCVMW0371390 Stove 2 I.D - CQCVMW0371391)	24/05/2022	Social and Environmental Benefits from the project activity Cooking practice prior to the installation of project activity stoves (i.e. baseline usage)	Harsh Raval Mihika Saxena Shreya Garg

Following topics are discussed with each beneficiary

- Verification of the participation in monitoring survey
- Verification of the survey answers and results provided by the PP
- Operation and usage pattern of stoves to check the number of stoves operational during the year, $N_{y,i,j}$
- Feedback on the ICS installed and ongoing LSC activities by PP
- Training and Ongoing support provided by PP for operation of stoves
- Social and Environmental Benefits from the project activity
- What was used for cooking purpose prior to the installation of the project activity stoves
- Was the user using traditional three-stone fire cookstoves prior to the installation of project stoves

During the remote audit, the interviews of the field personnel (Surveyors – Enumerators) were also conducted to verify the details regarding the survey techniques and the process involves in the monitoring survey data collection. The information for the same can be found below:

Interviews with the Field Assistance:

S. No.	Name	Organisation	Date of interview	Topic Covered	Team
1.	Enock Mphande	Field Assistance – Coordinato	24/05/2022	Procedure for data collection Survey techniques	Harsh Raval Mihika Saxena Shreya Garg

		r of Surveyor Team - Representative of C-Quest Capital Stove Asia Limited		Record keeping procedure Robustness and accuracy of data collection and transfer Integrity of Data Random sample selection Difficulties and problem solving during the survey Training provided for conducting the survey Competence of survey team Preparedness and backup plan for the survey	

Through the interviews conducted and comparing them with the evidence and survey conducted by the PP, the assessment team confirms the project is implemented in line with the registered PD/01/. There is no change in the monitoring and the operational plan.

2.4 Site Inspections

As already discussed in the above section, physical site visit is not done for the current verification. However, to achieve a reasonable level of assurance, the assessment team has followed the alternative means to substantiate the verification criteria.

The verification team has carried out remote interviews by video calls in order to assess the information included in the monitoring report, conditions on site and crosschecking the information reviewed through document review.

By means of

- Documents review (As mentioned under Appendix 1),
- Comparing the relevant evidence and
- Video interviews with the PP's representatives,
- Video interviews with the beneficiaries from sample survey and
- Video interviews with the personnel involved in the monitoring survey

Earthood is able to confirm that the project is implemented in line with the registered VCS PD/1/ during the monitoring period. There is no change of the project design, operation and monitoring plan and information provided in the final Monitoring Report is correct and accurate.

Therefore, assessment team believes it has achieved a reasonable level of assurance through remote site visit, this is in conformance with the VCS rules, and no request for an exemption or pre-approval from Verra is required.

However Since, validation and first verification have been conducted with remote site visit, assessment team ensured that the applicable section of the verification report includes a discussion of how a reasonable level of assurance was achieved without an in-person site visit.

A remote site audit/08/ was undertaken by Earthood on 24/05/2022via video call to carry out the following:

- An assessment of the implementation and operation of the registered project activity as per registered VCS PD/01/ and MR/2.2/.
- A review of information flows for generation, aggregation and reporting of the monitoring parameters.
- Interview with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PD/01/.
- A cross check between information provided in the monitoring report and data from other sources such as survey forms, survey results spreadsheets, technical specifications, or similar data sources.

- A review of calculation and assumptions made in determining the GHG data and emission reduction.
- Relevant QA/QC procedure were checked to prevent, identify, and correct, any error in the reported monitoring parameters.

Sampling Approach for remote Site visit:

There are 208,082 no of ICS installed by end of the current monitoring period and thus for applicable monitoring parameters, the PP has used the CDM Sampling standard "Sampling and Surveys for CDM Project Activities and Programme of Activities" version 09 for determining the sample size to achieve 90/10 confidence precision. A monitoring survey was done by the PP/13/ with consideration of random sample selection. This in accordance with the procedures mentioned in the registered PD.

So, in line with Sampling Standard v09.0/10/ paragraph 26, the assessment team has also applied the Acceptance Sampling approach for the remote audit as a part of verification to validate the results of the PP's sampling survey.

The assessment team has applied the acceptance sampling in line para 28-31 of sampling standard v09.0/10/.

- A random sample selection process was chosen from the project proponent's survey results
- Document review of project information including project design in PD, Monitoring survey details provided by PP, Validation report, previous verification was done and based on its own professional judgement AQL of 0.5 and UQL of 20% was selected. The Producer Risk and Consumer risk are assumed to be 10% each. Acceptance number taken for the sample size is 0.

Applying paragraph 39 of the sampling standard, version 09/10/, a sample size of 11 households was chosen and randomly selected from the survey data. Acceptance number thus determined for the sample is 0. Through the host country Malawi is in the list of the designated LDC by the UN, the assessment team has selected and audited all 11 selected samples.

The information provided in the sampling sheet/13/ has been cross checked with results of interviews. By the means of acceptance sampling, the assessment team could verify that there is no discrepancy in the Sampling/14/ and the sampling records as provided by the PP are acceptable in accordance with the para 33 of the Sampling standard.

The verification team also has carried out remote interviews with representative of PP/8.1/ in order to assess the information included in the project documentation and to gain additional information regarding the compliance of the project with the relevant criteria applicable for the Sampling plan/10/.

2.5 Resolution of Findings

The objective of this step is to identify, discuss and conclude on the issues related to the monitoring, implementation and operations of the registered project activity that could impair the capacity of the registered project activity to achieve emission reductions or influence the monitoring and reporting of emission reductions. This is done based on the desk review and interaction with project proponent and their site representative. The verification team prepares and/or updates a verification protocol (internal document) that records the conformities and non-conformities, which may be of following types.

CAR (Corrective Action Request) is raised if one of the following occurs:

- Non-compliance with the monitoring plan, the methodology or the standardized baseline are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is sufficient.
- Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants.
- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions.
- Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.

Clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

Forward action request (FAR) is raised during verification if the monitoring and reporting require attention and/or adjustment for the next verification period.

All CARs and CLs raised by the Earthood during verification shall be resolved prior to submitting a request for issuance. All the findings that are raised and communicated to project participant during the verification are included under Appendix 3. The section also includes the response, if provided, by the project proponent and an assessment by the verification team if it was closed out or otherwise.

A total number of 02 CLs, 02 CAR and 00 FARs were raised during the current verification and successfully closed.

2.5.1 Forward Action Requests

The project activity is undergoing second verification in VCS. No FAR was raised during the current monitoring period. There are also no open FARs from previous monitoring reports and verification report applicable for current monitoring period.

Details for which can be checked from Appendix 3 of this verification report.

2.6 Eligibility for Validation Activities

This section is not applicable for present verification.

3 VALIDATION FINDINGS

Not applicable.

3.1 Participation under Other GHG Programs

The project is registered under VCS only (VCS ID- 2372).

The PP has submitted the declaration/09/ which states that the net GHG emission reductions generated by the project activity will not be used for compliance with any other emission trading program or to meet binding limits on GHG emissions for the same monitoring period.

Issue 1 under CL#02 was raised regarding the same and closed as PP substantiated no participation in any other GHG program or scheme.

3.2 Methodology Deviations

There are no methodology deviations identified during the current monitoring period.

3.3 Project Description Deviations

There is no project description deviation identified during current monitoring period.

3.4 Grouped Project

The project activity is a group project. It is about distribution of energy efficient stoves for household cooking purpose in Malawi. By the end of this monitoring period a total of 208,082 cookstoves have been installed. As verified from the previous verification report, the total stoves installed by the end of previous monitoring period were 58,318. So, a total of 149,764 ICS (PAIs) were installed during the current monitoring period.

