



CLEAN COOKSTOVE FOR RURAL INDIA

Document Prepared By



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Summary:

VKU Certification Pvt. Ltd. (hereafter referred as VKU) was commissioned by EKI Energy Services Ltd. has verified the greenhouse gas emission reductions reported for the project activity “**Clean Cookstove for Rural India (VCS 2944)**”. This verification serves as the second assessment within the renewable crediting period of the project activity. The monitoring period spans from **01-January-2023 to 31-December-2023, encompassing both the start and end dates**. The renewable crediting period for the project activity is from **11-May-2022 to 10-May-2029, (inclusive of both dates)**.

The purpose of the verification: The objective of the verification process is to obtain an impartial evaluation of the ex-post determination of the monitored reductions in greenhouse gas (GHG) emission. This verification ensures that the monitoring methodology aligns with the plan outlined in the registered VCS Joint PD & MR /3/, and that the monitoring data used to confirm reductions in anthropogenic emissions from sources is comprehensive, definitive, and transparently presented.

The verification scope of the project is:

- To verify that the project is implemented as described in the registered VCS Joint PD & MR/3/.
- To evaluate the project's adherence to relevant regulations, including the legislation of the host country (India).
- To verify the implementation and functionality of the monitoring system, ensuring the generation of Verified Carbon Units without any instances of double counting.
- To verify the accuracy, completeness, consistency, transparency, and absence of significant errors or omissions in the reported data by examining monitoring records and emissions reduction calculations.
- To ensure that the actual monitoring systems and procedures align with those described in the monitoring plan.
- To assess the GHG emission reduction data and provide a conclusion with a reasonable level of assurance regarding the absence of material misstatements.
- To verify that reported GHG emission data is sufficiently supported by evidence.

VKU conducted the verification process in accordance with its own established procedures, aligning with the requirements set forth in the VCS program guide latest version 4.4/6/, VCS standard Version 4.6/5/, VCS validation and verification manual version 3.2/7/, CDM M&P, the latest version of the CDM Validation and Verification Standard 3.0/8/, "Standard for sampling and surveys for CDM project activities and programme of activities" version 09.0/15/, as well as relevant decisions made by the COP/MOP and the CDM EB. These requirements encompass Article 12 of the Kyoto Protocol, the CDM Modalities and Procedures as agreed in the Marrakech Accords under decision 3/CMP.1, the annexes to this decision, subsequent decisions and guidance provided by COP/MOP & CDM Executive Board, and other applicable rules, including the Host Country (India) legislation. Furthermore, standard auditing techniques were applied throughout the verification process.

The verification process included inter alia a desk review, on-site assessment applying sampling as per the guidelines, resolution of any outstanding matters, and the issuance of the final verification

report and certification. This comprehensive verification is aimed to ensure that the reported emission reductions are thorough and precise, aligning with the relevant VCS requirements, thus enabling the project to obtain certification.

VKU diligently followed a rule-based approach during the verification process, ensuring strict adherence to the applicable VCS requirements. The verification encompassed a comprehensive assessment of the project activity's operations, monitoring procedures and GHG emission reduction calculations. As a result, a total of **(13) findings were identified, comprising (07) Corrective Action Requests (CARs), (06) Clarification Request (CLs), and zero (00) Forward Action Requests (FARs).** All the raised findings were successfully resolved/closed after necessary corrections/clarifications by the client. The same has been discussed in [Appendix C](#) of this verification report.

The verification team ensured that the reported emission reductions are complete and reliable in accordance with applicable VCS requirements in order to be certified therefore the verification team has accepted the values within the precision levels applied as part of sampling techniques.

The GHG emission reductions were calculated based on the

- Approved methodology VMR0006 'Methodology for Installation of High Efficiency Firewood Cookstoves' (version 1.1)/12/
- Tool 30 - "Calculation of the fraction of non-renewable biomass"; Version 04/13/
- The monitoring plan included in the registered joint project description version 4.0 of 06-December-2023 & monitoring report, version 4.0 of 25-August-2024.

Verification Conclusion:

Based on VKU's thorough assessment, it is their professional judgment that the project activity "Clean Cookstove for Rural India" VCS 2944 fully complies with the applicable requirements of VCS standard version 4.6/5/ and associated guidelines. The project has successfully implemented the designated baseline and monitoring methodology outlined in VMR0006 "Methodology for Installation of High Efficiency Firewood Cookstoves" version 1.1/12/.

The monitoring system in place is effective and reliable, ensuring reasonable level of measurement allowed by the methodology and the VCS standards without any significant discrepancies. As a result, VKU is able to objectively state that the project has achieved an emission reduction of **705,715 tCO₂e** during the second monitoring period, which spans from **01-January-2023 to 31-December-2023 (inclusive of both start and end dates)**. This certification affirms the project's substantial contributions towards mitigating greenhouse gas emissions.

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1 INTRODUCTION

1.1 Objective

EKI Energy Services Limited (hereinafter referred to as PP) engaged the services of VKU Certification Private Limited (hereinafter referred to as VKU) to conduct the second verification of the "Clean Cookstove for Rural India". This is the second verification of the **renewable crediting period (11-May-2022 to 10-May-2029), (Inclusive of both dates)** for a period of twelve months (**01-January-2023 to 31-December-2023, encompassing both the start and end dates**) of the project activity. The project activity adopts renewable crediting period of 07 years period as mentioned in section 1.9 of VCS joint project description & monitoring report version 4.0 dated 06-December-2023 /3/.

Table No 01: Number and time period of VCS Verification under fixed crediting period:

Periodic Verification No.	Monitoring Period (Inclusive of both dates)	Number of years
Joint Validation/Verification	11-May-2022– 31-December-2022	00 Years 07 months & 21 days
2nd VCS Verification (Current Monitoring Period)	01-January-2023 to 31-December-2023	01 year, 00 months & 00 days
Total	NA	01 year 07 months 21 days

The verification will be performed by review of evidences & documents submitted to the VKU Assessment Team by PP, for the registered project activity to establish that:

- The project activity has been executed and operated in strict adherence to the registered VCS Joint PD & MR version 4.0 dated 06-December-2023/3/ & stated guidelines stated in the adopted methodology i.e., VMR0006: Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1. Furthermore, all essential physical aspects of the project, including the technology employed, technical specifications of the Cookstoves, monitoring protocols, replacement of inefficient traditional three stone Cookstoves with ICS, and efficient distribution of Cookstoves, have been diligently implemented.
- The monitoring report/1/ and accompanying documentation have been meticulously compiled and are comprehensive in nature.
- The data has been methodically recorded and stored in accordance with the prescribed monitoring methodology outlined in " VMR0006: Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1"/12/ and the approved monitoring plan.

The verification process aimed to confirm the seamless implementation and full functionality of the monitoring system, ensuring the accurate generation of Verified Carbon Units (VCUs) without any instances of double counting/28/. Additionally, meticulous scrutiny of the monitoring records

and emissions reduction calculations has been carried out to guarantee the precision as allowed by the sampling requirements, completeness, consistency, transparency, and absence of any material errors or omissions in the reported data. This aims to establish the reliability and integrity of the data.

1.2 Scope and Criteria

The scope of this verification was the independent objective review and ex-post determination of the monitored reductions in GHG emissions from the “Clean Cookstoves for Rural India”. The verification of this project was based on the validated & registered VCS joint PD & MR version 4.0 dated 06-December-2023 /3/ & monitoring report/1/ along with supporting documents submitted by the project proponent to the VKU verification team. The documents thus submitted to the VKU Assessment/Verification Team were reviewed against the following guidance & protocols:

- i. VCS Program Guide (Latest version 4.4) /6/
- ii. VCS standard version 4.6 /5/
- iii. VCS program Definitions (Version 4.4) /9/
- iv. VCS Registration & Issuance Process (Version 4.4) /10/
- v. VCS Validation and Verification manual version 3.2/7/
- vi. VMR0006: Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1/12/
- vii. Tool 30: “Calculation of the fraction of non-renewable biomass”; version 04.0/13/
- viii. Guidelines for Sampling and surveys for CDM project activities and programmes of activities, version 04 /14/

The steps involved are as follows:

- To assess the project’s compliance with other relevant rules including the host country legislation (India).
- To confirm that the monitoring system is implemented and fully functional to generate Verified Carbon Units without any double counting. 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 & is sufficiently supported by evidence.
- The verification process ensures that the reported emission reductions are comprehensive and accurate in order to obtain certification.

The verification method and criteria encompassed several phases, including

- I. Desk review of VCS Joint project description & monitoring report, registered under VCS (Version 4.0) dated 06-December-2023/3/ and other supporting documents listed in **Table-05**;
- II. Acceptance Sampling
- III. Onsite interviews & Focussed Group Discussions with End-Users, Stakeholders & PP representatives involved in project's implementation.
- IV. VKU's Completeness/Quality Check, and
- V. The Final issuance of the verification report.

Outstanding issues were resolved, leading to the issuance of the final verification report and the relevant VCS Verification Deed of Representation.

It is important to note that the verification process does not involve providing consultancy to the project proponents. However, requests for clarifications and corrective actions may have contributed to improvements in the monitoring processes.

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, as per section 04 clause 4.1.2, 4.1.10 and clause 4.1.24 of the VCS Standard version 4.6/5/. The verification report is based on the Monitoring report/1/, registered VCS Joint PD & MR version 4.0 dated 06-December-2023/3/ & supporting documents that were made available to the VKU's assessment team references in table-05 and information collected through performing interviews with End-Users/PP Representatives/Local Stakeholders during on-site visit. /44/ The technical review was performed by a technical reviewer(s) qualified in accordance with VKU's qualification procedure. The verification/assessment team and the technical reviewers consist of the following.

Table No 02: The Assessment Team Members are as follows:

Role/Qualification of Assessment Team	Gender	Last Name	Middle Name	First Name
Team Leader & Technical Expert TA 3.1 (Energy Demand. (Local Expert - Country: India)	Female	Kaushik	NA	Niharika
Project Trainee	Female	Das	NA	Kriti

Table No 03: The Technical Reviewer Team is as follows:

Role/Qualification of Technical Team	Gender	Last Name	Middle Name	First Name
Technical Reviewer & Technical Expert TA 3.1 (Energy Demand)	Male	Ahirwar	Kumar	Vivek

1.4 Summary Description of the Project

The project activity involves the distribution of fuel-efficient improved cookstoves (ICS) to replace the baseline traditional cookstoves in households in state Assam and Madhya Pradesh, as per the VCS Joint PD & MR version 4.0 dated 06-December-2023 /3/. The project intends to avail the households with clean cooking solutions; thereby, displacing the less efficient traditional cooking stoves from the kitchen with stoves of better efficiency. The baseline wood burning cookstoves are conventional system with no improved combustion air supply or flue gas ventilation system as verified by the assessment team during on-site review and personnel interview & focussed group discussion/44/ with the end-users. and is also declared in the section 1.1 of VCS Joint PD & MR version 4.0 dated 06-December-2023 /3/ & MR /1/

The project activity is implemented within the geographical boundary of Assam and Madhya Pradesh, Country: India. Thus, geographical area of project activity is considered as state Assam and Madhya Pradesh. It was verified through Google Earth Pro/47/ also geo-coordinates are verified during desk review and through GPS Map Camera/48/ during the site visit as well as through recorded live coordinates by onsite assessment team and found consistent with the data provided in the registered VCS Joint PD & MR/03/. The same is elaborated in section 4.1.

Table 04: The geographical boundary is delineated in the form of extreme geographic coordinates as follows:

S. No.	State	Country	GPS Coordinates
1	Madhya Pradesh	India	Latitude: 23° 28' 23.9664" N Longitude: 77° 56' 52.7928" E
2	Assam	India	Latitude: 26° 14' 38.9616" N Longitude: 92° 32' 16.2312" E

The baseline scenario is usage of traditional cookstove which utilizes open wood fires and the widespread use of these inefficient biomass stoves is a major contributor to deforestation we can also state that the baseline scenario is the continued use of non-renewable wood fuel by the target population to meet similar thermal energy needs as provided by project cookstoves in absence of project activity. 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. Through this project, the distribution and installation of 24,996 ICS devices in state Assam and 126,158 ICS in state Madhya Pradesh with a total of 151,154 stoves as per planned

distribution stated in registered PD-MR and Monitoring Report/1/. These 151,154 ICS devices were implemented till the end of this monitoring period. Each beneficiary has received 1 ICS per household. as verified by the assessment team during physical inspection of cookstoves during onsite visit & desk review of section 1.1 of VCS Joint PD & MR version 04 dated 06-December-2023 /3/ & section 1.1 of MR /1/ as submitted by the PP. The first project activity instance was implemented on 11-May-2022 under this grouped project activity. No Project activity instance has been distributed during the current monitoring period. As per the database /21/ submitted by PP the last instance was distributed on 31-December-2022.

Under this project improved cookstoves were distributed in the households as per the requirement of the stove users free of cost in Assam and Madhya Pradesh, as confirmed from the end-users while interview process during an onsite visit with Efficiency of project stove (fraction) at the start of project activity i.e., as per VCS Joint PD & MR version 04 dated 06-December-2023 /3/ The estimated annual average emission reductions over a 07-year period of Renewable crediting period are 714,973 tCO₂e/year. The total emission reductions for 07 years crediting period will be 5,004,811 tCO₂e. Total GHG emission reduction in second monitoring period from 01-January-2023 to 31-December-2023 (including both dates) is 705,715 tCO₂e.

Efficiency of the improved cookstove type i and batch j during year y i.e., $\eta_{(new,y,i,j)}$ calculated as per the equation 5 of the approved methodology/12/which is also calculated & stated by PP in the registered PD in section 5.4 page number, 41.

Vintage	Efficiency (%)
11-May-2022 – 31-December-2022	34.23%
01-January-2023 - 31-December-2023	33.89%

The project technology was witnessed by the assessment team during on-site audit and found to be operating as per the specifications and description provided in the MR/1/ and the registered VCS Joint PD & MR version 04 dated 06-December-2023 /3/. Lifespan of 07 years as confirmed from stove manufacturer specification /25/.

By implementing the project activity, the following GHG sources of emissions are reduced/avoided:

Baseline/Source	As per methodology section 8.1, the methodology does not account for baseline emissions separately, but instead quantifies emission reductions as a function of the reduction in the amount of non-renewable biomass fuel consumption in the efficient project stoves as compared to baseline stoves.
Project Equipment/Sink	The avoidance of GHG emission into the atmosphere is due to improved cooking stove (ICS) which directly reduces fuel wood consumption, of this project which is in line with 3.1.1 of ISO:14064 part-2

Baseline GHG emission source reduced/avoided	Emission reductions as a function of the reduction in the amount of non-renewable biomass fuel consumption in the efficient project stoves as compared to baseline stoves.
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Post distribution, training /35/ was provided to end users on use, care, and upkeep of these stoves. PP conducted spot checks which was checked through the records shared by the PP. The stoves distributed under the group project activity are under strict surveillance of the PP 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/25/. VVB assessed this by cross-checking the records submitted by the PP & also witnessing the same while interviewing the end-users about the regular visit of the project proponent representatives. VVB also conducted the interview process with the implementors & distributors and discussed about how the process of regular spot check & maintenance being maintained in the households where the ICS is disbursed.

All this evaluation by the Assessment Team along with the evidences thus provided, reasonably conclude that the system level implementation of ICS projects is implemented effectively by the PP. Each project ICS included in the project activity with an end user agreement executed between end user and PP/33/. The project proponent for the project activity EKI Energy Services Limited received carbon rights from user as per user agreement.

All the above information has been verified by the assessment team of VKU through desk review and during on-site assessment/43/ and it is found to be in line with the details provided in the registered VCS Joint PD & MR version 04 dated 06-December-2023 /3/. which is further found to be in-line with the adopted methodology i.e., VMR0006: Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1/12/ and Tool 30- Calculation of the fraction of non-renewable biomass Version 04.0/13/The implementation of the project activity aligns with the specifications outlined in the registered VCS Joint PD & MR version 04 dated 06-December-2023 /3/. The calculation of emission reductions has been conducted conservatively, adhering to the applied methodology/12/. The ex-ante GHG emission reductions for the current monitoring period, spanning from 01-January-2023 to 31-December-2023 (both days included) within the renewable crediting period of 11-May-2022 to 10-May-2029 (inclusive of both dates), are estimated to be 838,394 tCO₂e. However, the achieved emission reductions for the same monitoring period amount to 705,715 tCO₂e i.e., -15.83% lower emissions than the estimated ex ante.

2 VERIFICATION PROCESS

The registered VCS project “Clean Cookstoves for Rural India” (VCS ID 2944) is undergoing second periodic verification with VKU Certification Pvt Ltd from 01-January-2023 to 31-December-2023, (both dates included). The renewable 07-year crediting period from 11-May-2022 to 10-May-2029 (both dates included)

The Joint Validation and Verification/04/ was done by Applus+ Certification (LGAI Technological Center, S.A. (Applus+ Certification)

The approach adopted to ensure the quality of emission reductions is described in the following sections.

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 Latest version 4.4/6/, VCS standard version 4.6 /5/. The project activity falls under the category of “grouped projects”.

Sampling methods were employed by the assessment team for the verification of GHG emission reductions or removals generated by the project in accordance with the paragraph 26 of the Standard: Sampling and surveys for CDM project activities and programmes of activities, Version 09.0/15/.

- The GHG emission reductions are based on the approved Baseline and monitoring methodology VMR0006: Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1/12/
- Scope: 03 Energy Demand
- Project type: Type II – Energy Efficiency improvement project
- This is neither a grouped nor an AFOLU project.

Tools used for GHG Calculations are as follows as per registered VCS Joint PD & MR version 04 dated 06-December-2023/3/:

- Tool 30- “Calculation of the fraction of non-renewable biomass”; version 04.0/13/

Keeping in line with ISO (14064-3; 2019, clause 06 & 14065-2020, clause 09)/58/ Standard guidelines assessment team has framed down the process for completing the verification and has followed the same throughout the execution of audit of the said project i.e., VCS 2944

The verification consisted of the following phases:

1. **Planning and Intimation to VERRA about site visit:** The assessment team starts with a desk review then need for site visit is identified and site visit is planned. Assessment team also shared a NOVS Notice of Validation/Verification Services (NOVS) Form and submit it to auditing@verra.org, 15 business days before the initial meeting with the project proponent. The assessment team intimated Verra for this project activity on 23-January-

2024. Decision to conduct an onsite visit by VVB was considered, since this is the first time VKU has undertaken the verification process of this project and hence keeping in VCS standard version 4.4 guidelines in clause 4.1.9 and 4.1.10, physical inspection of the distributed cookstoves was considered.
2. **Document Review:** Relevant documents, such as the verification report, monitoring plan, methodology, VCS Joint PD & MR and QA/QC procedures are thoroughly reviewed.
 3. **Strategic Analysis:** Assessment team performed strategic analysis to understand the activities and complexity of the project, and to determine the nature and extent of the verification activities. The results of the strategic analysis shall be used in the risk assessment.
 4. **Risk Assessment;** Assessment team performed risk assessment of the GHG statement to identify the risk of a material misstatement or nonconformity with the criteria. /40/
 5. **Evidence Gathering Activities;** Using a risk-based approach assessment team prepared evidence gathering activities, to collect sufficient and appropriate evidence upon which to base the conclusion & determine whether the GHG statement conforms to the criteria, taking into account the principles of the standards or GHG programme that apply to the GHG statement.
 6. **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, the same was documented in VKU.F24W. Audit and Sampling Plan_VKU.VER.179.24_VCS_2944/41/
 7. **Evidence Gathering Plan;** The evidence-gathering plan is prepared based on the results of the VKU's Assessment Team's risk assessment. It was designed to lower the verification risk to an acceptable level. · The evidence-gathering plan thus specify the type and extent of evidence-gathering activities.
 8. **Client Confirmation and Approval:** The site visit audit plan is sent to the client for review and confirmation/approval via email.
 9. **On-Site Assessment:** This includes interviews and evaluation of the actual project scenario. /45/
 10. **Resolution of Discrepancies:** Any non-conformities identified during the assessment are addressed and resolved.
 11. **Independent Review:** A technical reviewer provides an independent assessment.
 12. **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 VCS monitoring report for “Clean Cookstoves for Rural India” version 01 of 02-February-2024, version 02 of 26-February-2024, Version 03 of 21-March-2024 & Version 4.0 of 25-August-2024/1/ and the emission reduction calculations spreadsheet version 01 of 02-February-2024, version 02 of 26-February-2024 & version 3.0 of 24-June-2024/2/ were assessed as part of the verification. In addition, the registered VCS Project Description version 04 dated 06-December-2023/3/ in particular the baseline estimations and the monitoring plan for the project was reviewed. The following **table-05** lists the documentation that was reviewed during the verification.

