INSTALLATION OF HIGH EFFICIENCY WOOD BURNING COOKSTOVES IN MOZAMBIQUE

Document Prepared By

VKU Certification Pvt. Ltd.

Regd. Off: Flat No. 306, Sky Star, N-1, New Rani Bagh Khandwa Road, Indore, Madhya Pradesh, India - 452020
URL: http://vkucertification.com | e-mail:info@vkucertification.com

Project Title	Installation of high efficiency wood burning cookstoves in Mozambique
Version	1.4
Report ID	VKU.VER.26.22_VCS_2351

Report Title	Installation of high efficiency wood burning cookstoves in Mozambique

Client	C-Quest Capital SGS Stoves Private Limited
Pages	81
Date of Issue	05-October-2024
Prepared By	VKU Certification Pvt. Ltd.
Contact	Regd. Off: Flat No. 306, Sky Star, N-1, New Rani Bagh Khandwa Road, Indore, Madhya Pradesh - 452020 URL: http://vkucertification.com E-mail: info@vkucertification.com
Approved By	Dr. Vikas Kumar Aharwal (Founder and Director) vikas.aharwal@vkucertification.com
Work Carried Out By	Vivek Kumar Ahirwar - Team Leader & Technical Expert TA 3.1 Raposo Ernesto Jacinto-Local Expert (Mozambique) Deepali Sharma -Validator/Verifier-Trainee Abhishek Kumar Srivastava- Technical Reviewer & Technical Expert TA 3.1

Summary:

VKU Certification Pvt. Ltd. (hereafter referred as VKU) was commissioned by C-Quest Capital SGS Stoves Private Limited (hereafter referred as CQC) to verify the greenhouse gas emission reductions reported for the grouped project activity "Installation of high efficiency wood burning cookstoves in Mozambique (VCS 2351-MP02)", covering monitoring period from 01-September-2021 to 28-February-2022 (both dates included) under fixed crediting period from 27-January-2021 to 26-January-2031 (both dates included) with regard to the relevant requirements for VCS activities.

The purpose of the verification is to have an independent review ex-post determination of the monitored reductions in GHG emissions 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.

The verification scope of the project is:

- To verify that the project is implemented as described in the registered VCS PD/14/.
- To assess the project's compliance with other relevant rules including the host country legislation.
- To confirm that the monitoring system is implemented and fully functional to generate voluntary carbon units without any double counting.
- To establish that the data reported are accurate, complete, consistent, transparent and free of material error or omission by checking the monitoring records and the emissions reduction calculation.
- To verify that 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 objective of the verification is to have an independent review ex-post determination of the monitored reductions in GHG emissions. Verification was conducted using VKU's procedures in line with the requirements specified in the VCS program guide version 4.3/3/, VCS standard Version 4.4/4/, VCS validation and verification manual version 3.2/22/, CDM M&P, and Verification Standard/25/, and relevant decisions of the COP/MOP and the CDM EB and applying standard auditing techniques. The verification consisted of desk review, on-site assessment and the resolution of outstanding issues and the issuance of the final verification report and certification.

VKU followed the rule-based approach to perform this verification. During the course of verification, a total of 10 findings were raised, which includes: 06 Corrective Action Request (CARs); 06 Clarification Request (CLs) and 00 Forward Action Requests (FARs). All the findings were raised and resolved successfully by the PP.

The verification team ensured that the reported emission reductions are complete and accurate in accordance with applicable VCS requirements in order to be certified therefore the verification team has detected no further uncertainties.

The GHG emission reductions were calculated on the basis of the approved methodology VMR0006 'Methodology of High Efficiency Firewood Cookstoves' (version 1.1)/6/ and the monitoring plan included in the project description, version 2.2 of 09-May-2022.

During this verification, 06 Corrective Action Request (CARs) and 06 Clarification Requests (CLs)and 00 Forward Action Requests (FARs) were identified related to operation, monitoring and GHG emission reduction calculation of the VCS project activity in relation to all relevant VCS requirements for the project activity and the applied baseline and monitoring methodology, and these CARs and CLs are successfully closed after necessary corrections/clarifications by the client. The same has been discussed in Appendix C of this verification report.

In conclusion, it is VKU's opinion that the grouped project activity "Installation of high efficiency wood burning cookstoves in Mozambique" VCS project ID 2351, meets all relevant requirements for VCS standard and guidelines and correctly applies the baseline and monitoring methodology VMR0006 "Methodology for Installation of High Efficiency Firewood Cookstoves" version 1.1/6/. The monitoring system is in place and the emission reductions are calculated without material misstatement. Hence, VKU is able to certify that the emission reductions from the project during the 2nd monitoring period from 01-September-2021 to 28-February-2022 (both dates included) under fixed crediting period from 27-January-2021 to 26-January-2031 (both dates included) amounts to 45,811 tCO2e.

1 INTRODUCTION

1.1 Objective

C-Quest Capital SGS Stoves Private Limited (hereafter CQC) commissioned VKU Certification (hereafter VKU) to carry out the second verification of the project "Installation of high efficiency wood burning cookstoves in Mozambique" (VCS 2351) for the period from 01-September-2021 to 28-February-2022 (both dates included).

This report summarizes the findings of the verification of the project, performed on the basis of VCS Requirements and UNFCCC criteria for CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The objective of the verification is to have an independent evaluation of grouped project activity by an accredited validation and verification body against the requirements of the VCS Program Guide Version 4.3/3/, VCS standard version 4.4/4/ and GHG program applied, on the basis of the registered PD/14/.

The verification is for the 2nd monitoring period from 01-September-2021 to 28-February-2022(both dates included) for a period of 6 months (181 days). The objectives of this verification exercise are, by review of objective evidence, to establish that:

- The grouped project activity has been implemented and operating as per the project description /14/(PD) and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place;
- Monitoring report/1/ and other supporting documents are complete;
- The data is recorded and stored as per the monitoring methodology and approved monitoring plan.

To confirm that the monitoring system is implemented and fully functional to generate Verified Carbon Units (VCUs) without any double counting/19/, and to establish that the data reported are accurate, complete, consistent, transparent and free of material error or omission by checking the monitoring records and the emissions reduction calculation. This aims to establish the reliability and integrity of the data.

1.2 Scope and Criteria

The verification scope is:

- To verify that the project is implemented as described in the registered VCS PD/14/.
- To assess the project's compliance with other relevant rules including the host country legislation.
- To confirm that the monitoring system is implemented and fully functional to generate voluntary carbon units without any double counting.
- To establish that the data reported are accurate, complete, consistent, transparent and free of material error or omission by checking the monitoring records and the emissions reduction calculation.
- To verify that 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 shall ensure that the reported emission reductions are complete and accurate in order to be certified.

The project is assessed against the requirements of VCS standard version 4.4/4/, VCS program guide version 4.3/3/, VCS validation and verification manual version 3.2/22/ and related rules and guidance. VKU has, based on the recommendations in the latest version of CDM Validation and Verification Standard version 9.0/25/, VCS validation and verification manual version 3.2/22/ and employed a rule-based approach (as criteria) in the verification, focusing on the identification of significant reporting rules and the reliability of project monitoring.

The method and criteria used for verification consisted of the following phases:

- Desk review of VCS Project Description, registered under version 2.2 on 09-May-2022/14/and other supporting documents listed in Table-03;
- Onsite interviews & Focussed Group Discussions with End-Users, Stakeholders & PP representatives involved in project's implementation/21/30/;
- Resolution of outstanding issues and and Completeness check and issuance of final verification report and applicable VCS Verification Deeds of Representation.

Verification is not meant to provide any consultancy towards the project proponents. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the monitoring.

1.3 Level of Assurance

All the revisions of the verification report before being submitted to the client were subjected to an independent internal technical review to confirm that all verification activities had been completed according to the pertinent VKU's procedure, with a **Reasonable level of assurance**. The verification report is based on the Monitoring report /1/, registered VCS PD /14/, supporting documents /7//8//9//15//18//19//20//21/ made available to the verification team and information collected through performing interviews on-site.

The technical review was performed by a technical reviewer(s) qualified in accordance with VKU's qualification procedure.

Table 1: The verification team and the technical reviewers consist of the following personnel:

Role/Qualification	Last Name	First Name
VCS Team Leader & Technical Expert TA 3.1	Ahirwar	Vivek Kumar
Local Expert (Mozambique)	Jacinto	Raposo Ernesto
Validator/Verifier-Trainee	Sharma	Deepali
Technical Reviewer & Technical Expert TA 3.1	Srivastava	Abhishek Kumar

The threshold for quantitative materiality with respect to the aggregate of errors, omissions and misrepresentations, relative to the total reported GHG emission reductions and/or removals was limited to one percent, as required by section 4.1.8 of the VCS Standard version 4.4/4/. As the project is a large project, the threshold shall be one percent as per Section 4.1.8 of VCS Standard 4.4/4/. The same was verified from PPs sampling survey and Verification team's acceptance sampling, it was found that the achieved proportion of non-working stoves is less than the expected range, hence uncertainty is reduced. Hence, accepted.

1.4 Summary Description of the Project

The group project has implemented distribution of 32,204 improved cook stoves (ICS) in Republic of Mozambique until current monitoring period replacing conventional open fire cookstoves (three stone fire). The proportion of operational stoves is 28,904 which was arrived by multiplying the percentage of operational stoves with the total number of stoves. The baseline stoves are conventional system with no improved combustion air supply or flue gas ventilation system as verified from on-site review and interview. The project stoves are having better efficiency compared to baseline cooking system i.e., open fire and therefore results in saving

firewood compared to baseline scenario. Each project ICS included in the grouped project activity with an end user agreement executed between end user and PP (Practical Action) /7/. The CQC has agreement for communication to VCS and CQC is acting as entity responsible for communication with VERRA. The project proponent for the grouped project activity which is C-Quest Capital Stoves Asia Limited, owns the rights to VCUs.

The ICS distributed in the group project activity is a TLC-CQC Rocket stove, designed by Total Land Care (TLC), an international NGO, the design is supported and certified by Aprovecho research centre /9/. Under this project one or two improved cookstoves distributed in the households as per the requirement of the stove users in Mozambique with per-stove efficiency of 34.5% which is 32.43% for vintage 1 and 32.11% for vintage 2 of current monitoring period which is calculated as per the equation 5 of the approved methodology/6/. The project technology was witnessed by the audit team during on-site audit and found to be operating as per the specifications and description. Each ICS has a life span of 10 years as confirmed from stove manufacturer specification/9/.

TLC cookstoves manufactured under the grouped project activity match the fixed design specification with the TLC Brochure/9/. This was achieved by using brick molds of specified dimensions to make bricks used for stove construction locally.

This ensured, that each stove that is built at individual end user household measures exactly same as the dimensions specified by the manufacturer. Post construction, training was provided to end users on use, care, and upkeep of these stoves. PP conducted spot audits on monthly basis and surveillance of the stoves distributed under the group project activity to ensure their proper functioning throughout the project lifetime. This along with spot audits and post installation maintenance services, ensure that the project stoves continue to work at efficiencies as specified by the manufacturer/9/.

The project's fixed crediting period is from 27-January-2021 to 26-January-2031 (both dates included). Emission reductions from 27-January-2021 to 31-August-2021 (both dates included) have already been verified as a part of the first monitoring period /13/ and can be further confirmed from VERRA registry. For the current monitoring period from 01-September-2021 to 28-February-2022 (both dates included) 32,204 ICSs distributed and 28,984 ICSs operational, results in overall reduction of 45,811 tCO_2e emission reductions/2/.

2 VERIFICATION PROCESS

2.1 Method and Criteria

Verification was conducted using VKU's procedures in line with the requirements specified in the VCS Requirements, i.e., VCS Program Guide Version 4.3/3/, VCS standard document version 4.4/4/. The GHG emission reductions are on the basis of the approved Baseline and monitoring methodology VMR0006, version 1.1/6/.

The verification consisted of the following phases:

1. Planning: The assessment team plans the GHG-programme site visit and starts with a desk review.
2. Audit and Sampling Plan: An audit plan is prepared, including all sub-elements required for an integrated verification process aligned with the contract, scope, objectives, level of assurance, and materiality.
3. Evidence Gathering & Risk Assessment: Based on strategic analysis, the team determines evidence gathering activities, preparing a plan to collect sufficient and appropriate evidence for each GHG-related activity characteristic, using a risk-based approach.
4. Client Confirmation: The site visit audit plan is sent to the client for review and confirmation.
5. Document Review: Relevant documents, such as the verification report, monitoring plan, methodology, VCS PD, and QA/QC procedures, are thoroughly reviewed.
6. On-Site Assessment: This includes interviews and evaluation of the actual project scenario.
7. Resolution of Discrepancies: Any non-conformities identified during the assessment are addressed and resolved.
8. Independent Review: A technical reviewer provides an independent assessment.
9. Final Verification: After completeness checks, the verification report and certification are issued.

The following sections outline each step in more detail.

2.2 Document Review

During the document review, VKU has applied standard auditing techniques to assess the quality of information provided. The verification was performed primarily based on the review of the monitoring report (MR) version 01 of 30-July-2022, MR version 1.1 of 24-February-2023, MR version 1.2 of 28-February-2023, MR version 1.3 of 13-March-2023, MR version 2.0 of 08-

August-2023 and MR version 2.1 of 23-August-2024/1/, the emission reduction (ER) calculations spreadsheet with version 01 dated 30-July-2022,ER spreadsheet version 1.1 of 24-February-2023, ER spreadsheet version 1.2 of 13-March-2023, ER version 2.0 of 08-August-2023 and ER version 2.1 of 24-August-2024 received from the PP /2/ were assessed as part of the verification. In addition, the registered Project Documents (VCS-PDs) /14/ in particular the baseline estimations and the monitoring plan for the project was reviewed.

As per section 3.25 and clause 3.25.3 of the VCS Standard version 4.4/4/ it is an obligation for the project proponent to make available to the validation/verification body the required supporting documents and data needed to support statements and data as documented in the monitoring report. After review of the documents listed below, assessment team confirms the requirements have been met.