Eligibility criteria for all new project activity instances to be added during the crediting period is specified in the section 3.5.15 of VCS standard Version 4.2 and accordingly incorporated in the registered PD. The eligibility of the added PAIs is verified as below:

Assessment of the project activity as a grouped project:

Criterion as defined in the PD	Eligibility Justification by the PP	VVB Assessment
Meet the applicability conditions set out in the methodology applied to the project	New project activity instances (TLC-CQC Rocket Stoves) meet the applicability conditions set out in Section 3.2 of the PD, where the end-user is household and the ICS deployed is at least 25% of thermal efficiency.	During the course of validation/4/, the PP has justified and validating VVB has validated that the TLC-CQC Rocket Stoves meets the methodological requirement of the at least 25% thermal efficiency, use of woody biomass and single pot stoves/16/. The records/17/ for the PAIs / ICS installed have been checked and it is confirmed that all the ICS installed during the monitoring period are TLC-CQC Rocket Stoves. Further, beneficiary records/18/, process of selection of beneficiary/8.1/ and PAI installation process/22/ have been checked and it is confirmed that project PAIs installed during the current verification are installed in the domestic premises of the households.

		The geolocations of the installations are provided by the PP (through monitoring survey forms/14/) and some random selected instances were checked. It is confirmed that PAIs installed are in geographical location of Malawi only. As confirmed from the manufacturer's speciation/16/ and project design the stoves does not use the biomass processed residues as a fuel. So, the new added instances are confirmed to be meeting the criteria as defined in the applied methodology/07/.
Use the technologies or measures specified in the project description	Only TLC-CQC Rocket stoves have been adopted in the project	The assessment has checked the installed stove records/17/ and also verified the samples during the remote audit/8.2/ through video calling that all the stoves used are TLC- CQC Rocket stoves.
Apply the technologies or measures in the same manner as specified in the project description	Only TLC-CQC Rocket stoves have been adopted in the project and it replace traditional cookstoves in household	The assessment has checked the installed stove records/17/ and also verified the samples during the remote audit through video calling that all the stoves used are TLC- CQC Rocket stoves. It was verified through sample audit that the traditional three fire stone stove are replaced with the energy efficient improved cookstoves.

Are subject to the baseline scenario determined in the project description for the specified project activity and geographic area.	The new project activity instances were installed within Malawi only and subject to the same baseline scenario determined in Section 3.4 of PD. Baseline scenario and geographical boundary can be confirmed from registration records/consent deeds of individual ICS which contains geographical coordinates, address of households as well as signed declaration from households stating that they were using traditional 3 stone fire or traditional pot support before the installation of project stove.	The assessment team conducted the remote audit of 11 samples taken in line with sampling guidelines v9.0/10/ and it was confirmed that all the all the project instances are installed in Malawi only and are same as baseline scenario determined in section 3.4 of PD. Further, the project proponent has also been submitted the registration records/22/ vide consent deeds signed by the beneficiaries prior to the installation of the project cook-stoves for the stoves installed during the current monitoring period. These consent deeds contain confirmation / declaration from each beneficiary for use of the convectional three stone fire or traditional open stoves prior to installation of project stove. The consent deeds are checked in samples by the assessment team and details are found to be matching with the claims by the PP. Also, during the remote audit, the assessment team has interviewed the sampled beneficiaries and each of them has confirmed using the conventional/traditional stoves in the baseline. The consent deeds also mention the location and address of

		beneficiaries which confirm the geographical location as selected in PD – Country of Malawi.
Have characteristics with respect to additionality that are consistent with the initial instances for the specified project activity and geographic area.	All new project activity instances use the activity method for demonstration of additionality. Step 1: Regulatory Surplus There is no mandated government programme or policy in host country of this project ensuring the distribution of new project activity instances. Step 2: Positive List The inclusion of new project activity instances complies with positive list as it satisfies criterion 1 where it meets all the applicability conditions of the methodology	The applied methodology uses activity method for the demonstration of additionality, where it can be approved as additional considering positive list of technologies provided the stoves are distributed free of cost. As verified above, the geographical area of the added PAIs is the country of Malawi. There are no laws and the current applicable regulations, related to cookstove distribution, applicable in the host country Malawi. The assessment team has searched the publicly available information and the applicable policies directly from the government of Malawi. It is found that latest available directive about use of stove is "National Charcoal Strategy 2017-2027"/21/ which only mentions about promotion of ICS to reduce the consumption of non-renewable biomass in Malawi. It does not mention any regulatory compulsion for use of the improved cook stoves. Further, representatives of the PP and the beneficiaries were also interviewed during the remote audit.

		It was confirmed that the distribution of the household cook stoves in the Malawi is a regulatory surplus activity. There is no regulation of guidelines which mandates the project proponent to distributes the ICS. Further during the audit of sampling survey, it was checked and confirmed with each beneficiaries the ICS are given to them free of cost and they are not being charged in any terms at the time of installation or during the ongoing operation. The sample purchase records/19/ for stoves are also checked to confirm the purchase of stoves by the PP. Thus, PAIs added during the monitoring period are confirmed to be complying the additionality requirement as defined in the applied methodology and the registered PD.
Where a capacity limit applies to a project activity included in the project, no project activity instance shall exceed such limit. Further, no single cluster of project activity instances shall exceed the capacity limit, determined as follows:	No project activity instance exceeds the applicable limit, which is 180 GWhth/y. The expected annual energy saving for each project activity instance is approximately 0.02 GWhth/y or 0.01% of the limit.	The registered and validated PD considers the one single ICS as a Project Activity Instance. The initial (highest) efficiency of the project activity cook stove is validated and fixed ex-ante during the validation based on the manufacture's specification. As per the applied methodology, the PP has carried out the survey during the first

Each project activity instance that exceeds one percent of the capacity limit shall be identified. Such instances shall be divided into clusters, whereby each cluster is comprised of any system of instances such that each instance is within one kilometer of at least one other instance in the cluster. Instances that are not within one kilometer of any other instance shall not be assigned to clusters. None of the clusters shall exceed the capacity limit and no further project activity instances shall be added to the project that would cause any of the clusters to exceed the capacity limit.	As the annual energy saving is below 1% of the limit, therefore no project activity instance is identified and divided into clusters.	monitoring period and expected wood saving to be achieved per stove is also determined and fixed in first monitoring period and fixed for the rest of the crediting period. In view of above the expected annual energy saving for each PAI comes to approximately 0.02 GWh_{th}/y only. Which is 0.01% of the limit. The efficiency of the stove is not expected to increase (or rather it will decrease) and wood (energy) saving per stove to be claimed is also fixed. So, it is concluded that no PAI has crossed or is expected to cross the limit. Further there is also no requirement of the cluster wise determination as instance cross the mark of 1% capacity limit.

Further, Para 3.5.16 of VCS standard version 4.2 requires new PAIs to meet the following requirements.

1) Occur within one of the designated geographic areas specified in the project description.

    - As verified and confirmed from the PAI installation records/17/ and audit of survey results/8.2/, the newly added PAIs are in the designated geographic area of Malawi only as specified in the registered project description.

2) Comply with at least one complete set of eligibility criteria for the inclusion of new project activity instances. Partial compliance with multiple sets of eligibility criteria is insufficient.

    - As verified in this section the newly added PAIs meets all the eligibility criteria for the inclusion of new project activity instances of the registered PD. No Partial compliance is sought by the PP or verified by the VVB.