As per section 3.26 and clause 3.26.3 of the VCS Standard version 4.6 it is an obligation for the project proponent to make available to the assessment team the required supporting documents and data needed to support statements and data as documented in the monitoring report. Thus, the assessment team reviewed the following documents during verification:

Table 05: Reference Table

	Current Verification Reference Documents
/01/	EKI Energy Services Limited.: VCS monitoring report for “Clean Cookstoves for Rural India”, Version 01 of 02-February-2024 Version 02 of 26-February-2024 Version 03 of 21-March-2024 Version 04 of 25-August-2024
/02/	EKI Energy Services Limited: Emission Reduction Calculation Sheet for “Clean Cookstoves for Rural India”, Version 01 of 02-February-2024 Version 02 of 26-February-2024 Version 03 of 24-June-2024
	Background Document/Weblinks
/03/	EKI Energy Services Limited: <u>Registered VCS Joint Project Description & Monitoring Report for the project “Clean Cookstoves for Rural India” version 4 dated 06-December-2023</u>
/04/	LGAI Technological Center, S.A. (Applus+ Certification): <u>Joint Validation & Verification Report for the project “Clean Cookstoves for Rural India” version 3.0 dated 07-December-2023</u>
/05/	VCS: Standard version, 4.6 of 21-March-2024 <u>VCS: Standard, version 4.5 of 04-October-2023</u>

/06/	<u>VCS: VCS Program Guide, version 4.4 of 29-August-2023 (Latest)</u>
/07/	<u>Validation and Verification manual version 3.2 dated 19-October-2016</u>
/08/	<u>CDM Validation and Verification Standard version 3.0 dated 09-September-2021</u>
/09/	<u>VCS Program Definitions (Version 4.4) of 29-August-2023 (Latest)</u>
/10/	<u>VCS Registration & Issuance Process (Version 4.4) of 04-October-2023 (Latest)</u>
/11/	VCS: Monitoring report Template VCS Version 4.3
/12/	VCS: <u>VMR0006-Methodology for Installation of High Efficiency Firewood Cookstoves v1.1</u>
/13/	<u>Tool 30- Calculation of the fraction of non-renewable biomass Version 04.0</u>
/14/	<u>UNFCCC: Guidelines for Sampling and Surveys for CDM Project activities and Programme of Activities, Ver. 4.0</u>
/15/	<u>UNFCCC: Standard for Sampling and surveys for CDM project activities and programmes of activities, Version 09.0</u>
/16/	<u>VERRA: Project search</u>
/17/	<u>UNFCCC: Project search</u>
/18/	<u>Gold Standard Foundation</u>
/19/	UNFCCC: Methodological Tool: Calculation of the fraction of non-renewable biomass, version 4.0
	Reference/Supporting Documents Submitted by PP to VVB
/20/	EKI Energy Services Limited: 1 st Monitoring Survey conducted from 03-January-2023 to 27-February-2023 for Madhya Pradesh and from 28-January-2023 to 16-February-2023 for Assam.
/21/	Project Database: VCS 2944
/22/	EKI Energy Services Limited; Sample Monitoring survey questionnaire forms
/23/	EKI Energy Services Limited; Photographs & Videos of the Monitoring Survey
/24/	Center for Energy Studies, IIT Delhi: Testing results of the solid biomass cookstove as per revised BIS protocols Certificate Reference Number: IITR/IRD/RP04288N/2022/01 Model No: Agneeka Eco Mini Model 4 SE Type of Fuel: Drywood Efficiency: 36.24 % PM _{2.5} (mg/MJd): 285.25

	CO (g.MJd): 4.02
/25/	GHG Reduction Technologies Private Limited: Manufacturer's specification for Agneeka Eco-Mini Stove Model No 4SE Cookstove
/26/	EKI Energy Services Limited; Sample Baseline survey questionnaire forms
/27/	EKI Energy Services Limited; Local Stakeholder Consultation for Assam & Madhya Pradesh • Invitation for Local Stake holder meeting of the Project Activity titled "- Clean Cookstoves for Rural India • Photographs • Minutes of Minutes of the LSC • Attendance Sheet
/28/	EKI Energy Services Limited: Declaration to avoid double counting, non-inclusion of projects in other standards
/29/	EKI Energy Services Limited: Comprehensive Declaration of Human Rights Principles & Equality (Includes Discrimination and sexual harassment, Labour Rights, Property Rights ect) for the improved Cookstove (VCS 2944)
/30/	Employment Declarations/Records
/31/	EKI Energy Services Limited: Feedback-and-Grievance-Register for current monitoring period from 01-January-2023 to 31-December-2023 (Inclusive of both dates)
/32/	EKI Energy Services Limited: KML File depicting the project boundary of project implemented site i.e., Assam and Madhya Pradesh.
/33/	EKI Energy Services Limited; Sample copy of Carbon Credit Ownership Agreement as evidence for unique identification of ICS EKI Energy Services Limited; Sample copy of Carbon Credit Ownership Agreement as evidence for the start date of the grouped project
/34/	EKI Energy Services Limited & GHG Reduction Technologies PVT. LTD: Beneficiary ICS Card with serial number & Distribution Date.
/35/	Training Records; Subsequent Training - Aaransh Agro Tech Subsequent Training - Bibsikha LLP Subsequent Training - Enviro Queen Pvt Ltd Subsequent Training - JPS Enterprises Beneficiary Awareness Training Records: Attendance Sheet Declarations from Implementors Photographs

/36/	EKI Energy Services Limited: Balance or Scale Calibration Certificate EKI-01679 EKI-01681 EKI-01683 EKI-01685
VVB Documents used during Current Verification	
/37/	Notice of Validation/Verification Services Form- VKU.VER.179.24_VCS _2944
/38/	Screenshot of the random sample generator as evidence for random sample selection for the parameters opted for monitoring survey. 1. Random Number Generator for Assam site 2. Random Number Generator for Madhya Pradesh site.
/39/	VKU-Sampling Plan Method and Guidance_ VKU.VER.179.24_VCS _2944
/40/	VKU-Risk Assessment_ VKU.VER.179.24_VCS _2944
/41/	VKU-Audit and Sampling Plan_ VKU.VER.179.24_VCS _2944
/42/	VKU-Attendance Sheet of Onsite audit_ VKU.VER.179.24_VCS _2944
/43/	Onsite visit on 13-February-2024 to 14-February-2024 in Assam and 15-February-2024 to 18-February-2024 in State: Madhya Pradesh in Project implemented site, Country: India
/44/	Personnel Interviews and Focussed Group Discussions during onsite visit dated 13-February-2024 to 14-February-2024 in Assam and 15-February-2024 to 18-February-2024 in Madhya Pradesh.
/45/	VKU-Appendix-1 of Field Assessment Checklist for Sample Selected by VVB for Energy Demand & Distribution Projects
/46/	Site visit Photographs/Evidences captured during onsite visit assessment team from 13-February-2024 to 14-February-2024 in Assam and 15-February-2024 to 18-February-2024 in Madhya Pradesh.
/47/	GPS Google earth software used for Location; Google Earth Pro
/48/	GPS Map Camera: Geotag Photos & Add GPS Location
/49/	ISO 14064-3:2019: Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements
/50/	ISO 14065:2020: General principles and requirements for bodies validating and verifying environmental information

/51/	ISO/IEC 17029:2019: Conformity assessment – General principles and requirements for validation and verification bodies
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2.3 Interviews

An on-site inspection/43/ was performed by the assessment team. However, the representatives of the PP were interviewed personally by assessment team from 12-February-2024 to 18-February-2024; i.e., Tables 06, 07, 08 & 09 provide a comprehensive overview of the onsite interview process/44/ conducted during the verification. These tables outline the personnel involved in the interviews, along with their respective roles. The interviews specifically targeted individuals responsible for monitoring the project activity, data collection and management, as well as those involved in the quality assurance and quality control (QA/QC) procedures & serve to identify the individuals interviewed and provide relevant information regarding their roles within the project. The key personnel interviewed during the opening meeting and closing meeting session of the onsite audit, are summarized in the below:

Table 06; Details of Personnel Interview/Focussed Group Discussion with Implementing Partner and Project Team in Madhya Pradesh

S.No	Date	Name and Role	Gender	Organization	Topic
1	15-February-2024 to 18-February-2024	Ravi Vishwakarma (Deputy Manager)	Male	EKI Energy Services Limited.	Description of the project activity, ownership, avoidance of double counting,
2		Monil Shrivastava (EKI Executive)	Male	EKI Energy Services Limited.	Emission reductions calculations Monitoring plan and monitoring arrangements Data recording, QA/QC procedures.
3		Gopal (Distribution Team)	Male	-	Random sampling procedures, Spot Audit procedures, Training of field staff
4		Pawan Patel (Distributor)	Male	Director, Aransh Agro	ICS operational status, commissioning details, project investment etc. Implementation Status, Training to maintain cookstove, Spot-checking mechanism, Documentation, Benefits of the project.

Table 07; Details of Personnel Interview/Focussed Group Discussion with Implementing Partner and Project Team in Assam

S.No	Date	Name and Role	Gender	Organization	Topic
1	13-February-2024 to 14- February-2024	Amit Sharma (Manager)	Male	EKI Energy Services Limited.	Description of the project activity, ownership, avoidance of double counting,
2		Bikash Uzarika	Male	Bibshikha	Emission reductions calculations Monitoring plan and monitoring arrangements Data recording, QA/QC procedures.
3		Monil Shrivastava (EKI Executive)	Male	EKI Energy Services Limited.	Random sampling procedures, Spot Audit procedures, Training of field staff ICS operational status, commissioning details, project investment etc.
4		Bhoben Neg	Male	Bibshikha	Implementation Status, Training to maintain cookstove, Spot- checking mechanism, Documentation, Benefits of the project.
5		Nipen Hazarika	Male	Bibshikha	

The topics covered during interview ranges from general features and implementation of project to technical details of the project like, distribution of cookstoves, annual follow-up visits to households, call over helpline number, process of Monitoring/sampling survey, internal audit and archiving procedures, grievance resolution process etc.

The assessment was based on the feedback received during onsite /43/ visit while interviewing /44/ the site personnel-end users which is coupled with the documentation in VKU.F62W.Field Assessment Checklist for Sample Selected by VVB for Energy Demand & Distribution Projects/45/. During Onsite Visit/45/, Assessment team also interviewed the local stakeholders/44/ and end users involved in the projects to verify the implementation of grievance mechanism and process of grievance resolution mentioned in the Monitoring

Report/1/ (refer section 1.11, & 2.2 of MR/1/) submitted by the PP. The assessment team confirmed the sustainable development claims and assessed the socio-economic impact of the project on the local community. Assessment Team also checked the records and observed that the PP provided opportunities for the locals to express their opinions and grievances, with efforts to resolve any issues through consultation with stakeholders. Assessment team thus verified all

the above statements via focused group discussions and personal interview/44/ with stakeholders and with end users/33/ as tabulated below. Each end-user household was installed with 01 stoves each:

Table no: 08: Details of Personnel Interview/Focussed Group Discussion with end users/beneficiaries

Topic of Discussion that was conducted with the end-users included:

- Evaluation of the baseline scenario
- On-site Interview on the number of project devices operating during the year y
- Amount of woody biomass consumed by improved cookstoves
- Operational status of cookstoves disbursed

S. No.	Date	Name of End-User	District	Village	Gender	Stove IDs of the End-Users
Acceptance samples undertaken randomly by VVB in State: Assam, District Udalguri						
1.	13-February-2024	Taslima Hussian	Udalguri	Ekrabari	Female	GHG-22D/0059288
2.	13-February-2024	Nirmala Das	Udalguri	Bangaligoan	Female	GHG-22D/0058228
3.	13-February-2024	Thiphri Daimari	Udalguri	Madhabgohain	Female	GHG-22D/0024312
4.	13-February-2024	Radhika Basumatary	Udalguri	Barigaon	Female	GHG-22D/0058713
5.	13-February-2024	Nashina Khatun	Udalguri	Norangapani	Female	GHG-22D/0065280
Acceptance samples undertaken randomly by VVB in State: Madhya Pradesh						
6.	15-February-2024	Mathura Bai	Dhar	Pipaliya	Female	GHG-22D/0392634
7.	15-February-2024	Kelash Goba	Dhar	Sanghvi Rayanpada	Female	GHG-22D/0278861
8.	15-February-2024	Bhavna	Dhar	Mehtakhedi	Female	GHG-22D/0147094
9.	15-February-2024	Govind	Dhar	Bamansata	Female	GHG-22/L1/0457515
10.	15-February-2024	Ganesh Patidar	Dhar	Dedala	Female	GHG-22D/0144885

11.	16-February-2024	Baisingh	Jabalpur	Mohni	Female	GHG-22/L1/0588406
12.	16-February-2024	Mano Bai	Jabalpur	Kohla	Female	GHG-22/L3/0448640
13.	17-February-2024	Amar	Dindori	Silthar	Female	GHG-22/L1/0512499
14.	17-February-2024	Lakhan	Dindori	Gunjiyari, Bhodasi	Female	GHG-22/L3/0573854
15.	17-February-2024	Hemant	Dindori	Kewlarda	Female	GHG-22/L3/0585591
16.	17-February-2024	Sudama	Dindori	Sarasdoli	Female	GHG-22/L2/0557185
17.	17-February-2024	Daudyal	Dindori	Lalpur	Female	GHG-22/L3/0602452
18.	17-February-2024	Gend	Dindori	Jarhanejhar	Female	GHG-22/L3/0534142

Assessment team shared a VKU.24W. Onsite Audit and Sampling Plan for Verification Activity version 01 with an agenda to visit all 18-sample selected by VKU's assessment team as a part of acceptance sampling. VVB has chosen Sample size (n) = 18 (Households) with acceptance number (c) as 1. Wherein, Producer risk is 10% and Consumer risk is 10%. AQL = 1% and UQL = 20% which is in line with paragraph 32 & 33 of the Standard: Sampling and surveys for CDM project activities and programmes of activities, version 09.0. These samples were chosen randomly using a random number generator /38/to avoid any biasedness.

Table No 09; Details of Local Villager/Stakeholders of volunteered for Personnel Interview/Focussed Group Discussion during onsite visit.

S. no	Name	District	Topic of Discussion
1.	Sourabh Singh	Jabalpur	Grievance Mechanism redressal Annual follow-up visits to households
2.	Nohar Penduram	Dindori	Spot check visit Training about the usage of cookstove
3.	Subham	Dindori	Impact of using high efficiency ICS cookstove replacing Baseline stove

The VKU Assessment Team meticulously documented the information obtained during the interview with site personnel /44/. This data was recorded using VKU's dedicated form, specifically VKU.F46W, known as the Attendance Sheet of Onsite Audit/41/. Similarly, the interviews conducted with selected end-users were individually documented in VKU's specialized form called VKU.62W: Appendix-1 of Field Assessment Checklist for Sample Selected by VVB for Energy Demand & Distribution Projects/45/. Through a comprehensive process involving documentation, desk review, document verification, and interviews with site personnel and end-users of the distributed cookstoves, the VKU Assessment Team affirms that no negative comments were received during the on-site interviews conducted by the team. For further details, please refer to section Local Stakeholder Consultation Apart from the monitoring survey, VVB has also interviewed the end user and confirmed regarding the baseline cookstove used prior to the implementation of the project stove. Furthermore, through document review and end user agreement signed by the end-user/30/. Verification team could verify that all instances replacing the baseline cookstoves that comply with the requirements to use efficiency of at least 25%¹ or above as per the manufacturer's specification in the applied methodology/12/.

2.4 Site Visits

VKU audit team visited the households who has received the cookstoves for an onsite inspection from 12-February-2024² to 14-February-2024 in Assam and 15-February-2024 to 18-February-2024. The sampling approach employed by the assessment team for selecting the samples for the onsite visit is explained below:

PP's sampling approach:

PP has performed simple random sampling plan. For measurement/monitoring of two parameters based on a representative sample. The simplified approach proposed in option (b) under Section 8.4 of the methodology is used for determining the minimum sample size in which case compliance with 90/10 confidence precision is not obligatory. Hence there is no obligation for VVB to assess the confidence precision check, as a simplified and conservative method is used by PP to perform ICS monitoring survey. This approach is referred by PP during first verification and is approved by VCS during the last Validation-Verification and the documents are uploaded on the project's webpage.

¹ As per Manufacturer Specification Efficiency of the project stove is 36.42%, which is higher than 25%.

² It is to note that assessment team travelled to project site in Assam on 12th visited the sample households on 13/02/2024

The project involves the distribution of ICS throughout the project area thereby replacing traditional cooking devices. The population is homogeneous in nature i.e., common technology with similar operating characteristics and dispersed in the country. Since the characteristics of the population (for example quantity of biomass consumed) are more similar. Therefore, a simple random sampling technique is used to calculate the samples. Samples were drawn by using the random number generator.

To determine the parameters, sampling involved the following approaches (outcome in brackets):

N_{y,j,j}	Visual inspection of the premises to see if ICS is operational and in use. Interview with the end user if required to verify that ICS is still in use (Yes/No)
B_{y=1, new, l,j, survey}	Interview with the end user and estimate the daily consumption of woody biomass of ICS (Weekly/Daily consumption of woody biomass)

Sample Size

A simplified approach was used for determining the minimum sample size for parameters listed under Section 9.2 of the methodology in which case it is not requisite for the sample size to meet confidence/precision requirements.

The project proponent chooses to use the same sample to monitor both parameters. According to the Standard for sampling and surveys for CDM project activities and programme of activities³, if there is more than one parameter to be estimated, then a sample size calculation should be done for each of them. Then either the largest number for the sample size is chosen as a sampling effort with one common survey (employing the instructions mentioned in section 8.4 serial number © of the applied methodology) dated from 03-January-2023 to 27-February-2023, or separate sampling efforts and surveys are undertaken for each parameter. Therefore the project proponent samples a combination of two parameters i.e. N_{y,j,j} and B_{y=1, new, l,j, survey} in the same sample. Sampling more than one parameter within the same sample (household) helps reduce travel needs for monitoring and the associated costs. PP thus keeping in adherence with both CDM standard and applied methodology took a larger sample of i.e., 300 each for Assam & Madhya Pradesh using a randomiser with 20% oversample/buffer samples for the monitoring survey.

Development of the Verification/Sampling Plan:

The audit team has diligently documented its verification and sampling plan, ensuring a comprehensive approach to gathering evidence. The verification plan has been formulated by considering crucial elements of the verification process, aligning with the criteria of engagement. The plan takes into account and effectively addresses the following aspects:

³ https://cdm.unfccc.int/sunsetcms/storage/contents/stored-file-20210531160756223/Meth_Stan05.pdf

- 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-

To ensure a comprehensive, transparent, and timely execution of the assessment task, the team leader has carefully crafted a detailed sequence of events that encompasses all the necessary steps to arrive at a substantiated final opinion. This meticulous planning allows for a systematic and organized approach to the assessment, ensuring that no crucial aspects are overlooked or neglected. In addition to the structured sequence of events, the team has implemented various tools and methodologies to facilitate the assessment planning process. These tools serve as aids in gathering and analysing the required information, ensuring the effectiveness and accuracy of the assessment. This approach guarantees that all relevant factors are taken into consideration and that the assessment is conducted in a rigorous and objective manner.

Table 10: Step 1- Identification of Materiality threshold

Check the relevant box against applicable threshold level	Threshold as per Section 4.1.10 of VCS Standard v4.6/5/	Related to
☒	1%	Quantitative materiality, as per reporting standards, dictates that the threshold for materiality concerning the aggregate of errors, omissions, and misrepresentations, either individually or in combination, for any reported value in relation to total reported GHG emission reductions and/or removals assets, should not exceed one percent. In other words, discrepancies below this one percent threshold are considered immaterial and do not significantly impact the overall reporting accuracy. The verification of the stated materiality threshold is conducted through the PP's sampling survey (referenced as /20/) and the acceptance sampling performed by the assessment team. These assessments revealed that the proportion of non-working stoves observed was lower than anticipated, leading to a reduction in uncertainty. Based on these findings, the reported results were accepted as valid and in compliance with the established materiality criteria.

Table 10.1 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 Joint PD & MR	To mitigate the risk associated with the project claims, a thorough review of the VCS Joint project description & monitoring report (Joint PD & MR) and

				Monitoring Plan, in alignment with VCS requirements, will be conducted. This review will ensure that the claims are consistent and compliant with the established VCS guidelines as stated in VCS standard version 4.6 and adopted methodology for the project i.e., VMR0006, version 1.1. Due to the thorough assessment of the systems in place through extensive interviews, documentation review the Assessment Team ensured that the risk due to non-compliance of monitoring is reduced within the uncertainties of the sampling guideline and methodology. Furthermore, to verify the plausibility of the monitoring parameters, project-specific evidence related to the host country/region Assam and Madhya Pradesh were cross-checked. This included interviews with relevant stakeholders such as end-users and beneficiaries, who can provide valuable insights and feedback on the project's effectiveness. Additionally, the Verification team has conducted interviews with the Promoters (referenced as /44/), which confirmed that the monitoring procedures were implemented according to the registered monitoring plan (referenced as /03/). By employing these rigorous review processes and verification
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				activities, the project can address and mitigate any potential risks and ensure the accuracy and reliability of the reported data and claims.
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	To mitigate the associated risks, a comprehensive review of the project claims stated in the VCS Joint project description & monitoring report (referenced as /03/) were conducted. This review helped in assessing the claims against VCS requirements to ensure compliance and accuracy. The Assessment Team has performed a detailed assessment of baseline delineation as per the requirements of methodology and registered Joint PD & MR in the latter part of this report i.e., section 3.4. Furthermore, background documents such as the monitoring survey report (referenced as /20/), which includes country-specific non-renewable biomass (f_{NRB}) studies, were cross-checked with project-specific evidence from the host country/region. This process helped verify and validate the claims made in the project documentation. Additionally, interviews with relevant stakeholders (referenced as /44/) were conducted to gather insights and perspectives from those involved in or impacted by the project. These

				interviews help provided valuable information to further assess the validity of the claims and ensure a comprehensive understanding of the project's performance. Regarding leakage, the default value of 0.95, as outlined in the specified methodology (referenced as /12/), will be considered. This default value accounts for any potential leakage and ensures accurate calculations and assessments. By undertaking these measures, the project can effectively mitigate risks, enhance transparency, and ensure the reliability and credibility of the reported claims.
3.	Accuracy of the monitoring survey	High	Inadequately delineated monitoring plan may lead non-compliance	To mitigate the risk associated with the accuracy of the monitoring plan, several measures were taken. These include: 1. Reviewing the monitoring survey report (referenced as /20/) and the VCS Joint project description & monitoring report (Joint PD & MR) (referenced as /03/). This review will assess the alignment of the monitoring plan with the reported data and claims, ensuring consistency and accuracy. 2. Ensuring compliance with VCS requirements. The monitoring plan was evaluated to ensure it meets

				the standards and guidelines set by VCS. - Assessing the sampling tool applied. The appropriateness and effectiveness of the sampling methodology used in the monitoring plan was examined to ensure reliable and representative data collection. - Conducting onsite interviews with the Project Proponent (PP), their associates, and end-users. These interviews provided an opportunity to verify the feasibility and appropriateness of the monitoring plan. Feedback from stakeholders involved in the project helped validate the accuracy of the data collected and the effectiveness of the monitoring procedures. By implementing these measures, the project can mitigate the risk associated with the accuracy of the monitoring plan and ensure that the reported data and claims are reliable and consistent with the established guidelines and requirements.
4.	Competence of personnel involved in conducting monitoring like surveys	Medium	Interview of the personnel involved and check the training records conducting such monitoring.	To mitigate the risk associated with monitoring surveys, the following steps were taken: Reviewing the training records (referenced as /35/) of the personnel responsible for conducting the surveys.