Table 2: The following table lists the documentation reviewed during the verification:

/1/	CQC: VCS monitoring report for "Installation of high efficiency wood burning cookstoves in Mozambique", version 01 of 30-July-2022, MR version 1.1 of 24-February-2023, MR version 1.2 of 28-February-2023, MR version 1.3 of 13-March-2023, MR version 2.0 of 08-August-2023 and MR version 2.1 of 23-August-2024
/2/	CQC: Emission Reduction Calculation Sheet for "Installation of high efficiency wood burning cookstoves in Mozambique", version 01 of 30-July-2022, ER version 1.1 of 24-February-2023, ER spreadsheet version 1.2 of 13-March-2023 and ER version 2.0 of 08-August-2023 and ER version 2.1 of 24-August-2024
/3/	VCS Program Guide, version 4.3 of 17-January-2023
/4/	VCS Standard, version 4.4 of 17-January-2023
/5/	VCS: Monitoring report Template VCS Version 4.2
/6/	VCS: Link -VMR0006-Methodology for Installation of High Efficiency Firewood Cookstoves v1.1
/7/	CQC: Sample copies of end user agreement between PP and end user
/8/	Result of performance test of ICS as per WBT, Test report dated October 2015
/9/	Manufacturer's specification: TLC Brochure - Declaration of ICS life and Efficiency
/10/	UNFCCC: Guidelines for Sampling and Surveys for CDM Project activities and Programme of Activities, Ver. 4.0
/11/	UNFCCC: Standard for Sampling and surveys for CDM project activities and programmes of activities, Version 09.0
/12/	Carbon Check: Validation report "Installation of high efficiency wood burning cookstoves in Mozambique" version 04 of 10-May-2022

/13/	Carbon Check: Verification report "Installation of high efficiency wood burning cookstoves in Mozambique" version 1.2 of 25-May-2022
/14/	C-Quest Capital Stoves Asia Limited: Registered PD for the project 'Installation of high efficiency wood burning cookstoves in Mozambique' version 2.2 of 09-May-2022
/15/	CQC: User survey Sample User Survey Form Sample User survey photo taken during survey Sampling _Survey sheet_2351_Mozambique MP2 Attendance sheet and presentation for data collection training during survey
/16/	VERRA: https://registry.verra.org/app/projectDetail/VCS/2351
/17/	CQC: Project installation database
/18/	CQC: Grievance/Repair/Maintenance- Training records
/19/	CQC: Declaration to avoid double counting, non-inclusion of projects in other standards
/20/	CQC: Monitoring Survey Report (11-April-2022 to 25-April-2022)
/21/	Site visit Photographs and attendance sheet from 06-February-2023 to 08-February-2023
/22/	Validation and verification manual version 3.2 dated 19-October-2016
/23/	UNFCCC: Project search: https://cdm.unfccc.int/Projects/projsearch.html
/24/	Gold Standard Foundation: https://registry.goldstandard.org/projects?q=&page=1
/25/	CDM Validation & Verification Standard version 09.0 dated 09-September-2021
/26/	VCS Program Definitions version 4.3 dated 21-December-2022
/27/	https://www.ipccnggip.iges.or.jp/public/2019rf/pdf/4_Volume4/19R_V4_Ch04_Forest%20Land.pdf
/28/	Tool 30 v3.0 - Calculation of the fraction of non-renewable biomass
/29/	GPS map camera (GPS App)
/30/	Onsite Interviews conducted onsite from 06-February-2023 to 08-February-2023
/31/	Sampling and calculation sheet of Monitoring Period 1 (27-January-2021 to 31-August-2021)

/32/	Photographs of Brochure taken at site by VVB
/33/	Sample Purchase records
/34/	VKU's Internal Procedure on Sampling Method & Guidance: VKU.F74A.Sampling Plan Method and Guidance
/35/	KML File indicating the Project Boundary – Republic of Mozambique
/36/	Stove Manufacturing Guide for easy maintenance and contact number of Implementor/PP
/37/	CQC: Public Notice for Scope 3 Emissions declared on C-Quest Capital Official website for VCS 2351
/38/	CQC: The screenshots of the emails sent to stove manufacturers to avoid double claiming of Scope 3 Emissions under this grouped project.
/39/	KML File indicating the province of Mozambique where distribution has taken place- Tete and Sofala
/40/	KML File indicating initial ICS distribution in the province of Tete
/41/	Verra s6.1 OPERATIONS 2351 Mozambique-MP1-Survey – Data room
/42/	VCS 2351 MP02 N_{yij} Precision_Data
/43/	Stoves in Operation – Verified Secondary Data
/44/	Privileged and Confidential – Stove Champion Data
/45/	2351 MP01 B_{ynew} & N_{yij} Precision_23082024

2.3 Interviews

The key personnel interviewed during the opening meeting and closing meeting session of the onsite audit, and the main topics of the interviews are summarized in the table below.

Table 3: Key personnel interviewed are mentioned in the table below –

SL.	Date	Name and Role	Organization	Topic
1	06-February-2023 to 08-February-2023	Lambos Moiane	CQC	

2	06-February-2023 to 08-February-2023	Audrade David	Energy Africa	Description of the grouped project activity, ownership, avoidance of double counting, Emission reductions calculations Monitoring plan and monitoring arrangements Data recording, QA/QC procedures. ICS operational status, commissioning details, project investment etc. Implementation Status, Training to maintain cookstove, Spot-checking mechanism, Documentation, Benefits of the project
3	06-February-2023 to 08-February-2023	Joao Paulo de Saso	Energy Africa	
4	06-February-2023 to 08-February-2023	Efoncalo Jn	CQC	
5	06-February-2023 to 08-February-2023	Dorcobra Arteno	CQC	

Table 4: The promoters interviewed are mentioned in the table below –

SL.	Date	Name and Role	Topic
1	06-February-2023	Manuel Vidazad Maque	Implementation Status, Training to maintain cookstove, Spot audits, Documentation, Benefits of the project, Zero-cost distribution of ICS to End-users
2	07-February-2023	Afonoo Sausa Saudilla	
3	08-February-2023	Dorcobra Florencia Artono	

Table 5: The end users interviewed are mentioned in the table below.

Each end-user household was installed with 2 stoves each.

S.No.	Date	Name and Stove ID	Topic
1.	6th-February-2023 to 8th-February-2023	Manuela Alberto (Stove 1 ID CQCVMZ0015445, Stove 2 ID CQCVMZ0015446)	• On-site Interview on the number of project

			devices operating during the year y ($N_{y,i,j}$) • Check the baseline scenario, usage of pre-project device if any
2.	6th-February-2023 to 8th-February-2023	Felizarda Amerco (Stove 1 ID CQCVMZ0010607, Stove 2 ID CQCVMZ0010608)	• On-site Interview on the number of project devices operating during the year y ($N_{y,i,j}$) • Check the baseline scenario, usage of pre-project device if any
3.	6th-February-2023 to 8th-February-2023	Dizage Zeferino (Stove 1 ID CQCVMZ0034547, Stove 2 ID CQCVMZ0034575)	• On-site Interview on the number of project devices operating during the year y ($N_{y,i,j}$) • Check the baseline scenario, usage of pre-project device if any
4.	6th-February-2023 to 8th-February-2023	Isabel Fabiao (Stove 1 ID CQCVMZ0010653, Stove 2 ID CQCVMZ0010654)	• On-site Interview on the number of project devices operating during the year y ($N_{y,i,j}$) • Check the baseline scenario, usage of pre-project device if any
5.	6th-February-2023 to 8th-February-2023	Zito Zimbulane Sebastiao (Stove 1 ID CQCVMZ0010564, Stove 2 ID CQCVMZ0010566)	• On-site Interview on the number of project devices operating during the year y ($N_{y,i,j}$) • Check the baseline scenario, usage of pre-project device if any

6.	6th-February-2023 to 8th-February-2023	Inaçia Foxtino (Stove 1 ID CQCVMZ0021765, Stove 2 ID CQCVMZ0021766)	• On-site Interview on the number of project devices operating during the year y ($N_{y,i,j}$) • Check the baseline scenario, usage of pre-project device if any
7.	6th-February-2023 to 8th-February-2023	Cantia Jose (Stove 1 ID CQCVMZ0012673, Stove 2 ID CQCVMZ0012674)	• On-site Interview on the number of project devices operating during the year y ($N_{y,i,j}$) • Check the baseline scenario, usage of pre-project device if any
8.	6th-February-2023 to 8th-February-2023	Aida Xaleca (Stove 1 ID CQCVMZ0011347, Stove 2 ID CQCVMZ0011348)	• On-site Interview on the number of project devices operating during the year y ($N_{y,i,j}$) • Check the baseline scenario, usage of pre-project device if any

Apart from the monitoring survey, VVB has also interviewed the HH/end user and confirmed regarding the baseline cookstove (i,e, Three stone fire) used prior to the implementation of the project stove. Furthermore, through document review end user agreement signed by the household/7/. Verification team could verify that all new instances replace baseline cookstoves that comply with the requirements to use efficiency of at least 25% or above as per the manufacturer's specification in the applied methodology/6/.

2.4 Site Visits

VKU audit team from 06-February-2023 to 08-February-2023 conducted an on-site inspection following sampling approach as explained in below:

PP's sampling approach:

PP has proposed simple random sampling plan using 90/10 as confidence/precision. This is in line with the Section 8.4 of the applied methodology/6/ and the registered monitoring plan/14/. The sample size for each parameter is determined following guidelines-Appendix 1 Section 2.1.1 for Sampling and Surveys for CDM Project activities and Programme of Activities Ver. 4.0 (EB86, Annex 4) /10/ and registered monitoring plan/14/. The monitoring parameter(s) monitored through the sampling plan were:

Number of operating unit (ICS) under the grouped project activity.

Development of the Verification/Sampling Plan:

The audit team has formally documented its verification/ sampling plan as well as determined the evidence-sampling plan. The verification plan is developed based on key elements of the verification process as per the criteria of engagement. The plan identifies and addresses the following:

a) Level of Assurance

b) Materiality

c) Standards of evaluation & reporting for the verification including the assessment criteria

d) Scope and objectives

e) Assessment team and the roles of team members

f) Schedule of verification activities

Verification Approaches-

a) ASP: Acceptance Sampling

b) SPL: Sampling Approach (all data available)

c) CDC: Complete data check of data including all data aggregation steps

d) COM: Full data check at higher data aggregation levels and sampling at original data levels document the rationale for the decision.

Sampling/Verification Plan-

In order to ensure a complete, transparent and timely execution of the assessment task, the team leader has planned the complete sequence of events necessary to arrive at a substantiated final opinion. Various tools have been established in order to ensure an effective assessment planning.

Table 6: Step 1- Identification of Materiality threshold

Check the relevant box against applicable threshold level	Threshold as per	Related to

	Section 4.1.8 of VCS Standard v4.4/4/	
☒	1 %	Quantitative materiality demands that the threshold for materiality with respect to the aggregate of errors, omissions and misrepresentations, individually or in the aggregate, for any reported value relative to the total reported GHG emission reductions and/or removals assets shall be limited to one percent. The same was verified from PPs sampling survey /15/ and VVBs acceptance sampling, it was found that the achieved proportion of non-working stoves is less than the expected, hence uncertainty is reduced. Hence, accepted.

Table 7: Step 2- Identification of risks, their level and assessment

S.No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the potential risk		Assessment of the records/information/interview with personnel to check controls/ mitigation measures
		Risk level	Potential actions causing risk	
1.	Monitoring parameter	High	Monitoring not done as per the registered PD	The risk will be mitigated by reviewing the claims in the VCS PD, Monitoring Plan and its assessment based on VCS requirements. The plausibility of the related monitoring parameter can be further cross-checked with the project specific evidence, related to the host country/region and interviews with the related stakeholders (end users/beneficiaries). Interviews conducted by Verification team with Promoters/30/also confirmed the monitoring

				procedures were in line with the RMP/14/.
2.	Project design: Information on project design without adequate controls related to data, evidences (project/sector related)	High	Project design incorrectly described thus leading to incorrect delineation of the baseline scenario, causal change, threats to the project	The risk will be mitigated by reviewing the claims in the VCS PD/14/and its assessment based on VCS requirements. The background documents including monitoring survey report/15/ (such as those related country specific f_{NRB} study) shall be cross-checked with the project specific evidence, related to the host country/region and interviews/30/ with the related stakeholders. Leakage is considered as default 0.95 in accordance with methodology/6/.
4.	Accuracy of the monitoring survey	Medium	Inadequately delineated monitoring plan may lead non-compliance of the VCS principle	The risk due to accuracy of the monitoring plan will be ensured by reviewing the VCS PD/14/, VCS requirements, sampling tool applied and ensuring feasibility/appropriateness of the monitoring plan by means of onsite interviews with the PP, their associates and the end users.
5.	Competence of personnel involved in conducting monitoring like surveys	Medium	Interview of the personnel involved and check the training records conducting such monitoring.	The risk will be mitigated by reviewing the training records/18/ of the personnel involved in the conducting such surveys and by following the monitoring responsibilities. The training records will be reviewed which will also be confirmed during the interviews/30/.

Sampling Plan:

Where, due to the number of project activity instances, it is unreasonable to undertake an

individual assessment of each initial or new instance, the validation/verification body shall document and explain the sampling methods employed for the validation of such instances. Such sampling methods shall be statistically sound. The number of instances included in the project, eligible for monitoring and generation of VCUs shall be proportional to the percentage of sampled instances found to be in compliance by the validation/verification body.

☐	No sampling approach has been used by the VVB to verify the project's compliance with SD Vista requirements.
☒	A sampling approach has been applied by the VVB to verify the project's compliance with VCS requirements for the aspects derived in step 2 above. The statistical approach of sample size (i.e., 08) calculation is provided below.

AS: Acceptance Sampling

Verification team has applied a sampling approach for the onsite interviews as part of assessment in accordance with the paragraph 26 of the Standard: Sampling and surveys for CDM project activities and programmes of activities, Version 09.0 /11/. In accordance with the paragraph 39 c of the sampling standard, acceptance sampling has been chosen by the verification team. Verification team has opted for AQL of 1.0 % and UQL of 20%; producer risk of 10% and consumer risk of 20% as per VVBs professional judgement according to para 30 of Sampling and surveys for CDM project activities and programme of activities v09.0 /11/ in determining the VVB's sample size of 08 ICS with acceptance number c as 0. This is also in line with VKU's internal procedures/34/.

Table 8: Sample size and acceptance number based on AQL, UQL, and producer and consumer risks as per Sampling and Survey Standard v09.0 -

Producer risk		5%		5%		5%		5%	
Consumer risk		5%		10%		15%		20%	
AQL	UQL	Sample size (n)	Acceptance number (c)	Sample size (n)	Acceptance number (c)	Sample size (n)	Acceptance number (c)	Sample size (n)	Acceptance number (c)
0.5%	10%	46	1	38	1	33	1	29	1
0.5%	15%	30	1	25	1	22	1	10	0
0.5%	20%	22	1	18	1	9	0	8	0
1.0%	10%	61	2	52	2	33	1	29	1
1.0%	15%	30	1	25	1	22	1	19	1
1.0%	20%	22	1	18	1	16	1	14	1
Producer risk		10%		10%		10%		10%	
Consumer risk		5%		10%		15%		20%	
AQL	UQL	Sample size (n)	Acceptance number (c)	Sample size (n)	Acceptance number (c)	Sample size (n)	Acceptance number (c)	Sample size (n)	Acceptance number (c)
0.5%	10%	46	1	38	1	19	0	16	0
0.5%	15%	19	0	15	0	12	0	10	0
0.5%	20%	14	0	11	0	9	0	8	0
1.0%	10%	46	1	38	1	33	1	29	1
1.0%	15%	30	1	25	1	22	1	10	0
1.0%	20%	22	1	18	1	9	0	8	0

Verification team based on its professional judgement and observation during acceptance sampling, derived its assessment including conclusions as discussed later in the following section of this report. The verification team selected random samples from PP's sample list. The stoves details (unique serial number, date of installation, type of ICS, name of user and address) were checked and found to be consistent with that reported in the installation database. No inconsistency was observed for any of the 08 samples (in total 16 samples as each household has 2 ICS) with respect to on-site inspection & document review. This assessment of the selected samples was done to ascertain the implementation status of the grouped project activity w.r.t. the stove types, serial number, location, operation etc. of ICS.