3) Be included in the monitoring report with sufficient technical, financial, geographic, and other relevant information to demonstrate compliance with the applicable set of eligibility criteria and enable sampling by the validation/verification body.

    - The sufficient other relevant information regarding newly added PAIs is provided in the section 3.3 of the MR to demonstrate compliance with the applicable set of eligibility criteria. Further, sampling and audit has been carried by the assessment team to check the provided information.

    - All the information and eligibility criteria as claimed by the PP is found to be correct and accurate.

4) Be validated at the time of verification against the applicable set of eligibility criteria.

    - The eligibility of the newly added PAIs is validated during the current verification

5) Have evidence of project ownership, in respect of each project activity instance, held by the project proponent from the respective start date of each project activity instance (i.e., the date upon which the project activity instance began reducing or removing GHG emissions).

    - The installation records/17/ and the purchase records/19/ have been checked on random sampled basis and the date of inclusion and ownership of the added ICS have been validated.

    - The cookstoves have been purchased and distributed free of cost to the beneficiaries by the PP. The ownership of ICS remains with the beneficiary, while the ownership of emission reductions is with the PP.

    - The ownership claim is also checked with the registration records/consent deeds/22/, where beneficiary confirms the ownership of the emissions reductions to the PP.

6) Have a start date that is the same as or later than the grouped project start date.

- The start date of the PAIs is considered from the date of installation and start of operation (i.e., checked in ER sheet[/03/]and cross-checked with the installation records of ICS[/17/]). The same is later than the start date of the grouped project for all the newly added PAIs. The start date of all the newly added PAIs during the monitoring period are confirmed to be within the monitoring period duration.

7) Be eligible for crediting from the start date of the instance through to the end of the project crediting period (only). Note that where a new project activity instance starts in a previous verification period, no credit may be sought for GHG emission reductions or removals generated during a previous verification period (as set out in Section 3.4.4) and new instances are eligible for crediting from the start of the next verification period.

    - As checked and verified from the ER calculation sheet, all the emission reductions are being claimed for the current monitoring period only. The PP has apportioned the operating days based on vintage of the stoves and accordingly the ERs being claimed during the monitoring period.

Based on the above assessment the assessment team confirms that inclusion of project activity instances in the grouped project is valid as per criteria defined in the registered PD and VCS standard, version 4.2.

Issue in CAR#04 was raised as demonstration of eligibility of for ICS installed during the monitoring period was not adequate and objective. The CAR#04 was successfully resolved.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

The project activity involves distribution of energy efficient cookstoves for household cooking purpose in Malawi.

The Stoves distributed are TLC-CQC rocket stoves/17/ which significantly reduces the fuel usage and emissions while cooking. The working conditions of all the stoves of sample survey were verified during the remote survey audit and found to be in operational condition. The assessment team confirms that the stoves are working fine.

The project has installed a total 208,082 cookstoves by the end of the monitoring period and from this about 149,764 cookstoves were installed during current monitoring period and 58,318 during the previous 1st Monitoring period. The installation and implementation are inline with the details provided in the registered PD.

The project proponents for the project activity are C-Quest Capital Stoves Asia Limited and C-Quest Capital SGS Stoves Private Limited, who own the rights to VERs. The new PP "C-Quest Capital SGS Stoves Private Limited" has been added to the project activity through the accession deed/24/ dated 25/04/2022, which is confirmed through the project webpage on VERRA website.

The assessment team has interviewed the end-users during the remote audit and confirmed that project has been implemented as planned and as mentioned in the VCS- PD/01/, the records available and the survey samples. The assessment team also checked the sample calculations as per the guidelines, "Sampling and Survey for CDM Project Activities and Program Activities" Version 09.0/10/ and found to be consistent as per the monitoring period. It has been confirmed that the project has not received any other form of environmental credit for the project. The project has been implemented as described in the revised VCS PD/01/ and no discrepancy was identified between the project implementation and the project description. The data and variables provided in the monitoring report are same as stated in the approved PD/01/. PP has submitted a monitoring survey sheet/13/ as well and its monitoring survey records/14/ where 136 stoves samples were surveyed and found that all 136 stoves were in proper working condition.

Hence, $N_{y,l,j}$ of 136/136 = 1.00

Verification team confirms through audit that PP has conducted regular spot checks to check the status of ICSs as mentioned in the MR[/2.2/] and registered VCS PD[/01/]. Further, the procedures used by PP to address the concerns regarding the replacement of the part damaged or broken parts were checked and confirmed during the remote audit[/8.2/] through interviews with the beneficiaries. All the beneficiaries confirmed that they have been given training on how to use the stoves during the installation and are also aware of the procedures/contact details to the PP in case of any stove is damaged or broken. In such case the PP guides them on re-build or replaces the necessary parts if needed.

This is the second verification and the total emission reductions achieved under this monitoring period i.e., from 16/04/2021 to 15/10/2021 are 267,407 tCO_2e.

Assessment team concludes the following:

- There are no material discrepancies between project implementation and the project description provided in the registered PD[/01/].
- The monitoring plan is implemented completely and monitoring system (i.e., process and schedule for obtaining, recording, compiling, and analysing the monitored data and parameters) is appropriate.
- There are no material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description[/01/] and the applied methodology[/07/].
- All the ex-ante parameters which are used in the calculations of the emission reductions are consistent with the VCS PD[/01/].
- The GHG emission reductions or removals generated by the project have not included in another emission trading program or any other mechanisms that includes GHG allowance trading[/09/].
- The project has not received or sought any other form of environmental credit or has become eligible to do so since validation or previous verification[/04/].
- The project activity is registered under VCS only.

In the view of the information's verified above the assessment team is able to conclude that the project has been implemented as described in the project description.

CL#01 was raised for submission of various supporting documents related to the project status and verification. The CL#01 was successfully closed.

CAR#03 was raised as number of ICS installed during the MP with dates were not transparently mentioned under version 01 of the MR. CAR#03 was successfully closed with submission of corrected MR by the PP.

4.2 Safeguards

4.2.1 No Net Harm

The project activity does not involve any negative environmental or socio-economic impacts, as the project activity involves:

- Distribution of energy efficient improved cookstoves, which requires less amount of fuel compared to the open fire stoves, which will indeed help in reducing the burden of collection fuel on the women. Thus, promote gender equality.
- The cooking practice or habit on the project stove is identical to the practice followed on the baseline stove. Therefore, the project does not force the population into any practice or habit that they will not eagerly take up.
- The project activity is about distribution of improved cooking devices, which are energy efficient and release less smoke and toxic pollutant in environment compared to the baseline stoves.
- The project activity will be creating employment for the people during different phases, which will help with the increase in the economic growth of that area.

Hence, no mitigation measure is required.

Issue 3 in CL#02 was raised for demonstration on SDG contribution. The issue was successfully resolved.

4.2.2 Local Stakeholder Consultation

The project activity is undergoing second verification and local stakeholder consultation was appropriately conducted prior to validation as the way of informing the stakeholders about the project design and maximise participation from stakeholders.

Verification team has also confirmed through remote site visit that PP has conducted regular spot checks to check the status of improved cookstoves distributed. Further, the information regarding the procedure for replacement of damaged or missing parts was also checked.

It was confirmed during the remote audit/8.2/ that PP has a robust grievance mechanism and a proper ongoing communication with stakeholders and no negative feedback were received from the end users, for the current monitoring period. In case of any support or if replacement of any stove part is required, the stove users can contact the local implementation partner. The contact details for the same, were shared during the time of installation. In case of any feedback the beneficiaries are able to contact the site team / representative of the PP and register their grievance.