				This review ensured that the individuals involved in the monitoring process have received appropriate training and possess the necessary skills and knowledge to carry out accurate and reliable surveys. 2. Following the defined monitoring responsibilities. The roles and responsibilities of the monitoring team be clearly defined and adhered to throughout the survey process. This includes ensuring that all required data is collected, recorded, and analysed in a consistent and systematic manner. 3. Verifying the training records during interviews with relevant stakeholders (referenced as /44/). By conducting interviews, the validity of the training records was confirmed, and any discrepancies or concerns can be addressed. By conducting a thorough review of the training records/35/ and verifying them through interviews, the project can mitigate the risk associated with monitoring surveys. This approach ensures that trained personnel are involved in the survey process and that they follow the established monitoring responsibilities, thereby
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				enhancing the reliability and accuracy of the collected data.
5	Sampling	High	The major risk associated with sampling in a large-scale cookstove project is the potential for sampling bias, where the selected sample does not accurately represent the entire population. This can lead to incorrect conclusions about the project's performance.	1. Measurement Errors: Errors in measuring emissions reductions from cookstoves can lead to inaccurate results. This risk can be mitigated by ensuring that the validation and verification body (VVB) uses calibrated equipment and follows standardized measurement procedures. 2. Data Accuracy: Inaccurate data collection or reporting can impact the credibility of emission reductions. The VVB can mitigate this risk by conducting thorough data validation and verification checks. 3. Non-compliance: Failure to comply with project requirements or methodologies can lead to invalidation of emission reductions. The VVB can mitigate this risk by ensuring that the project adheres to all relevant standards and guidelines. To mitigate this risk, the VVB must use random sampling techniques and ensure that the sample is representative of the entire population. Regular audits and reviews can also help identify and correct any sampling biases.

Sampling Plan:

Due to a large number of project activity instances in both Assam & Madhya Pradesh it is impractical to assess each one individually. To overcome this, the verification team used appropriate sampling methods for assessment. These methods are carefully selected to ensure statistical validity and reliability. The team documents and explains the chosen sampling methods in detail, providing transparency and clarity to the verification process. The number of instances included in the project, eligible for monitoring, and the generation of Verified Carbon Units (VCUs) is determined proportionally based on the compliance rate observed among the sampled instances. This approach allows for a representative assessment of the project activity while maintaining efficiency and accuracy in the verification process.

☐	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., 18, acceptance number (c) = 1) calculation is provided below.

AS: Acceptance Sampling

VKU's Assessment Team has diligently employed a acceptance sampling methodology during the onsite interviews as an integral part of their assessment process, in strict accordance with the specifications outlined in paragraph 26 of the Standard for Sampling and Surveys for CDM project activities and programmes of activities, Version 09.0/15/. The team has consciously opted for acceptance sampling, a well-established technique that facilitates a systematic and representative sampling of project instances. By attentively adhering to these sampling guidelines, VKU's Assessment Team ensures a robust, accurate, and comprehensive assessment of the project activities. thereby upholding the highest standards of evaluation.

From the PP's sampling survey sheet assessment team by acceptance sampling has opted for **AQL of 01% and UQL of 20%; producer risk of 10% and consumer risk of 10%** as per VVBs professional judgement (based on the experience for the similar kind of other verification projects in same Technical area 3.1) thus keeping in-line with the para 30 and para 31 of Sampling and surveys for CDM project activities and programme of activities version 09.0/16/ in determining the VVB's selected sample size of **18 with acceptance number (c) as 1**. Random samples from the sampling survey done by project participants were randomly selected as per the sampling standard version 09 & sampling guidelines version 4.0. VVB has physically witnessed all 18 random samples (Each household as 01 Improved cookstove) and confirms that all the stoves where in operation as per the PP's data. This is also in line with VKU's internal procedure i.e., VKU-Sampling Plan Method and Guidance/39/.

It must be noted that the samples are already taken from the samples of the PP. Under this grouped project activity EKI has distributed 24,996 ICS in Assam and 126,158 ICS in Madhya

Pradesh, a sample survey of 300 households in Assam and 300 household in Madhya Pradesh has been collected keeping the survey larger and conservative. This has been done by PP as per guidelines/simplified approach stated in section 8.4 serial number (b) for the monitoring survey of the applied methodology VMR0006 version 1.1.

The monitoring survey was performed by a field team from 03-January-2023 to 27-February-2023 for Madhya Pradesh and from 28-January-2023 to 16-February-2023 for Assam, the survey households were chosen from the potential ICS beneficiaries using simple random sampling approach.

As per registered PD, the PP has chosen to conduct the monitoring survey of the said parameters i.e., $N_{y,j,k}$ (Number of project devices of type i and batch j operating during year y) & $B_{y=1,new,l,j,survey}$ (Quantity of woody biomass used by project devices in tonnes per device of type i. and batch j) Biennially (at least once in two years). Therefore, the monitoring survey conducted from 03-January-2023 to 27-February-2023 for Madhya Pradesh and from 28-January-2023 to 16-February-2023 for Assam is applicable to the current monitoring period & is in adherence with the guidelines stated in the applied methodology & registered PD-MR. Further it is to be noted that the PP has referred the Section 8.4 option (b) for estimating the sample size for the monitored parameters in which case compliance with 90/10 confidence precision is not obligatory & thus samples was selected in line with the guidelines provided in methodology. The frequency of monitoring of each of the monitored parameters taken at validation & 1st verification has been kept in line with applied methodology VMR0006 version 1.1 stated in guidelines for each for the monitored parameters.

The project involves distribution of ICS throughout the project area thereby replacing traditional cooking devices. The population is homogeneous in nature i.e., common technology with similar operating characteristics but dispersed i.e., distribution of ICS is spread across State Madhya Pradesh and State: Assam of Host Country: India. Since the characteristics of the population (for example quantity of biomass consumed) are more similar. Therefore, a simple random sampling technique is used to calculate the samples. Samples were drawn by using the random number generator. /38/ The assessment team performed acceptance sampling based on the sampling guidance and picked 18 random ICS samples (Each household received 01 Improved cookstove) in random using randomiser that is representative of the sampling frame i.e., cookstoves distributed across state Madhya Pradesh and Assam.

The sampling plan implemented by the PP is in accordance with the applied approved monitoring methodology /12/ and the VCS Joint PD & MR /03/. The PP has appropriately performed simple random sampling procedure in line with the applied methodology VMR0006 version 1.1/12/. Survey has been carried out. As the VCS Joint PD & MR /03/ mentions the option for simple random Sampling, so it was found appropriate to the verification team. The sampling surveys/20/ have been carried out by the well-trained personnel. Further, preparedness for conducting survey was adequate and survey plan was robust. Further a brief description has been provided in section 4.4 of this report.

**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		L10%		10%		L10%		L10%	
Consumer Risk		5%		10%		L15%		220%	
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

The verification team has chosen an AQL (Acceptable Quality Level) of 1.0% and a UQL (Unacceptable Quality Level) of 20%, ensuring a producer risk of 10% and a consumer risk of 10%, based on the VVB's professional judgment in accordance with the guidelines outlined in para 30 of the Sampling and Surveys for CDM Project Activities and Programmes of Activities v09.0. It must be noted that higher acceptable quality level (AQL) i.e., 1% was chosen over 0.5% since this is the second monitoring period of the project activity. The level of failures or non-responsiveness based on the earlier monitoring period was zero on the identified samples by the PP. The relative margin of error obtained is also less than 10%. Based on this prior information available at the time of second monitoring period, the AQL was chosen at 1%. These priors provided the necessary inputs for the professional judgement.

To determine the sample size, the VVB selected 18 household samples (each household received 01 ICS) with one-acceptance number (c), utilizing a random number generator software from the monitoring survey provided by the client.

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 18 random household samples with respect to on-site & document review. This assessment of the selected samples was done to ascertain the implementation status of the 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 joint project description & monitoring report. 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 situations in 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 emission reductions that will impair the estimate of emission reductions;
- Issues identified in a FAR during previous assessment i.e., in validation or verification report to be cross verified during verification have not been resolved by the project participants.

A clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met. A forward action request (FAR) is also raised in cases where any required deviation/information is not fulfilled in current verification and thus needs to be taken up in consequent verification for better transparency thus holding the applicability of the methodology eligible to the project activity and there is no impact of the same on additionality, baseline scenario & emission reduction calculation of project.

Keeping in line with the Clauses 4.1.21 of the VCS Standard Version 4.6, Assessment team has documented a summary of total **13 findings** that include, **00 FARs, 06 CLs and 07 CARs** were raised during this verification which were closed successfully and details are provided under Appendix B of this report.

2.5.1 Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impair the estimate of emission reductions; Forward Action Requests

Based on the review of the previous Joint VCS Validation/Verification Report, VVB hereby confirms that no FAR was raised which needs to be closed during this verification and no FAR has been raised during current verification, (01-January-2023 to 31-December-2023; Inclusive of both start and end dates).

2.6 Eligibility for Validation Activities

VKU has not undertaken any validation activities as part of the verification and does not hold accreditation for validation of any relevant sectoral scope. The validation for the said project “VCS 2944” was done prior to this verification by some other VVB. Hence this section is not applicable. 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/44/ and interview with the PP during site visit/43/

Assessment team assessed the VERRA's website at the time of submission <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. Although, we do hold the accreditation for verification under the Technical Area 3.1 Energy Demand. However, VKU has previously completed some verification projects in the same relevant scope. It is to also confirm in this section that as there are no new instances added by PP during the current monitoring period. Hence the requirement to specify & elaborate about the eligibility criteria is not required to be stated and is not assessed by the assessment team.

3 VALIDATION FINDINGS

3.1 Methodology Deviations

There is no methodology deviation identified or requested by PP during the current monitoring period from 01-January-2023 to 31-December-2023 (Inclusive of both start and end dates). Also, no methodology deviations identified during the previous Joint Validation & Verification which was confirmed from the previous VCS Joint Validation & Verification Report /04/ easily accessible to the assessment team on the Verra webpage.

3.2 Project Description Deviations

During the current monitoring period, no discrepancies or deviations in the project description have been identified. This finding aligns with the absence of any deviations detected during the VCS Joint Validation & Verification process /04/. To ensure accuracy and compliance, the assessment team cross-references the project webpage /16/ to verify the consistent and accurate portrayal of the project's description.

3.3 New Project Activity Instances in Grouped Projects

As there are no new instances added by PP during the current monitoring period this section is not applicable.

3.4 Baseline Reassessment

The project activity doesn't undergo any baseline reassessment during the monitoring period.

4 VERIFICATION FINDINGS

4.1 Project Details

Based on the on-site assessment and monitoring results conducted by the audit team, it has been verified that the project implementation and operation are in compliance with the Joint PD & MR (Joint project description & monitoring report) /03/. The primary objective of the project is to distribute efficient and improved cooking stoves (ICS) to rural households in Madhya Pradesh & Assam states of Host Country: India. The improvement in thermal efficiency of the cooking stoves is achieved through proper design of the combustion chamber and ensuring effective air flow during the cooking process. This design optimization enables better heat transfer and reduces energy loss during cooking. In both Assam & Madhya Pradesh the baseline cooking practice predominantly involves the use of conventional cooking devices that rely on firewood. By introducing wood-fuel ICS, the project aims to replace the traditional wood-fuel method and thereby reduce greenhouse gas (GHG) emissions. The use of wood-fuel ICS results in improved heat transfer to the cooking utensils, reducing the amount of non-renewable biomass fuel required for cooking.

Overall, the project's approach contributes to mitigating GHG emissions by promoting the adoption of more efficient and sustainable cooking practices in rural households of Madhya Pradesh & Assam states of Host Country: India.

The assessment team also conducted a verification of the project location. This was accomplished through a desk review using Google Earth Pro/47/ and during the onsite visit verified the location of each end-user household using GPS map camera software/48/. The latitude and longitude coordinates specified in the registered VCS Joint PD & MR/03/ which when checked through Google Earth/47/ were confirmed to be accurate.

PP obtained the geographic coordinates of the individual household while distributing the improved cookstove as confirmed from the PP while the onsite visit during the personnel interviews. The same was cross-checked by the assessment team during the desk-review by cross-checking the project database. PP has submitted a KML file to the VVB required as per section 3.11 clause 3.11.1 of VCS Standard Version 4.6. PP has submitted KML file /32/ to the VVB marked with geodetic polygons to delineate the project's geographic areas. The files were cross-verified by the VVB and are found in-line with the VCS Standard version 4.6. (Finding was also raised in this respect in [CL#01](#) and was successfully closed by the VVB) Refer the pictorial depiction of the KML below for the districts in which the ICS was distributed across Madhya Pradesh and Assam states of Country: India

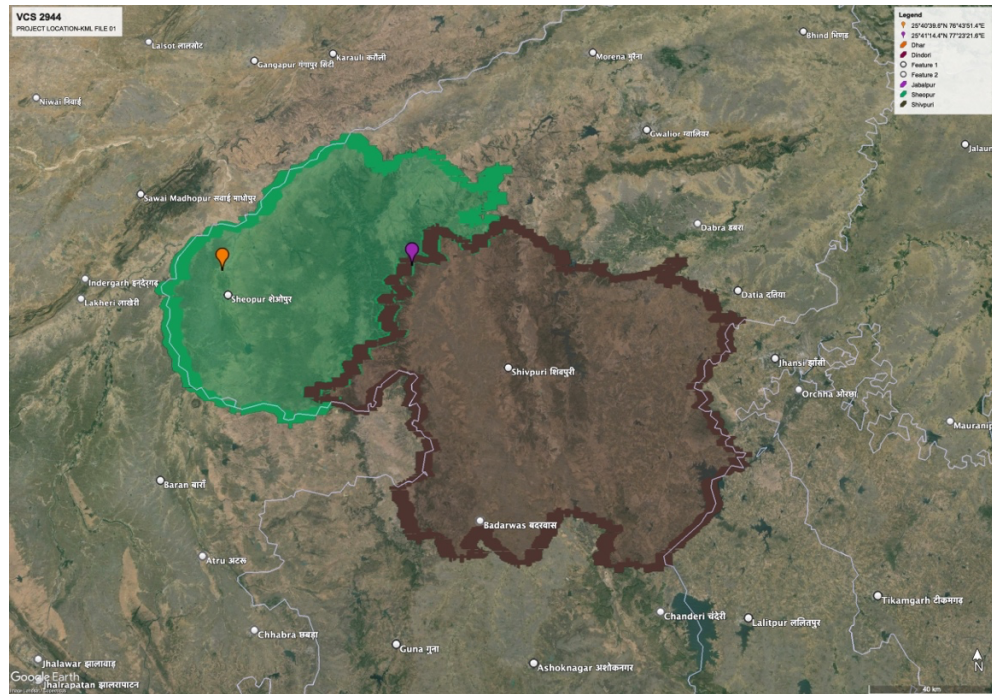


Figure 01 & 02: Project Boundary of 03 Districts where the project implemented in Madhya Pradesh as verified through Google Earth using KML file



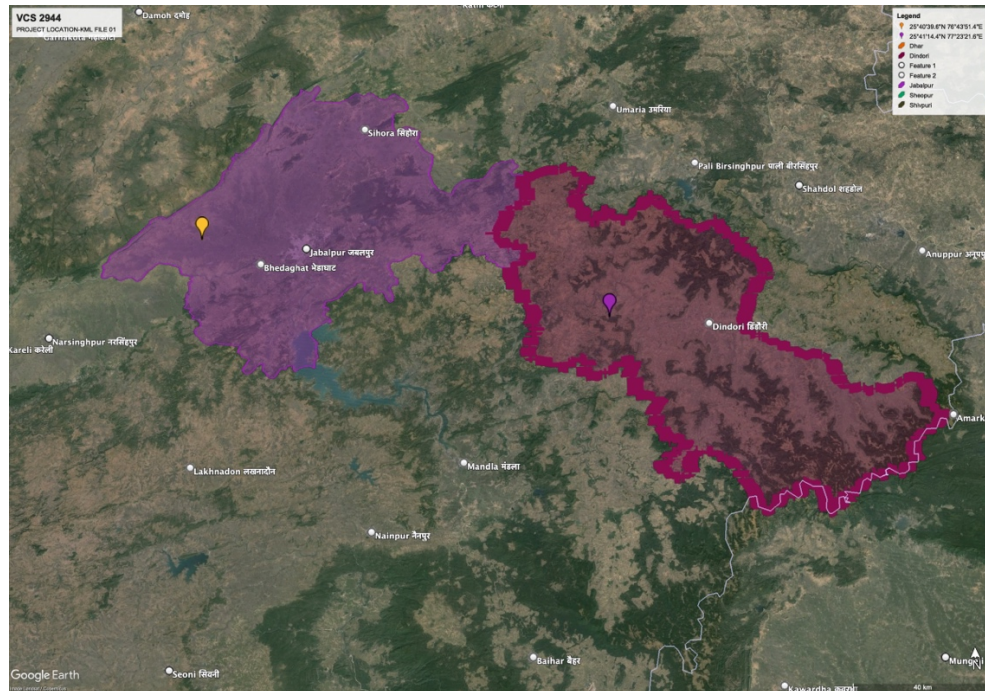
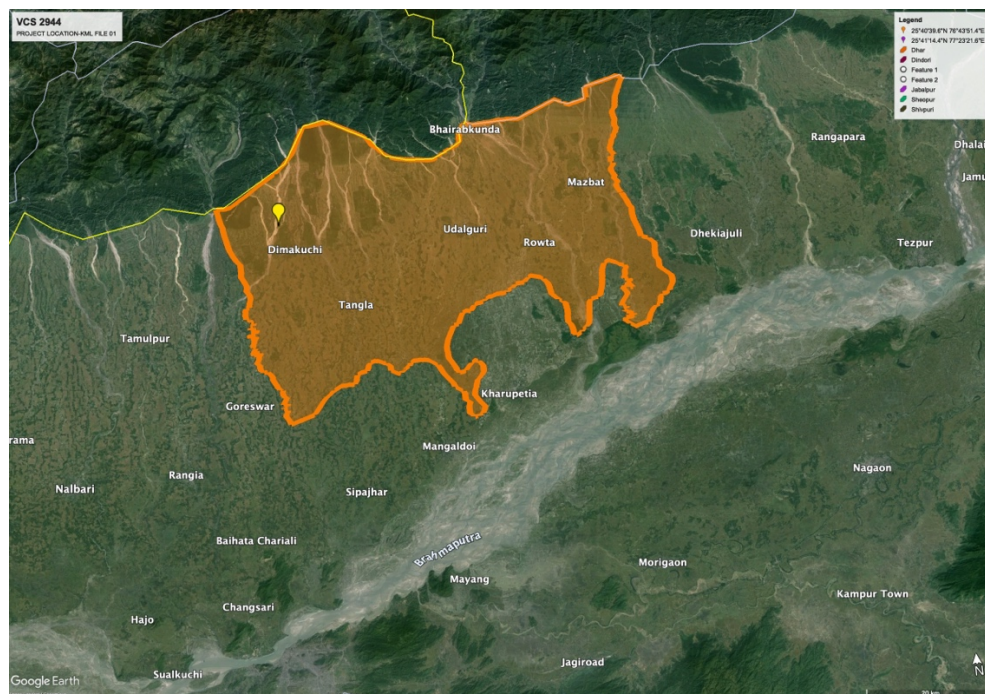


Figure 03 & 04: Project Boundary of 03 Districts where the project implemented in Madhya Pradesh as verified through Google Earth using KML file



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 EKI Energy Services. Bishikha LLP, Enviro Queen Pvt Ltd, JPS Enterprise, and Aransh Agro are associated

with EKI energy for ICS distribution in Assam and MP and GHG Reduction Technologies Pvt Ltd is the manufacturer of the ICS deployed under the project activity.

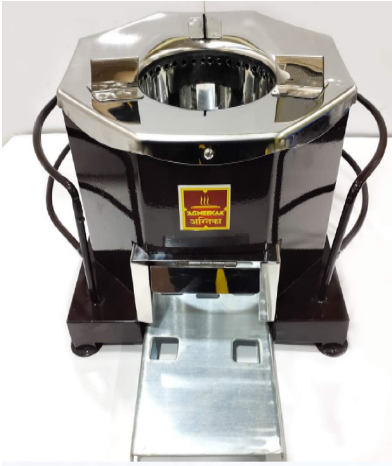
Users transfer the ownership of carbon credit via end user agreement /33/. The overall monitoring will be managed by the project implementer EKIESL. The team visits the site regularly to ensure proper use of stoves, take feedback and make the end user aware of their health and environmental sustainability as well as the benefits of saving time and money with the use of ICS. EKI Energy Services Limited received carbon rights from user as per user agreement. /33/ The operational and management structure is verified from document review and on-site interview /43/. The spot-checking audit documents as well as training to technical staff was further checked and confirmed. The first project activity instance was implemented on 11-May-2022 under this grouped project activity and EKI has distributed 24,996 ICS in Assam and 126,158 ICS in Madhya Pradesh.

The latest monitoring survey for the grouped project activity was conducted from 03-January-2023 to 27-February-2023. The emission reductions achieved in this monitoring period are 705,715 tCO₂e during the monitoring period from 01-January-2023 to 31-December-2023 (both days included).