2.5 Resolution of Findings

The objective of this phase of the verification is to resolve any outstanding issues which need to be clarified for VKU's positive conclusion on the project description. To guarantee transparency a verification protocol has been customized for the project. The protocol shows in a transparent manner the requirements, means of verification and the results from verifying the identified criteria. The verification protocol consists of three tables; the different columns in these tables are described below.

A corrective action request (CAR) is raised if one of the following occurs:

- Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;
- Mistakes have been made in applying assumptions, data or calculations of emissions reductions that will impair the estimate of emission reductions;
- Issues identified in a FAR during validation to be verified during verification have not been resolved by the project proponents.

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

In summary, 06 CLs, 06 CARs and 00 FARs were raised during this verification which were closed successfully and details are given under Appendix C of this report.

2.5.1 Forward Action Requests

Based on the review of the validation report for the 1st Monitoring Period /12/ and previous verification report/13/, no FAR found raised which needs to be closed during this verification. No FARs were raised in current monitoring period.

2.6 Eligibility for Validation Activities

VKU has not undertaken any validation activities as part of the verification. VKU holds accreditation for validation of some sectoral scopes. This section is not applicable as no validation activities were undertaken. It is to further conclude that during current verification there is no validation assessment undertaken either by VKU itself or parallelly by other certification bodies, as the same was confirmed with focussed group discussions and interview with the PP /30/ during onsite visit. Assessment team assessed the VERRA's website : https://verra.org/validation-verification/vku-certification-pvt-ltd/#vcs wherein the scope of services of VKU certification Pvt. Ltd. is mentioned as verification and not validation. Thus, ensuring that the accreditation details mentioned in FVR is consistent and correct.

3 VALIDATION FINDINGS

The project is already registered under VCS with reference number 2351/16/. The validation/12/ and 1st verification of the project was done by Carbon Check (India) Pvt. Ltd /13/ and it was registered under the VCS registration reference no. 2351. The fixed crediting period is from 27-January-2021 to 26-January-2031 (both dates included). This verification assessment is for the 2nd monitoring period 01-September-2021 to 28-February-2022 (both dates included).

3.1 Participation under Other GHG Programs

The project is registered only under VCS and not registered in any other GHG program. This was confirmed based on both independent assessment and declaration submitted by PP/19/, the assessment team accepted the claim that there will not be double counting from this grouped project activity. Thus, ensuring emission reduction generated from the grouped project activity will not be double counted hence accepted by the assessment team. Also, assessment team checked the following registries to confirm the same. The details of the registries checked are as follows:

1.https://cdm.unfccc.int/Projects/projsearch.html

2.http://www.goldstandard.org/

3.https://registry.verra.org/app/search/VCS/All%20Projects

4.https://projects.globalcarboncouncil.com/pages/approved_projects

Rejection by other GHG programs

The Project is not rejected by other GHG programs. The assessment team as part of double counting diligence explained above, also checked for rejection by any other registries to confirm the same. The details of the registries checked are as follows:

1. http://cdm.unfccc.int/
2. http://www.goldstandard.org/
3. https://verra.org/verra-standards-and-programs/

4.https://projects.globalcarboncouncil.com/pages/approved_projects

3.2 Methodology Deviations

No methodology deviation has been applied during the current monitoring period. Also, there were no deviations identified during the previous verification which were confirmed from the previous verification report issued by CCIPL /13/.

3.3 Project Description Deviations

The project activity ownership changed to C-Quest Capital SGS Stoves Private Limited for this project activity and applicable from Communications Agreement dated 07-September-2022 and Accession Representation dated 11-January-2023.The relevant document for change in company name and corresponding change in communication agreement to VCS has been provided. The same has been approved by the registry and confirmed from the VERRA website[1].

There is no deviation from the current monitoring period. This deviation does not affect the applicability of the methodology, additionality, or the appropriateness of the baseline scenario. Hence, the assessment team finds that the project deviation is valid.

3.4 Grouped Project

The grouped project (the project) is the dissemination of energy efficient stoves for cooking purposes. A total of 32,204 ICS were disseminated by the end of this monitoring period. Total operational stoves are 28,984.

Table 9: The Monitoring Period wise distribution is shown below-

[1]https://registry.verra.org/app/projectDetail/VCS/2351

Date of first ICS installed	27-January-2021
No. of instances added/ICS installed during 1st MP	15,544
No. of instances added/ICS installed during 2nd MP	16,660
Total no. of ICS distributed till end of 2nd MP (28-February-2022)	32,204
Total Operational Stoves	28,984

The volume of ICS distributed in this period is smaller than ex-ante anticipated in the registered document, resulting in lower emission reductions than anticipated.
Under this grouped project PP has considered each ICS as a project activity instance (PAI) which is deemed acceptable as per the VCS Program Definitions version 4.3 and Section 3.6 of the VCS Standard version 4.4/4/. The eligibility criteria of the Project Activity Instance, was established at the group project validation in the VCS PD /14/.

- Quality and completeness of evidence, data and documentation relating to the new project activity instances:

The assessment team has reviewed the evidences collected by the PP for the PAI included in this verification and confirmed the following;

- Implementation and operational status of the PAIs visited by VVB verification team as a part of acceptance sampling
- Monitoring and data collection
- Flow of information; generating, aggregating and reporting of the monitoring parameters
- Conformance of the new project activity instances with the eligibility criteria set out in the project description:

The verification team assessed the appropriateness of new project activity instances (added to the grouped project) against the requirements of the following key elements defined in section 3.2.11 of the Validation and Verification Manual (version 3.2) /22/:

Table 10: - Eligibility Criteria for new project activity instances

Key Element	Requirements /22/	Verification team Assessment
Methodology: Meet the applicability conditions set out in the methodology applied to the project	The project activity instance shall use VCS approved methodology-VMR0006: Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1 and shall meet the applicability conditions set out in the methodology.	All 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 has 34.5% thermal efficiency, which is higher than 25%. The records for the PAIs / ICS installed have been checked and it is confirmed that the ICS installed during the monitoring period are TLC-CQC Rocket Stoves. Further end-user agreement records

		/7/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 geocoordinates of the installations are provided by the PP (monitoring survey results) and some random selected instances were checked. It is confirmed that PAIs installed are in geographical location of Mozambique only. So, the new added instances are confirmed to be meeting the criteria as defined in the applied methodology/6/.
Technology: Use the technologies and measures specified in the project description	The project activity instance shall implement TLC-CQC Rocket Stoves having minimum efficiency of 25%; below which it shall not be eligible under this grouped project.	The assessment has checked the installed stove records/17/ and also verified the samples during the onsite visit/21/ through interviews/30/ and checking the kitchens of the households that all the stoves are TLC-CQC Rocket stoves and are operational. Moreover, during onsite audit verification team did not find any baseline stove usage in the sample end users/21/.
Additionality: Have characteristics with respect to additionality that are consistent with the initial instances for the specified project activity and geographic area.	Each project activity instance shall demonstrate its compliance with- 1.Regulatory Surplus: The project should not be mandated by any law, statute or other regulatory framework, or for UNFCCC non-Annex I countries, any systematically enforced law, statute or other regulatory framework. 2. Positive List: The inclusion of new project activity instances shall have	1.Regulatory Surplus: There is no law, statute or government programme or policy in Mozambique mandating the project activity nor is there any systematically enforced law, statute or other regulatory framework for such projects applicable in the Republic of Mozambique. Further, representatives of the PP and the beneficiaries were also interviewed during the onsite audit/30/. Hence this requirement is satisfied for all project activity instances to be included in the current grouped project. 2. Positive List: ICS were distributed at zero cost to stove owner/end user. Further during the onsite audit/21/, it was checked and confirmed with each beneficiaries the ICS are given to

	to comply with positive list that is the ICS are installed/ distributed at zero cost to end user and the project activity instance has no other source of revenue but GHG credits.	them free of cost and they are not being charged in any terms at the time of installation or during the ongoing operation. Verification team also interviewed/30/ the enumerators, promoters present during the onsite audit for verifying the zero-cost distribution and found consistent answers. The sample purchase records/33/ 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/6/ and the registered PD/3/.
Geographic Areas	VVBs must ensure that the project description clearly identifies the geographic areas within which new instances may be added. Geographic areas must be defined using geodetic polygons and provided in a KML file. Such geographic areas need not be contiguous and may be large or small, noting the grouped project requirements for additionality and baseline assessments of the geographic area.	The verification team reviewed the sales record database/17/ and by further conducting interviews/30/ with representatives of PP to confirm that all new project activity instances are located within the geographical area identified in the registered VCS PD/14/. All new project activity instances are located within the host country of Republic of Mozambique. /17/. This was further verified by the KML file/35/ submitted by PP indicating the project boundary which is Republic of Mozambique. PP has submitted a KML file for current distribution in Mozambique-Tete province and another for initial ICS distribution there/39//40/. This was found to be appropriate to the verification team as per VCS Standard v4.4 para 3.11.1 and in line with the registered VCS PD/14/. Thus, the requirements of this key element are met.
Identification of baseline scenario and demonstration of additionality:	The assessment of baseline scenario and additionality is based upon the initial instances included within each geographic area. VVBs must ensure that, for each	The verification team conducted the onsite audit of 8 samples taken in line with 'Sampling and surveys for CDM project activities and programmes of activities' v9.0/10/ and it was confirmed that all the selected project instances are installed in

	project activity, a single baseline scenario exists for each geographic area. VVBs must also ensure for each project activity that additionality is demonstrated across the entirety of each geographic area. Failing this, VVBs must require that the geographic areas are redefined such that the requirements are met. As with projects with multiple instances, project activity instances within a grouped project should be part of the same investment decision if they are to be included in a single project.	Mozambique which is the project boundary/40/. VVB assessed the KML files submitted by PP and it met the VCS Standard v4.4 requirement, para 3.11.1.(2)(b) and 3.11.1.(3)/36//39//40/. ICS distributed by PP have replaced the baseline scenario i.e., 3- stone fire stoves as determined in section 3.4 of registered VCS PD/14/. Further, the project proponent has also submitted the end-user agreements/7/ signed by the beneficiaries. These end- user agreements contain confirmation / declaration from each beneficiary that they were using the conventional three stone fire or traditional open stoves prior to installation of project stove and now they have replaced the traditional 3-stone fire stoves with the project stoves. The end-user agreements are checked in samples by the assessment team and details are found to be matching with the claims by the PP. Also, during the onsite audit, the assessment team has interviewed/30/ the sampled beneficiaries and each of them has confirmed using the conventional/traditional stoves in the pre-project scenario/baseline scenario. This was found to be appropriate to the verification team, based on the evidences and fulfilment of eligibility criteria. Thus, the requirements of this key element have been met by all the new project activity instances added to the grouped project.
Ownership: Have evidence of project ownership, in respect of each project activity instance, held by the project proponent	A default Beneficiary Agreement for end users including the provision that emission reductions generated by the project activity are owned by the Project Proponent will be provided for project activity instance.	The assessment team has examined the copy of End user agreement/7/ given by end users to project participant regarding emission reduction claims.

<table>
<tr><td>from the respective start date of each project activity instance</td><td></td><td></td></tr>
<tr><td>Start Date</td><td>The start date of project activity instance shall be same as or later than the grouped project start date.</td><td>Project Activity Instance Database containing date of installation of each ICS. The verification team also verified the end-user agreement/7/ of the 1st ICS installed under the grouped project date. The first ICS under the project has been installed on 27/01/2021 which is same as the start date of the project in the registered VCS PD/14/.</td></tr>
<tr><td>Where a capacity limit applies to a project activity included in the project, no project activity instance shall exceed such limit</td><td>The aggregate energy savings by a single project activity shall not exceed the equivalent of 180 GWhth/year as mentioned in the methodology AMS II G: Energy efficiency measures in thermal applications of non-renewable biomass.

Each project activity instance that exceeds one percent of the capacity limit (i.e., 1.8 GWhth) shall be identified.

3.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.</td><td>The registered and validated PD/14/ 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/9/. As per the applied methodology/6/, the PP has carried out the survey during the first 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. This was further confirmed from the approved reports issued on the VERRA/16/. In view of above the expected annual energy saving for each PAI comes to approximately 0.107 GWhth/y only. Which is 0.01% of the limit.
<table>
<tr><td>Capacity Limit of each ICS</td><td>Capacity Limit of Project</td></tr>
<tr><td>180 GWhth/y</td><td>180GWhth/y*32,204= 57,96,720 GWhth/y</td></tr>
</table>
</td></tr>
</table>

		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.
Double Counting	The Improved Cookstove distributed under this project shall be uniquely identifiable based on the distribution records	The assessment team has examined the copy of End user agreement/7/ given by end users to project participant regarding emission reduction claims containing corresponding end user details (i.e., name, geographical coordinates, unique serial number) and the Project Activity Instance Database/17/ containing unique serial number of each ICS.
Target Population	End user for each project activity instance shall be households, with non-renewable biomass on inefficient wood stoves. Each ICS will be assigned a unique serial number with name of ICS user, address, GPS of household, stove model, distribution date, etc	The assessment team reviewed the End user agreement/7/ given by end users to project participant regarding emission reduction claims containing corresponding end user details (i.e., name, geographical coordinates, unique serial number), the Project Activity Instance Database/17/ and through onsite interviews/30/. It was confirmed through interviews of the sampled households, the end-users were previously using 3-stone fire for cooking which is replaced by ICS due to this project activity. VVB observed during onsite audit all sampled end-users were using the ICS distributed by PP/21/.
Crediting period	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	In accordance with the supporting document 'Manufacturer specifications'/9/ submitted by the PP the ICS distributed has a lifetime of 10 years. Accordingly, PP has opted for a crediting period of fixed 10 years which is in line with the VCS standard/4/.

	removals generated during a previous verification period and new instances are eligible for crediting from the start of the next verification period.	
Monitoring and GHG information system	VVBs must ensure that the project has an appropriate monitoring plan that includes a sampling plan to collect data from all project activity instances and information systems, allowing for centralized data collection. VVBs must ensure the sampling plan is able to generate statistically significant results.	The verification team reviewed the VCS MR /1/ and further conducted interviews/30/ with representatives of PP to confirm that the monitoring plan and procedures mentioned therein (which includes the sampling plan) is in conformance to the requirements laid out in the VCS PD /14/, Moreover, according to the monitoring plan the PP is responsible for collecting and storing data. The verification team further confirms that new project activity instances will conform to the monitoring plan requirements and procedures stated therein. However, as per specific requirements of the applied methodologies VMR0006 version 1.1/6/, sampling for monitoring the project under methodologies has taken place during the current monitoring period as verified from the Sampling and survey sheet provided by the PP/15/. The questions from the sampling survey sheet are mentioned in Appendix B of the FVR. Based on the review of the applied methodologies/6/ and VCS PD/14/ this is deemed to be acceptable to the verification team. Refer to section 4.1 below for detailed discussion on monitoring activities. This was found to be appropriate to the verification team. Thus, the requirements of this key element have been met by all the new project activity instances added to the grouped project.