Issue 2 in CL#02 was raised regarding ongoing local stakeholder's consultations and was successfully resolved.

4.3 AFOLU-Specific Safeguards

This section is not applicable as the project is a non-AFOLU project.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The assessment team has reviewed the monitoring plan and found out that the monitoring of GHG emission reduction from the project activity was implemented in accordance with the registered PD/01/. The monitoring plan has been implemented as per the applied methodology and all parameter in the monitoring plan had been sufficiently monitored as per the applied methodology VMR0006: Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1/07/.

Data and parameters monitored:

1. Number of project devices of type I and batch j operational during year y, $N_{y,i,j}$

Means of verification

Criteria/ Requirements	Assessment/Observation
Measuring/ Reading /Recording frequency	As per the applied methodology and registered PD, the parameter is to be recorded once every two years. However, PP caries out the monitoring survey every year.
Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes/No)	Yes, measuring and reporting frequency is in accordance with monitoring plan and methodology.
Monitored Value	208,082
Monitoring equipment	No equipment was used for the monitoring
Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or	NA

		as per the manufacturer's specifications?	
		Calibration Frequency/ interval	There is no calibration required since the value is obtained from installation database.
		How are the values in the monitoring report verified?	The value 208,082 stoves were obtained from the monitoring survey/13//14/ and the value is checked from the records submitted for the current monitoring period.
		If applicable, has the reported data been crosschecked with other available data?	Yes, the reported data in MR has been compared with monitoring survey records/14/ and ER sheet/03/. Further results are verified through acceptance sampling of the monitoring survey.
		Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, the data management ensure correct transfer of data and reporting of emission reduction and all necessary QA/QC processes are in place.
Findings	CL#01 and CAR#03 were raised and closed successfully.		
Conclusion	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 verification team is able to confirm that the project is implemented as per the registered PD and there is no discrepancy observed between the actual monitoring system and the monitoring plan set out in the registered PD and the applied methodology. The emission reduction calculation for the project activity is estimated based on the biomass saved by the ICS. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.		

2. Efficiency of the improved cookstove type i and batch j during year y, $\eta_{new,y,i,j}$

Means of verification	**Criteria / Requirement**	**Assessment/ Observation**
	Measuring / Reading / Recording frequency	The parameter is measured and recorded during validation and thereafter calculated annually.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes/ No)	Yes, measuring/calculating and reporting frequency is in accordance with monitoring plan and methodology.
	Monitoring Equipment	The value has been calculated.
	Is accuracy of the monitoring equipment as stated in the monitoring plan? If monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/ national standards, as per the manufacturer's specification?	NA
	Calibration frequency/ interval:	NA
	How were the values in the monitoring report verified?	The Efficiency of cookstoves is defined as per the vintage year of operation as defined in the applied methodology and registered PD/01/. The value for the first year is considered based on the manufacturer's specification. The registered PD defines, the efficiency of the improved cookstoves with estimation of loss in efficiency per year using equation 5 of the applied methodology.

<table>
<tr><td></td><td></td><td></td><td>So, the efficiency of the stoves is checked and verified as
<table>
<tr><th>Year (y)</th><th>$\eta_{new,y,i,j}$</th></tr>
<tr><td>1</td><td>32.43%</td></tr>
<tr><td>2</td><td>32.11%</td></tr>
<tr><td>3</td><td>31.78%</td></tr>
<tr><td>4</td><td>31.47%</td></tr>
<tr><td>5</td><td>31.15%</td></tr>
<tr><td>6</td><td>30.84%</td></tr>
<tr><td>7</td><td>30.53%</td></tr>
<tr><td>8</td><td>30.23%</td></tr>
<tr><td>9</td><td>29.92%</td></tr>
<tr><td>10</td><td>29.63%</td></tr>
</table></td></tr>
<tr><td></td><td></td><td>If applicable, has the reported data been cross checked with other available data?</td><td>The reported data is cross checked with Manufacturer's specification/16/, registered PD/01/ and calculation provided in the ER sheet/03/ for yearly loss.</td></tr>
<tr><td></td><td></td><td>Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC process in place?</td><td>This is a calculated parameter and transfer of data, calculation and reporting in ER calculation is correct.</td></tr>
<tr><td>Findings</td><td colspan="3">No findings were raised.</td></tr>
<tr><td>Conclusion</td><td colspan="3">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 verification team is able to confirm that the project is implemented as per the registered PD and there is no discrepancy observed between the actual monitoring system and the monitoring plan set out in the registered PD and the applied methodology.</td></tr>
</table>

	The emission reduction calculation for the project activity is estimated based on the biomass saved by the ICS. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.

3. Annual quality of woody biomass used by improved cookstoves in tonnes per device of type i and batch j, $B_{y=1,new,i,j,survey}$

Means of verification

Criteria/ Requirements	Assessment/ Observation
Measuring/ Reading / Recording frequency	The value is monitored in the first year of the project implementation and after that fixed for the crediting period.
Is the measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes/ No)	Yes, measuring and reporting frequency is in accordance with monitoring plan and methodology.
Monitoring Equipment	In accordance with the applied methodology and validated registered PD, the parameter is determined during the first verification and fixed for the remaining crediting period. A weighing scale was used to measure the amount of wood being used by the cookstove during the First monitoring period.
Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/ national	In accordance with the applied methodology and validated registered PD, the parameter is determined during the first verification and fixed for the remaining crediting period. Usage of any monitoring equipment is not in the scope of current verification. However, the assessment team has verified the values used in the current Monitoring Period with validated and

		standards, or as per the manufacture's specification?	approved Verification Report (MP1)[/4/] and subsequent calculation[/23/] for the same.
		Calibration Frequency/ interval:	In accordance with the applied methodology and validated registered PD, the parameter is determined during the first verification and fixed for the remaining crediting period. The determination and calculation of this parameter is not under the scope of current verification. However, the assessment team: - Has verified sampling and calculation sheet of MP1[/23/] for determination of wood consumption for checking the consistency of values used - Confirms it was demonstrated that the consumption of biomass for individual project stoves can be measured exclusive of one another (for two pot stoves) - Confirms that PP has used the value which was verified by VVB during the MP1 and accepted by Verra through issuance of MP1.
		How were the values in the monitoring report verified?	The value of the parameter is 1.3359. The value has been calculated inline with sampling standard "sampling and surveys for CDM project activities and programme of activities" version 9 and it was fixed during the first year of introduction of the improved cookstoves, which as been verified

		from the sample survey report[/23/] and first verification report[/04/].
	If applicable, has the reported data been cross checked with other available data?	Checked with First verification report and cross checked with the sample data of first verification[/23/].
	Does the data management ensure correct transfer of data and reporting of emission reduction and are necessary QA/QC processes in place?	Yes, the data ensure correct transfer of data and reporting of emission reductions management. QA/ QC processes are in place.
Findings	No findings were raised.	
Conclusion	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 verification team is able to confirm that the project is implemented as per the registered PD and there is no discrepancy observed between the actual monitoring system and the monitoring plan set out in the registered PD and the applied methodology. The emission reduction calculation for the project activity is estimated based on the biomass saved by the ICS. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.	

4. The operating lifetime of the project device, Life span

Means of verification

Criteria/ Requirement	Assessment/ Observation
Measuring/ Reading/ Recording frequency	The parameter was calculated once at the beginning of project improved cookstove installation.
Is the measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes/ No)	Yes, measuring and reporting frequency is in accordance with monitoring plan and methodology.