The district wise distribution in both Assam & Madhya Pradesh is provided in MR & Joint PD-MR for easy interpretation about distribution of cookstoves and the implementation of the project activity. All ICS taken account under the project activity are commissioned. All the data recorded during stove registration and monitoring survey process was captured via handheld digital devices (smart phones and/or tablets). The information collected is then transferred to a centralized online project database/21/

VCS 2944 ICS quantity district wise		
S.no	District	Quantity of cookstoves
1	Dhar	44,845
2	Dindori	45,831
3	Jabalpur	11,063
4	Sheopur	16,681
5	Shivpuri	7,738
6	Udalguri	24,996
7	Total	1,51,154

Below Tables indicates the Technical Specification of ICS as per the brochure and confirmed by assessment team onsite visit.

TECHNICAL SPECIFICATION OF COOKSTOVE			
			
A)	Cook Stove Type/Category	AGNEEKAA ECO MINI STOVE MODEL NO. 4 SE	
		Natural Draft	
B)	Secondary Air Supply	Through Natural Draft	
C)	Stove Material Used	Body	Galvanised Iron Sheet
		Body Material Thickness	0.6 mm
		Combustion Chamber	Stainless Steel 202 grade
		Combustion Chamber material Thickness	1 mm SS 202 grade
		Insulation Material	Thermal Wool
		Insulation Material Thickness	6 to 8 mm
		Top Plate	Stainless Steel 202 grade
		Top Plate Material Thickness	1mm
D)	Physical Structure	External Dimension	Length: - 260mm
			Weight: - 260mm
			Height: - 248mm
		Combustion Dimension	Diameter: - 125mm
E)	Grate Thickness	2 mm Material HR Sheet	
F)	Weight Of the Stove	3.8 Kg	

G)	Type of Fuel Wood	Firewood 30 to 50 mm diameter	
H)	Feeding Process	Continuous Feeding Front Loading	
I)	Expected Life of Stove	7 Years	
J)	Guarantee /Warranty Period	1 Year	
K)	Box Dimension	Outer Side Box Dimension	Length: - 300mm
			Weight: - 300mm
			Height: - 270mm
L.)	Thermal Efficiency	36.42%	

Figure 05: Cookstove image shown below: AGNEEKAA ECO MINI STOVE MODEL NO. 4 SE

The technical specification was confirmed during the desk-review via the GHG Reduction Technologies Private Limited: Manufacturer's specification for Agneeka Eco-Mini Stove Model No 4SE Cookstove provided by PP to the assessment team. During site visit the cookstoves were physically inspected and the model number along with other technical specifications were confirmed.

Item	Evidence gathering activities, evidence checked, and assessment conclusion:				
Audit history	Audit type	Period	Program	Validation/ verification body name	Number of years
	Validation & Verification	11-05-2022 to 31-12-2022	VCS	LGAI Technological Center, S.A. (Applus+ Certification)	0.64 year
	Verification	01-01-2023 to 31-12-2023	VCS	VKU Certification	01 year
	Total	11-05-2022 to 31-12-2023	VCS		1.64 years
	Evidence gathering activities: Keeping in line with the requirements stated in ISO 14064-3: 2019 (E) section 6.1.3 & program requirement, the assessment team has performed the desk-review during the pre-engagement stage to confirm the duration of the current monitoring period, the last monitoring period & the crediting period of this project				

	activity. Apart from the desk-review the VVB also confirmed the audit history while performing the personnel interview & focussed grouped discussion with PP during the on-site visit. Evidence Checked: While contracting VKU to perform this verification, the PP shared the details for the project activity including the audit history i.e., (Details of crediting period, monitoring period & number of verification) thus initially itself VKU confirmed the audit history by cross-checking with the Joint Project Description & Monitoring Report/3/ & Joint Validation/Verification Report/4/ already approved by Verra and are accessible to the VVB on Verra's webpage. VVB's Conclusion: VVB would like to conclude that the above stated activities performed and evidences collected to confirm the audit history is in-line with the ISO 14064-03 /49/& program requirements which is deemed accurate and satisfactory to VKU's assessment team.
Double counting and participation under other GHG programs	Project's GHG Program Status, Cross-Verification of GHG Benefits & Rejection by other GHG programs: The project has not applied under any other GHG program except VCS for current monitoring period, 01-January-2023 to 31-December-2023 (Inclusive of both dates). The project is registered under VCS only with project ID 2944. This was confirmed by checking VERRA registry website and similar exercise was performed for CDM/GS/GCC/UCR registries with similar project title/capacity and Project Proponents but the assessment team was not able to trace any such project registered under any of the above stated registries or under any other similar mechanisms. Similarly, an exercise of independently searching for such project registration or claim for current monitoring period was performed for other GHG related benefits & based on both independent assessment and declaration submitted by PP/28/, the assessment team accepted the claim that there is no double counting from this project activity for current monitoring period. The Project is not rejected by other GHG programs. A declaration/28/ for the same is checked and found correct by the assessment team. The assessment team has also cross-checked the issuance records available on the Verra website and thus confirmed & ensured that the emission reduction generated from the project activity are not & will not be double counted hence accepted by the assessment team.

No double claiming with emissions trading programs or binding emission limits	The project is not included in an emissions trading program or any other mechanism that includes GHG allowance trading. Verification through Declaration: The PP declares through the declaration /28/ that Net GHG emission reductions or removals generated by the Project will not be used for compliance with an emissions trading program or to meet binding limits on GHG emissions in any Emission Trading program or other binding limits any specific monitoring period under two mechanisms.
No double claiming with other forms of environmental credit	The project has not sought or received another form of GHG-related environmental credit. Issuance Records Confirmation: The assessment team has also cross-checked the issuance records available on the Verra website and thus confirmed & ensured that the emission reduction generated from the project activity are not & will not be double counted hence accepted by the assessment team. The assessment team has also cross-checked the issuance records available on the Verra website and thus confirmed & ensured that the emission reduction generated from the project activity are not & will not be double counted hence accepted by the assessment team.
Supply chain (scope 3) emissions double claiming	VVB confirms the following: The project proponent(s) or authorized representative is not a buyer or seller of a product whose emissions footprint is changed by the project activities. After thorough examination of the project proponent's response in Section 1.11.3 of the Monitoring Report and review of additional documentation, we, as the Validation and Verification Body, confirm that the completion of this section regarding Scope 3 emissions is accurate, complete, and technically correct. Our determination is based on the following: MR Completion: The project proponent has correctly selected "No" to the question "Do the project activities affect the emissions footprint of any product(s) (goods or services) that are part of a supply chain?" This selection is appropriate given the nature of the project activities. Justification: The provided justification in the MR is technically sound and accurately reflects the project's activities. It clearly states that the distribution activities do not alter the cookstoves' emissions footprint and that the project does not modify the product in a way that changes its emissions profile.

	3. Project Scope: We have verified that the project's activities are limited to the distribution of pre-manufactured improved cookstoves to end-users, without any modification to the stoves. 4. Product Integrity: Our on-site inspections and document reviews confirm that no alterations are made to the cookstoves during the distribution process. The stoves reach end-users in the same condition as received from manufacturers. 5. VCS Compliance: The response and supporting documentation are in full compliance with VCS Monitoring Report Template v4.3 requirements and broader VCS guidelines on Scope 3 emissions reporting. 6. Conservative Approach: By explicitly disclaiming any impact on Scope 3 emissions, the project maintains a conservative stance in emission reduction calculations. Conclusion: Based on the completed Monitoring Report section and the additional declaration provided, we can assert with high confidence that: 1. The project proponent's response in Section 1.11.3 is technically correct and fully compliant with VCS requirements. 2. The project activities do not affect the emissions footprint of the cookstoves in a manner that necessitates Scope 3 emissions reporting. We confirm the that this section is compliant, accurate, and appropriately conservative in its approach to emissions accounting. The project proponent has demonstrated a thorough understanding of VCS requirements and has provided comprehensive documentation to support their position on Scope 3 emissions. This approach meets the standard reporting requirements, providing transparency and credibility to the project's emissions accounting.
Sustainable development contributions	As per the VCS Standard Version 4.6 of Appendix 03: Document History and Effective dates, For V4.2, serial number 04 states that “it is required by project proponents to demonstrate contributions to a minimum of three SDGs in all monitoring reports verified after the effective date. Effective immediately for all projects that request registration on or after 20-January-2023. Projects that request registration before 20-January-2023 shall demonstrate contributions to at least three SDGs by 20-January-2025”. This is project's second periodic verification of first crediting period for the Monitoring Period 01-April-2022 to 31-March-2023 (Inclusive of both start and end dates), Since this project is registered before 20-January-2023, so the Project Proponent (PP) must demonstrate contributions to at least three SDGs by 20-January-2025. For the current monitoring period, the PP is voluntarily showing contributions to 06 SDGs, as indicated below:

1. **SDG Target: 1.1; Proportion of population below the international poverty line:** The implementation of the ICS cookstove dissemination project in Assam & Madhya Pradesh has resulted in a significant increase in the total monthly income of 36 participants' (i.e., people involved in stove manufacturing, distribution & monitoring) to INR 12,000 – 25,000, bringing them above the international poverty line. Contribution over project lifetime has contributed to the total monthly income of $589 \times 36 = 625$ participants' (i.e. people involved in stove manufacturing, distribution & monitoring) to INR 12,000 – 25,000, bringing them above the international poverty line. The assessment team assessed this with in-line with the baseline for international poverty line. A CL#01 has been raised in this regard. Project Proponent referred to **Fact Sheet: An Adjustment to Global Poverty Lines from cited on World Bank website and can be accessed from here**
<https://www.worldbank.org/en/news/factsheet/2022/05/02/fact-sheet-an-adjustment-to-global-poverty-lines>

Hence VKU found the above claimed Project specific indicator: 1.1; Proportion of population below the international poverty line authentic & correct.

2. **SDG Target: 3.9: Project-specific indicator: number of users claimed the reduction in particulate matter emissions;** The implementation of the ICS cookstove dissemination project activities to decrease in particulate matter emissions. In the current monitoring period, the project activity continues to reduce the particulate matter in 151,154 households emitted during cooking thereby improving overall health outcomes and reducing burdens of disease. Overall also the contribution of this project towards this SDG is also the same. VVB conducted focussed group discussion with the end-users along with personal interviews while physically inspecting the cookstoves distributed. The assessment team also cross-checked the monitoring survey questionnaire where the end-user confirmed reduction in soot. The survey results indicate that the respondents perceived a noticeable decrease in smoke and soot levels around the cooking area after the adoption of the improved cookstoves. They also reported experiencing reduced levels of eye itchiness, which is commonly associated with cooking on open fires. During the on-site visit to Assam & Madhya Pradesh, the assessment team directly interviewed the end-users of the

cookstoves to gather their feedback on the cooking experience. The end-users confirmed that there was a significant reduction in smoke, and the improved cookstoves required less cooking time compared to the baseline stoves. As a result, the end-users reported an improvement in their health since the baseline stoves had adverse impacts on their well-being. Overall, the dissemination of the ICS cookstoves has not only contributed to a considerable decrease in particulate emissions but has also led to improved health outcomes for the beneficiaries, as validated through surveys and direct interviews with end-users. The same is evidenced from survey results. Hence VKU found the above claimed Project specific indicator: Reduction in particulate emissions authentic & correct.

3. **SDG Target: 7.1.2; Proportion of population with primary reliance on clean fuels and technology;** The implementation of the ICS cookstove dissemination project activity has augmented access to clean cooking technology by distributing a set of project stoves in 151,154 households. The assessment team confirmed the same from the project database /21/ submitted by the PP also during onsite visit, assessment team interviewed the end-users that confirmed the implementation of the cookstoves in their respective households and further explains the seamless implementation of the project activity in India i.e., distribution of fuel-efficient improved cookstoves (ICS) replacing the baseline wood burning cookstoves. As confirmed by interviewing the end-users recorded in VKU.62W: Appendix-1 of Field Assessment Checklist for Sample Selected by VVB for Energy Demand & Distribution Projects/45/ the ICS burn wood more efficiently thereby improving thermal energy transfer hence saving fuel. Cumulative contribution till the end of this monitoring period is also 151,154 households. Hence VKU found the above claimed Proportion of population with primary reliance on clean fuels and technology authentic & correct.

4. **SDG Target: 8.3.1 Project specific indicator: Total Number of jobs created.** The implementation of the ICS cookstove dissemination project activity in Assam & Madhya Pradesh has provided a total of at least 36 individuals direct and indirect employment under the project activity during the current monitoring period in Country for various activities related to project implementation, maintenance, and monitoring.

However, the cumulative contribution till the end of this monitoring period as evidenced through the records submitted by the PP. The project activity has created job opportunities for 415 heads (Male:

Female: 335:80) in the ICS manufacturing unit and 254 heads (Male: Female: 211:43) in the ICS distribution and monitoring activity. The assessment team confirmed the above claimed SDG from the employment records submitted to VKU. Hence VKU found the above claimed total number of jobs for both male & female created as authentic & correct.

5. **SDG Target 13: Project Specific Indicator: Total greenhouse gas emissions per year;** With ICS cookstove dissemination through the project implemented activities lead to an emission reduction of 705,715 tCO₂e. in the current monitoring period that spanned from 01-January-2023 to 31-December-2023, including both the dates). Cumulatively till the end of this monitoring period is the project Prevented the release of 870,015 (164,300⁴ + 705,715⁵) tCO₂e into the atmosphere.

Assessment team evaluated the calculation of the emission reductions for this monitoring period in the ER sheet/2/ & also evaluated the application of correct methodology and formulae for this monitoring period with the registered methodology i.e., VMR0006: Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1. For last monitoring period (1st verification) VKU referred to the approved VCS verification and monitoring report available on the Verra's webpage and thus conforms that VKU found the above claimed Project Specific Indicator: Total greenhouse gas emissions per year; authentic & correct.

6. **SDG Target: 15.2.1 Progress towards sustainable forest management by increasing above-ground biomass in forests.** The implementation of the ICS cookstove dissemination project in the host country India and specifically to project implemented states (Assam & Madhya Pradesh) resulted in significant benefits. The project has contributed to the reduction of deforestation of 391,813 tonnes⁶ of woody biomass from forests surrounding the communities and reducing pressure on forest reserves. Cumulatively the project has contributed to reduce deforestation of 704,281 (312,468 + 391,813) tonnes of woody biomass from forests surrounding the communities and reduced pressure on forest reserves. The ER sheet /2/ has been referred by the VVB that

⁴ 1st Monitoring Period value of emission reductions.

⁵ 2nd Monitoring Period value of emission reductions.

⁶ This value can be cross-checked from the ER Sheet submitted by the PP.

	includes the information related to the estimation of savings of non-renewable biomass per HH under tab SDG 15. The improved efficiency of the ICS cookstoves allows for better combustion of wood, resulting in enhanced thermal transfer to cooking pots and ultimately fuel savings. This initiative not only helps curb deforestation in the host country (India) but also reduces health hazards associated with indoor smoke pollution. Additionally, the project has the potential to reduce the time spent by women and children on collecting firewood, enabling them to allocate more time for other activities. Overall, the ICS cookstove dissemination project in the host country (India) and specifically to project implemented area (Assam & Madhya Pradesh) has proven to be a valuable intervention with various positive outcomes. Hence VKU found the above claimed Progress towards sustainable forest management by increasing above-ground biomass in forests authentic & correct. 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/3/. The verification team from VKU assessed the implementation of these training programs during the onsite visit and interviews conducted with site personnel. They verified the training records present at the site, which were submitted by the client, to ensure that the staff members have received the necessary training. By conducting these training programs, the project activity ensures that its staff members are well-prepared, informed, and capable of carrying out their responsibilities effectively. This helps to maintain the safety of the project operations and ensures the accurate monitoring of emission reductions. In view of the information as verified above the assessment team is able to conclude that the project has been implemented as described in the project description/03/. All the above stated information was verified by VKU assessment team during onsite visit/43/ and site personnel interviews /44/ and thus found to be acceptable.
Additional information relevant to the project	The assessment team confirms that as per information provided in the monitoring report submitted by the PP to the VVB of no commercially sensitive information has been excluded from the public versions of project documents & thus conforms with the VCS Program requirements on what may be excluded. The information was cross-checked by interviewing the PP representative during the personal interviews.

4.2 Safeguards and Stakeholder Engagement

4.2.1 Stakeholder Identification

There has been no change in the stakeholder's make up since validation.

Stakeholder Identification	VVB confirms on basis of desk-review of project documents, & interview with onsite personals that stakeholder's identification was as per the VCS Standard, v4.6, paragraph 3.18.1, which emphasizes the consideration of user population significance and the extent of impact by project activities, the Project Proponent has identified household owners (end users), distributors, and their representatives as stakeholders. This decision was made based on the substantial positive impact expected from the project activities. As per registered VCS PD-MR identification of households was done based on a general survey. A baseline scenario was calculated by assessing the number of households using mud or three-stone stoves and the potential for emission reductions by replacement of mud or three-stone stoves by ICS was checked. This ensures a correct approach confirming the required criteria for calculating the Quantity of woody biomass used by project devices in tonnes per device of type i as per applied methodology along with stakeholder identification. /27/
Legal or customary tenure/access rights	The manufacturer of the ICSs holds ownership of the factory and land-use rights, which have been granted through specific legal statutes, for their production facility. End-users possess rights to the ICS, secured through an end-user agreement established between the Project Proponent and the end-users, confirmed by the assessment team on basis of desk-review of project documents, & interview with onsite personals.
Stakeholder diversity and changes over time	The assessment team on basis of desk-review of project documents, & interview with onsite personals confirms that the project instances are situated in the states of Assam and Madhya Pradesh, known for their rich tapestry of social, economic, and cultural diversity. The project's impacts on stakeholder diversity over time are as follows:

	Social Diversity: The project promotes social inclusivity through community engagement for cook stove operation. The efficient use of firewood reduces the time spent by women and children gathering fuel, enabling them to allocate saved time to other productive activities. No negative impacts on social diversity have been identified. Cultural Diversity: The project encourages participation from individuals of diverse cultural backgrounds, fostering cultural harmony within the project location. No adverse effects on cultural diversity have been observed. Economic Diversity: The project contributes to the local economy by providing employment opportunities for both skilled and unskilled labour. No detrimental effects on economic diversity have been recorded.
Expected changes in well-being	The distribution of energy-efficient cook stoves in the project area has brought about substantial positive changes in various dimensions of well-being and stakeholder characteristics under the baseline scenario. Environmental benefits include a reduction in deforestation due to the efficient utilization of firewood and improved air quality, particularly reducing indoor smoke pollution and enhancing respiratory health. Social impacts involve time savings for women and children, empowerment of women through decreased daily workloads, and overall improvements in health. On the economic front, households are expected to experience direct financial benefits through fuel savings, and the project creates job opportunities, fostering economic development within the community. These changes collectively contribute to the project's overarching goal of promoting sustainability and enhancing the overall quality of life for stakeholders in the state of Madhya Pradesh.
Location of stakeholders	In the context of the project activity instances situated within the geographical boundaries of India, specifically in the states of Assam and Madhya Pradesh, anticipated positive changes in well-being and stakeholder characteristics include: End-User Well-being:

	• Time Saving: End-users experience improved well-being through time savings in wood collection and cooking activities. • Enhanced Health Impact on the end-user: The adoption of Improved Cook Stoves (ICSs) leads to less smoke and improved safety during cooking operations. Indigenous People's Well-being: • Employment Opportunities: Indigenous people in the project area benefit from increased employment opportunities arising from the manufacturing and distribution of ICSs. These expected changes underscore the positive impact of the project on the well-being of end-users and indigenous communities, aligning with improvements in time efficiency, safety, and economic opportunities. Furthermore, the Verification and Validation Body (VVB) has witnessed the photos and documents shared for the distribution campaigns conducted by the Project Proponent (PP), ensuring minimum efforts by the people in the distribution process. This distribution & project implementation & monitoring approach contributed to the identification of end-users as stakeholders.
Location of resources	In terms of the location of territories and resources owned or accessed by stakeholders, it can be stated that the end-user possesses ownership of their respective houses where Improved Cook Stoves (ICSs) have been installed. Additionally, the manufacturer of ICSs holds ownership of their factory. VVB confirmed the same by interviewing the end-users and also cross-checking the location during the physical visit. Also, it should be noted that as per PD the areas identified for ICS distribution are the ones where there was traditional cookstoves were used especially tribal areas.

4.2.2 Stakeholder Consultation and Ongoing Communication

Ongoing consultation	The process of registering complaint is mentioning below: It is to confirm that the assessment team has assessed the process of ongoing consultation mechanism during the onsite visit. The assessment team has performed focussed group discussion with the end-users to confirm about the communication channel if established with the beneficiaries. The implementation teams, the distributors & the project proponent representative were interviewed personally and following was confirmed. 1. End users can call the customer care number provided by the Project Proponent (PP) to register their complaints. This number, which is included in the Improved Cookstove (ICS) Card, is +91 7507000785. When a complaint is lodged through this customer care number, it is received and managed at the Head Office (HO) of PP located in Indore, Madhya Pradesh. 2. Alternatively, end users can get in touch with a well-trained representative from a distribution channel partner, who is often located near their communities, to record their complaint. These representatives visit the beneficiaries periodically and are equipped to handle such grievances. 3. End users also have the option of contacting field officers who visit beneficiaries. These field officers are tasked with soliciting any grievances, relaying them to the HO, and taking appropriate actions as necessary. As part of ongoing communication with local stakeholders, end users are informed about the grievance register kept at the HO of PP. This register serves as a formal record of complaints and ensures that all inputs are appropriately addressed.									
Date(s) of stakeholder consultation	<table><tr><th>Date of meeting</th><th>Village/Location</th><th>State</th></tr><tr><td>10-May-2022</td><td>Udalguri</td><td>Assam</td></tr><tr><td>04-July-2022</td><td>Dhar</td><td>Madhya Pradesh</td></tr></table>	Date of meeting	Village/Location	State	10-May-2022	Udalguri	Assam	04-July-2022	Dhar	Madhya Pradesh
Date of meeting	Village/Location	State								
10-May-2022	Udalguri	Assam								
04-July-2022	Dhar	Madhya Pradesh								

	19-September-2022	Sheopur,	Madhya Pradesh
	19-September-2022	Shivpuri	Madhya Pradesh
	09-October-2022	Jabalpur	Madhya Pradesh
Communication of monitored results	The monitoring results are communicated from the distributors to the end users through the distributor's representatives.		
Consultation records	The grievance register /31/ is a crucial tool in the project's communication and feedback loop. It is maintained by the distributors to record any input or grievance related to the project activity. During question-and-answer sessions with stakeholders, queries are noted and documented in this register, ensuring that all concerns are captured and addressed. In addition to the grievance register, stakeholders attending consultation meetings are provided with contact details of the project proponent and local representatives/partners. This allows stakeholders to share suggestions or queries either through calls, messaging, or emailing post-meeting, facilitating continuous communication and engagement.		
Stakeholder input	There has been no grievance received for the current monitoring period. There has been no complaints/replacements request received by end-users during the verification period.		