Based on the above assessment the verification team confirms that inclusion of project activity instances in the grouped project are valid.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

As verified from on-site assessment and monitoring results of PP, the audit team confirms the project implementation and operation complies with the PD/14/. The purpose of the project is to disseminate efficient, improved cooking stoves (ICS) in rural households of Mozambique. For the current monitoring period, from 01-September-2021 to 28-February-2022, the first stove was installed/distributed on 01-September-2021 in the village of Capirizanje of Tete province (Coordinates of Tete are: -16.1372, 33.6141). The coordinates for the first installation were -15.8052 latitude and 34.2156 longitude. Tete is located in western Mozambique, Tete Province is inland and borders Malawi to the west, Zimbabwe to the northwest, and Mozambican provinces like Manica and Sofala to the east.

Subsequently, the last stove (CQCVMZ0046816) was installed on 12-January-2022, in the village of Sansao mutemba, also situated in the province of Tete. The coordinates for this installation were -16.1650 latitude and 33.5680 longitude.

Table 11a: A total of 16,660 stoves were installed/added during the current monitoring period. The year wise distribution is as follows -

Year	Province Name	Number of stoves installed/added
1-September-2021 to 31-December-2021	Tete	16,368
1-January-2022 to 28-february-2022	Tete	292

The verification team reviewed the end-user agreements for the distributed stoves and confirmed that the specified dates and latitude align with the information provided by the PP.

Table 11b: To show the easy facilitation of the implementation of project, the table shown below depicts the stove distribution status per each Province of Mozambique.

Province Name	**Total Stoves added/installed till the end date of Monitoring Period (28-February-2022)**
Tete	29,540
Sofala	2664
Total Stoves	**32,204**

The monitoring period wise distribution is shown in Table 9 of this report.

The improvement in thermal efficiency is achieved by properly designing the dimensions of the combustion chamber and ensuring effective air flow during cooking. The baseline cooking practice in Mozambique is the use of the three-stone fire cooking, popularly known as conventional method using firewood. The project thus reduces greenhouse gas (GHG) emissions by replacing traditional wood-fuel by wood-fuel ICS. The replacement of conventional method by ICS improves heat transfer to the cooking utensil thereby reducing the amount of fuel (non-renewable biomass) required for cooking.

A reduction in consumption of non-renewable biomass contributes towards reduction in GHG emissions into the atmosphere. Thus, ICS reduce GHG emissions through their improved thermal efficiency as compared to traditional/baseline stoves. This project is implemented by Practical Action (PA) /15//18//19//20/. Users transfer the ownership of carbon credit via end user agreement /07/. The operational and management structure is verified from document review and on-site interview /30/. The verification team confirms that during the current monitoring period i.e., 01-September-2021 to 28-February-2022 (both dates included) the VCS grouped project has disseminated 32,204 ICS implemented in Mozambique/17/. The first stove was installed on 27-January-2021 and is also verified from project installation database/17/ and validation report/12/ and end user agreement/7/ and found to be accurate. The ICS promoted under the project have 10 years technical life /9/ and initial tested efficiency of ICS was 34.5 %. This was further confirmed by the verification team by the TLC Brochure/9/ submitted by the PP. During this 2nd monitoring period operational status of total 32,204 ICS were taken into consideration and monitoring survey confirmed a 100% operational rate between 01-September-2021 to 28-February-2022 (both dates included) /2/. The operational rate was further confirmed by the section 9.2 of applied methodology, “Number of project devices of type i and batch j operating during year y ($N_{y,i,j}$) can be measured directly or based on representative sample.” However, as per VERRA findings, PP has revised the operational rate, hence the number of operational cookstoves has been modified from 32,204 to 28,984. It is found to be more conservative by VVB since the operational cookstove were found to be 100% based on the monitoring survey by PP but the secondary data of other projects registered in the same project region suggests the operation percentage is 92.80% which is less than 100%. PP has considered the more conservative value of 90% which is found as per the stove champion follow up survey conducted in MP4 which is very conservative value and more details are provided in Appendix-B attached to this report /43/.

PP had conducted second monitoring survey during the period of 11-April-2022 to 25-April-2022 (both dates included) in Mozambique. During the survey it was found that 100% project devices are in operation, and this was further confirmed by the Verification team from the submitted sampling spreadsheet by PP, stove champion data/44/, secondary data of other projects in the region/43/. However, as per latest data, 90% stoves are taken under operation.

So, to measure Ny,i,j, PP multiplied the achieved proportion with commissioned stoves that is 90% x 32,204= 28,984

During the interviews /30/ verification, QA/QC procedures were identified which demonstrate that:

Operational and management system of the grouped project is in place; data were centralized; monitoring data were crosschecked with the sales records stored and confirmation that all operational staff were trained before taking up positions /18/. The verification team thus confirmed that the monitoring of the grouped project activity has been implemented in accordance with the monitoring plan in the registered VCS PD. The registered VCS PD /14/ clearly describes the monitoring and responsibility of monitoring is done by PP.

VKU verification team verified 08 ICS (in total 16 samples as each household have 2 ICS) which is required number of samples as explained in section 2.4 above to ascertain accuracy of information. VKU confirms the project cook-stoves are operating in all samples interviewed/30/, each cook-stove has unique identification number (ID) which has been provided in the end user agreement/7/ and are consistent as per project database/17/. Along with the serial number, the stove model, end user name, address, installation date, location etc. had also been noted which were found to be consistent on ground during the site visit/21/.

During the interviews/30/, it was found that if the stove owners are unsuccessful in stove repairing, stove owner can contact the ground staff of PP/implementor over phone (phone number is provided to the stove owner upon stove registration) and the field staff notify the implementer to provide the necessary assistance.

VKU verification team has assessed the baseline scenario during onsite audit through interviews with end-users/30/. VKU verification team noted during the onsite audit that the targeted population were using non-renewable wood fuel(firewood) on 3-stone fire stove for cooking. Therefore, PP has considered the default value for n_{old} as 0.1 in line with section 9.2 of the applied methodology VMR0006 v1.1.

It is noted that no changes have been observed or identified during the onsite visit which may impact the additionality, no addition of component nor extension of technology, no addition nor removal of project sites,; no change has been observed or identified that may impact the scale of the grouped project activity or applicability of baseline and monitoring methodology VMR0006 “Methodology for Installation of High Efficiency Firewood Cookstoves” version 1.1/6/.

VKU verification team confirms that all the emission sources within the project boundary have been considered appropriately. Monitoring of all parameters during the monitoring period is followed as per registered monitoring plan. The table below describes the data/parameters relevant to the monitoring plan.

Table 12: Data parameters fixed ex-ante and available at validation are given below:

	Data/parameter	Unit	Value applied	Assessment
1	Fraction of woody biomass saved by the project activity during year y that can be established as non-renewable biomass ($f_{NRBy)}$	Fraction	0.81	The value has been calculated in accordance with Tool 30 version 3; using latest available versions of Food and Agriculture Organization (FAO) report, UN Data and other publicly available data that have been published by reliable sources. The value is fixed as per registered PD/14/ for the entire crediting period.
2	Net calorific value of the non-renewable woody biomass that is substituted or reduced ($NCV_{wood\ fuel}$)	TJ/tonne	0.0156	It is IPCC default value verified from 2006 IPCC Guidelines for National Greenhouse Gas Inventories/27/; Volume 2 Energy, Chapter 1 Introduction. Further, this is a default value as stated in the VMR0006 Methodology, version 1.1/6/.
3	CO2 emission factor for the use of wood fuel in baseline scenario ($EF_{wf,CO2}$)	tCO2/TJ	112	It is an IPCC default value verified from 2006 IPCC Guidelines for National Greenhouse Gas Inventories/27/; Volume 2 Energy, Chapter 2 Stationary combustion. The value is fixed as per registered PD/14/ for the entire crediting period.
4	Non-CO2 emission factor for the use of wood fuel in baseline scenario ($EF_{wf,non\ CO2}$)	tCO2/TJ	26.23	It is IPCC default value from 2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 2 Stationary Combustion. This value is fixed ex-ante during validation /12/

5	Efficiency of baseline cookstove(η_{old})	Fraction	0.1	A default value of 0.1 shall be used if baseline device is a three-stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney. Further, this is a default value as stated in the VMR0006 Methodology, version 1.1/6/.
6	Efficiency of project stove at the start of project activity(np)	Fraction	0.345	As per manufacturer specification/9/. Consistent with the registered PD /14/. This has been validated during registration as well /12/.

Table 13: Data and parameters monitored

Parameter	Value	Description/Assessment
Number of project devices of type i and age a that are operating in year y $N_{y,i,i}$	28,984	From the total commissioned ICS, PP has conducted the sample survey/15/ in line with monitoring plan and sampling and survey guidelines/10/ covering 48 HH and 96 ICS samples (as each household has 2 ICS) which were found 90% operational by the PP. The sample size estimations by PP follows Guideline for Sampling and surveys for CDM project activities and programmes of activities, version 04.0. According to the section 9.2 of applied methodology, "Number of project devices of type i and batch j operating during year y ($N_{y,i,j}$) can be measured directly or based on representative sample." PP had conducted second monitoring survey during the period of 11-April-2022

		to 25- April-2022 in Mozambique. As per the Monitoring Period sample survey, 100% of stoves were found to be operational. However, due to VERRA findings raised because of inconsistencies. Data has been updated. As per the stove champion follow up survey conducted in latest Monitoring period, stoves in operation were 100%, and as per the secondary data of other projects/43/, stoves in operation percentage was 92.80%. PP has considered minimum number of stoves in operation as 90%. Hence, PP has considered the lowest value of stoves in operation 90% on a conservate basis. So, to measure $N_{y,i,j}$ PP multiplied the achieved proportion with commissioned stoves that is 90% x 32,204= 28,984 During the site visit/21/, VKU confirmed with the household/end user whether or not the PP has performed monitoring/measurement campaign, survey on stove operation (for the parameter $N_{,y,i,j}$). The verification team also interviewed HH on baseline scenario of the household and enquired/observed the pre-project/baseline stove/s and its operation during the project scenario. The verification team also assessed Competence of personnel involved in conducting monitoring. Hence, VKU verification team verified taking 08 samples and verified 16 ICS samples (as each household has 2 ICS) and all samples were found operational. Hence reported results are accepted.

Efficiency of the improved cookstove type i and batch j during year y (ηnew,I,j)	For Vintage 1: 32.43% For Vintage 2: 32.11 %	This parameter has been calculated using the applied methodology Section 8.4 option (b)/6/. The applied efficiency is correct as per the methodology requirement and registered VCS PD /14/ and hence accepted.
Annual quantity of woody biomass used by improved cookstoves in tonnes per device of type i and batch j, determined in the first year of the implementation of the project through a sample survey. $\mathbf{B_{y=1,new,i,j,survey}}$	1.0903	In accordance with the applied methodology and validated registered PD, the parameter is determined in the first verification. The assessment team; - Has verified sampling and calculation sheet of Monitoring Period 1/31/ 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) -As per the VERRA findings the wood consumption value for parameter $\boldsymbol{B_{y=1,new,i,j,survey}}$ has been changed by PP for MP-1 and consecutively in this MP also which is cross checked with the raw data sent by PP /40/ for all samples surveyed according to the requirement of methodology. - Confirms that PP has used the updated value which has been verified by VVB by the supporting document assessment of Reference 41.
Life Span	10 years	As per manufacturer specification/9/. Value was fixed once at the time of project stove installation. It is consistent with the registered PD /14/.

Assessment team concludes the following:

- There are no material discrepancies between project implementation and the project description found in current monitoring period.
- The monitoring plan is implemented completely and monitoring system (i.e., process and schedule for obtaining, recording, compiling and analyzing 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 and the applied methodology/6/.
- 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 /19/.
- The GHG emission reductions or removals generated by the project have not been included in any emissions trading program or any other mechanism that includes GHG allowance trading/19/.
- According to VCS Standard 4.4/4/, specific guidelines are applicable when the producer(s) or retailer(s) of the impacted good or service are identified but not involved in the project or do not possess a website. The distribution agent has been informed by the Project Proponent (PP) that Verified Carbon Units (VCUs) may be issued for the greenhouse gas emission reductions and removals achieved through this grouped project. The PP intends to claim carbon credits under VERRA. To support the current project verification, the PP has submitted evidence in the form of emails and a public statement, which can be found in Appendix-B of the monitoring report (MR/1/). This evidence confirms that the PP has communicated with suppliers to prevent any double counting of emission reductions. /37//38/.
- The grouped project activity complies with six indicators for sustainable development in the interim approval guidelines for Clean Development Mechanism (CDM) projects from India as discussed under section 1.11 of MR /1/. Assessment team has verified the same during on site visit/21/ and found all the indicators to be effective and applicable for the grouped project activity. SDG Indicators taken by PP are-

  - ✓ **4.3.1 i.e. (Number of individuals who received any informal training)** Vocational training and project related training with respect to successful implementation of programme, appropriate methods of conducting surveys, carrying out maintenance activities etc. in addition to issues related to climate change was provided to at least 5 individuals associated with the project. Assessment team has verified training documents/18/.
  - ✓ **7.1.2 i.e. (Proportion of population with primary reliance on clean fuels and technology)** Increasing access to clean cooking technology by distributing a set of project stoves in 16,102 households. Assessment team verified the same through Sampling _Survey sheet_2351_Mozambique MP2/15/ and onsite audit/21/.

- ✓ **8.3.1 i.e. (Proportion of informal employment in non-agriculture employment, by sex)** A total of 5 individuals were directly and indirectly employed under the project activity during the current monitoring period in Country for various activities related to project implementation, maintenance, and monitoring. Assessment team verified the same through training records of employees/18/.

- ✓ **13.0 i.e. (Tonnes of greenhouse gas emissions avoided or removed)** Due to installation of this project activity, PP has prevented the release of 45,811 tCO_2 eq emissions in the current monitoring period into the atmosphere. Assessment team verified the emissions reductions for the project through ER spreadsheet/2/.

- ✓ **15.2.1 i.e. (Progress towards sustainable forest management by increasing above ground biomass in forests)** The project has resulted in saving of 43,036 tons of biomass in 16,102 households during the current monitoring period. Assessment team verified the same through ER spreadsheet/2/.

- ✓ **3.9 i.e. (Reduction in PM 2.5 emissions)** Annual emission of PM 2.5 is reduced by 47% in project households. For the 16,102 households which have received 2 stoves each. The same is evidenced from survey results/15/ which show that 87.50% of the respondents felt reduction in smoke and soot levels near the cooking area and 81.25% of respondents experienced reduced levels of itchiness of eye associated with cooking on open fire. Assessment team verified the response of HH through Sampling _Survey sheet_2351_Mozambique MP2/15/.

In view of the information as verified above the assessment team is able to conclude that the grouped project has been implemented as described in the registered VCS PD/14/, All the above stated information was verified by VVB during onsite audit/21/ and personnel interviews /30/.