		Monitoring Equipment	The value is measured based on the manufacturing specification. So, there is no monitoring equipment.
		Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/ national standards, or as per the manufacture's specification?	NA
		Calibration Frequency/ interval:	NA
		How were the values in the monitoring report verified?	The value monitored is 10. The value used has been verified from the manufacturing specifications/16/ of the improved cookstoves and from the registered VCS PD/01/ and verification report/04/.
		If applicable, has the reported data been cross checked with other available data?	Cross checked with previous validation and verification reports and manufacturing specifications/16/
		Does the data management ensure correct transfer of data and reporting of emission reduction and are necessary QA/QC processes in place?	Yes, the data ensures correct transfer of data and reporting of emission reductions management. QA/ QC processes are in place.
Findings	Issue in CL#01 was raised regarding the submission of manufacturer's specification. It was successfully closed as the PP submitted the manufacturer's specification, which was found satisfactory.		

Conclusion	This parameter has been verified from manufacturer's specifications provided by the PP. The emission reduction calculation for the project activity is estimated based on the biomass saved by the ICS. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.

The details of the parameters fixed at the beginning of the project are given below:

Ex- ante parameters:

Parameter	Value	Unit	Assessment
$f_{NRB,y}$	0.91	Fraction	The fraction of woody biomass saved is calculated by C4 Eco solutions in line with applicable methodological CDM Tool 30, version 3.0. The value has been checked with the registered PD/01/ and is found consistently reported and used during the current monitoring period.
$NCV_{wood\ fuel}$	0.0156	TJ/tonne	The value used for Net calorific value of the non-renewable woody biomass is a default value from the 2006 IPCC Guidelines. The value has been checked with the registered PD/01/ and is found consistently reported and used during the current monitoring period.
$EF_{wf,CO2}$	112	tCO_2/TJ	The value taken for CO_2 emission factor for the use of wood is a Default value from 2006 IPCC guidelines. The value has been checked with the registered PD/01/ and is found consistently reported and used during the current monitoring period.
$EF_{wf,non\ CO2}$	26.23	tCO_2/TJ	The value used for non-CO_2 emission factor for the use of wood fuel is taken from 2006 IPCC Guidelines. The value has been checked with the registered PD/01/ and is found consistently reported and used during the current monitoring period.
ηold	0.1	Fraction	The value for efficiency of baseline cookstove is taken from default methodology/07/ used. The value has

			been checked with the registered PD/01/ and is found consistently reported and used during the current monitoring period.
η_p	0.345	Fraction	The value for efficiency of project stove is taken from the manufacturer's specification/16/. The value has been checked with the registered PD/01/ and is found consistently reported and used during the current monitoring period.

Manufacture of ICS:

The ICS distributed in the project activity is a TLC-CQC rocket stove, developed by CQC in partnership with Total Land Care(TLC), an international NGO. The design is supported and certified by Aprovecho research center. The thermal efficiency of 34.5% is certified in their laboratory by following the latest WBT protocols. It was also verified during the remote audit with the PP/8.1/ and from the technical specifications of the stoves. The metal part now used are of highest grade which are built to last at least 10 years and the same was mentioned in the manufacturing specifications/16/.

The base (mud and brick structure) of the cookstoves is usually prepared by the end users themselves and the metal parts are provided to end users by the PP. These metal parts are provided free of cost. The trainings have been provided to end users to build and repair the stoves in case of any cracks or damage.

Considering the above information and the evidence (manufacturing specification) /16/ submitted by the PP, it was concluded that the project stoves can easily survive the lifetime of 10 years due to the ease of repair and free replacement parts available.

Sampling approach:

By the end of current monitoring period, the project activity has installed 208,082 number of the ICS / PAIs. For as defined in the registered PDD, the PP has applied sampling approach for measurement and determination of the parameter $N_{y,I,j}$ (i.e. Number of ICS installed and operating till the end of the current monitoring period including ICS installed in current and previous MP - “Number of project devices of type I and batch j operational during year y,)

The sampling approach was checked and verified by the assessment team as below.

Determination of the Sample Size:

Emission reductions for the group project activity is being claimed for this monitoring period i.e., 16/04/2021 to 15/10/2021 with total number of installed stoves being 208,082. In line with the VCS PD/01/ and applied methodology VMR0006 version 1.1/07/, the PP has calculated the sample size considering the confidence level of 90% and precision 10% with simple random sampling technique. In doing so, it has considered an expected proportion (p) of 80%, which is a conservative approach as compared to normal range of 90%. This calculation gives a sample size of 68. The formula used for the calculation of sample size is:

$$n \geq \frac{1.645^2 N \times p \times (1-p)}{(N-1) \times 0.1^2 \times p^2 + 1.645^2 p \times (1-p)}$$

Where:

n = Sample Size

N = Population size

p = Expected proportion, 0.8

1.645 = Represents the 90% confidence required

0.1 = Represents the 10% relative precision

$$n \geq \frac{1.645^2 \text{ x } 81634 \text{ x } 0.8\ (1-0.8)}{(81634-1) \text{ x } 0.1^2 \text{ x } 0.8^2 + 1.645^2 \text{ x } 0.8\ (1-0.8)} = 67.60 = 68$$

Therefore, 68 samples were covered by the PP. As under this project activity two stoves have been distributed in each household with a single beneficiary per household, the survey is conducted considering the beneficiary/household as a sample in place of stove. This is more appropriate approach as it widens the range of survey and stove numbers. Thus, a total of 68 householder and 136 stoves were surveyed by the PP. Thus, the PP has calculated and surveyed appropriate number of samples which conservative estimates of 80%, also there is no oversampling involved in the project.

Selection of Samples for Survey:

The PP has used the random selection technique for the selection of the samples. A random auto-number generator has been used and based on the same samples were selected.

The process for selection of random numbers, screenshots of the process/15/ and generated numbers are submitted by the PP and checked. Out of total beneficiaries 68 samples are randomly selected and further used for monitoring survey purpose.

The verification team has accessed the screenshots of random numbers/15/ generated during selection and matched it with the monitoring survey results/14/. It is found and concluded that the PP has used as robust and accurate mechanism for selection samples and all the samples selected for the survey are randomly selected.

Conduction of Monitoring Survey:

Selected sample details are conveyed to the field team, which has visited each sample householder and collected the details.

The assessment team has interviewed the person involved in the monitoring survey/8.2/ and has also witnessed the demonstration of the step-by-step collection of the information during the survey. The verified details of the survey process are as below:

- A special mobile application prepared by the PP for survey is used, in which the surveyors receive the question to be asked and details to be verified during the survey. This was assessed by the assessment team during the remote audit while interviewing the field team/8.2/.

- The surveyor takes the feedback from beneficiaries, checks operating condition of the stoves, and upload the details along with the details and photograph of the respondent/beneficiaries.
- The GPS coordinates of location during the survey are also noted down and survey results do not get submitted without GPS results.

The conducted survey forms/14/ are submitted by the PP from their server and checked by the verification team for details including photograph and GPS locations of the beneficiaries.

Thus, the assessment team is of the opinion that the PP has established and followed as well robust and accurate procedure for conducting survey. The survey personnel were well trained and competent enough to carry out the survey and understand the gravity of correct data collection requirement. Further, preparedness for conducting survey was adequate and survey plan was robust. The integrity and correctness of the survey data is reasonably assured.

The sampling surveys have been carried out by the well-trained personnel. Some of them were interviewed by the team during audit as details provided under section 2.3.

Analysis of Results

The parameter that was monitored during the survey is:

- $N_{y,l,j,}$ number of project devices operational during year y.

The parameter was surveyed by a questionnaire and visually inspecting the operational status of ICS installed. End users' interview was also conducted during survey to confirm the operational status.