4.2.3 Free, Prior, and Informed Consent

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	Following clause 3.18.8 of VCS standard v.4.6, the project proponent has disclosed 1. The minimum information, including the nature, size, pace, reversibility, and scope of the cook stove project activity;

	2. The reason/purpose of the project, which is to efficiently use non-renewable biomass fuel and reduce other environmental and health hazards for the community; 3. The duration of the project activity, set at 7 years; 4. The locations that will be affected, primarily the villages in Dhar, Shivpuri, Sohpur and Jabalpur districts (Madhya Pradesh) and Udalguri (Assam); and 5. A preliminary assessment of the likely economic, social, cultural, and environmental impact, including potential risks and fair and equitable benefit sharing in a context that respects the precautionary principle. Stakeholders were briefed verbally that the project would bring solely positive effects on economic, social, cultural, or environmental aspects, including savings in non-renewable biomass fuel and increased employment opportunities. 6. Moreover, information regarding personnel likely to be involved in the execution of the project, including Indigenous Peoples, private sector staff, research institutions, government employees, and others, was shared with stakeholders, clarifying that they would be the end-users/beneficiaries of the project activity. Hence, it is evident that the affected community was informed prior to the operational date of the project activity.
Outcome of FPIC discussion	Issue: The project devices (project cook stoves) are installed in the households of these beneficiaries on their own will and PP is having transparent agreements with these concerned. Thus, it can be said that the project has not encroached on land, relocated people without consent, and forced physical or economic displacement. Evidence Gathering Activities: The assessment team has cross-checked the end-user agreements signed by the beneficiaries and the cards shared with the beneficiaries during the onsite visit. The end-users were also interviewed about how did they receive the cookstoves. It was confirmed that improved cookstove only added an advantage to their existing usage of traditional cookstoves i.e., replacing them and providing a better opportunity to them for cooking with less firewood and less time. They have not been displaced or

	relocated without consent and it didn't affect them either financially or in any other means. Evidence checked: End-user agreements, Beneficiary cards, Interview, Focused Group discussion with end-users.
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4.2.4 Grievance Redress Procedure

Grievances received	Resolution and outcome
N/A	The grievance register is a vital tool for capturing and addressing stakeholder concerns related to the project activity. Here's a detailed explanation of how the process works: 1. Maintenance of the Grievance Register /31/: Distributors maintain the grievance register to collect inputs or grievances related to the project activity. During question-and-answer sessions with stakeholders, queries are noted and documented in this register. 2. Providing Contact Details: Stakeholders attending consultation meetings receive the contact details of the project proponent and local representatives/partners. This enables stakeholders to share suggestions or queries through calls, messaging, or emailing post-meeting, ensuring continuous communication and engagement. 3. Process for Handling Grievances: Receipt of Complaints: When end users call the customer care number, the Project Proponent (PP) at the Head Office (HO) receives the complaint. Sharing of Complaints: PP then shares the complaint with their local representative. Resolution: The local representative works to resolve the grievance. Field Officers' Role: Field officers visit beneficiaries, collect complaints, and share them with the HO for resolution.

	• Periodic Communication: PP periodically shares SMS with information and the customer care number for end users to reach out. • Centralized Resolution: All collected complaints are centralized at the HO level for resolution with the assistance of local representatives. • Closure of Complaints: Upon addressing the complaint/grievance, PP closes it in the register. Grievance Status: For the current monitoring period, no grievances have been recorded. This indicates effective grievance management and stakeholder engagement practices.
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4.2.5 Public Comments

Following are the comments received during the stakeholders' consultation in Udalguri (Assam)-

Summary of comments received	Actions taken
Question asked by Bina Boro: Will project provide improved health in our village?	Yes, the project will result in improved health reducing health hazards from indoor air pollution.
Question asked by Ansuli Narzary: Will the project release any harmful pollutants or hazardous toxic or notorious substances in air?	No, not from what we know there is no project emissions associated to project and does not have any negative impacts
Question asked by Bholaram Boro: Will project provide health benefits in our village?	Yes, project reduces health hazards from indoor smoke pollution and women and children will have to spend less time collecting contributing to reduction in GHG emissions
Question asked by Mayarani Bosumatary: Will there be employment generation due to the project activity for youth from adjoining area?	Responding about the increased possibilities for employment of local youth due to the project activity, it was pointed out that the preference would be given to the locals in employment at project site.
Question asked by Radha Rani Singha:	Yes, the project requires less biomass, thus project reduces rate of deforestation.

Will project support for forest cutting?	
Question asked by Anari Brahma:	No, the project does not lead to any kind of water pollution.
Will the project lead to water pollution?	

Following are some of the comments received during the stakeholders' consultation in Dhar, Shivpuri, Sohpur, Jabalpur (Madhya Pradesh)-

Summary of comments received	Actions taken
Why cook stove is good?	The work is done in small woods, due to less smoke the problem of eyes has also ended, even trees do not have to be cut. Food is also prepared quickly.
How much firewood is used?	The firewood required is less as compared to traditional cook stove.
What happens if it will get damaged?	In any case, if it is damaged, you can get the second (new one).
Do we have to go anywhere for receiving it or we can get it to our home directly?	You can surely receive it from your home.
How this cook stove can burn?	It requires small pieces of wood, and that should not be big in a size.
How we can produce burning energy in it?	It requires small pieces of wood.
How is your cook stove different from traditional stoves?	It will require less fuel and release less smoke.
Can we use thick firewood pieces in it?	No! Only thin and small pieces of firewood are enough

4.2.6 Risks to Local Stakeholders and the Environment

Risk identified		Mitigation or preventative measure taken
Risks to stakeholder participation	Not Applicable	There are no exclusions, lack of communication or barriers in the project activity, that might prevent stakeholders from engaging or participating. PP has made accessible arrangements for the stakeholders to record their grievances /inputs and maintain an

		ongoing communication. Hence ensuring maximum stakeholder participation.
Working conditions	Not Applicable	The ICS provides a safer cooking alternative compared to traditional cook stoves. Additionally, comprehensive training sessions on cook stove usage are conducted for stakeholders to minimize potential risks associated with working conditions.
Safety of women and girls	Not Applicable	In Indian rural scenario women and girls are mainly responsible for wood collection. The reduction in wood consumption through improved cook stoves has not only lessened the number of trips required for wood collection but has also contributed to the safety of women and girls, mitigating their vulnerability to potential incidents.
Safety of minority and marginalized groups, including children	Not Applicable	ICS is a safer way of cooking as compared to the traditional cook stoves. Additionally, proper trainings regarding the use of cook stoves and the associated benefits are deployed to the stakeholders, so as to decrease the chances of potential risks linked to the safety of minority and marginalized groups, including children.
Pollutants (air, noise, discharges to water, generation of waste, release of hazardous materials)	Not Applicable	Due to the project activity, there is no risk due to generation of pollutants (noise, discharges to water, generation of waste, and release of hazardous materials). The efficiency of the ICS is much higher than the baseline cookstove which ensures efficient burning of fire wood. Thus, the project improves air quality and produces less waste generated (ash) due to efficient utilization of firewood as compared to the baseline cookstove.

4.2.7 Respect for Human Rights and Equity

4.2.7.1 Labor and Work

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Discrimination and sexual harassment	Evidence gathering activities: Desk-review, Personal interview & focussed grouped discussion. Evidence checked: The Project Proponent (PP) has provided a declaration/29/ stating that no incidents of discrimination or sexual harassment have occurred within the project. A Assessment Conclusion: There have been no reports of such incidents during the monitoring period. This commitment to maintaining a respectful and inclusive environment underscores the project's dedication to upholding ethical standards and ensuring the well-being of all stakeholders involved.
Management experience	Evidence gathering activities: Desk-review of declaration, Personal interview & focussed grouped discussion. Evidence checked: Declaration provided by PP/29/ o new entity has been involved in project design or implementation, hence not applicable. Assessment Conclusion: In conclusion, the project has maintained continuity in its design and implementation, with no new entities being involved in the process during the current monitoring period. This stability indicates a consistent approach to project management and suggests that the existing project framework and partnerships have been effective in driving progress towards its objectives.
Gender equity in labor and work	Evidence gathering activities: Desk-review of declaration, Personal interview & focussed grouped discussion. Evidence checked: Declaration provided by PP/29/ The Project Proponent (PP) adheres strictly to principles of gender equality in labour and work. During the current monitoring period, PP has employed 12 women in the project activity, offering them an average salary range of Rs.12,000 to Rs.18,000. It is noteworthy that this salary range is consistent with what male employees receive for the same job roles. Declarations confirming these practices have been provided, showcasing PP's commitment to fair and equal employment opportunities for all genders.

	Assessment Conclusion: In conclusion, the Project Proponent (PP) has demonstrated a strong commitment to gender equality in labour and work practices. By providing employment opportunities to 12 women in the project activity and ensuring they receive the same salary range as their male counterparts for the same job roles, PP has actively promoted gender equality and fair treatment in the workplace. These actions align with international standards and underscore PP's dedication to fostering an inclusive and equitable work environment.
Human trafficking, forced labor, and child labor	Evidence gathering activities: Desk-review of declaration, Personal interview & focussed grouped discussion. Evidence checked: Declaration provided by PP/29/ Assessment Conclusion: The Project Proponent (PP) strictly follows Indian laws prohibiting human trafficking, forced labor, and child labor. Specifically, the project complies with the Immoral Traffic (Prevention) Act, 1956, which prohibits human trafficking for the purpose of commercial sexual exploitation or forced labor. Additionally, the project adheres to the Child Labor (Prohibition and Regulation) Act, 1986, which prohibits the employment of children in certain occupations and processes. There have been no reports of human trafficking, forced labor, or child labor during the current monitoring period, highlighting PP's commitment to upholding these laws and ensuring the protection of vulnerable populations.

4.2.7.2 Human Rights

The following demonstrations show how the project is committed to safeguard the rights of Indigenous People (Ips), Local communities (LCs), and customary right holders, while following the international human rights law⁷, the UNDRIP⁸ and ILO Convention 169-

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Human rights	Evidence gathering activities: Desk-review of declaration, Personal interview & focussed grouped discussion. Evidence checked: Declaration provided by PP/29/

⁷ <https://www.ohchr.org/sites/default/files/Documents/Publications/fs9Rev.2.pdf>

⁸ https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf

Assessment Conclusion:

- **Free, Prior, and Informed Consent (FPIC):** The project activity has obtained FPIC from local stakeholders, including Indigenous Peoples (IPs), Local Communities (LCs), and customary right holders. This ensures their unforced consent before the project operation, respecting their right to make decisions.
- **Non-discriminatory Participation** in the Project Activity: The project distributed devices without cultural or social biases, safeguarding the rights of IPs, LCs, and customary rights holders to be free from discrimination.
- **Employment Due to the Project Activity:** The project activity has led to the employment of 1 person from IPs, LCs, and customary right holders, enabling them to exercise their right to fair treatment in employment and salary.
- **Right to Maintain, Control, Protect, and Develop Cultural Heritage:** The project activity is not implemented or developed on any tangible cultural heritage and does not affect the intangible cultural heritage of IPs, LCs, and customary right holders. Instead, it promotes cultural harmony through the collective engagement of these groups.

These conclusions highlight the project's commitment to respecting the rights of local stakeholders and promoting cultural harmony in the project area.

4.2.7.3 Indigenous Peoples and Cultural Heritage

Based on the nature of the project activity involving the production and distribution of cook stoves manufactured outside the beneficiary's land, it is concluded that:

1. **No Impact on Tangible⁹ Cultural Heritage:** The project activity does not impact any tangible cultural heritage of the stakeholders, as it does not involve any development or implementation on their land.
2. **No Negative Impact on Intangible Cultural Heritage:** There have been no negative impacts of the project activity on the intangible cultural heritage of the stakeholders. Instead, the project fosters cultural harmony by involving diverse groups without affecting their customs, traditions, or beliefs.

This conclusion underscores the project's commitment to preserving and respecting the cultural heritage of the stakeholders while promoting sustainable development.

⁹ Tangible cultural heritage consists of non-physical intellectual wealth, such as folklore, customs, beliefs, traditions, knowledge, and language

4.2.7.4 Property Rights

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Disputes over rights to territories and resources	N/A
Respect for property rights	Evidence gathering activities: Desk-review of declaration, Personal interview & focussed grouped discussion. Evidence checked: Declaration provided by PP/29/ Assessment Conclusion: In conclusion, the project activity involving the production and distribution of cook stoves has not incorporated any land or property of the stakeholders, including Indigenous Peoples (IPs), Local Communities (LCs), and customary rights holders, as the stoves are manufactured outside their land. Furthermore, the project has obtained the free, prior, and informed consent of the end users, including the IPs, LCs, and customary rights holders. This ensures that their land and property rights are protected and respected throughout the project implementation.

4.2.7.5 Benefit Sharing

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Summary of the benefit sharing plan	Since the above section 4.2.7.4 is not applicable, hence this section is also not applicable.
Benefit sharing during the monitoring period	N/A

4.2.8 Ecosystem Health

Item	Evidence gathering activities, evidence checked, and assessment conclusion	
	Risk Identified	Mitigation or preventative measure taken during the monitoring period
Impacts on biodiversity and ecosystems	No risk identified	Evidence gathering activities: Desk-review of registered PD, Personal interview & focussed grouped discussion. Evidence checked: In person physical witness of the project implemented area during an on-site visit. Assessment Conclusion: This project activity is characterized by its positive impact on biodiversity and the ecosystem. By reducing deforestation caused by traditional fuel gathering practices, the project helps preserve local flora and fauna. Additionally, the promotion of improved cook stoves leads to more efficient use of resources, further benefiting the environment. Overall, the project contributes to the conservation of biodiversity and the enhancement of the local ecosystem.
Soil degradation and soil erosion	No risk identified	Evidence gathering activities: Desk-review of registered PD, Personal interview & focussed grouped discussion. Evidence checked: In person physical witness of the project implemented area during an on-site visit.

		Assessment Conclusion: This project activity plays a crucial role in positively impacting biodiversity and the ecosystem. By reducing the need for traditional fuel gathering, it helps to mitigate deforestation, which is a significant threat to many species and habitats. Furthermore, the promotion of more efficient use of firewood through improved cook stoves not only helps conserve forests but also reduces the pressure on local ecosystems. This contributes to the overall health and resilience of the environment, benefiting both wildlife and local communities.
Water consumption and stress	No risk identified	Evidence gathering activities: Desk-review of registered PD, Personal interview & focussed grouped discussion. Evidence checked: In person physical witness of the project implemented area during an on-site visit. Assessment Conclusion: This project activity plays a crucial role in positively impacting biodiversity and the ecosystem. By reducing the need for traditional fuel gathering, it helps mitigate deforestation, a significant threat to many species and habitats. Furthermore, the promotion of more efficient use of firewood through improved cook stoves not only helps conserve forests but also reduces the pressure on local ecosystems. This contributes to the

		overall health and resilience of the environment, benefiting both wildlife and local communities.
Usage of fertilizers	No risk identified	Evidence gathering activities: Desk-review of registered PD, Personal interview & focussed grouped discussion. Evidence checked: In person physical witness of the project implemented area during an on-site visit. Assessment Conclusion: This project activity has a multifaceted positive impact on biodiversity and the ecosystem. 1. Reducing Deforestation: By decreasing the reliance on traditional fuel gathering, the project helps reduce deforestation. This, in turn, helps preserve habitats for a variety of plant and animal species, contributing to overall biodiversity conservation. 2. Promoting Efficient Use of Firewood: The project's promotion of more efficient use of firewood through improved cook stoves not only reduces the amount of wood needed but also minimizes harmful emissions. This helps improve air quality and reduces pressure on local forests.

		3. Preserving Ecosystem Services: By conserving forests and reducing emissions, the project helps maintain ecosystem services such as carbon sequestration, water regulation, and soil conservation. These services are crucial for the health and resilience of ecosystems. 4. Community Benefits: The project's positive impact extends to local communities by reducing the time and effort needed for fuel gathering, especially for women and children. This allows them to allocate saved time to other productive activities, leading to improved well-being and livelihoods. In conclusion, the project's efforts to decrease deforestation and promote efficient use of firewood have far-reaching benefits for biodiversity, ecosystems, and local communities.
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4.2.8.1 Rare, Threatened, and Endangered species

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Species or habitat	Evidence gathering activities: Not Applicable Evidence checked: Not Applicable

Assessment Conclusion: Given that the project activity involves the manufacturing and distribution of Improved Cook Stoves (ICS), which is not situated in or near habitats for rare, threatened, or endangered species, there are no direct impacts on these species or their habitats. The production and distribution of ICS are typically conducted in industrial or commercial settings that are separate from natural habitats. As a result, the project does not pose a risk to these species or their habitats, and the assessment for this particular aspect is not applicable.

4.2.8.2 Introduction of Species

This project activity involves the manufacturing and distribution of ICS, and no planting or species introduction, hence this information is **not applicable**.

Species introduced	Evidence gathering activities, evidence checked, and assessment conclusion		
Species introduced	Classification	Justification for use	Adverse effects and mitigation
N/A	N/A	N/A	N/A

Existing invasive species	Mitigation measures to prevent spread or continued existence of invasive species
N/A	N/A

4.2.8.3 Ecosystem conversion

Item	Evidence gathering activities and evidence checked
Ecosystem conversion	Evidence gathering activities: Not Applicable Evidence checked: Not Applicable Assessment Conclusion: Since the project activity is not an Afforestation and Reforestation (ARR) project, Agroforestry and Agro-silvopastoral Systems (ALM) project, Wetland Restoration and Conservation (WRC) project, nor an Avoided Conversion of Grasslands and Shrublands (ACOGS) project, the information related to these specific project types is not applicable. This means that the project does not fall under any of these categories and therefore does not need to be evaluated based on the criteria specific to these types of projects.

4.3 Accuracy of Reduction and Removal Calculations

The equations and choices provided in the methodology /12/ and all other methodological tools are correctly quoted in the MR /1/. The emission reductions of the project activity are calculated using the formulae mentioned in the applied methodologies; VMR0006 version 1.1 /12/. The verification team has reviewed the emission reduction spread sheet (ER sheets /2/ and checked all the formulae and found they are correct and are in accordance with the monitoring plan of the Joint PD & MR /03/ and the applied monitoring methodology /12/.

Methods and formulae set out in the project description for calculating actual emissions for current monitoring period.

According to applied methodology VMR0006 (version 1.1) /12/ the emissions are calculated as below:

Baseline Emission:

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

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 ₂ e
ER _{y,i,j}	=	Emission reductions by improved cookstove of type i and batch j during year y in t CO ₂ e

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

.....(VMR0006 v.1.1, 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) ¹⁰

¹⁰2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 1 Introduction

EF_{wf,CO_2}	=	CO ₂ emission factor for the use of wood fuel in baseline scenario (IPCC default for wood fuel, 112 tCO ₂ /TJ) ¹¹
$EF_{wf,non\ CO_2}$	=	Non-CO ₂ emission factor for the use of wood fuel in baseline scenario (IPCC default for wood fuel, 26.23 tCO ₂ /TJ) ¹²
$N_{y,i,j}$	=	Number of improved cookstoves of type i and batch j operating during year y
0.95	=	Discount factor to account for leakage

The quantification of woody biomass saved due to the implementation of improved cookstoves to be estimated using the equation below:

$$B_{y,savings,i,j} = B_{y=1,new,i,survey} \times \left(\frac{\eta_{new,y,i,j}}{\eta_{old}} - 1 \right) \quad \text{.....(VMR0006 v.1.1, equation 4)}$$

Where

η_{old} = Efficiency of baseline cookstove

$\eta_{new,y,i,j}$ = Efficiency of the improved cookstove type i and batch j determined through water boiling test (WBT) during year y

Alternatively, efficiency may be determined using the following equation-

$$\eta_{new,y,i,j} = \eta_p \times (DF_n)^{y-1} \times 0.94 \quad \text{.....(VMR0006 v.1.1, equation 5)}$$

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). This value may be based on actual monitoring or based on manufacturer's declaration on expected loss in efficiency or through publicly available literature on relevant industry standards. Alternatively default value of 0.99 efficiency loss per year can be considered.

¹¹2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 2 Stationary Combustion

¹²2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 2 Stationary Combustion

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

$B_{y=1,new,i,j,survey}$ = Annual quantity of woody biomass used by improved cookstoves in tons per device of type *i* and batch *j*, determined in the first year of the implementation of the project through a sample survey.

The appropriateness of default values used in the monitoring report is elaborated below:

Table No: 11 Data and Parameters Available at Validation or Ex-ante parameters:

S.No	Data/parameter	Unit	Value applied	Assessment
1	Fraction of woody biomass saved by the project activity during year <i>y</i> that can be established as non-renewable biomass (f_{NRBy})	Fraction	For Assam - 81.75% For Madhya Pradesh - 89.2%	Assessment Team hereby confirms that the value has been determined via State of Forest report (Forest Survey of India Ministry of Environment, Forest & Climate Change, GoI, 2019). The default value as per the Methodological tool: Calculation of the fraction of non-renewable biomass (Tool 30 version 4.0). As per of methodological tool, the value is calculated as per the following Equation (1), $f_{NRBy} = NRB/(NRB+DRB)$ The value is fixed as per registered Joint PD & MR version 04 dated 06-December-2023/03/ for the entire crediting period.
4	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; Volume 2 Energy, Chapter 1 Introduction. Further, this is a default value as stated in the VMR0006 Methodology, version 1.1/12/.