Table 14: Assessment of the audit history is as below-

Audit Type	Monitoring Period	Program	VVB Name	Number of years	VCUs Issued	Conclusion
Validation	Not Applicable	VCS	Carbon Check (India) Private Ltd	Not Applicable	Not Applicable	Ok/12/
Verification	27-January-2021 to 31-August-2021(both dates included)	VCS	Carbon Check (India) Private Ltd	0 years, 7 months, 5 days.	8,265 tCO_2e	VKU's assessment team has cross verified the emission reductions reported in the monitoring report for MP 1 along with the verification report for MP 1 and VCU's issued were cross verified from the VCU's issuance record link available on the project webpage/16/.
Verification	1-September-2021 to 28-February - 2022(both dates included)	VCS	VKU Certification Pvt.Ltd.	0 years, 6 months, 0 days.	45,811 tCO_2e	VKU's assessment team has concluded the monitoring report and verification report for MP 2 on 04-October-2024.
Total	27-January-2021 to 28-February - 2022 (both dates are included)	VCS		1 year, 1 month, 5 days	54,076 tCO_2e	Ok

4.2 Safeguards

4.2.1 No Net Harm

The project involves use of improved cooking stove in households replacing conventional cooking stoves. Therefore, the project results in avoidance of CO_2 emissions due to improvement in efficiency as verified from the manufacturer's specification /9/. Therefore, there is no negative environmental impact from the grouped project activity. In addition, due to the grouped project activity, jobs are created on local level as verified during on-site interview /30/ which has improved socio-economic impacts in the project area. The project is neither involved in any activity that would bring environmental deterioration nor will lead to any emission of toxic substances. The project stoves will rather reduce emissions due to the increased thermal efficiency compared to the baseline stoves. Any leakage is accounted in the VMR0006 V1.1 Methodology/6/. Leakage is considered as default 0.95 in accordance with methodology/6/.

Therefore, there is no net harm from the grouped project activity.

4.2.2 Local Stakeholder Consultation

Local stakeholder consultation is not applicable for the project proponent during verification. PP organized stakeholder consultation during validation /12/ of the grouped project activity which was validated by the validation agency. The verification team has interacted with local stakeholders during on-site assessment /21/ and details are summarized in section 2.3 of this report. There was no negative comment or feedback from local stakeholders as recorded by the verification team.

The local implementation partners as well as PP have the responsibility to take grievances regarding the grouped project activity and same will be conveyed to PP during operation of grouped project activity. Thus, ongoing communication of stakeholders is followed through grievance mechanism.

The Project Proponent has reported its feedback and grievance redressal procedure in Section 2.2 of the MR /1/, and the policy is outlined in the document "Grievance Redressal Mechanism" /17/. In the opinion of assessment team, based on interviews/30/ and observations, the grievance redressal procedure will address issues that may arise during project planning and implementation. The grievance redressal process has been designed where beneficiaries and stakeholders have PP contact information and the understanding that they should contact the organization with any problems, questions, or grievances.

As per VCS PD /14/ and further confirmed during interviews /30/, the end-users have a provision to approach PP through their village chief. The village chief then reports the concerns to the concerned person, i.e., field staff from PP who takes it further and resolves the issue. In the opinion of VVB, this would protect the traditional sentiments and value system of the villages and help them express their issues without any hesitation and deemed appropriate to the VVB. The typical diagram of this grievance addressal mechanism is mentioned in the section 2.2 of the MR /1/.

During the interviews/30/ and based on document review /15/, it can be confirmed that grievance addressal procedure has been designed and is implemented according to section 2.2 of the MR /1/ and that it is effective in its aim. The grievances recorded during the current monitoring period are mentioned in the MR/1/.

The verification team confirms on the procedure and method for engagement, method for documenting the outcomes of local stakeholders' consultation and account of all inputs received. The verification team confirms that the project proponent has taken due account of all input/ feedback received during the monitoring process (positive or negative) have been compiled in the sampling survey results sheet /15/and in Section 2.2 of MR, this has been checked by the verification team during the onsite interviews /30/. Hence the verification team found the local stakeholders ongoing communication as appropriate.

4.3 AFOLU-Specific Safeguards

The project is a non-AFOLU projects, this section is not required.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The equations and choices provided in the methodology /6/ and all other methodological tools are correctly quoted in the MR /1/. The emission reductions of the project instances of the grouped project and project activity instance are calculated using the formulae mentioned in the applied methodologies; VMR0006 version 1.1 /6/. The verification team has reviewed the emission reduction spread sheets (ER sheets) /2/ and checked all the formulae and found they are correct and are in accordance with the monitoring plan of the PD /14/ and the applied monitoring methodology /6/.

According to applied methodology VMR0006 (version 1.1) /6/ the emissions are calculated as below:

Baseline Emission:

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

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 cookstove of type i
ER_y	=	Emission reductions during year y in t CO_2e
$ER_{y,i,j}$	=	Emission reductions by improved cookstove of type i and batch j during year y in t CO_2e

$$ER_{y,i,j} = B_{y,savings,i,j} \times NCV_{wood\ fuel} \times f_{NRB,y} \times \left(EF_{wf,CO2} + EF_{wf,non\ CO2}\right) \times N_{y,i,j} \times 0.95 \quad \text{Equation (2)}$$

Where:

$B_{y,savings,i,j}$	=	Quantity 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 that can be established as non-renewable biomass (f_{NRB})
$NCV_{wood\ fuel}$	=	Net calorific value of the non-renewable woody biomass that is substituted or reduced (IPCC default for wood fuel, 0.0156 TJ/tonne)[2]
$EF_{wf,CO2}$	=	CO_2 emission factor for the use of wood fuel in baseline scenario (IPCC default for wood fuel, 112 tCO_2/TJ)[3]
$EF_{wf,non\ CO2}$	=	Non-CO_2 emission factor for the use of wood fuel in baseline scenario (IPCC default for wood fuel, 26.23 tCO_2/TJ)[4]
$N_{y,i,j}$	=	Number of improved cookstoves of type i and batch j operating during year y
0.95	=	Discount factor to account for leakage

To calculate $B_{y,savingsi,j}$, PP use equation 4 of the applied methodology[5]

[2]2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 1 Introduction

[3]2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 2 Stationary Combustion

[4]2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 2 Stationary Combustion

[5]Equation 4 of methodology VMR0006, version 1.1

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

Where:

$B_{y=1,new,i,survey}$ Annual quantity of woody biomass used by improved cook stoves 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 system is a three stone fire, or a conventional system with no improved combustion air supply or flue gas ventilation system, i.e., without a grate or a chimney.

$\eta_{new,l,j}$ Efficiency of the improved cook stove determined using Equation 5 of the methodology.

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

Where:

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 cookstove per year of operation (fraction). default value of 0.99 efficiency loss per year has considered for the project activity

0.94 Adjustment factor to account for uncertainty related to project cookstove efficiency test

Leakage Emissions: In accordance with methodology VMR0006 version 1.1/6/, leakage is considered as default 0.95.

Sampling approach :-

As assessed in this section, emission reductions for the project "Installation of high efficiency wood burning cookstoves in Mozambique" are being claimed for this monitoring period and the total population of the stoves for the current monitoring period i.e.,01-September-2021 to 28-February-2022 (both dates included) is 32,204 ICS. Operational ICS in this monitoring period: 28,984.

The sampling plan implemented by the PP is in accordance with the applied approved monitoring methodology /6/ and the VCS PD /14/. The PP has appropriately performed Simple random Sampling procedure, reliability levels were set at 90% confidence and 10% precision in line with the applied methodology VMR0006 version 1.1/6/. Survey has been carried out. As the VCS PD /14/ mentions the option for Simple random Sampling, so it was found appropriate to the verification team.

The sampling surveys/15/ have been carried out by the well-trained personnel/18/ Further, preparedness for conducting survey was adequate and survey plan was robust. Monitoring parameters $N_{y,i,j}$ was monitored through monitoring sample surveys. Monitoring of the parameters ensures compliance with the applied methodology VMR0006, version 1.1 /6/. Verification team has checked the survey records /15/ and sample size calculation/10/. Parameter $N_{y,j,j}$ monitors the number of stove in operation.

PP has provided the detailed sample size calculation under section 4.3 of the MR/1/.

Table 15: The table below mentions the sample size calculated applying the formula-

Definition	Value	Justification
The population size N is	1st MP:15,544 2nd MP; 16,660 Total:32,204	Number of stoves registered in database
The expected proportion p for ny,i is	0.85	A conservative assumption of 85% is applied for sample size calculation.
Sample size	47.723	Calculated
Sample size (Rounded up)	48	Calculated
Total Sample selected short listed	69	Including 30% non-response

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

However, as per the sampling Guideline: Sampling and surveys for CDM project activities and programmes of activities version 04 /10/, Appendix 2, § 3.1

Retention rate of improved cookstove (proportion parameter) –

"The required sample size for this parameter is dependent on:

(a) The expected value of the proportion parameter;

(b) The level of precision and confidence in that precision (90/10 reliability criterion).

Based on similar studies done in the region, it is thought that this proportion is 0.85 (85%) during this monitoring period. Since the PAIs are assumed to be homogeneous with respect to the retention rate of improved cookstove.

In the registered VCS-PD /14/, section 5.3, the expected proportion value was assumed to be 0.8 expecting that the 80% of the ICS still in operation (was just an example to show how PP will calculate the sample size using the formula mentioned in VCS-PD). During this MP verification, 0.85 has been chosen as proportional parameter by PP, considering 85% of ICS will be operational. The confidence /precision level is 90/10 but PP has taken the assumption of 85% as a more conservative approach as PP is assuming only 85% ICS to be operational, although as found from the actual sampling survey conducted by the PP/15/,100% ICS were operational. Hence, the rejection level is under 10% and within the limits. Sample size, thus arrived, meets the relative precision error i.e., under 10%. However, actual proportion of ICS in operation is observed as 100% during the 1st MP verification and in the 2nd MP verification, it was observed as 100% as well, which shows that considering 0.85 as expected proportion is conservative on PP's side.

Although, now PP has considered operational percentage of stoves as 90% based on Secondary data like other projects set up in the same region/43/.

According to the section 9.2 of applied methodology, "Number of project devices of type i and batch j operating during year y (Ny,i,j) can be measured directly or based on representative sample."

PP had conducted second monitoring survey during the period of 11-April-2022 to 25-April-2022 (both dates included) in Mozambique. During the survey, it was found that 100% project devices are in operational, and this was further confirmed by the Verification team from the submitted sampling survey sheet and photographs from the survey/15/. As per the stove champion follow up survey conducted in latest Monitoring Period, stoves in operation were 100%, and as per the secondary data of other projects, stoves in operation percentage was observed as 92.80%. PP has considered as minimum number of stoves in operation as 90%. Hence, PP has considered the lowest value of stoves in operation 90% on a conservate basis. Assessment team conducted acceptance sampling based on the sampling and survey sheet/15/ submitted by the PP.

So, to measure $N_{y,i,j}$ PP multiplied the achieved proportion with commissioned stoves that is

90% x 32,204= 28,984

Hence, the verification team found it is in line with the sampling guideline and PD /14/ found the sampling approach conservative and appropriate, based on the provisions of the sampling guideline and the same has been updated in section 4.4 of the FVR.

Table 16: The resultant applied sample size by the PP are summarized below:

Parameters	$N_{,y,i,j}$
Sample size -ICS	48
Actual Samples Surveyed (each household has 2 ICS)	96
ICS found operating	90%
Precision achieved	0.00%

VVB used acceptance sampling during verification for checking the operational status in the households. The sampling done by Verification team represents the population of the grouped project activity. Applying paragraph 39 (c) of the sampling standard, version 09 /11/, a sample size of 08 ICS was chosen (with no discrepant records). The grouped project activity is located in a least developed country [6]-Mozambique. A sample size of 08 was determined, based on an AQL of 1.0% and UQL of 20%, producer risk 10% and consumer risk 20%. Acceptance number (c) thus determined for the sample is 0 in line with para 30 and 31 of "Sampling and Surveys for CDM project activities and programme of activities" version 09.0. It is also in line with VKU's Internal Procedures/34/. Verification team inspected 08 samples and in total-16 ICS samples (since each household has 2 ICS, from monitoring survey). It was observed that out of the 16 samples, all the 16 stoves were found to be operational and this matched with the PP's records and hence no discrepant records were observed with the MR /1/ and ER spreadsheet /2/ and thus c=0. Thus, PP's set of records has been accepted in line with para 33 of the sampling standard, version 09 /11/. Verification team has cross verified these sample documents.

The monitoring parameters to be monitored through the sampling plan is:

1. Number of project devices operating during year y **($N_{y,j,j}$)**

Simple random sampling was applied by the PP for selection of the monitoring samples with 90/10 confidence/precision for determining the sampling for all the parameters which is deemed acceptable as per the VCS PD/14/. 90/10 is a methodological choice/6/.

Furthermore, the database and sample purchase invoice /33/ was also checked/cross verified to confirm the number cookstove for the parameter N,y,i,j.

As per paragraph 25 of the Sampling Standard, version 09 /11/, the verification team has to verify whether the project participants entity have implemented the sampling and surveys according to the sampling plan in the registered monitoring plan. The verification includes determining:

(a) Whether the required confidence/precision has been met;

(b) Whether the selected sample was representative of the population.

As per the applied methodology VMR0006 version 1.1 section 9.2 /6/, and registered VCS PD /14/ the necessary confidence / precision of 90/10 for the parameters have been met. 90/10 is a methodological choice/6/ and has been cross verified by the verification team from the supporting documents submitted/2//15/.

Emission reductions have been calculated in accordance with the applied methodology VMR0006 version 1.1 /6/, and VCS PD /14/. The PP has used monitored data and ex-ante fixed data including default values as mandated/permitted by the applied methodology. The values

[6] Least Developed Country-Mozambique

used for calculation of GHG emission reductions have been thoroughly checked by the verification team and was found appropriate and correct.

The full set of emission reductions calculation are provided in emission reduction spread sheet/2/. ER_y realized during the monitoring period is 45,811 tCO_2e which are 16% less than the estimated emission reduction i.e., 54,714 tCO_2e for the current monitoring period due to B_y savings value considered during the validation was 1.83 tonnes/device/year whereas the actual value during verification was found to be 1.0903 tonnes/device/year and it can be verified from the MR/1/ and ER spreadsheet/2/ provided by PP and completely assessed by the verification team as stated above.

The verification team has checked and confirmed the emission reduction calculations in the spreadsheet and found to be accurate. The monitoring report/1/ is supported by emission reduction spreadsheet/2/. The consistency and formula were verified and found to be accurate.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

When verifying the reported emission reduction, VKU ensured that there was a clear audit trail that contained the evidence and records that validate the stated figures. All source documents that form the basis for assumptions and other information underlying the GHG data are shown above.

When assessing the audit trails, VKU also examined:

1. whether sufficient evidence was available, both in terms of frequency and in covering the full monitoring period

2. the source and nature of the evidence

3. if comparable information was available from sources other than that used in the monitoring report/1/, VKU cross-checked the monitoring report against the other sources to confirm that the stated figures were correct. The sources and the data referenced are shown in Section 2.2 above.

All records needed for monitoring are archived in line with the requirements of the registered monitoring plan. No significant, lack of evidence and missing data were detected during verification. Hence, the verification team confirms that the monitoring system ensures required quality of the monitoring system to ensure the quality of the monitored data. All internal data are subjected to QA/QC measures.

The operational status of project ICS is monitored through sample survey following UNFCCC sampling and survey guideline follows 90/10 confidence precision. 90/10 is a methodological choice/6/. The survey forms/15/ and photographs were checked to ascertain the monitoring

results reported in survey/15/. For enhancing the survey reliability and QA/QC, training has been provided to the data collector during survey /15/ which was further verified from the training details provided by the PP/18/. It is also noted the achieved precision is less than 10% and hence meets the desired confidence precision. The monitored results are found consistent with on-site audits.