The table summarizes the Sampling results:

Monitored Parameter	**Sample size**	**Survey result (Stoves found to be operational)**	**Precision achieved**
$N_{y,j,j}$	136	136	0.00%

Proportion of operational stoves obtained from the survey is multiplied by the total commissioned stoves to arrive at this value. Since proportion of operational stoves is found 100%, all total installed stoves of 208,082 are considered operational by the PP.

Verification of the Sampling survey by the Assessment team

- The assessment team has checked and verified the ICS installation records/17/ as provided by the PP and total number of installed stoves are verified as 208,082. Thus, the PP has correctly considered the population size N in determination of sample size

- The registered PD mentions the 90/10 confidence/precision ration for sample determination and the same has been correctly applied.
- The expected proposal is considered as 80%. Based on experience and professional judgement, the assessment team feels is reasonably conservative estimate by the PP in selection of sample size.
- The sample survey questions used, and survey process is robust and is able to provide the result for determination of operational stove from the selected samples.
- The monitoring survey has been carried out by the well-trained personnel. Monitoring parameters $N_{y,j,j}$ is monitored through monitoring sample surveys. Verification team has checked the survey records and sample size calculation and it is found to in line with the applied methodology and registered PD.
- The assessment team used the acceptance sampling approach and a sample size of 11 was determined, based on 0.5% Acceptable quality level and 20% unacceptable quality level with 10% of producer risk and 10% of consumer risk in line with para 30 and 31 of "Sampling and surveys for CDM projects activities and programmes of activities" version 09.0/10/ respectively. Thus, the acceptance number taken by the assessment team is 0.
- 11 samples from the survey data were randomly selected and communicated to the PP for audit. PP had arranged a video/remote interviews for the samples. All 11 samples were checked and verified by the team.
- The survey results provided by PP were crosschecked during the remote audit of the sample, installation date, monitoring survey date, condition and operating of the stove for all 11 beneficiaries were checked and verified by means of video call by the team.
- Assessment team interviewed all 11 samples, and as two stoves were distributed in each household, the operational status of the stoves was checked. it was observed that all the 22 stoves were operational and hence, no discrepant records were observed with the survey data of the PP.

Furthermore, the emission reductions have been calculated in accordance with the applied methodology VMR0006 version 1.1/07/ and VCS PD/01/. The PP has used the monitoring data and ex-ante fixed data including default values as mentioned in VCS PD and applied methodology. The values used for calculation of GHG emission reductions have been thoroughly checked by the verification team and is found to be appropriate and correct.

Emission reduction calculations:

Leakage Emissions: Leakage is considered as 0.95, which is default value in accordance with VMR0006 version 1.1/07/.

The project activity is about the replacing the traditional three stone fir pot with the improved energy efficient rocket stoves. Therefore, equations 1 and 2 from the applied methodology is used in calculation of net GHG emissions.

Equation 1.

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

Where,

i = Indices for the situation where more than one type/model of improved cookstove is introduced to replace three-stone fire.

J = Indices for the situation where there is more than one batch of improved cookstoves of type i

ER_y = Emission reduction during year y in tCO_2e

$ER_{y,I,j}$ = Emission reduction by improved cookstove of type i and batch j during year y in tCO_2e

Equation 2:

$ER_{y,I,j} = By,_{saving,i,j} \times NCV_{wood\ fuel} \times f_{NRB,y} \times (EF_{wf,CO2} + EF_{wf,non\ CO2}) \times N_{y,I,j} \times 0.95$

Where,

$B_{y,saving,i,j}$ = Quantitly of woody biomass that is saved in tonnes per improved cookstove of type i and batch j during year y

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

$NCV_{wood\ fuel}$ = Net calorific value of non-renewable woody biomass that is substituted or reduced (IPCC default for wood fuel, 0.0156 TJ/tonne)

$EF_{wf,CO2}$ = CO_2 emission factor for the use of wood fuel in baseline scenario (IPCC default for wood fuel,112 tCO_2/TJ)

$EF_{wf,non\ CO2}$ = Non- CO_2 emission factor for the use of wood fuel in baseline scenario (IPCC default for wood fuel, 26.23 tCO_2/TJ)

$N_{y,I,j}$ = Number of improved cookstoves of type i and batch j operating during year y

0.95 = Discount factor to account for leakage

Now, to calculate the $B_{y,saving,i,j}$, we will be using equation 4 of the applied methodology

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

Where,

$B_{y=1,new,i,survey}$ = Annual quantity of woody biomass used by improved cookstove in tonnes, determined in the first year of the implementation of the project through a sample survey.

η_{old} = Efficiency of baseline cookstove. A default value of 0.10 has been used as the replaced is a three stone fire, with no improved combustion.

$\eta_{new,I,j}$ = Efficiency of the improved cookstove determined using Equation 5 of the methodology.

$$\eta_{new,y,i,j} = \eta_p \times (DF_n)^{y-1} \times 0.94$$

η_p = efficiency of project stove (fraction) at the start of project activity

$(DF_n)^{y-1}$ = Discount factor to account for efficiency loss of project cook stoves per year of operation (fraction). Default value is 0.99 efficiency loss per year has considered.

0.94 = Adjustment factor to account for uncertainty related to project stove

Therefore,

For year 2021

Installation date: 24/02/2021

Vintage 1: 183 days (16/04/2021 to 15/10/2021)

$B_{y=1,new,i,survey}$ = 1.3359

$\eta_{new,y,I,j}$ = 0.345 X (0.99)1-1 X 0.94 = 0.3243

$B_{y,saving,i,j}$ = 1.3359 X ((0.3243/0.1) -1) = 2.9964

$ER_{y,i,j}$ = 2.9964 X0.0156 X 0.91 X (112 + 26.23) X 1 X 0.95 X 0.50 =2.80

Therefore, Total ER = 267,407 tCO_2e

Verification team confirms that all the parameters are correctly used in the calculations, all results are verifiable and transparent, all assumptions are described and based on verifiable evidence and calculations are done in accordance with the pre-defined formulae from registered VCS PD. The total number of emission reductions for the monitoring period (16/04/2021 to 15/10/2021) is 267,407 tCO_2e.

The verification team has checked and confirmed the calculations in the calculation sheet and found to be accurate. The monitoring report is supposed by emission reduction spreadsheet. The consistency and formula were verified and found to be accurate.

Issue in CAR #04 was raised ER sheet mentioned the incorrect MP number. The issue was resolved and closed.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

The assessment team confirms that the calculation and data is authentic. The quality of supporting documents submitted for verification are adequate. The assessment team has checked the quality and maintenance of the supporting documents during the remote site visit to confirm the authenticity of the documents and to check the appropriate calculations. The assessment team confirms that the proper evidence is available for the whole monitoring period and the same is verifiable and the data collection system meets the requirement of the monitoring plan and the applied methodology according to the assessment carried out.

The assessment team confirms the quality of evidence to determine the GHG reductions are satisfactory and the detailed information regarding the roles and responsibilities have been provided in the monitoring report.

4.6 Non-Permanence Risk Analysis

Not applicable for the project activity.

5 VERIFICATION CONCLUSION

Earthood Services Private Limited (Earthood) was contracted by C- Quest Capital Stoves Asia limited, has performed the independent verification of the emission reductions for the VCS project activity (VCS ID- 2372) “Installation of High Efficiency Wood Burning Cookstoves in Malawi - Project 2” in Malawi for the monitoring period 16/04/2021 to 15/10/2021 as reported version 02.2 dated 09/09/2022. The C-Quest Capital Stoves Asia Limited is responsible for the collection of dated in accordance with the monitoring plan and the reporting of GHG emission reductions from the project activity.