				This parameter shall remain fixed for the monitoring periods.
5	CO ₂ emission factor for the use of wood fuel in baseline scenario (EF_{wf,CO_2})	tCO ₂ /TJ	112	It is an IPCC default value verified from 2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 2 Stationary combustion. The value is fixed as per registered Joint PD & MR version 04 dated 06-December-2023/03/ for the entire crediting period.
6	Non-CO ₂ emission factor for the use of wood fuel in baseline scenario $EF_{wf,non CO_2}$	tCO ₂ /TJ	26.23	It is an IPCC default value verified from 2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 2 Stationary combustion. The value is fixed as per registered Joint PD & MR version 04 dated 06-December-2023/03/ for the entire crediting period.
7	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 1.1/12/.
6	Efficiency of project stove at the start of project activity η_p	Fraction	36.42%	This value is as per manufacturer specification/25/. Consistent with the registered Joint PD & MR /03/. This has been validated during registration as well. This parameter shall remain fixed for the monitoring periods.

7	DFn	Fraction	0.99	This is as per methodology, the default value of 0.99 efficiency loss per year. This parameter is determined ex-ante
8	Life Span	Fraction	07	This parameter will be monitored once at the time of the Project stove installation. Operating lifetime of project device for projects opting Equation 5 for determining project stove efficiency

Since the current monitoring period is from 01-January-2023 to 31-December-2023, so for the parameter ($\eta_{new,y,i,j}$: Efficiency of the improved cookstove type i and batch j determined through water boiling test (WBT) during year y) PP has taken the values as estimated in the registered PD-MR.

Year(y)	$\eta_{new,y,i,j}$
1	34.23%
2	33.89%

As assessed in this section, emission reductions for the project “Clean Cookstoves for Rural India” are being claimed for this monitoring period and the total population of the stoves for the current monitoring period i.e., 01-January-2023 to 31-December-2023 (both dates included) is 151,154 ICS that prevented the release of tCO₂ into 705,715 the atmosphere.

The data collection involved a field team that utilized random sampling from the ICS beneficiary database. Using Excel's random selection function, 675 samples were identified across each state i.e., Assam and Madhya Pradesh. This condensed version below highlights the essential points of the survey, focusing on the number of stoves distributed, the survey sample size, data collected, and the method of selection.

VVB's Opinion:

VVB carefully examined the monitoring data collected during the specified period to confirm its accuracy and completeness. This scrutiny aimed to identify any potential errors, inconsistencies, or outliers that could affect the quality of the data. After confirming the accuracy of the monitoring data, the project proponent proceeded with data analysis. They used appropriate statistical methods and techniques to process the collected data and derive meaningful insights from it. By analysing the data, they could identify trends, patterns, and any significant changes related to the emissions reductions or environmental performance of the project. Based on the results of the data analysis, the project proponent estimated the emissions reductions achieved as

outlined in the monitoring report. This estimation is crucial for evaluating the project's effectiveness in reducing greenhouse gas emissions or achieving its intended environmental goal

Hence, the verification team found it is in line with the sampling guideline and Joint PD & MR /03/ found the sampling approach conservative and appropriate, based on the provisions of the sampling guideline and the same has been Joint PD & MR in section 4.4 of the FVR.

Emission reductions have been calculated in accordance with the applied methodology VMR0006 version 1.1 /12/, and VCS Joint PD & MR /03/. The PP has used monitored data and ex-ante fixed data including default values as mandated/permitted by the applied methodology. The values used for the calculation of GHG emission reductions have been thoroughly checked by the verification team and was found appropriate and correct.

4.4 Quality of Evidence to Determine 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 helped verify 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 the required quality of the monitoring system to ensure the quality of the monitored data. All internal data are subjected to QA/QC measures.

For the measurement/monitoring of two parameters based on a representative sample, the simplified approach proposed in option (b) under Section 8.4 of the methodology is used for determining the minimum sample size. Compliance with 90/10 confidence precision is not obligatory in this case. Hence VVB has not established any comparison/justification for the correct applicability of 90/10 confidence precision as it is not required as per methodology and registered PD.

Monitored Parameters

The project involves the Introduction of an improved cook stove as energy efficiency measures:

No.	Monitoring Parameters	Sampling parameters	Parameter type	Monitoring frequency
1	$N_{y,j,k}$ Number of project devices of type i and batch j operating during year y	The proportion of ICS is still in operation.	Proportion	Biennially (at least once in two years)
2	$B_{y=1, new, i, j, survey}$ Quantity of woody biomass used by project devices in tonnes per device of type i . and batch j	Daily consumption of woody biomass per ICS	Mean value	In the first year of project implementation

The project aims to distribute Improved Cook Stoves (ICS) across the project area, replacing traditional cooking devices in households. The target population is the complete set of households that received the ICS. Since the population is homogeneous, with similar technology and operating characteristics, a simple random sampling technique is used to select samples, drawn using a random number generator. To determine the parameters, the following approaches were used in sampling (outcome in brackets):

$N_{y,j,j}$ Visual inspection of the premises to see if ICS is operational and in use. Interview with the end user if required to verify that ICS is still in use (Yes/No)

$B_{y=1, new, i, j, survey}$ Interview with the end user and estimate the daily consumption of woody biomass of ICS (Weekly/Daily consumption of woody biomass)

Determination of Sample Size for Monitoring Survey:

A simplified approach was used to determine the minimum sample size for parameters listed under Section 9.2 of the methodology, where meeting confidence/precision requirements is not necessary. The project proponent chose to use the same sample to monitor both parameters. According to the Standard for Sampling and Surveys for CDM Project Activities and Programmes of Activities, if there is more than one parameter to be estimated, a sample size calculation should be done for each. Then, either the largest number for the sample size is chosen as a sampling effort with one common survey, or separate sampling efforts and surveys are undertaken for each parameter. Therefore, the project proponent sampled a combination of two parameters, $N_{y,j,j}$ and $B_{y=1, new, i, j, survey}$, in the same sample. Sampling more than one parameter within the same household helps reduce travel needs for monitoring and the associated costs.

Oversampling is strongly encouraged, not only to compensate for any attrition, outliers, or non-response associated with the sample, but also to prevent a situation at the analysis stage where

the required reliability is not achieved, and additional sampling efforts would be required. The sample size shown above was adjusted upwards to account for non-responses. The project proponent determined the appropriate non-response rate based on previous experience.

Sampling Frame & Implementation: The sampling frames are defined below. Overall, the same group of end users, which are household users, is expected to be associated with all ICS units. Thus, it is expected that the parameter of interest is not influenced by geographical location. Therefore, all monitoring parameters can be assumed to be highly homogeneous for each ICS model, regardless of how the end user group and distribution/installation location are defined. The project used a simple random sampling approach to determine the minimum sample size based on the project target population:

- For populations less than 300, a minimum sample size of 30 was selected.
- For populations between 300 and 1000, a minimum sample size of 10% of the group size was chosen.
- For populations over 1000, a minimum sample size of 100 was decided.

The simplified approach was followed by PP to determine the minimum sample size for monitoring parameters, with compliance to 90/10 confidence precision not being mandatory, as stated in section 8.4 serial number (b) page no 12 of the applied methodology. Further according to the VCS methodology VMR0006, a minimum sample size of 100 is required for project populations exceeding 1000. However, for more accurate/conservative results, EKI has selected 300 samples for each project location (Assam and Madhya Pradesh), totalling 600 samples for the monitoring survey applicable to current monitoring period (conducted from 03-January-2023 to 27-February-2023). Kitchen Performance Tests (KPT) were not planned or performed during this monitoring period.

VVB would like to confirm that a finding was raised with regard to the KPT test as stated in the registered PD that “For further verification, EKI may plan to conduct a kitchen performance test (KPT) for some of the households, to get a more reliable value of the fuelwood consumption for the project stove. EKI will report the changes and update the documents accordingly during the respective period.” So, it is to note that since during this monitoring period no latest survey has been conducted and the survey results being applicable for biennial period can be used as per applied methodology and registered PD, the PP has not done any KPT for current monitoring period and as stated in the Project Description document may plan in upcoming verifications.

Trained personnel from the project participant conducted the sampling, having received training in surveying techniques to reduce errors and avoid conflicts of interest, confirmed by assessment team while interviewing the site incharges/implementors. The start and end dates of each monitoring period were recorded, and emission reductions attributable to each period were calculated. Six people underwent two training sessions for this purpose during the monitoring period. The EKI operation team selected survey samples randomly using online software. To ensure more reliable results, 300 samples were chosen for each location (Assam and Madhya

Pradesh) instead of the minimum sample size of 100. Additionally, 20% oversampling was conducted to account for non-response, resulting in 375 samples for each location. The survey team received training on the survey process, question awareness, and fuelwood consumption measurement on the project stove before starting the monitoring survey. The survey, conducted by EKI Energy Services Limited, involved personal visits to sample households to collect information according to a questionnaire administered to the cookstove user. For assessing fuelwood consumption on the project cookstove, the surveyor asked the end user to bundle the required fuelwood for a day, which was then weighed using a pre-calibrated scale, which was done in the last monitoring survey (also applicable to the current monitoring period).

VVB's justification/assessment for oversampling: The Assessment Team cross-verified the Monitoring Survey Sheet and confirmed that the Project Proponent (PP) opted for a 20% non-response rate when selecting samples for the monitoring survey, a conservative estimate based on professional judgment and prior experience. This high rate accounts for potential non-availability during household surveys, rather than lack of engagement, as the focus is primarily on the operationality of stoves and the beneficiaries are routinely surveyed by field officers, any such nonresponse is basically a non-availability at the time of survey and not lack of engagement. Once the required number of ICS is covered, the survey team ends the survey. Therefore, no oversampling is done in actual. However the PP follows the guidelines stated in the applied methodology, VVB apart from that also cross-checked the standard CDM documents for conducting survey that also states that the chosen non-response rate also aligns with instructions outlined in the Standard "Sampling and surveys for CDM project activities and programmes of activities" ver 9.0, allowing for "if at the time of survey when survey team arrives at end user household and they (Household member who is familiar with cooking practices) are not present." In that case, the survey team may disregard that sample and proceed to the next available sample for the survey. Once the required number of ICS is covered the survey team ends the survey. The PP provided a detailed explanation in the registered & VCS approved PD-MR, justifying the 20% non- response rate within the larger sample size as a conservative measure. The oversampling of 20% additional samples was conducted not only to compensate for potential non-responses but also to ensure the necessary reliability for analysis without requiring further sampling efforts. Hence seems correct and satisfactory approach by the assessment team.

Data to be collected: Field Measurement:

The table below summarizes field measurement data requirements:

Parameter	Timing (indicative)	Frequency as required by the methodology	Methods to be applied
N _{y,jj}	Monitoring will likely occur every 12 to 24 months	Biennially	Visits to the premises, visual inspection, and interview with ICS end-user.

N_{y,jj} : The survey involves a visual inspection of the premises to see if ICS is operational and in use. An interview with the end user was conducted if required to verify that ICS is still in use. Based on the response received from the end user, the value of the parameter is calculated.

B _{y=1, new, l, j, survey}	Monitoring will occur within the first year after installation	The first year of installation	Interview with the end user for determining the average quantity of firewood used in the project stove per week/day. Sample surveys has been used for estimation of consumption of firewood in project households. (Wood fuel quantity)
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The survey involves interviews with the end user to estimate the daily consumption of woody biomass for the ICS (weekly/daily consumption of woody biomass). The site was visited by staff who asked each household about their daily consumption of firewood for the project stove. A bundle of the said quantity of firewood was made from the available firewood stock with the user and then weighed using a weighing scale. Similarly, the weight of firewood used in survey households was noted down and then averaged for the final value of the parameter. The assessment team during the site visit confirmed from the end-user regarding thorough visit of PP's representative and the questions they were interviewed to estimate the values of the above declared parameters. Thus confirming the correct implementation of the monitoring survey by the PP's team.

The surveys were retained in form of soft copies, and the database was backed up. The original survey questionnaires filled by the survey team and signed by the users were stored in the project office, which were cross-checked by assessment team during the verification process. A backup of the survey results was also stored on an electronic medium which have been shared by PP during the verification assessment.

Analysis of the monitoring survey results/process: The project proponent manages a project database/x/ that includes data directly attributable within the project, allowing unambiguous determination of the emission reductions attributable to each project, including:

- A list of households participating in the project, including name, community/location, distribution/installation date, and unique serial number;
- Assurance that the efficiency of the new ICS is similar to the specified efficiency in cases where replacements are made. Data obtained from the samples were used to estimate proportions and mean values for the parameters described above. These values were then factored into the emissions reduction calculations, resulting in the request for the issuance of VCUs. The parameters are applied for emission reduction calculations.

Monitoring Questionnaires & Quality Control/Quality Assurance Procedure: The project proponent incorporated non-response and outlier removal into a Quality Control/Quality Assurance system. The choice of measure for each parameter depended on the cost of each data collection approach and the logistics required. The most effective measure for each parameter was determined from the following list:

- **Oversampling:** Randomly drawing a sample more than the calculated number (e.g., 20%) and collecting data for each parameter.
- **Buffer Group:** Randomly drawing additional samples (e.g., 20%) and collecting data from only the minimum number of ICS as per sample size calculation.

The sampling plan included procedures to ensure good-quality data. Field personnel were required to review, understand, and agree to follow the monitoring plan procedures, including provisions for maximizing response rates and documenting out-of-population cases, refusals, and other sources of non-response. A documented quality control and assurance strategy was implemented, addressing non-sampling errors such as non-response or bias from the interviewer. Monitoring personnel were trained on how to properly survey households to prevent interviewer bias. In cases where a household refused to participate, another household was chosen at random. To further reduce interviewer bias, a well-designed questionnaire was used and tested. Surveyors were trained by EKI for the monitoring survey, which included interviewing beneficiaries and weighing firewood using weighing equipment, confirmed by PP in the registered PD & MR submitted to the assessment team.

Monitoring questionnaires were used to record each sample ICS user's contact information and pertinent data concerning the corresponding serial number of the ICS that was distributed. For the first monitoring survey, the questionnaire was filled out manually by the interviewer, and the data recorded manually were transferred into the electronic database. Stove users were requested to provide information to the interviewer, including the serial number/unique ID of the stove, date of ICS receipt/onset of usage, address, beneficiary name, etc. Users also shared information on the functioning of the ICS, benefits observed from its use, traditional cookstove uses, other cooking fuel-specific information (e.g., LPG, kerosene), fuel use patterns, fuel details (quantity, sources, cost), and any problems in collecting fuel. VVB has cross-checked the filled questionnaires/photos of the survey submitted by the PP to cross-confirm the authenticity of the process/statements provided by the PP.

Survey Results: For the above stated parameters, 375 samples were selected (considering 20% non-response) from each location (Assam & Madhya Pradesh) for all monitoring parameters using Section 8.4 option (b) of the applied methodology VMR0006. The survey team surveyed 300 samples each on the ground from the 375 selected samples. A single homogeneous population was considered for both parameters. Although 100% of the stoves were found to be operating during the 1st monitoring survey, since some users may be absent for a few days during the year for family functions or festivals, EKI has decided to consider a 10% reduction in the number of stoves in operation for the current monitoring period. Similarly, taking a conservative

approach to the quantity of fuelwood used for the project stove, EKI has voluntarily decided to consider a 10% reduction in the value obtained from the survey results for both locations for the current monitoring period (Please refer ER sheet for better elaboration, also section 4.4 can also be referred for the calculation). Appropriate record-keeping procedures have been implemented to ensure that each monitoring period's dataset can be transparently attributed to its corresponding project, preventing any occurrences of double counting. An internal review of the project database was conducted to determine the current status of each device.

During the interviews /44/ verification, QA/QC procedures were identified which demonstrate that: Operational and management system of the project activity is in place; The verification team thus confirmed that the monitoring of the project activity has been implemented in accordance with the monitoring plan in the registered VCS Joint PD & MR. The registered VCS Joint PD & MR /03/ clearly describes the monitoring and responsibility of monitoring is done by PP.

Leakage Assessment: The methodology uses a net-to-gross adjustment factor of 0.95 to account for leakages, eliminating the need for surveys. All ICSs in the project are newly manufactured or installed, so no other leakage is applicable.

Monitoring Reporting: The project proponent assessed all monitoring data and produced a record for VVB's verification. The monitoring plan aims to ensure successful monitoring of emission reductions. EKIESL manages overall monitoring and activities related to emissions reduction. Roles and responsibilities for data monitoring, collection, archiving, and equipment calibration were proposed. The team comprised the following participants.

Monitoring activities involve data collection during and post-distribution to enable unique identification of each ICS unit and avoid double counting. Repair and Maintenance - EKIESL plans to establish a service center for end user repairs, following manufacturer recommendations. The team visited regularly to ensure proper stove use, provide feedback, and promote health and environmental benefits. No negative feedback was received.

During desk-review & onsite visit following roles and responsibilities were confirmed with registered PD & interview with the people associated with the project:

- EKIESL: Develops VCS documentation, communicates with VERRA and VVBs, identifies local partners and ICS manufacturers, designs distribution and monitoring systems, trains local resources, conducts regular monitoring, and holds annual review meetings.
- Distributor / Operational Team (Local Representative): Supports EKIESL, assists in baseline data collection and efficiency testing, acts as the local representative, deploys local teams, assists in training, and bridges communication between end users and EKIESL.
- ICS Distributor(s): Deploys ICS, registers end users, provides demonstrations and education on ICS use, conducts periodic checks, and gathers feedback.
- ICS Manufacturer or Supplier: Designs and develops ICS, provides technical parameters, and educates EKIESL on installation and use.

These roles and responsibilities were confirmed through interviews with site personnel, field officers, and Project proponent representatives during onsite visits and discussions.

VKU verification team verified 18 random household samples (each household has 01 cookstove) with acceptance number (c) as 1. samples from the sampling survey done by project participants as per the applied methodology VMR0006 version 1.1. However as per the acceptance sample size taken by assessment team had $c=1$ (i.e., acceptance number 01) still all the stoves visited by the team were found operational according to the data provided by the project participants, 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/44/, each cook-stove has unique identification number (ID) which has been provided in the end user agreement & ICS card that is owned by the end-user are consistent as per project database & monitoring survey/20/. 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/43/

VKU verification team has assessed the baseline scenario during onsite audit through interviews with end-users/33/. VKU verification team noted during the onsite audit that the targeted population were using non-renewable wood fuel firewood/fossil fuels on Traditional stoves for cooking now completely replaced with improved cookstoves.

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 of values of the actual operational parameter relevant to determination of emission reductions which are within the control of the PP; no change has been observed or identified that may impact the scale of the project activity or applicability of baseline and monitoring methodology VMR0006 “Methodology for Installation of High Efficiency Firewood Cookstoves” version 1.1/12/ and was found consistent with the registered Joint PD & MR/3/

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 no: 13 Data and Parameters Monitored

S.no	Parameter	Unit	Value applied	Description/Assessment
1.	Number of project devices of type i and age a that are operating in year y $N_{y,i,j}$	Number	24,996 ICS in Assam and 126,158 ICS in Madhya Pradesh with a total of 151,154 ICS devices.	The project has commissioned total ICS, i.e., 151,154 cookstoves. PP has conducted the monitoring survey/20/ in line with monitoring plan and sampling and survey guidelines stated in the methodology VMR0006 version 1.1

				covering sample size of 300 random samples each in both Assam & Madhya Pradesh (Each Household has 01 ICS) which were found 100% operational by the PP. The sample size estimations by PP follow section 9.2 & 8.4 serial number (b) 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 monitoring survey between the period of from 03-January-2023 to 27-February-2023.in Assam and Madhya Pradesh. 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 survey sheet by PP. So, to measure $N_{y,i,j}$ PP multiplied the achieved proportion with commissioned stoves that is 100% x 151,154= 151,154. During the site visit /43/, 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
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				assessed Competence of personnel involved in conducting monitoring. Hence, VKU's verification team employed acceptance sampling and verified taking random 18 household samples with acceptance number 01 (Each house has been distributed 01 cookstove) and verified ICS samples and all samples were found operational. Thus, VKU concludes that reported results are deemed satisfactory.	
2.	Efficiency of the improved cookstove type i and batch j determined through water boiling test (WBT) during year y ($\eta_{new,y,i,j}$)	Fraction	Year(y)	$\eta_{new,y,i,j}$	This parameter is used for calculation of emission reductions & is defined as the efficiency of the improved cook stove type i and batch j determined as per equation 5 of methodology during year y. Efficiency of the improved cookstoves to be estimated using equation 5 of the applied methodology where loss in efficiency per year is calculated, and therefore this parameter does not need to be monitored in every verification. Calculation to be performed using equation below: $\eta_{new,y,i,j} = \eta_p \times (DF_n)^{y-1} \times 0.94$ This parameter is determined ex-ante. The average lifetime of the cookstove is 7 years The value has been considered as ex-ante fixed for same ICS type for the year 1 which can be confirmed from the registered PD-MR and further yearly loss in efficiency of ICS is calculated
			1	34.23%	
			2	33.89%	

				and respective vintage wise efficiencies have been determined. (The project has chosen to determine the efficiency using equation 5 as given by the methodology; therefore, monitoring this parameter via a sampling survey is not required.) However, the grouped project activity allows for the option to use a different model of cook stoves for future instances, so this parameter value may vary based on a different model in the future. A default value of 0.99 efficiency loss per year can be considered. In case of a change in the ICS model for new project activity instances, the efficiency of the new ICS model should be determined during the verification, and the same will be considered for that project activity instance. This is in line with the methodology and registered VCS PD-MR /03/ hence deemed satisfactory to VKU's assessment team.
3.	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	Tonnes	Value after the 1st monitoring Survey. For Assam – 3.78 kg/device/day or equal to 1.3797 tonnes/device/year¹³.	According to the applied methodology VMR0006: Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1, and the validated registered PD /03/, a i.e., $B_{y=1,new,i,j,survey}$ is determined during the first verification and

¹³ Detailed Computation stated in ER sheet as well as section 5.4

	sample survey. $B_{y=1,new,i,j,survey}$		For Madhya Pradesh 3.6 kg/device/day or equal to 1.314 tonnes/device/year¹⁴. Value after considering 10% voluntary reduction in fuelwood consumption on the result of the 1st monitoring Survey 1. For Assam - 3.4 kg/device/day or equal to 1.2417 tonnes/device/year¹⁵. 2. For Madhya Pradesh - 3.24 kg/device/day or equal to 1.1826 tonnes/device/year¹⁶.	remains fixed for the entire crediting period. It was confirmed that the project proponent (PP) utilized the verified value, which was assessed during the first Monitoring Period. This value was approved by Verra and documented in the first Monitoring Period Verification Report. For the current Monitoring Period (MP), the value of Annual quantity of woody biomass used by the improved cookstoves in tonnes per device of type i and batch j ($B_{y=1,new,i,j,survey}$) for the improved cookstove distributed as a part of the project activity was determined by measurement campaigns at the representative households along with sample surveys.
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¹⁴ Detailed Computation stated in ER sheet as well as section 5.4

¹⁵ Value after considering 10% voluntary reduction in fuelwood consumption on the result of the 1st monitoring Survey.