Also, PP has set up grievance/repair/maintenance mechanisms/18/ and rectifies any issues for the operation of the project device. So, VKU is of the opinion that this method of calculation of emission reductions is accurate and results in conservative estimation of emission reduction and is line with the applicable VCS requirements.

4.6 Non-Permanence Risk Analysis

There is no non-permanence risk rating determined by the project proponent.

5 VERIFICATION OPINION

VKU Certification Pvt. Ltd. has performed second verification of the emission reductions reported for the project activity “Installation of high efficiency wood burning cookstoves in Mozambique”, VCS Registry Project ID 2351, for the monitoring period 01-September-2021 to 28-February-2022(both dates included), with regard to the relevant requirements for VCS activities. The project proponents of the “Installation of high efficiency wood burning cookstoves in Mozambique” project is responsible for:

the preparation of greenhouses gas emissions data and the reported greenhouse gas emission reductions from the project on the basis set out in the monitoring plan contained in the registered project design document version 02.2 of 09-May-2022/14/. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of greenhouse gas emission reductions of the project.

It is the responsibility of VKU to express an independent verification opinion about the project’s conformity with the requirements of VCS Standard version 4.4/4/ and GHG program applied, on the reported greenhouse gas emission reductions from the project.

Based on documented evidence and confirmed by an on-site assessment, VKU can confirm that:

the project has been implemented and operated as per the registered VCS-PD/14/;

the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS Standard version 4.4 requirements/4/;

the monitoring is in place as per the applied baseline and monitoring methodology/06/;

the monitoring plan in the registered VCS-PD/14/ is as per the applied baseline and monitoring methodology.

VKU Certification'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. VKU Certification planned and performed the verification by obtaining evidence and other information and explanations that VKU Certification considered necessary to give reasonable assurance that reported GHG emission reductions are fairly stated. It is VKU's opinion that the GHG emission reduction stated in the monitoring report version 2.1 of 23-August-2024/1/ for the "Installation of high efficiency wood burning cookstoves in Mozambique" for the monitoring period 01-September-2021 to 28-February-2022 (both dates included) are fairly stated.

The GHG emission reductions are calculated on the basis of approved methodology VMR0006 version 1.1/06/ and the monitoring plan included in the registered Project Description Document, version 02.2 of 09-May-2022/14/.

Hence VKU is able to certify that the emission reduction from the project during the monitoring period 01-September-2021 to 28-February-2022 (both dates included) amounts to 45,811 tCO_2e. VKU is an approved ISO 14064-3:2019 accredited Validation/Verification Body[7].The assessment team meticulously followed the prescribed steps outlined in the standard, starting with Strategic Analysis, followed by Risk Assessment and the development of an Evidence Gathering plan. Subsequently, the team diligently executed the planned activities to collect the necessary evidence.

To ensure comprehensive evaluation, an Audit plan was prepared, and an Onsite visit was conducted accordingly. Onsite activities were carried out in accordance with the pre-established Evidence Gathering plan. Following the completion of the onsite activities, VKU proceeded with the post-site evaluation, which involved scrutinizing supporting documents, Monitoring Reports (MR), and Emission Reports (ER). The project then underwent Independent Technical review. Adhering to the stipulated requirements, the assessment team formed a positive opinion based on their findings.

It is VKU's opinion that the GHG emission reduction stated in the monitoring report version 2.1 of 23-August-2024/1/ for the "Installation of high efficiency wood burning cookstoves in Mozambique" for the monitoring period 01-September-2021 to 28-February-2022 (both dates included) are fairly stated.

[7] VKU is accredited to validation at the time of submission of this project activity. (https://verra.org/validation-verification/vku-certification-pvt-ltd/#vcs)

Hence VKU is able to certify that the emission reduction from the project during the monitoring period 01-September-2021 to 28-February-2022 (both dates included) amounts to 45,811 tCO_2e.

Verification period: From 01-September-2021 to 28-February-2022 (both dates included)

Year	Baseline emissions or removals (tCO2e)	Project emissions or removals (tCO2e)	Leakage emissions (tCO2e)	Net GHG emission reductions or removals (tCO2e)
01-September-2021 to 31-December-2021	26,818	0	0	26,818
01-January-2022 to 28-February-2022	18,993	0	0	18,993
Total	45,811	0	0	45,811

The estimated ex-ante GHG emission reductions and removals and the achieved emission reductions and removals for this monitoring period are reported as below-

Year	Ex-ante emissions reductions/removals	Achieved emissions reductions/removals	Percent difference	Justification for the difference
2021 (01-September-2021 to 31-December-2021)	36,879	26,818	-27.28%	Total Emission reductions achieved during the current monitoring period are lower than the ex-ante emission reductions due to 90% ICS operationality. Also, $B_{y=1,new,i,survey}$ value considered during the
2022 (01-January-2022 to 28-	17,835	18,993	6.49%	

February-2022)				validation was 1.83 tonnes/device/year whereas the actual value during verification was found to be 1.0903 tonnes/device/year.
Total		45,811 tCO_2e	-16%	

APPENDIX A: ABBREVIATIONS

Abbreviations	Full texts
BE	Baseline Emissions
BEF	Baseline Emission Factor
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM M&P	Modalities and Procedures CDM
CL	Clarification Request
CO2	Carbon dioxide
CO2e	Carbon dioxide equivalent
CQC	C-Quest Capital
DNA	Designated National Authority
EB	Executive Board
EF	Emission Factor
ER	Emission Reductions
FAR	Forward Action Request
GHG(s)	Greenhouse gas(es)
GWP	Global Warming Potential
HH	Household
IPCC	Intergovernmental Panel on Climate Change
MoV	Means of Verification
MR	Monitoring Report
NA	Not Applicable
OSV	On Site Visit
PAI	Project Activity Instances
PDD	Project Design Document
PP(s)	Project Proponent(s)
QA/QC	Quality Assurance /Quality Check
Ref.	Document Reference

SS(s)	Sectoral Scope(s)
TA(s)	Technical Area(s)
UNFCCC	United Nations Framework Convention on Climate Change
VCU	Verified Carbon Unit
VCS	Verified Carbon Standard
VKU	VKU Certification Ltd.
VVS	Validation and Verification Standard
VVB	Validation and verification body

APPENDIX B: SAMPLING SURVEY SHEET QUESTIONNAIRE

S.No.	Questions
1.	On which date survey was conducted?
2.	What was the time of the survey?
3.	Stove- info: - a) What is the code-number for stove ID 1 & 2? b) What is the model of stove? c) Location where the survey was conducted?
4.	What are details of the respondent- a) Name b) Age c) Registered user or not d) In case registered user is not available respondent's relationship with registered user e) Contact details
5.	Identification of stove status- a) Status of the stove 1- found or not b) Status of the stove 2- found or not c) Registration card for stove 1 d) Registration card for stove 2 e) Whether the data of stove 1 matched? f) Whether the data of stove 2 matched? g) Whether the stove 1 is operational or not? h) Whether the stove 2 is operational or not?
6.	What is the frequency of stove usage by households?
7.	Whether any baseline stoves are used or not? If yes, how many baselines stoves are there?
8.	What is the feedback received from the users? (Both positive/ negative)
9.	What are the benefits observed by users after using these stoves?

APPENDIX C: AUDIT FINDINGS

Type			Date	14-February-2023
CL#01			Reference	Section of Ver protocol:1.1,1.7,1.11
Description of the Non Conformance				
1. **In Section 1.1 of MR:** In the start of Section 1.1, 51,464 stoves were distributed and, in this table, it is mentioned that 32,204 stoves were distributed. PP is requested to clarify the inconsistency in the number of cookstoves distributed. 2. **In Section 1.7 of MR:** PP is requested to add a reliable source of data as Wikipedia is a freely editable website by general public. 3. **In Section 1.11 of MR:** VCS Standard v4.4, Paragraph 3.17.1 'Note' mentions the completion of verification required in order to not state the SDGs claimed. As verified from https://registry.verra.org/app/projectDetail/VCS/2351 .SD VISTA Program is still under validation, hence PP shall demonstrate compliance with the requirements of Section 1.11.				
1st Response from PP			**Date**	**24-February-2023**
1. **In Section 1.1 of MR:** PP corrected the typo error in the section 1.1. PP installed 32,204 project stoves till the end of Monitoring Period(28-ferbruary-2022). To confirm the same, database spread sheet is being submitted to the VVB. 2. **In Section 1.7 of MR:** PP updated the section 1.7 of the MR with reference from UN's website. 3. **In Section 1.11 of MR:** PP included all SDGs claiming by PP in the section 1.11 of the MR v1.1				
1st Assessment by Audit Team	**Status**	OPEN	**Date**	**27-February2023**
1.In Section 1.1 of MR: Assessment team confirms that PP has updated information in Section 1.1 of MR. Hence, accepted. **2.In Section 1.7 of MR:** Assessment team confirms that PP has updated section 1.7 of MR with a reliable reference: UN Website. Hence, accepted. **3.In Section 1.11 of MR:** Assessment team confirms that PP has mentioned SDG contributions in Section 1.11 of MR. Although, PP is requested to clarify the mention of two tables for SDGs. #OPEN 4. **Section 1.1 of MR:** PP is requested to confirm the no. of cookstoves distributed per household. #OPEN 5. **Section 1.5 of MR:** PP is requested to share evidence of start date of the grouped project activity. #OPEN				

2nd Response from PP	Date	28-February-2023
3. **In Section 1.11 of MR:** PP now updated the section 1.11 as per the VCS MR template v4.2. 4. **Section 1.1 of MR:** PP would like to confirm that only two stoves are installed per household in Mozambique under this project. 5. **Section 1.5 of MR:** End user agreement signed by stove owner (Stove id-CQCVMZ0000486) is submitted to VVB to verify the start date.		

2nd Assessment by Audit Team	Status	CLOSED	Date	02-March-2023
3. In Section 1.11 of MR: Assessment Team verified that PP has mentioned SDG contributions in Section 1.11 of MR and also updated SDGs table as per mentioned latest VCS MR template version 4.2. Hence accepted. **4. Section 1.1 of MR:** Assessment Team verified that PP has confirmed and mentioned the no. of cookstoves distributed per household in the MR. Hence accepted. **5. Section 1.5 of MR:** Assessment Team verified that PP has shared End user agreement signed by stove owner for the confirmation of start date of grouped project activity. Hence accepted. **CL#01 Closed.**				

Type	Date	14-February-2023
CL#02	Reference	Section of Ver protocol: 1.1,2.2,4.2
Description of the Non Conformance		
1. **In Section 1.1 of MR:** PP is requested to share survey form samples for the current verification. 2. **In Section 2.2 of MR:** PP is requested to list out the any continuous complaints/grievances received during monitoring period and how those grievances are addressed. Also provide the evidence of the same. 3. **In section 4.2 of the MR:** The operational percentage of the ICS for this monitoring are taken as 100% and indicated that the source for this is Monitoring Survey. PP is requested to clarify how 100% operational project stove was observed with the measurement methods and procedures applied, any standards or protocols followed, and the person/entity responsible for the measurement. 4. **MR:** PP is requested to provide records of training happened during the monitoring period 01/09/2021-28/02/2022.		

5. **In Section of 2.2 of MR:** PP is requested to substantiate the result of the survey by providing Monitoring Survey Report that comply with para 64 of the "Guideline: Sampling and surveys for CDM project activities and programmes of activities Version 04.0", any evidence of data collection (filled in survey forms), photographs during the survey.

1st Response from PP	Date	24-February-2023

1. **In Section 1.1 of MR:** PP is submitting survey forms and monitoring survey report for the current MP to the VVB.
2. **In Section 2.2 of MR:** PP follows a proper complaints/Grievances Redressal Policy and Procedure, which ensures that individual stakeholders' complaints/grievances are properly prioritized and addressed. PP incorporated the grievances received in the MR v1.1. Also, PP is being submitted the grievance report to the VVB.
3. **In section 4.2 of the MR:** According to the section 9.2 of applied methodology, "Number of project devices of type i and batch j operating during year y (Ny,i,j)can be measured directly or based on representative sample." PP had conducted second monitoring survey during the period of 11-April-2022 to 25- April-2022 in Mozambique. During the survey it was found that 100% project devices are in operational, and this can be confirmed from the submitted spreadsheet file named "Sampling _Survey sheet_2351_Mozambique MP2". So, to measure Ny,i,j, PP multiplied the achieved proportion with commissioned stoves that is 100% x32,204=32,204.
4. **MR:** PP is being provided the training records (attendance sheet and photographs) to the VVB.
5. **In Section of 2.2 of MR:** PP is being submitted the Monitoring survey report to the VVB.

1st Assessment by Audit Team	Status	CLOSED	Date	27-February-2023

1.In Section 1.1 of MR: Assessment team confirms that PP has submitted survey sample forms to the VVB. Hence, accepted.

2. In Section 2.2of MR: Assessment team confirms that PP has mentioned grievances raised during the current monitoring period in the MR and PP has also submitted the grievance report to the VVB. Hence, accepted.

3. In section 4.2 of the MR: Assessment team confirms that PP has mentioned required information in the revised M. Hence, accepted.

4. MR: Assessment team confirms that PP has submitted required records to the VVB. Hence, accepted.

5. In Section of 2.2 of MR: Assessment team confirms that PP has submitted the Monitoring Survey Report to the VVB. Hence, accepted.

CL#02 Closed.

Type	Date	14-February-2023
CL#03	Reference	Section of Ver protocol:4.1,4,2,4.3,5.4

Description of the Non-Conformance

1. **In Section 4.1 of the MR:** PP is requested to provide Stove Efficiency Report to the VVB.
2. **In section 4.2 of MR:** PP is requested to clarify and provide details whether monitoring frequency has been maintained in line with the registered PD for parameter Ny,i,j.
3. **In section 4.3 of MR:** PP has provided the section for spot-checking(ongoing). PP is requested to clarify if any spot-checking activities/SOP followed for selection of households were undertaken during the monitoring period and provide the evidence for the same. Moreover, PP to specify who is responsible for sampling and how sampling is conducted.
4. **In section 4.3 of MR:** PP is requested to support the 'repair/necessary assistance' procedure through some documentary evidence.
5. **In section 4.3 of MR:** PP is requested to provide training record for the local coordinators/field staff.
6. **In Section 5.4 of MR:** PP is requested to explain the cause of any increase in the actual GHG emission reductions achieved during this monitoring period.

1st Response from PP	Date	24-February-2023

1. **In Section 4.1 of the MR:** PP is submitting the stove efficiency report of TLC-CQC-Rocket stove.
2. **In section 4.2 of MR:** As per the applied methodology, Project Proponent needs to conduct the monitoring survey at least once every 2 years (biennial). However, PP is conducting monitoring survey annually (at least once every year), same is mentioned in registered PD of VCS 2351 under section 5.2. PP further clarify that first monitoring survey was conducted during 20-November-2021 to 15- December-2021 and second monitoring survey was conducted during 11-April-2022 to 25- April-2022.
3. **In section 4.3 of MR:** PP has a procedure for internal auditing called spot-checking, where field staff randomly selects households to ensure proper functioning of the project stoves throughout the project lifetime and to ensure that the project stoves continue to work as efficient as specified by the manufacturer. Field staff of project proponent randomly select units included in the database and visit or contact the stove owners to cross-check the information on the database with the factual evidence in the field. Any inconsistencies found (e.g., change in the address of a user) gets updated on the database, and in case, ICS are found to be no longer in use, they get clearly marked as such and is excluded from emission reductions calculations. Spot check report for the current monitoring period being submitted to VVB.