It is our responsibility to express an independent verification statement on the reported GHG emission reductions from the project activity. Earthood commenced the verification based on the baseline, monitoring methodology VMR0006 version 1.1 and, the monitoring plan mentioned in the registered VCS PD.

Earthood's 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. Earthood planned and performed the verification by obtaining evidence and other information and explanations that Earthood considered necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

In our opinion the GHG emission reductions reported for the project activity for the period 16/04/2021 to 15/10/2021 are fairly stated in the Monitoring report version 02.2 dated 09/09/2022. The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology VMR0006., Version 1.1 and the VCS standard, version 4.3.

The current monitoring period is from 16/04/2021 to 15/10/2021 only, so all the emission reductions achieved during the monitoring period falls under the vintage year of 2021. Also, it is to be noted that period of 01/01/2021 to 15/04/2021 was part of the first monitoring period. The total emissions reductions verified and issued for 2021 vintage in the first monitoring period are 76,829 tCO2e. Thus, emission reductions being claimed up to end of the current monitoring period for vintage year 2021 are 344,236 tCO2e.

Verification period: 16/04/2021 to 15/10/2021

Verified GHG emission reductions and removals in the above verification period:

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
2021 *(*16/04/2021 to 15/10/2021*)*	267,407	-	-	267,407
Total	**267,407**	**-**	**-**	**267,407**

Approved by:

Kaviraj Singh

Managing Director — Date: 21/09/2022

Earthood Services Private Limited — Place: Gurgaon, Haryana, India

APPENDIX 1: DOCUMENT REFERENCES

S. No.	Title of Document	Version	Date
1.	Registered PD for the project activity Available at Verra registry for project activity page: https://registry.verra.org/app/projectDetail/VCS/2372	03	11/10/2021
2.1	Initial Monitoring report submitted for verification	01	19/04/2022
2.2	Final Monitoring Report verified for certification	02.2	09/09/2022
3.	Emission Reductions calculation sheet	Corresponding to Final MR	-
4.	Previous verification report (MP1) for the project activity along with the sample data and calculation sheet Available at Verra registry for project activity page: https://registry.verra.org/app/projectDetail/VCS/2372	3.1	17/02/2022
	Validation report for the project activity Available at Verra registry for project activity page: https://registry.verra.org/app/projectDetail/VCS/2372	4.1	30/11/2021
5.	VCS Standard https://verra.org/wp-content/uploads/2022/06/VCS-Standard_v4.3.pdf	4.3	-
6.	VCS program Guide https://verra.org/wp-content/uploads/2022/01/VCS-Program-Guide_v4.1.pdf	4.1	-
7.	Approved methodology VMR0006 https://verra.org/methodology/vmr0006-methodology-for-installation-of-high-efficiency-firewood-cookstoves/	1.1	-

8.1	Remote site visit and interviews conducted by assessment team with the Project Proponent	-	24/05/2022
8.2	Remote interviews conducted by assessment team with the beneficiaries for the project and Monitoring Surveyors (Follow up on survey data)	-	24/05/2022
9.	Declaration/Confirmation from PP regarding not having created or sought any other form of environmental credits for the same period	-	-
10.	Sampling and surveys for CDM project activities and programmes of activities https://cdm.unfccc.int/sunsetcms/storage/contents/stored-file-20210531160756223/Meth_Stan05.pdf	09.0 EB50, A30	-
11.	VCS webpage for the project activity, VCS ID 2372 https://registry.verra.org/app/projectDetail/VCS/2372	-	-
12.	Africa Covid cases https://economictimes.indiatimes.com/news/international/world-news/south-africa-says-it-may-be-entering-fifth-covid-wave/articleshow/91176065.cms	-	29/04/2022
13.	Sampling sheet of monitoring survey conducted by the PP	-	-
14	Monitoring Survey results for the samples selected by the PP	-	-
15	Process flow for random selection of Sample including screenshots of the selection process	-	
16	Manufacturers / Technical specification of the ICS	-	-
17	ICS installation records as verified from the server of the PP, including date of First and last ICS installed during MP	-	-
18	Records for Beneficiary added during the monitoring period	-	-
19	Sample purchase records for the stoves	-	-
20	Details of the Regular Spot Check Activities conducted during the current monitoring period	-	-

21	National Charcoal Strategy 2017 – 2027 Issued by “The Ministry of Natural Resources, Energy and Mining”; Government of Malawi	Last Accessed: 20/06/2022	2017
22	Registration Records / Consent Deeds signed by the beneficiaries prior to the installation of the ICS Signed records confirms Domestic household use Confirmation from beneficiaries using conventional three stone open fire stoves prior to installation of project activity stoves	-	-
23	Verified Sampling and Calculation Sheet of MP1 for determination of quantity of woody biomass used in the ICS	-	-
24	Deed of Accession in Respect of VCS Registration Deed of Representation dated 25/04/2022	-	25/04/2022

APPENDIX 2: ABBREVIATIONS

Abbreviations	Full texts
BEF	Baseline Emission Factor
CO_2	Carbon dioxide
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CMS	Central Monitoring System
CL	Clarification Request
CMP	Conference of Parties Serving as Meeting of Parties
CAR	Corrective Action Request
EB	Executive Board
FAR	Forward Action Request
GHG	Green House Gas
ICS	Improved cookstoves
MR	Monitoring Report
O&M	Operation and Maintenance
PD	Project Description
PP	Project Proponent
QA/QC	Quality Assurance and Quality Control
UNFCCC	United Nations Framework Convention on Climate Change
VCS PD	VCS Project Description
VCS	Verified Carbon Standard
VCSA	Verified Carbon Standard Association
VCUs	Verified Carbon Units

APPENDIX 3: FINDINGS OVERVIEW

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

FAR ID	00	**Section no.**		**Date :** DD/MM/YYYY
Description of FAR				
NA				
Project participant response				**Date :** DD/MM/YYYY
NA				
Documentation provided by project participant				
NA				
VVB assessment				**Date:** DD/MM/YYYY
NA				

Table 2. CAR & CL from this verification

CL ID	01	**Section no.**	-	**Date :** 26/05/2022
Description of CL				
The PP is requested to provide supporting for the following - Copies for the results of monitoring survey conducted - Evidence/proof for random sample selection claim and process followed - Proof for the number of ICS installed till end of monitoring period and their type - Manufacturer's specification for the stoves installed during the monitoring period				
Project participant response				**Date :** 28/05/2022
All the supporting documents requested by VVB is being shared for reference.				
Documentation provided by project participant				
Following is the list of supporting that are being shared to the VVB - Spreadsheet as well as PDF records of the monitoring survey conducted - Screenshot of the website being used to generate the random numbers for sample selection reflecting the process followed (in PDF format) - Database including total number of ICS installed till end of monitoring period and the details of ICS - Manufacturer's specification for the installed ICS				
VVB assessment				**Date:** 01/06/2022

The PP has submitted the following documents:

1. Spreadsheets as well as PDF records of monitoring survey conducted. Same are checked and found appropriate with survey sheet provided. OK
2. Screenshots of the website used to generate the random numbers for sample selection. OK
3. Proof of the number of ICS installed till end of monitoring period compiled in a database and shared. OK
4. Manufacturer's specification for ICS installed during monitoring period. OK

CL#01 is closed.