	1st monitoring Survey Result	After considering 10% voluntary reduction
$B_{y=1,new,i,survey}$	= 3.78 Kg / device / Day = 3.78*365/1000 tonnes / device / year = 1.3797 tonnes / device / year	= 3.78 * (100% - 10%) Kg / device / Day = 3.40*365/1000 tonnes / device / year = 1.2417 tonnes / device / year

¹⁶ Value after considering 10% voluntary reduction in fuelwood consumption on the result of the 1st monitoring Survey.

	1st monitoring Survey Result	After considering 10% voluntary reduction
$B_{y=1,new,i,survey}$	= 3.60 Kg / device / Day = 3.60*365/1000 tonnes / device / year = 1.3140 tonnes / device / year	= 3.60 * (100% - 10%) Kg / device / Day = 3.24*365/1000 tonnes / device / year = 1.1826 tonnes / device / year

				The VKU assessment team cross-checked this value by examining a sample of project participants' samples through questionnaire operation surveys and interviews, including activities such as: 1. Ensuring consistency between the information recorded in the Survey sheet and the data obtained from on-site interviews. This process was carefully documented, and the validation and verification body (VVB) thoroughly reviewed the calibration records. Additionally, the monitoring report (MR) outlined robust (QA/QC) procedures that align with the requirements specified in VCS PD /03/. These measures were implemented to ensure accurate and reliable data collection throughout the project, promoting confidence in the reported results and the calculation of Verified Carbon Units (VCUs). This thorough verification process helps ensure the accuracy and validity of the verified value used by the project proponent in the current Monitoring Period.
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During the verification process, it was identified that in Section 04 of the Monitoring Report (MR) the reported values for $B_{y=1, new, i, j, survey}$ initially stated values of 3.78 kg/device/day (1.3797 tonnes/device/year) for Assam and 3.6 kg/device/day (1.314 tonnes/device/year) for Madhya Pradesh. These figures have been re-calculated to reflect the 10% voluntary reduction applied by the Project Proponent, as per the registered Project Description (PD) mentioned on page 60. We confirm that the correct values of 3.4 kg/device/day (1.2417 tonnes/device/year) for Assam and 3.24 kg/device/day (1.1826 tonnes/device/year) for Madhya Pradesh, which include this 10% reduction, are consistently

used in all GHG emission reduction calculations. VVB has thoroughly reviewed the emission reduction calculations and confirm that ER has been calculated correctly & correct values have been applied throughout the quantification process, in alignment with the registered PD.

Justification for Parameter $B_{y=1,new,i,j,survey}$ and its value being representative and conservative:

As the Validation and Verification Body (VVB), we have thoroughly examined the issue regarding the representativeness and conservativeness of the sampling period for measuring $B_{y=1,new,i,survey}$. After rigorous analysis, we can conclusively state that the chosen sampling period and the resulting value are not only compliant with the applicable methodologies. Our determination is based on the following comprehensive assessment:

- A. **Methodological Compliance:** The monitoring survey conducted from 03-January-2023 to 27-February-2023 strictly adheres to the VMR0006 Methodology v1.1 requirements. This methodology explicitly mandates in parameter criteria for $B_{y=1,new,i,survey}$ on page 17 that the determination of $B_{y=1,new,i,survey}$ is to be done in the first year of device introduction, which has been precisely followed.
- B. **Ex-ante Parameter Validation:** It is crucial to emphasize that $B_{y=1,new,i,survey}$ is an ex-ante fixed parameter cross-confirmed from the registered and VCS approved Joint PD-MR version 04 dated 06/12/2023, section 6.1, page 71. This value underwent stringent validation and was unequivocally accepted by VERRA during the project registration and initial verification process. The integrity and appropriateness of this value have already been established and approved by accredited third-party VVB.
- C. **Cross-Referencing with AMS-II.G:** The VVB cross-checked the requirements for seasonal variation in firewood usage as mentioned in AMS-II.G, which is referenced by version 1.1. We found that AMS-II.G. also does not specify requirements for considering variations for the $B_{y=1,new,i,survey}$ parameter. However, in the referenced methodology AMS II G version 13.1, it was also confirmed that parameter 18, page 25 of the methodology also mentions about determination of the value in first year of implementation of the devices via measurement campaigns at representative households that has been performed by PP and thus the value got approved during the Validation-Verification stage of the project activity.
- D. **Methodological Hierarchy:** It is imperative to note that VMR0006 Version 1.1 takes precedence in this project context. This methodology does not mandate consideration of seasonal variations in firewood consumption for this specific parameter. Adhering to the primary methodology is not just acceptable but required for maintaining methodological integrity.
- E. **Sampling Approach and Size:** The project participant has implemented a simple random sampling approach as per Sampling and surveys for CDM project activities and programmes of activities version 4.0, adhering to and exceeding the minimum sample size guidelines stated in VMR0006 Version 1.1:
 - For project populations > 1000: Minimum sample size of 100 required
 - The project actually surveyed 300 samples for each project location (Assam & Madhya Pradesh)

- A total of 600 samples were used for the monitoring survey. This sample size far exceeds the minimum requirement of 200 (100*2) samples for populations > 1000, significantly enhancing the statistical robustness of the results.
 - The project's decision to survey 300 households per state, three times of the required minimum, provides a robust dataset that inherently captures a wider range of household conditions and usage patterns.
- F. **Diverse Geographical Coverage:** By including equal samples (300 each) from two distinct project locations (Assam & Madhya Pradesh), the survey inherently accounts for regional differences that may influence firewood usage patterns.
- G. **Enhanced Conservativeness:** Going above and beyond methodological requirements, the project proponent has voluntarily implemented a 10% reduction in fuelwood consumption calculations. This self-imposed conservative measure significantly exceeds any potential variations that might be attributed to fuel wood consumption, ensuring an exceedingly conservative estimation of emission reductions.
- H. **On-Site Verification:** Our team conducted extensive on-site visits and undertook 18 random samples with acceptance number 01 as per Sampling and surveys for CDM project activities and programmes of activities, Version 9.0 to a subset of the 600 (300 samples each state) to a subset of the 600 surveyed households across both project locations. During these visits, we:
- Verified the accuracy of survey data through household interviews
 - Inspected installed operating cookstoves across 18 samples in
 - Collected corroborating evidence through photos as per beneficiaries consent.

Given these factors, we confidently conclude that the current approach is conservative and exceeds standard requirements.

GHG Calculations:

1) Actual ER calculations for ICS distributed in Assam for the current monitoring period of 01-January-2023 to 31-December-2023 are-

Dates of installation of ICS in Assam- 11-May-2022 to 01-November-2022

Step 1) Determination of efficiency of ICS $\eta_{new,y,i,j}$ during the current monitoring period-

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

Where,

$$\eta_p = 36.42\%$$

$$DF_n = 0.99$$

$$\text{Hence, } \eta_{new,y,i,j} \text{ for } y=1 = 36.42\% \times (0.99)^{1(1-1)} \times 0.94$$

$$= 34.23\%$$

$$\eta_{new,y,i,j} \text{ for } y=2 = 36.42\% \times (0.99)^{1(2-1)} \times 0.94$$

$$= 33.89\%$$

Step 2) Determination of quantity of woody biomass $B_{y,savings,i,j}$ that is saved in tons per ICS during the current monitoring period-

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

Where,

$$B_{y=1,new,i,survey}^{17} = 1.2417 \text{ (considering 10\% voluntary reduction in fuelwood consumption)}$$

$$\eta_{old} = 0.1$$

$$\eta_{new,y,i,j} \text{ for } y=1 = 0.3423$$

$$\eta_{new,y,i,j} \text{ for } y=2 = 0.3389$$

$$\text{Hence, } B_{y,savings,i,j} \text{ for } y=1 = 1.2417 \times [(0.3423/0.1) - 1]$$

$$= 3.01 \text{ tons/year}$$

$$B_{y,savings,i,j} \text{ for } y=2 = 1.2417 \times [(0.3389/0.1) - 1]$$

$$= 2.97 \text{ tons/year}$$

Step 3) Determination of emission reductions ($ER_{y,i,j}$) for the current monitoring period-

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

Where,

$$N_{y,i,j} = \text{Number of improved cookstoves of type i and batch j operating during year y} \times (1 - 10\%) \text{ (considering 10\% voluntary reduction in the number of stoves in operation)}$$

$$= \text{Number of improved cookstoves of type i and batch j operating during year y} \times 0.9$$

$$B_{y,savings,i,j} \text{ for } y=1 = 3.01 \text{ tons}$$

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$$B_{y=1,new,i,survey} = 3.78 \text{ Kg / device / Day (1st monitoring Survey without considering 10\% voluntary reduction in fuelwood consumption)}$$

$$= 3.78 \times 365 / 1000 \text{ tonnes / device / year}$$

$$= 1.3797 \text{ tonnes / device / year}$$

$$B_{y,savings,i,j} \text{ for } y=2 = 2.97 \text{ tons}$$

$$NCV_{wood \text{ fuel}} = 0.0156 \text{ TJ/ton}$$

$$f_{NRB,y} = 0.8175$$

$$EF_{wf,CO_2} + EF_{wf,non \ CO_2} = 112 + 26.23 = 138.23 \text{ tCO}_2/\text{TJ}$$

$$\text{Thus, } ER_{y,i,j} \text{ for Assam} = 112,527 \text{ tCO}_2\text{e (Round Down)}$$

2) Actual ER calculations for ICS distributed in Madhya Pradesh for the current monitoring period of 01-January-2023 to 31-December-2023 are-

Dates of installation of ICS in Madhya Pradesh- 16-July-2022 to 31-December-2022

Step 1) Determination of efficiency of ICS $\eta_{new,y,i,j}$ during the current monitoring period-

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

Where,

$$\eta_p = 36.42\%$$

$$DF_n = 0.99$$

$$\text{Hence, } \eta_{new,y,i,j} \text{ for } y=1 = 36.42\% \times (0.99)^{1(1-1)} \times 0.94$$

$$= 34.23\%$$

$$\eta_{new,y,i,j} \text{ for } y=2 = 36.42\% \times (0.99)^{1(2-1)} \times 0.94$$

$$= 33.89\%$$

Step 2) Determination of quantity of woody biomass $B_{y,savings,i,j}$ that is saved in tons per ICS during the current monitoring period-

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

Where,

$$B_{y=1,new,i,survey}^{18} = 1.1826 \text{ (considering 10\% voluntary reduction in fuelwood consumption)}$$

$$\eta_{old} = 0.1$$

$$\eta_{new,y,i,j} \text{ for } y=1 = 0.3423$$

$$\eta_{new,y,i,j} \text{ for } y=2 = 0.3389$$

$$\begin{aligned} \text{Hence, } B_{y,savings,i,j} \text{ for } y=1 &= 1.1826 \times [(0.3423/0.1) - 1] \\ &= 2.87 \text{ tons/year} \end{aligned}$$

$$\begin{aligned} B_{y,savings,i,j} \text{ for } y=2 &= 1.1826 \times [(0.3389/0.1) - 1] \\ &= 2.83 \text{ tons/year} \end{aligned}$$

Step 3) Determination of emission reductions ($ER_{y,i,j}$) for the current monitoring period-

$$ER_{y,i,j} = B_{y,savings,i,j} \times NCV_{wood\ fuel} \times f_{NRB,y} \times (EF_{wf,CO_2} + EF_{wf,non\ CO_2}) \times N_{y,i,j} \times 0.95$$

Where,

$N_{y,i,j}$ = Number of improved cookstoves of type i and batch j operating during year y x (1-10%) (considering 10% voluntary reduction in the number of stoves in operation)

= Number of improved cookstoves of type i and batch j operating during year y x 0.9

$$B_{y,savings,i,j} \text{ for } y=1 = 2.87 \text{ tons}$$

$$B_{y,savings,i,j} \text{ for } y=2 = 2.83 \text{ tons}$$

$$NCV_{wood\ fuel} = 0.0156 \text{ TJ/ton}$$

$$f_{NRB,y} = 0.8920$$

$$EF_{wf,CO_2} + EF_{wf,non\ CO_2} = 112 + 26.23 = 138.23 \text{ tCO}_2/\text{TJ}$$

Thus, $ER_{y,i,j}$ for Madhya Pradesh = 593,188 tCO₂e (Round Down)

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$B_{y=1,new,i,survey}$ = 3.60 Kg / device / Day (1st monitoring Survey without considering 10% voluntary reduction in fuelwood consumption)
= 3.60*365/1000 tonnes / device / year
= 1.3140 tonnes / device / year

Hence, the total number of ERs for the current monitoring period for the cook stoves distributed in both Madhya Pradesh and Assam are-

$$= (112,527 + 593,138))$$

$$= 705,715 \text{ tCO}_2\text{e. (Round Down)}$$

VVB's opinion on 10% reduction in the number of stoves: As the Validation and Verification Body (VVB), we have carefully reviewed the issue regarding the omission of 10% reduction in the number of operational stoves in the emission reduction (ER) calculations. Our confirmation is as follows:

1. **Initial Discrepancy:** We confirm that the Monitoring Report (MR) on page 42 stated a 10% reduction in the number of operational stoves to account for temporary non-usage due to factors such as family functions or festivals.
2. **Confirmation of Implementation:** We can confirm that the 10% reduction in the number of operational stoves has been correctly applied in the revised ER calculations. This adjustment aligns with the conservative approach described in the Monitoring Report.
3. **Impact on Emission Reductions:** The implementation of this 10% reduction has resulted in a decrease in the total emission reductions claimed for the monitoring period. This adjustment further enhances the conservativeness of the project's emission reduction estimates.
4. **Additional Verification Steps:** To ensure the accuracy of this revision, we have:
 - a) Cross-checked the calculations against the methodological requirements.
 - b) Verified the consistent application of the 10% reduction across all relevant calculations.
 - c) Confirmed that the 10% number in stove reduction & fuelwood usage is properly documented and justified in the Monitoring Report

Conclusion: Based on our thorough review and verification process, we can confidently state that the project proponent has correctly addressed the initially identified discrepancy. The 10% reduction in the number of operational stoves is accurately reflected in both the ER calculations and the Monitoring Report.

The emission reductions calculation is provided in emission reduction spread sheet/2/. ER_y achieved during the current monitoring period is 705,715 tCO₂e which are -15.83% lower than the estimated emission reduction i.e., 838,394 tCO₂e for the current monitoring period Actual ERs achieved are lower than ex- ante Emission Reductions. The ex-ante estimation of emission reductions was based on the assumption that all installations would be completed on the first day of the crediting period. However, in practice, not all project ICS installations were finalized on that day. This discrepancy led to a lower emission reduction achieved during the monitoring period compared to the ex-ante estimation for the same period.

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.

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 in line with the applicable VCS requirements set out in section 3.15 of VCS Standard version 4.4/05/ and that the verification of the GHG statement was conducted in accordance with ISO 14064-3; 2019

4.5 Non-Permanence Risk Analysis

This is not an AFLOU project, hence non-permeance risk is not applicable to the present project activity.

5 VERIFICATION OPINION

5.1 Verification Summary

VKU Certification Pvt. Ltd. (referred to as VKU) declares that it conducted the second verification of the fixed crediting period, for the monitoring period 01-January-2023 to 31-December-2023, (inclusive of both start and end dates), for the project activity “Clean Cookstoves for Rural India”, VCS Registry Project ID 2944, with regard to the relevant requirements for VCS activities. The project proponents of the “Clean Cookstoves for Rural India” amount to 705,715 tCO₂e of carbon dioxide equivalent (tCO₂e). These reported reductions have been assessed in accordance with the relevant requirements outlined in the VCS Standard, version 4.6/05/

The project proponents of the “Clean Cookstoves for Rural India” are 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 4.0 of 06-December-2023/03/.
- 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 4.6/5/ 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 joint project description & monitoring report /03/;
- the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS standard version 4.6 requirements/5/;
- the monitoring is in place as per the applied baseline and monitoring methodology;
- The monitoring plan in the joint project description version 04 of 06-December-2023 & monitoring report version 04 of 25-August-2024/03/is as per the applied baseline and monitoring methodology.

As per VCS Standard Version 4.6, clause 4.1.23, 4.1.24 and 4.1.25, VKU is of opinion that that GHG emission reduction stated in the monitoring report version 4.0 of 25-August-2024 for the “Clean Cookstoves for Rural India” in India for the period 01-January-2023 to 31-December-2023 (Inclusive of both start and end dates) **are fairly and correctly stated**

5.2 Verification Conclusion

VKU'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 level of assurance** that reported GHG emission reductions are fairly stated.

Table No 20: Opinion/Conclusion by Validation-Verification Body

Opinion	Final Documents	Monitoring Period	Emission Reductions achieved	Remarks
Positive opinion ☒ Negative Opinion ☐ Adverse Opinion ☐ Unmodified Opinion ☒ Modified Opinion ☐	Monitoring Report Version 04 dated 25-August-2024 Emission Reduction Sheet Version 03 dated 24-June-2024	01-January-2023 to 31-December-2023 (Inclusive of both the days)	705,715 tCO _{2e}	The GHG emission reductions are calculated on the basis of approved methodology, VMR0006 /12/ and the monitoring plan included in the registered VCS Joint PD and MR/3/
Hence VKU is able to certify that the emission reduction from the project during the current monitoring period 01-January-2023 to 31-December-2023 (Inclusive of both start and end dates) amounts to 705,715 tCO_{2e} assessed in line with the applicable VCS requirements set out in section 3.15 of VCS Standard version 4.6/5/ The VVB hereby issues a resolutely positive and unmodified opinion meticulously drafted in strict accordance with ISO 14064-3:2019, /49/ Section 09, and the precise provisions of Clause 9.7.1.6 & 9.7.2 of ISO 14065:2020. /50/ This opinion stands in full alignment with the exacting requirements delineated in ISO/IEC 17029:2019, Section 9.7./51/ Our verification process provides a robust and reasonable level of assurance regarding the veracity of the reported GHG emission reduction data. This data is devoid of any material misstatements and is steadfastly supported by the evidence furnished by the Project Proponent (PP), comprehensively presented in Table 04 of this report.				