   Also, sampling procedures has been updated the MR v1.1 under section 4.3.

4. **In section 4.3 of MR:** If the stove owners are unsuccessful in stove repairing, stove owner can contact the ground staff of PP/implementor over phone (phone number is provided to the stove owner upon stove registration) and the field staff notify the implementer to provide the necessary assistance. To confirm this PP is being submitted the grievance records to VVB.

5. **In section 4.3 of MR:** PP provides training to ground staffs of PP as well as implementing partner, attendance sheet and photographs of the training is being submitted to VVB.

6. **In Section 5.4 of MR:** PP would like to clarify that there is no increase in actual ER compared to ex-ante ER. This is due to the following factor.
   a. Actual emission reduction achieved are lower than the value estimated in ex-ante calculation. This is due to $B_{y=1,new,i,survey}$ value considered during the validation was 1.83 tonnes/device/year whereas the actual value during verification was found to be 1.102 tonnes/device/year.

These details have been incorporated in MR v1.1 section 5.4.

1st Assessment by Audit Team	Status	CLOSED	Date	27-February-2023

1.In Section 4.1 of the MR: Assessment team confirms that PP has submitted the stove efficiency report to the Verification team. Hence, accepted.

2. In section 4.2 of MR: Assessment team confirms that PP has justified the monitoring frequency which is in line with the registered PD and is also mentioned in the MR. Hence, accepted.

3.In section 4.3 of MR: Assessment team confirms that PP has mentioned the spot-checking procedure in the Section 4.3 of the MR. Hence, accepted.

4.In section 4.3 of MR: Assessment team confirms that mentioned the support/repair assistance procedure in the MR. They have also submitted grievance report as part of evidence. Hence, accepted.

5. In section 4.3 of MR: Assessment team confirms that PP has submitted training records to Verification team. Hence, accepted.

6. In Section 5.4 of MR: Assessment team confirms that PP has explained the cause of decrease in Emission reductions. The same have been incorporated in the MR. Hence, accepted.

CL#03 Closed

Type	Date	14-March-2023
CL#04	Reference	Section of Ver protocol: MR,
Description of the Non Conformance		

1. **MR:** PP is requested to clarify if the monitoring period first and last dates are included in the Monitoring period or not.
2. **Section 1.1 of MR:** PP to also mention target cookstoves planned to be distributed in Section 1.1 of MR.
3. **Section 1.11 of MR:** Please clarify the outcome, whether the implemented project increase or decrease the above ground biomass in forests in Section 1.11 of MR.
4. **Section 4.2 of MR:** The parameter description for $n_{new,y,i,j}$ is inconsistent with the registered PD. Please clarify
5. **Section 4.3 of MR:** If 69 nos were estimated as per the steps above, PP is requested to clarify why only 96 stoves were surveyed instead of 138 (=69*2)?

1st Response from PP	Date	14-March-2023

1. **MR:** PP would like to confirm that monitoring period is 01-September-2021 to 28-February-2022, including both dates.
2. **Section 1.1 of MR:** PP would like to clarify that under this project (VCS ID -2351) PP targeting to install approximately 500,000 TLC-CQC Rocket stoves in Mozambique.
3. **Section 1.11 of MR:** PP corrected the error in draft in the section 1.11, the implemented project activity will increase the above ground biomass level.
4. **Section 4.2 of MR:** There is drafting error in registered PD, PP uses equation 5 of the methodology (option V mentioned in "description of measurement method sand procedure to be applied" of new,i,j) for estimating the efficiency of improved cookstoves.
5. **Section 4.3 of MR:** PP would like clarify that sample as per the sample size calculation there were 48 ICS in the sample for the monitoring period. 30% more samples have also been selected to cover up for any attrition, outliers, or non-response related to the sample. Therefore, the sample size for parameter $N_{y,i,j}$ calculated for the monitoring survey was 69.

The survey staff also checked the second stove that was installed in the household. Hence, during this survey total 96 stoves were surveyed.

1st Assessment by Audit Team	Status	CLOSED	Date	15-March-2023

1. **MR**: Assessment team confirms the monitoring period dates are inclusive of the first and last dates. Hence, accepted.

2. **Section 1.1 of MR:** Assessment team confirms PP has mentioned target cookstoves in the relevant section of MR. Hence, accepted.

3. **Section 1.11 of MR:** Assessment team confirms that PP has mentioned that project activity will increase the above ground biomass level. Hence, accepted.

4. **Section 4.2 of MR:** Assessment team confirms that as PP is using equation V of the VMR0006 V1.1 methodology. The description of the parameter is correct. Hence, accepted.

5. **Section 4.3 of MR:** Assessment team confirms PP mentioned 48 Samples to be surveyed and as 1 HH has 2 stoves each. The survey staff checked 96 stoves, which is more than 69 stoves. Hence, it is conservative and accepted.

CL#04 Closed

Type	**Date**	08-August-2024
CL#05	**Reference**	Section of Ver protocol: MR & ER
Description of the Non Conformance		
1. According to the registered project description (PD) and monitoring report (MR), the parameter '$B_{y=1,new,i,j,survey}$', is determined *ex-post* after one year of stove operation and fixed for the rest of the crediting period. However, the monitoring reports does not transparently outline the process and methods used to determine this value. 2. The MR does not provide information about whether the survey conducted meets the statistical requirements of 90/10 or 95/10 confidence and precision, and whether it is representative of different types of cookstoves distributed/strata, as per the Standard for Sampling and surveys for CDM project activities and programme of activities. 3. Section 4.3 of the MR states that this parameter was determined through measurement campaigns at representative households. However, assessed it is not stated as to how the monitoring procedures applied align with VMR0006, v1.1 and how the conditions specified under '$B_{y=1,new,i,j,survey}$' parameter table (refer page 17-18 of VMR0006, v1.1) were satisfied.		
1st Response from PP	**Date**	23-August-2024
1. During the monitoring survey, field staff asked the user to make a pile for the total firewood required for cooking in a day for all the stoves available in his/her house and weighted the same with the weigh scales. Further user was asked to extract and make the piles for the wood required for the project stove 1 and project stove 2 separately from that pile and weigh both the piles. Same been recorded and data transferred to excel spreadsheet. Therefore, firewood consumed for each project stove can be distinguished clearly. Proper training has been provided to the monitoring personnel before conducting the onsite monitoring survey.		

For the subsequent MPs after first monitoring period, the parameter $B_{y=1,new,i,j,survey}$ was already established and was not separately verified during these monitoring periods. Considering the applied methodology VMR0006 v1.1 according to which this parameter is "Determined in the first year of project implementation", the assessment would not change.

2. PP has adapted the 90/10 confidence and precision as per the Standard for Sampling and surveys for CDM project activities and programme of activities. The precision attained 3.51% is within the chosen 90/10 confidence and precision. The precision calculations have been provided to the MP01 verifying VVB and same being provide to the current MP verifying VVB.

3. $B_{y=1,new,i,j,survey}$, determined in the first year of the introduction of the devices (e.g., during the first year of the crediting period, y=1) through measurement campaigns at representative households. Calibration of weighing scales used for measuring the fuelwood was done in house before start of monitoring survey. In order to ensure completeness and accuracy of monitoring information, electronic database is operated and maintained for the project activity.

As the parameter is determined through measurement campaigns and not based on sample surveys to estimate this parameter, that are solely based on questionnaires or interviews, hence the conditions specified under '$B_{y=1,new,i,j,survey}$' parameter table (refer page 17-18 of VMR0006, v1.1) were not applicable

1st Assessment by Audit Team	Status	Closed	Date	03-October-2024

1. PP has provided the procedure for the measurement of parameter '$B_{y=1,new,i,j,survey}$', in the response and clarified it clearly as per the procedure followed during the first year of implementation and MP-1 reports. The current MP-MR states the source of value of the parameter clearly and it is as per the registered VCS PD and applied methodology VMR0006 V1.1 according to which this parameter is "Determined in the first year of project implementation". PP has also revised the value of parameter '$B_{y=1,new,i,j,survey}$' in revised MR according to the "Verra s6.1Operations MP1 2351" sheet submitted where raw ground data of all selected samples is provided with reliability check for parameter '$B_{y=1,new,i,j,survey}$' which is assessed and found consistent hence the value of '$B_{y=1,new,i,j,survey}$'is updated in revised FVR with assessment.

2. VVB has verified the MR submitted by PP and section 4.3 of MR clearly states the statistical requirements of 90/10 confidence and precision applied by PP as per the Standard for Sampling and surveys for CDM project activities and programme of activities. The "Verra s6.1Operations MP1 2351" sheet submitted has raw ground data of all selected samples with reliability check for parameter '$B_{y=1,new,i,j,survey}$' which was assessed and found that the precision attained for the parameter is 3.51% which is within the chosen 90/10 confidence and precision and is accepted since this is as per the actual ground data available at the time of first MP. The precision calculations have

been provided to the MP01 verifying VVB and same was provided to current MP verifying VVB and hence accepted.

3. As verified from the applied methodology by VVB that the value of $B_{y=1,new,i,j,survey}$, was determined in the first year of the introduction of the devices (e.g., during the first year of the crediting period, y=1) through measurement campaigns at representative households. PP has used the measurement campaigns at representative households for determination of this parameter which is as per the methodology version 1.1 applicable and registered VCS PD. Hence VVB confirms that the parameter is appropriately calculated and the conditions specified under '$B_{y=1,new,i,j,survey}$' parameter table (refer page 17-18 of VMR0006, v1.1) were not applicable.

CL#05 Closed

Type	**Date**	08-August-2024
CL#06	**Reference**	Section of Ver protocol: MR & ER

Description of the Non Conformance

1. The proportion of operational cookstoves within the monitoring period(s) is reported to be 100% This is likely unrealistic, given the minimal probability of 100% stove operation without breakages and abandonment over their lifetime. The project documentation does not transparently provide the measures put in place for on-time stove maintenance support for repairs and replacement.
2. The monitoring report(s) does not provide sufficient information on how the samples for determining stoves in operation were selected and the sampling process used and whether the minimum sample size was met for each respective monitoring period.

1st Response from PP	**Date**	23-August-2024

1. TLC-CQC rocket cookstoves are built on-site at the end user premises as per the design specification. This will be achieved using brick molds of specified dimensions to make bricks locally that are suitable for the stove construction. PP provides the metal parts to implementing partner /end user for the installation and registration of ICS.

PP ensures the IP/ households and village members are aware & appropriately trained to construct, maintain and repair the project stoves. End users are provided with information/details to communicate with IP/PP in case of further assistance/support required in repairing & maintenance of project stoves.

As per the current MP survey 100% of stoves were found to be operational. However, as per the stove champion follow up survey conducted in latest MP, stoves in operation were 100%, and as per the secondary data of other projects, stoves in operation percentage was 92.80%. PP has considered as minimum number of stoves in operation as 90%. Hence, PP has considered the lowest value of stoves in operation 90% on a conservate basis.

MR has been updated as per the response provided.

2. Sampling standard "sampling and surveys for CDM project activities and programme of activities" version 9 was used for determining the sample size to achieve 90/10 confidence precision. The actual sample size for the parameter stove in operation was not less than either the calculated sample size or the minimum sample size as per the sampling plan defined in the registered VCS PD. MR revised accordingly.

1st Assessment by Audit Team	Status	Closed	Date	03-October-2024

1. As per revised MR and ER sheet submitted to VVB proportion of operational cookstoves within the monitoring period(s) is reported as 90%. PP has provided the background evidences such as
   - The **stove champion follow up survey** conducted in MP3 & MP4, found stoves in operation as 100% for both MPs.
   - The **secondary data** of other projects registered under different carbon credit mechanism in the project region, stoves in operation was found as 92.80%.
   - Respective MPs project database where the proportion of operational cookstove is found to be 100% (for MP03 & MP04).

   All these sources of data were assessed and found to be correct. However, PP has considered the minimum number of ICS in operation as 90% on a conservate basis in ER estimations (for all MPs) which is more conservative and found acceptable by VVB.

2. MRs section 4.3 states the process in brief that is followed for sampling and sampling survey sheets clearly shows the calculation of the applied approach and 90/10 confidence precision is used which is found to be correct by VVB in the documents submitted. However, additional stove champion survey in MP3 and MP4 conducted also confirms the stove in operation.

CL#06 Closed

Type	Date	14-February-2023
CAR#01	Reference	Section of Ver protocol: Title Page, Contents,1.6,1.8,1.11

Description of the Non Conformance

1. **In the title page of MR:** PP is requested to update font color as per VCS MR Template version 4.2.
2. **In the Contents section:** PP is requested to update page numbers as per the MR in the Contents table and correct the formatting as well.

3. **In Section 1.6 of MR:** PP is requested to update the crediting period as per VCS PD Version 4.0. 4. **In Section 1.8 of MR:** Minor Editorial correction-PP is requested to correct the serial number. 5. **In Section 1.11 of MR:** PP is requested to follow Monitoring Report Template v4.2 and add Table 1: Sustainable Development Contributions. 6. **MR:** PP is requested to use the latest MR template as per VERRA website.				
1st Response from PP			**Date**	**24-February-2023**
1. **In the title page of MR:** PP corrected the fonts as per the VCS MR template v4.2. 2. **In the Contents section:** PP updated the Page numbers. 3. **In Section 1.6 of MR:** The crediting period of the project is 10 years, from 27 -January-2021 to 26-January-2031 (both days included), which is in accordance with registered PD. 4. **In Section 1.8 of MR:** PP corrected the errors in serial number. 5. **In Section 1.11 of MR:** PP now been included the Table of Sustainable Development Goals under the section 1.11. 6. **MR:** PP updated the MR template Version 4.2.				
1st Assessment by Audit Team	**Status**	**OPEN**	**Date**	**27-February-2023**
1.In the title page of MR: Assessment team confirms that PP has corrected the fonts as per the VCS MR template v4.2. Hence, accepted. **2. In the Contents section:** Assessment team found that page numbers are not present in the MR. PP is requested to update in the MR. #OPEN **3. In Section 1.6 of MR:** Assessment team confirms that PP has updated the crediting period in the MR. Hence, accepted. **4. In Section 1.8 of MR:** Assessment team confirms that PP has updated the serial numbers. Hence, accepted. **5. In Section 1.11 of MR:** Assessment team confirms that PP has included Table for Sustainable Development Goals under the section 1.11. Hence, accepted. **6. MR:** Assessment team confirms that PP has updated the template to V4.2. Hence, accepted. **7.Section 1.10 of MR:** PP is requested to add the supporting documents in the Appendix of the MR. **8. Section 5.4 of MR:** PP is requested to fill information in Project Emissions and Leakage Emissions				
2nd Response from PP			**Date**	**28-February-2023**
2. In the Contents section: PP has updated page number throughout the MR. **7. Section 1.10 of MR:** PP has already taken the measures to update the scope 3 notice in website, PP will update the screen shot in appendix once the website is updated.				