CL ID	02	**Section no.**	1.9, 1.10, 1.11, 2.2	**Date :** 26/05/2022

Description of CL

1. The PP is requested to clarify/substantiate the compliance with the requirements set out under Para 3.21 (Other Forms of Credit) of VCS standard 4.2 for section 1.9 and 1.10 of the MR (Participation under other GHG programs/Other forms of credit)

2. In accordance with VCS standard version 4.2, section 3.17.4, the project proponent shall establish mechanisms for ongoing communication with local stakeholders to allow stakeholders to raise concerns about potential negative impacts during project implementation.
   - The PP is requested to clarify how section 2.2 of monitoring report complies with VCS standard V4.2 requirements pertaining to the ongoing communication.

3. The PP has stated that the project activity is being pursed under SD Vista and VVBs not require to demonstrate the SDG contribution separately. PP is requested to substantiate the claim.

Project participant response **Date :** 28/05/2022

1. PP confirms that the project is neither registered under any other GHG programs nor has applied for any other programme to create another form of GHG-related environment credit. Supporting of the same is being submitted.

2. PP has clarified in section 2.2 of MR with the statement that "As a part of the ongoing communication, the stove users can contact the local implementation partner in case any support or replacement of any stove part is required. The contact details of the local implementation partner have been shared with the end users during the stove installation. The local support staff address the end users' query by providing the necessary support. In case of replacement of stove part is needed, local staff coordinates with the management team to arrange the replacement of the part. At the time of monitoring survey also, field staff takes feedback from the local stakeholders."

3. RFR for the project activity under SD Vista has already been submitted to Verra and the same can be checked on Verra website using the below link: https://registry.verra.org/app/projectDetail/SDVISTA/2372

Documentation provided by project participant

1. Declaration confirming not registered under any other GHG programs is being submitted to VVB for reference.

VVB assessment **Date:** 01/06/2022

1. The PP has provided the declaration for confirming non- participation in any other GHG program or trading mechanism. The project activity is also not registered with any other GHG mechanism and there are no possibilities for double counting of the GHG emission reductions for current monitoring period. OK

2. PP has incorporated information regarding the communication with local stakeholders in section 2.2 of the revised MR, in line with the guidelines provided under the clause 3.17.4 and 3.17.5 of the VCS standard v 04.2. OK

3. RFR for the project activity under SD Vista has been verified from VERRA Registry for project activity page: https://registry.verra.org/app/projectDetail/VCS/2372. OK.

CL#02 is closed.

CAR ID	03	**Section no.**	Completeness of MR	**Date :** 26/05/2022
Description of CAR				
1. Under section 1.1 of the MR, the PP is required to provide the implementation status of the project activity along with relevant dates. However, details of the ICS implemented/installed during the current monitoring are not provided. Thus, PP is requested to transparently mention following information in the MR - Status of the ICS installed and operating at the start of MP - No of ICSs installed with dates during the MP - Last date of the ICS installed in the MP - Status of random/spot check surveys conducted during the monitoring period				
Project participant response				**Date :** 28/05/2022
All the requested details of the ICS has now been updated in section 1.1 of the MR.				
Documentation provided by project participant				
Revised MR Version 02				
VVB assessment				**Date:** 01/06/2022
A revised MR has been provided by the PP along with information regarding the status of ICS installed, number of ICS installed during the MP and the status of random survey conducted. All this information is found to be OK. Hence, accepted. CAR#03 is closed.				

CAR ID	04	**Section no.**	Completeness of MR	**Date :** 26/05/2022
Description of CAR				

1. Being a group project, the PP is required to provide relevant information about new instances of the project activity included in the monitoring period and demonstrate and justify how each new instance of the project activity(s) meets the eligibility criteria set out in the project description. The same has been provided by the PP under section 3.3. However, the demonstration needs to be more specific to the applicable instances with objective supporting evidence/basis to be provided. 2. Minor correction - The monitoring period number mentioned in the ER sheet is incorrect. PP is requested to revise the same.
Project participant response **Date :** 28/05/2022
1. All the necessary information including the basis of instances meeting the eligibility criteria set out in the project description has now been reflected in the MR. 2. There was typo error in the ER sheet and the same has been revised.
Documentation provided by project participant
1. Efficiency report (WBT) of the installed ICS is being submitted to the VVB.
VVB assessment **Date:** 01/06/2022
The PP has provided the revised MR with: - added information of the baseline stove replaced and provided records / deeds from the beneficiaries confirming the replaced baseline stoves as conventional / traditional three stone open fire stoves. Accepted - Clarified in the MR that they follow annual frequency for monitoring survey. This fulfils the methodology requirement. Ok - Provided verified calculation/survey sheet of MP 1 used in determination of the wood consumption in the stove. This is checked for consistency and methodology requirements as found appropriate. OK CAR#04 is closed.

Table 3. FAR from this verification

FAR ID	NA	**Section No.**		**Date :** DD/MM/YYYY
Description of FAR				
NA				
Project participant response				**Date :** DD/MM/YYYY
NA				
Documentation provided by project participant				
NA				
VVB assessment				**Date:** DD/MM/YYYY
NA				

APPENDIX 4: COMPETENCY STATEMENTS

Competence Statement			
Name	Harsh Raval		
Education	Bachelor of Engineering in Chemical Engineering Master of Science in Environmental and Energy Engineering		
Experience	15 Years		
Field	Climate change, Environment and waste management		
Approved Roles			
Team Leader	Yes		
Validator	Yes		
Verifier	Yes		
Methodology Expert	Yes (AMS-I.D, ACM0002)		
Local expert	Yes (INDIA)		
Financial Expert	No		
Technical Reviewer	Yes		
TA Expert	Yes		
Reviewed by	Deepika Mahala (Quality Manager)	**Date**	08/12/2021
Approved by	Ashok Gautam (Technical Manager)	**Date**	08/12/2021

Name	Shreya Garg		
Country	India		
Education	M.Sc. (Climate Science & Policy), TERI University		
Experience	6 Years +		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS.I.A., AMS.I.C., AMS.I.D., AMS.I.F., AMS.II.D., AMS.II.G., AMS.II.J., AMS.III.AV., ACM0002, ACM0012		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (TA 1.2, TA 3.1)		
Reviewed by	Abhishek Mahawar	**Date**	01/03/2018

Approved by	Ashok Gautam	**Date**	01/03/2018

Competence Statement			
Name	Enea Katundu		
Country	Malawi		
Education	Master of Science		
Experience	3 Yrs +		
Field	Research and Social Empowerment		
Approved Roles			
Team Leader	NO		
Validator	NO		
Verifier	NO		
Methodology Expert	NO		
Local expert	YES (Malawi)		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert	NO		
Reviewed by	Abhishek Mahawar	**Date**	01/03/2018
Approved by	Ashok Kumar Gautam	**Date**	01/03/2018

Competence Statement			
Name	Mihika Saxena		
Education	B. Tech Civil Engineering		
Experience	NA		
Field	Environmental Science		
Approved Roles			
Team Leader	No		
Validator	No		
Verifier	No		
Methodology Expert	No		
Local expert	No		
Financial Expert	No		
Technical Reviewer	No		
TA Expert	No		
Trainee	Yes		
Reviewed by	Deepika Mahala	**Date**	09/03/2022
Approved by	Ashok Gautam	**Date**	09/03/2022

Competence Statement

Name	Shifali Guleria		
Education	M.Sc. (Environmental Studies and Resource Management), TERI University		
Experience	3+ year		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	YES (AMS-I.A., AMS-II.G.,AMS-II.E., AMS-III.A.V., AMS-I.D, ACM0002)		
Local expert	YES		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (1.2, 3.1)		
Reviewed by	Deepika Mahala	**Date**	16/02/2022
Approved by	Ashok Gautam	**Date**	18/02/2022