8. Section 5.4 of MR: PP has updated information of Project emission and Leakage emission in the MR.				
2nd Assessment by Audit Team	**Status**	**CLOSED**	**Date**	**02-February-2023**
2. In the Contents section: Assessment Team verified that PP has Updated Page number of monitoring report. Hence accepted. **7. Section 1.10 of MR:** Assessment Team verified that PP has updated the Appendix Section of MR which serves as documentary evidence to the Verification team. Hence, accepted. **8. Section 5.4 of MR:** Assessment Team verified that PP has updated information of Project Emissions and Leakage Emissions. Hence accepted. **CAR#01 Closed.**				

Type	**Date**	**14-February-2023**
CAR#02	**Reference**	Section of Ver protocol: 2,2.2,4.2
Description of the Non Conformance		
1. **In Section 2 of MR:** PP is requested to update the font size of all Section 2 Headings as per VCS MR template version 4.2. 2. **In Section 2.2 of MR:** PP is requested to update the section number as well as font as per VCS MR Template version 4.2. 3. **In Section 4.2 of MR:** PP is requested to update Parameter '$B_{y=1,new,l,j,survey}$' as per registered PD version 02.2. **4.In section 4.3 of MR:** Kindly justify how the PP has considered 85% as conservative value for expected proportion of n_{yi} is appropriate.		
1st Response from PP	**Date**	**24-February-2023**
1. **In Section 2 of MR:** PP updated the font size as per the VCS MR template version 4.2. 2. **In Section 2.2 of MR:** PP updated the section number as well as font size as per the VCS MR template version 4.2. 3. **In Section 4.2 of MR:** PP updated the data unit of $B_{y=1,new,l,j,survey}$ as per the registered PD.		

4.In section 4.3 of MR: PP would like to clarify that, during previous monitoring period PP considered 85% as expected proportion and found 100 % were operational. In the second monitoring period also, PP conservatively considered 85% as expected proportion. Therefore, this assumption is more conservative with respect to 100% expected proportion.				
1stAssessment by Audit Team	**Status**	**OPEN**	**Date**	**27-February-2023**
1.In Section 2 of MR: Assessment team confirms that PP updated the font size as per the VCS MR template version 4.2. Hence, accepted. **2.In Section 2.2 of MR:** Assessment team confirms that PP updated the section number and font size as per the VCS MR template version 4.2. Hence, accepted. **3.In Section 4.2 of MR:** Assessment team confirms that PP updated the data unit of $B_{y=1,new,l,j,survey}$ as per the registered PD. Hence, accepted. **4. In section 4.3 of MR:** Assessment team confirms that PP's approach is conservative and hence acceptable. However, PP is requested to update Para reference and document name. #OPEN				
2nd Response from PP			**Date**	**28-February-2023**
4. In section 4.3 of MR: PP corrected the paragraph number and document name in the in the section 4.3 of revised MR v1.2				
2nd Assessment by Audit Team	**Status**	**CLOSED**	**Date**	**02-March-2023**
4. In section 4.3 of MR: Assessment Team verified that PP has updated Para references and document name. Hence accepted. **CAR#02 Closed.**				

Type	**Date**	**14-February-2023**
CAR#03	**Reference**	Section of Ver protocol:4.1,4.3,5.1
Description of the Non Conformance		
1. **In section 4.1 of MR:** PP is requested to update the footnote for Mozambique.		

2. **In section 4.3 of MR:** The registered PD indicates that oversampling is encouraged to anticipate any low response and answers bias but how this has been complied is not included in the MR. PP is requested to substantiate this with detail sample calculation. 3. **In section 5.1 of MR:** PP is requested to maintain the consistency of reference given for equation used in footnote.

1st Response from PP	Date	24-February-2023
1. **In section 4.1 of MR:** PP updated the footnote in the section of 4.1 of MR. 2. **In section 4.3 of MR:** PP is now have been incorporated the sample size calculation in detail under section 4.3 of the MR v1.1 3. **In section 5.1 of MR:** PP updated the reference in the section of 5.1 of MR.		

1st Assessment by Audit Team	Status	CLOSED	Date	27-February-2023
1.In section 4.1 of MR: Assessment team confirms that PP updated the footnote in the section of 4.1 of MR. Hence, accepted. **2.In section 4.3 of MR:** Assessment team confirms that PP has incorporated the sample size calculation in the MR. Hence, accepted. **3.In section 5.1 of MR:** Assessment team confirms that PP updated the reference in the section of 5.1 of MR. Hence, accepted. **CAR#03 Closed.**				

Type	Date	14-March-2023
CAR#04	Reference	Section of Ver protocol:1.1,1.11,3.1,3.3
Description of the Non Conformance		
1.Section 1.1 of MR: PP is requested to correct the last date of MP in table of Section 1.1 of MR. **2. Section 1.10 of MR:** As per the guidance document to complete the section 1.10, PP needs to elaborate regarding supply chain (scope 3) emissions. This section is incomplete. **3.Section 1.11 of MR:** The reference is inconsistent with the other references to the VCS standard. PP is requested to update. **4.Section 3.1 of MR:** PP to state the status of the ownership of the project activity, project design in this section.		

5.Section 3.3 of MR: PP to provide the calculation for substantiation. The same was not found mentioned in the ER sheet or sampling sheet.

6.Section 4.2 of MR: PP to provide units of measurement as per SI units as per the guidance document. Dimensions have also not been provided.

7. Section 4.3 of MR: PP is requested to provide or reproduce the results given in the ER sheet here for traceability and for audit trail purpose.

1st Response from PP	Date	14-March-2023

1. **Section 1.1 of MR:** PP corrected the error in section 1.1, the last date of the current monitoring period is 28-February-2022.
2. **Section 1.10 of MR:** PP has now been included the details according to the guidelines in the VCS standard v4.4 and VCS Monitoring Report template v4.2.
3. **Section 1.11 of MR:** PP corrected the typo error in section 1.11.
4. **Section 3.1 of MR:** PP has now been added the status of the ownership of the project activity, project design in the section "3- implementation status".
5. **Section 3.3 of MR:** PP has now included annual energy saving/stove in the ER sheet v.1.2, also mentioned the section 5.4 of the MRv1.2.
6. **Section 4.2 of MR:** Parameter $B_{y=1,new,i,j,survey}$ was validated and verified by VVB (Carbon Check (India) Private. Ltd.) during the first verification as per the methodology requirement. So, PP redrafted the section 4.2 of the MR.
7. **Section 4.3 of MR:** PP would clarify that the sampling sheet named "Sampling _Survey sheet_2351_Mozambique MP2" has been submitted to the VVB and it contains all the data analysis related to sampling, reliability and precision check.

1st Assessment by Audit Team	Status	CLOSED	Date	15-March-2023

1. **Section 1.1 of MR:** Assessment team confirms has corrected the last date of MP in the MR. Hence, accepted.
2. **Section 1.10 of MR:** Assessment team confirms that PP has included details in section 1.10 of MR. Hence, accepted.
3. **Section 1.11 of MR:** Assessment team confirms PP has corrected the typo error in the MR. Hence, accepted.
4. **Section 3.1 of MR:** Assessment team confirms PP has added required details in the relevant section of MR. Hence, accepted.
5. **Section 3.3 of MR:** Assessment team confirms that PP has mentioned required calculation in ER Sheet and Section 5.4 of MR. Hence, accepted.
6. **Section 4.2 of MR:** Parameter $B_{y=1,new,i,j,survey}$ needs to be confirmed during the 1st verification as per the VMR0006 V1.1 Methodology. Hence, redrafted section accepted by the VVB.
7. **Section 4.3 of MR:** Assessment team confirms the sampling sheet named "Sampling _Survey sheet_2351_Mozambique MP2" covers all required information by the VVB. Hence, accepted.

CAR#04 Closed.

Type	Date	04-August-2023
CAR#05	Reference	Section of Ver protocol:1.7,3.1,3.3
Description of the Non Conformance		
1.In section 1.7 of MR: As per PRR comments received, PP to update Section 1.7 of the monitoring report which does not include sufficient information about the project location of the project activity instances included in this monitoring period. **2.In section 1.7 of MR:** As per PRR comments received, the project proponent to submit a KML file to the VVB as per VCS Standard v4.4, section 3.11.1 requirements. 3.**In section 3.1 of MR:** As per PRR comments received, Section 3.1 of the monitoring report does not provide clarity on the timeline of the distribution of cookstoves/project activity instances (PAIs) during this monitoring period. PP to update the section as per requirement. 4. **In section 3.3 of MR:** As per PRR comments received, in section 3.3 of the monitoring report, the project proponent to complete the eligibility criteria requirements for the inclusion of new project activity instances as per VCS Standard v4.4, section 3.6.16 and 3.6.17.		
1st Response from PP	**Date**	07-August-2023
1. PP would like to clarify that a total of 16,660 stoves has been installed in the Tete province of Mozambique within the ongoing monitoring period (1-September-2021 to 28-February-2022). Furthermore, PP has included the geographical coordinates of both the initial and final stoves installed in this current monitoring period the section 1.7 section of MR v2.0. Further PP has submitted the end user agreements of both the mentioned stove IDs clearly mentioning the location of the household. 2. PP has submitted the KML file of Mozambique to VVB. 3. PP has updated the section 3.1 of MR v2.0 according to the distribution timeline of the distribution of cookstoves/project activity instances (PAIs) during this monitoring period. 4. PP has updated the section 3.3 of MR v2.0 with eligibility criteria requirements for the inclusion of new project activity instances (ICS) as per VCS Standard v4.4, section 3.6.16 and 3.6.17.		

1st Assessment by Audit Team	Status	Closed	Date	09-August-2023

1.In section 1.7 of MR: Assessment team confirms PP had added information on the distribution of ICS in the province of Mozambique. Moreover, PP had added information on the fist and last stove distributed during the current monitoring period along with supporting documents. **2.In section 1.7 of MR:** Assessment team confirms PP has submitted the KML file of Mozambique to the VVB. Hence, accepted. **3.In section 3.1 of MR:** Assessment team confirms PP has updated the section according to the distribution timeline of ICS. Hence, accepted. **4. In section 3.3 of MR:** Assessment team confirms PP has updated the section to include eligibility requirements for inclusion of new PAI. Hence, accepted. CAR#05 Closed

Type	**Date**	04-August-2023
CAR#06	**Reference**	Section of Ver protocol:1.11,3.2.2
Description of the Non Conformance		
1.In section 1.11 of MR: PP is requested to clarify whether the SDGs achieved in this project contribute towards "nationally stated sustainable development priorities" of Mozambique as per the MR template. 2. **In section 3.2.2 of MR:** PP to update this section as Project Description Deviation applicable to this project activity.		
1st Response from PP	**Date**	07-August-2023
1. PP would like to clarify that the SDGs achieved in this project does not contributes to any law, statute or rather regulatory framework, or for UNFCCC non-Annex I countries, any systematically enforced law, statute or other regulatory framework. 2. The project activity ownership of the project changed to C-Quest Capital SGS Stoves Private Limited and accordingly PP has taken the project description deviation. The relevant documents (Deed of accession and Deed of Partial Release in respect of VCS registration deed of representation both dated 11-January-2023 and communications agreement dated 07-September-2022) for transferring the ownership to VCS has been provided. Verra has approved this deviation, and it has been published on the project page[8].		

[8] Verra Search Page

1st Assessment by Audit Team	Status	Closed	Date	09-August-2023
1.In section 1.11 of MR: Assessment team confirms PP has stated clarification on Nationally stated sustainable development priorities. Hence, accepted. **2. In section 3.2.2 of MR**: Assessment team confirms that PP has updated this section. Hence, accepted. **CAR#06 Closed.**				

~~Type~~			~~Date~~	~~DD/MM/YYYY~~
~~FAR~~			~~Reference~~	~~Section of VAL/VER~~
~~Description of the Non Conformance~~				
~~1st Response from PP~~			~~Date~~	~~DD/MM/YYYY~~
~~1st Assessment by Audit Team~~	~~Status~~	~~Open/Closed~~	~~Date~~	~~DD/MM/YYYY~~

APPENDIX D: COMPETENCE STATEMENTS

Team Leader:

Certification Pvt. Ltd. VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Vivek Kumar Ahirwar
Nationality	Indian
Countries of Experience	India, Madagascar, Thailand, Indonesia, Bangladesh, Nepal, Ghana, Uganda, Kenya etc
Education Qualification	B.E. (Mechanical Engineering) M. Tech (Energy Management)
Year of Experience	12 Years +
Area of Expertise	Climate Change & Environment
Eligible Sectoral Scope	TA 1.1 - Thermal energy generation TA 1.2 - Renewables TA 2.1 - Energy Distribution TA 3.1 - Energy Demand

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	YES
Local Expert (Country Wise)	YES
TA Expert (1.1, 1.2, 2.1, 3.1)	YES
Financial Expert	YES

Reviewed by	Vandana Gupta (Quality Manager)	Date	28/02/2023
Approved by	Dr. Vikas Kumar Aharwal (Director)	Date	04/03/2023

Local Expert (Mozambique):

Certification Pvt. Ltd. VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Raposo Ernesto Jacinto
Nationality	Mozambican
Countries of Experience	The Republic of Mozambique
Education Qualification	Bachelors in Agricultural Engineering
Year of Experience	4+ Years in agricultural market development activities
Area of Expertise	Climate Resilient Smart Agriculture.
Eligible Sectoral Scope	NA

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	NO
Verifier	NO
Team Leader	NO
Technical Reviewer	NO
Local Expert (Mozambique)	YES
TA Expert (X.X)	NO
Financial Expert	NO

Reviewed by	Vandana Gupta (Quality Manager)	Date	27/12/2022
Approved by	Vivek Kumar Ahirwar (Technical Manager)	Date	27/12/2022

Validator/Verifier-Trainee:

Certification Pvt. Ltd. VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Deepali Sharma
Nationality	Indian
Countries of Experience	India
Education Qualification	B.Sc. (Environmental Science) M.Sc. (Environmental Science)
Year of Experience	2 years as Intern and 6 months as Employee
Area of Expertise	Climate Change & Environment
Eligible Sectoral Scope	NA

Roles

Project Trainee	NO
Validator/Verifier Trainee	YES
Validator	NO
Verifier	NO
Team Leader	NO
Technical Reviewer	NO
Local Expert (Mozambique)	NO
TA Expert (X.X)	NO
Financial Expert	NO

Reviewed by	Vandana Gupta (Quality Manager)	Date	02.02.2023
Approved by	Vivek Kumar Ahirwar (Technical Manager)	Date	02.02.2023

Technical Reviewer:

Certification Pvt. Ltd.
VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Abhishek Kumar Srivastava
Nationality	India
Countries of Experience	India, Uganda
Education Qualification	M. Tech- Energy Management M. Sc. -Physics
Year of Experience	14 Years
Area of Expertise	Climate Change & Environment / Industry
Eligible Sectoral Scope	1. GHG emission reductions from fuel combustion

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	YES
Local Expert (Country Wise)	YES
TA Expert (1.1, 1.2, 3.1,)	YES
Financial Expert	YES

Reviewed by	Vandana Gupta (Quality Manager)	Date	25/02/2023
Approved by	Vivek Kumar Ahirwar (Technical Manager)	Date	25/02/2023