Verification period: From 01-January-2023 to 31-December-2023 (both dates included):

Verified GHG emission reductions and removals in the above verification period, broken down by calendar year:

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Reduction VCUs (tCO ₂ e)	Removal VCUs (tCO ₂ e)	Total VCUs (tCO ₂ e)
01-January-2023 to 31-December-2023	705,715	0	0	705,715	0	705,715
Total	705,715	0	0	705,715	0	705,715

For projects required to assess permanence risk: Since the grouped project activity does not fall under the AFOLU (Agriculture, Forestry, and Other Land Use) or Geologic Carbon Storage (GCS) project categories, it is not required to assess the permanence risk. Therefore, the following tables are not applicable.

i) Provide a conclusion on the following information:

The non-permanence risk rating (%)	NA
If applicable, the Long-term Average (LTA), whether it has been properly updated, and if it has been reached.	NA
Whether a loss has been appropriately accounted for, in accordance with the VCS Program rules, if applicable.	NA

ii) Complete the table below:

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Buffer pool allocation (tCO ₂ e)	Reductions VCUs (tCO ₂ e)	Removals VCUs (tCO ₂ e)	Total VCU issuance (tCO ₂ e)
DD-MMM-YYYY to 31-Dec-YYYY							
01-Jan-YYYY to 31-Dec-YYYY							
Total							

5.3 Ex-ante vs Ex-post ERR Comparison

Net GHG emission reductions for total project activity instances under this project are: -

Vintage period	Ex-ante estimated reductions/removals	Achieved reductions/removals	Percent difference	Explanation for the difference
01-January-2023 to 31-December-2023	8,38,394	705,715	-15.83%	The ex-ante estimation of emission reduction was initially calculated under the assumption that all installations of Improved Cook Stoves (ICS) would be completed on the first day of the crediting period. However, in practice, not all installations were finished by this date. This discrepancy between the planned and actual installation dates led to a lower level of emission reduction achieved during the monitoring period than what was originally estimated for the same period.
Total			-	

APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

Section	Information	Justification
NA	NA	NA

APPENDIX 2: ABBREVIATIONS

Abbreviations	Full texts
AT	Assessment Team
BE	Baseline Emissions
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM M&P	Modalities and Procedures CDM
CER(s)	Certified Emission Reduction(s)
CH ₄	Methane
CL	Clarification Request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
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
NGO	Non-governmental Organization
JOINT PD & MR	Joint project description & monitoring report
PE	Project Emission
PP(s)	Project Proponent(s)
PSA	Power Sale Agreement
Ref.	Document Reference
SS(s)	Sectoral Scope(s)
TA(s)	Technical Area(s)
TR	Technical Reviewer
UNFCCC	United Nations Framework Convention on Climate Change
VCU	Verified Carbon Unit
VKU	VKU Certification Ltd.
VVS	Validation and Verification Standard

APPENDIX 3: SAMPLING SURVEY SHEET QUESTIONNAIRE

Sampling Survey Questionnaire put to use by VKU during Onsite Assessment with End Users/46/

Household / Stakeholder's Details for ICS visited by Verification Team as per VVB Sample selected

Sr. No.....	
End-user/ Stakeholder's name <i>(Indicate relationship with owner in case is different person)</i>	
ID of the related sales agreement/Any relevant document	
Location with coordinates <i>(Village / District / Region / neighbourhood)</i>	
Device Model / Type/Size (fill according to applicability)	
Date of purchase/installation/distribution	
ID of the device	
Is the device in operation? How many in number?	Yes/No
Is the baseline stove in use?	Yes/No
How many dependants in the household? (Family Size)	
How many meals cooked per day? <i>(Per day preferentially, other measures allowed)</i>	☐ Breakfast ☐ Lunch ☐ Dinner
Do you know how to contact CME/PP/ PD in case of any problem/complaint/suggestion?	Yes/No

Is there any test that has been conducted for your device by CME/PP/ PD? <i>(e.g., efficiency tests)</i>	Yes/No
How much it saves? <i>(% of firewood save/Currency/day preferentially, other measures allowed but trying to keep homogeneity)</i>	☐ < 30% saving ☐ 30 % – 50 % saving ☐ 31 >50 % saving
Is there any other previous device in use actually? In which situations?	Yes/No. If yes, explain.
Which was the previous used fuel?	Firewood/Charcoal/Coal/LPG/others-
Cooking inside home? Outside?	☐ Inside ☐ Outside
Opinion about:	☐ Less smoke observed ☐ Respiratory wellness improved ☐ Decrease in Allergies ☐ No Itching in eyes ☐ Time-saving ☐ Fuel Saving
The user is happy with the stove. <i>(Include any comments of the user)</i>	Yes/No If No, please comment
Signature/Thumb Impression of the end-user: <i>(If the end-user doesn't want to sign, respect the decision)</i>	

APPENDIX 4: AUDIT FINDINGS

CL: Clarification Request_06

CAR: Corrective Action Request_07

FAR: Forward Action Request_00

Description of Clarification Requests (CLs) raised by VVB:

Type	Date	23-February-2024
CL#01	Reference	Section 01 of Ver protocol//MR/DR//OSV/AT
Description of the Non-Conformance		
In Section 1.5 of MR: PP has not submitted the signed agreement between PP and the Project Distributor. In section 1.6 of MR PP has not submitted the end-user agreement of the first ICS distributed. Also, PP to submit sample end-user agreements to the VVB for verification. In section 1.8 of MR: "As per the latest Monitoring Report (MR) template for grouped projects, separate submission of (KML) files is required. However, the Project Proponent (PP) has not provided the necessary KML files and acknowledging their submission within this document, as required by VCS Standard version 4.5, clause 3.11.1." In section 1.10 of MR PP has not provided declaration for "not registered and not seeking registration under any other GHG emission program to avail carbon benefits during the crediting period of the project activity" to the assessment team. - PP to submit required declaration for scope 03 emissions from the manufacturers/ other entity In section 1.11 of MR: The Project Proponent (PP) has not provided clarification regarding the extent to which the Sustainable Development Goals (SDGs) achieved in this project contribute towards the "nationally stated sustainable development priorities" of India, as specified in the MR template. This clarification will enable a better understanding of the alignment between the project's SDG achievements and the sustainable development objectives outlined by the country. - PP has not submitted the employment record information for the current monitoring period as claimed in this section. In Section 1.11 SDG Indicator Table: PP to specify the national poverty line since the project is implemented in Country India. Also, PP to specify the baseline for international poverty line referred here. - PP has not provided evidence for stated claims in SDG 08 & 15.2		
1 st Response from PP	Date	26-February-2024
- Signed agreement between PP and the Project Distributor enclosed here with - End-user agreement of the first ICS distributed & sample end-user agreements enclosed here with - KML files are enclosed here with - Not registered and not seeking registration under any other GHG emission program to avail carbon benefits declaration enclosed here with - Scope 03 emissions from the manufacturers/ other entity enclosed here with - The parameter updated as per nationally stated sustainable development priorities" of India. - Employment record information enclosed here with - As per international poverty line reference, the new extreme poverty line of \$2.15 per person per day. Reference link enclosed in MR V02.		

9. Employment record & ER sheet enclosed here with				
1 st Assessment by Audit Team	Status	Closed	Date	27-February-2024
In Section 1.5 of MR: Signed agreement between PP and the Project Distributor has been submitted and same has been checked and verified. (Closed) In section 1.6 of MR: End-user agreement of the first ICS distributed and sample end-user agreements has been submitted by the PP and same has been checked and verified. (Closed) In section 1.8 of MR: Project Proponent (PP) has provided the necessary KML files as required by VCS Standard version 4.5, clause 3.11.1 and same been checked and verified. (Closed) In section 1.10 of MR PP has provided the declaration for "not registered and not seeking registration under any other GHG emission program to avail carbon benefits during the crediting period of the project activity" and same has been checked and verified. (Closed) - Declaration for scope 03 emissions from the manufacturers/ other entity has been submitted by the PP and same has been checked and verified. (Closed) In section 1.11 of MR: PP has updated parameter as per nationally stated sustainable development priorities" of India and same has been checked and verified. (Closed) - Employment record information for the current monitoring period has been submitted and same has been found to be consistent. (Closed) In Section 1.11 SDG Indicator Table: PP to specify the national poverty line since the project is implemented in Country India. Also, PP to specify the baseline for international poverty line referred here. - PP has provided evidence for SDG 08 & 15.2 and same has been checked and confirmed. (Closed) Hence CL#01 is successfully closed.				

Type	Date	23-February-2024
CL#02	Reference	Section 02 of Ver protocol//MR/DR//OSV/AT
Description of the Non-Conformance		
In Section 2.1.2 of MR: PP has not provided a copy of grievance register where the grievances are recorded - PP to state if there is any complaints/replacements request stated by end-users during the verification period. In section 2.1.4 of MR: PP has not stated methods that will be employed for resolution of grievances that would have been recorded. In section 2.2 of MR: The statements in the section does not give an actual representation of true impacts of cookstoves on environment. Drastic change in smoke due to usage of ICS is not possible. The statements need to be re-assessed. In section 2.3 of MR: For whom is PP strictly following the laws in the section. The context is missing and specific details/elaboration has not been provided.		

6. PP has not stated the national laws referred in this section and how is project activity in compliance with those laws.				
7. In section 2.3.2 of MR: What does IPs & LCs stand for?				
8. How was (Non-discriminatory Participation in the Project Activity) assessed by the PP during the time of ICS distribution?				
1stResponse from PP		Date	26-February-2024	
1. Copy of grievance register enclose here with.				
2. No complaints/replacements request stated by end-users during the verification period.				
3. Methods of Resolution of grievances details are added in MR V02.				
4. Statement corrected in MR V02.				
5. Statement corrected in MR V02.				
6. Discrimination or sexual harassment declaration enclosed here with.				
7. Indigenous People (Ips), Local communities (LCs)				
8. PP has not assessed the cultural or social background of the end user before distributing the device to any region. Thus, we can say the devices were distributed without social or cultural biases.				
1stAssessment by Audit Team		Status	Closed	Date
				27-February-2024
1. In Section 2.1.2 of MR: A copy of grievance register has been submitted by the PP and same has been checked and verified. (Closed)				
2. PP has stated that there are no complaints/replacements request stated by end-users during the verification period and same has been found consistent. (Closed)				
3. In section 2.1.4 of MR: Methods of Resolution of grievances have been updated in the MR and same has been found consistent. (Closed)				
4. In section 2.2 of MR: PP has updated the statement and same been found check and found consistent. (Closed)				
5. In section 2.3 of MR: PP has updated the statement and same been found check and found consistent. (Closed)				
6. PP has submitted declaration for discrimination or sexual harassment and same has been checked and verified. (Closed)				
7. In section 2.3.2 of MR: PP has elaborated the term Ips and Lcs and same has been found consistent. (Closed)				
8. PP has justified that PP has not assessed the cultural or social background of the end user before distributing the device to any region. Thus, the devices were distributed without social or cultural biases and same has been checked and verified. (Closed)				
Hence CL#02 is successfully closed.				

Type	Date	23-February-2024
CL#03	Reference	Section 03 of Ver protocol//MR/DR//OSV/AT
Description of the Non-Conformance		
1. In Section 3.1 of MR: PP has not mentioned and provided the supporting documents for technical specifications of the ICS distributed along with photographs of the ICS thus disbursed.		

2. Information on further ICS disbursement is missing in the Monitoring Report submitted to the VVB
3. **In section 3.2.1 & 3.2.2. of MR:** PP has not described and reported on any project description deviations applied in previous monitoring reports.? Please confirm.
4. **In section 3.3 of MR:** Since there is no new project activity instance added during the current monitoring period, why the eligibility criteria table is added in the section? Also, PP to re-confirm with clause 3.6.11 of the VCS standard if the assessment/defining the eligibility criteria is required in this monitoring period, since the eligibility criteria for the instances already added is stated in the registered VCS joint PD-MR for the said project activity.
5. PP has not indicated if the project activity instances are within ten kilometres of another instance of the same project activity and with the same project proponent or not. The PP has not stated if the grouped project complies with the requirements laid down in clause 3.6.8 of the VCS Standard Version 4.5.

1stResponse from PP	Date	26-February-2024
1. Technical specifications of the ICS distributed along with photograph of the ICS enclosed here with 2. Details are added in MR V02 3. Details are updated in MR V02 4. As there are no new instances are added during the current monitoring period this section is not applicable. 5. As per validation of PD MR, Section 3.6.8 of the VCS standard v4.4 is not applicable for the project those have been listed on or before 21 December 2022 and validation is completed by 30 June 2023. The current project was listed on 13 May 2022 and validation was completed on 19 May 2023. Therefore, the revised condition mentioned in section 3.6.8 of VCS standard v4.4 is not applicable to the current project. Please refer the “DECEMBER 2022 VCS PROGRAM UPDATE: OVERVIEW OF SUBSTANTIVE UPDATES TO PROGRAM RULES AND REQUIREMENTS AND EFFECTIVE DATES Release Date: 21 December 2022”. Same has been included in the section 1.4 of the PD MR.		

1stAssessment by Audit Team	Status	Closed	Date	27-February-2024
1. In Section 3.1 of MR: PP has provided the technical specifications of the ICS distributed along with photograph of the ICS and same has been checked and confirmed. (Closed) 2. PP has updated the information on further ICS disbursement in the Monitoring Report and same been found consistent. (Closed) 3. In section 3.2.1 & 3.2.2. of MR: PP has updated the project description deviations section in the Monitoring Report and same has been found consistent. (Closed) 4. In section 3.3 of MR: PP has confirmed that there are no new instances are added during the current monitoring period, hence this section is not applicable and same has been found consistent. (Closed) Hence CL#03 is successfully closed.				

Type	Date	23-February-2024
CL#04	Reference	Section 04 of Ver protocol//MR/DR//OSV/AT
Description of the Non-Conformance		

1. **In Section 4.1 of MR:** PP has not submitted a copy of the survey forms/questionnaire used during the monitoring survey.
2. **In section 4.3 of MR:** PP has not referenced the stated document with a weblink.
3. PP has not specified the project implementation process via flow chart or any other detailed/aggregated manner.
4. PP has not provided evidence for demonstration of ICS use, discussing with the end users on its benefits and educate them on continued use of ICS and discontinuation of the use of conventional/traditional open firing practice. Eg: Photographs or training records
5. Details about training conducted for the distribution/implementing/other teams involved in the project implementation are not mentioned in the monitoring report. PP has not specified the total trainings conducted during the current monitoring period. PP to further substantiate the claims with relevant documents to the VVB.
6. PP has not provided evidence for demonstration of ICS use, discussing with the end users on its benefits and educate them on continued use of ICS and discontinuation of the use of conventional/traditional open firing practice. Eg: Photographs or training records.
7. PP has not mentioned if any feedback is gathered either positive or negative and provide evidence for the same .

1stResponse from PP
Date

26-February-2024

1. Copy of the survey forms/questionnaire used during the monitoring survey is enclosed here with
2. The reference weblink added in MR V02.
3. The flow chart details added in MR V02.
4. Awareness training records & photographs enclosed here with.
5. Details of training conducted & number of total trainings conducted are added in MR V02.
6. Awareness training records & photographs enclosed here with.
7. Details are added in MR V02. Evidence enclosed here with.

1stAssessment by Audit Team
Status

Closed

Date

27-February-2024

1. **In Section 4.1 of MR:** Copy of the survey forms/questionnaire used during the monitoring survey have been provided by the PP and same has been checked and verified. **(Closed)**
2. **In section 4.3 of MR:** PP has referenced the stated document with a weblink and same have been found consistent. **(Closed)**
3. Flow chart of Project Implementation process have been added in the Monitoring Report and same have been checked and verified. **(Closed)**
4. PP has provided evidence for the training such as awareness training records and photographs and same has been checked and verified. **(Closed)**
5. PP has updated details about training conducted for the distribution/implementing/other teams involved in the project implementation in the monitoring report. Also, PP has added the total trainings conducted in monitoring report and have been checked and verified. **(Closed)**
6. PP has provided evidence for the training such as awareness training records and photographs and same has been checked and verified. **(Closed)**
7. PP has updated the details in monitoring report and provided evidence for the same and same have been checked and verified. **(Closed)**

Hence CL#04 is successfully closed.

Type	Date	20-March-2024
CL#05	Reference	Section 01 of Ver protocol//MR/DR/TR Section 02 of Ver protocol//MR/DR/TR Section 04 of Ver protocol//MR/DR/TR
Description of the Non-Conformance		
1. In section 1.12 of MR: - PP has not clarified about the quantified amount of increased total monthly generation is on monthly or annually basis. PP has not also provided the context for international poverty line. - PP has not clarified are the demographics of the stakeholders recorded and monitored to satisfy this condition” Cultural Diversity, Economic Diversity”. 2. In section 2.1.1 of MR: PP has not clarified the rights on ERs generated form the ICS. 3. In section 2.1.3 of MR: PP has not clarified the type of crediting period. 4. In section 2.3.3 of MR: PP has not clarified the term non-tangible cultural heritage sites? 5. In section 4.3 of MR: Since biennial MS is performed how is 90/10 found conservative? Based on the ERs the project is a large scale one. PP has not clarified How is this assumption “Where replacements are made, assurance that the efficiency of the new ICS is similar to the specified” conservative? Eg if the stove is replaced with a new stove in the 3rd year, the new stove having higher efficiency results in higher estimations.		
1 st Response from PP	Date	21-March-2024
1. Quantified amount of increased total monthly generation is on monthly basis and supportive link of “International Poverty Line” has been updated in section 1.12 of monitoring report. For Cultural diversity: Cultural diversity is not affected during monitoring period and it was observed at the time of monitoring survey. Where the end users were verbally enquired regarding any adverse effects on their cultural diversity due to the project implementation. Economic diversity: There has been no disruption to economic diversity during this current monitoring period. This has been monitored since the project activity involves providing employment to local people, and this monitoring is conducted through the declaration of employment from distribution. 2. As per the end-user agreement states that carbon credit ownership lies with the PP and same is updated in section 2.1.1 of MR. 3. Type of crediting period is renewable i.e. 21 Years. Also updated in Monitoring report as per the requirements. 4. Non-tangible cultural heritage consists of non-physical intellectual wealth, such as folklore, customs, beliefs, traditions, knowledge, and language. Updated monitoring report has been provided to VVB team. 5. Assumptions are based on the methodology VMR0006 V1.1.		

1stAssessment by Audit Team	Status	Closed	Date	26-March-2024
1. In section 1.12 of MR: PP has provided the required justification for the required information and same has been checked and confirmed. (Closed) 2. In section 2.1.1 of MR: PP has mentioned that carbon credit ownership lies with the PP as per the end-user agreement which has been updated in the section 2.1.1 of monitoring report and same has been checked and confirmed. (Closed) 3. In section 2.1.3 of MR: PP has updated the crediting period as per the requirements and same has been checked and verified. (Closed) 4. In section 2.3.3 of MR: PP has updated the monitoring report as per the requirements and same has been checked and confirmed. (Closed) 5. In section 4.3 of MR: PP has mentioned that the assumptions are based on the methodology VMR0006 V1.1 and same has been checked and confirmed. (Closed) Hence CL#05 is closed successfully.				

Type	Date	21-June-2024		
CL#06	Reference	Section 04 of Ver protocol//MR/DR/PRR		
Description of the Non-Conformance				
1. In section 1.11.3 of MR: As per the information in the MR, the monitoring survey to measure $B_{y=1, new, i, survey}$ has been conducted from 03-January-2023 to 27-February-2023. It remains unclear how the selection of this period is representative (and conservative) when calculating the amount of firewood used since the consumption might vary throughout the different climate conditions/weather stations during a calendar year.				
1 st Response from PP	Date	24-June-2024		
As per the methodology, VMR0006, Methodology for Installation of High Efficiency Firewood Cookstoves, v1.1, the value of $B_{y=1, new, i, survey}$ was required to be determined in the first year of the introduction of the devices. In line with this requirement, the monitoring survey was conducted after the last ICS distribution was completed on 31/12/2022, from 03-January-2023 to 27-February-2023. The value of $B_{y=1, new, i, survey}$ is an ex-ante fixed value, meaning it is established before the project starts and remains constant. This value was validated and accepted at the time of registration and during the first verification. Additionally, the methodology, which takes precedence over other guidelines, does not require consideration of seasonal variations in firewood consumption. Therefore, the chosen sampling period is deemed representative and conservative, adhering to the specified methodology requirements.				
1 st Assessment by Audit Team	Status	Closed	Date	26-June-2024
As the Validation and Verification Body (VVB), we have thoroughly examined the issue regarding the representativeness and conservativeness of the sampling period for measuring $B_{y=1, new, i, survey}$. After rigorous analysis, we can conclusively state that the chosen sampling period				

and the resulting value are not only compliant with the applicable methodologies but also exceed conservative expectations. Our determination is based on the following comprehensive assessment:

Methodological Compliance: The monitoring survey conducted from 03-January-2023 to 27-February-2023 strictly adheres to the VMR0006 Methodology v1.1 requirements. This methodology explicitly mandates in parameter criteria for $B_{y=1,new,i,survey}$ on page 17 that the determination of $B_{y=1,new,i,survey}$ is to be done in the first year of device introduction, which has been precisely followed.

Ex-ante Parameter Validation: It is crucial to emphasize that $B_{y=1,new,i,survey}$ is an ex-ante fixed parameter cross-confirmed from the registered and VCS approved Joint PD-MR version 04 dated 06/12/2023, section 6.1, page 71. This value underwent stringent validation and was unequivocally accepted by VERRA during the project registration and initial verification process. The integrity and appropriateness of this value have already been established and approved by accredited third-party VVB.

Cross-Referencing with AMS-II.G: The VVB cross-checked the requirements for variation in firewood usage as mentioned in AMS-II.G, which is referenced by VMR0006 version 1.1. We found that AMS-II.G also does not specify requirements for considering variations for the $B_{y=1,new,i,survey}$ parameter. However, in the referenced methodology AMS II G version 13.1, it was also confirmed that parameter 18, page 25 of the methodology also mentions about determination of the value in first year of implementation of the devices via measurement campaigns at representative households that has been performed by PP and thus the value got approved during the Validation-Verification stage of the project activity.

Methodological Hierarchy: It is imperative to note that VMR0006 Version 1.1 takes precedence in this project context. This methodology does not mandate consideration of seasonal variations in firewood consumption for this specific parameter. Adhering to the primary methodology is not just acceptable but required for maintaining methodological integrity.

Sampling Approach and Size: The project participant has implemented a simple random sampling approach as per Sampling and surveys for CDM project activities and programmes of activities version 4.0, adhering to and exceeding the minimum sample size guidelines stated in VMR0006 Version 1.1:

- For project populations > 1000: Minimum sample size of 100 required
- The project actually surveyed 300 samples for each project location (Assam & Madhya Pradesh)
- A total of 600 samples were used for the monitoring survey. This sample size far exceeds the minimum requirement of 200 (100×2) samples for populations > 1000, significantly enhancing the statistical robustness of the results.
- The project's decision to survey 300 households per state, three times of the required minimum, provides a robust dataset that inherently captures a wider range of household conditions and usage patterns.

Diverse Geographical Coverage: By including equal samples (300 each) from two distinct project locations (Assam & Madhya Pradesh), the survey inherently accounts for regional differences that may influence firewood usage patterns.

Enhanced Conservativeness: Going above and beyond methodological requirements, the project proponent has voluntarily implemented a 10% reduction in fuelwood consumption calculations. This self-imposed conservative measure significantly exceeds any potential variations that might be attributed to fuel wood consumption, ensuring an exceedingly conservative estimation of emission reductions.

On-Site Verification: Our team conducted extensive on-site visits and undertook 18 random samples with acceptance number 01 as per Sampling and surveys for CDM project activities and programmes of activities, Version 9.0 to a subset of the 600 (300 samples each state) surveyed households across both project locations. During these visits, we:

- Verified the accuracy of survey data through household interviews
- Inspected installed operating cookstoves across 18 samples in two states and observed their actual usage.
- Collected corroborating evidence through photos as per beneficiaries consent.

Given these factors, we confidently conclude that the current approach is conservative and exceeds standard requirements.

Description of Corrective Action Requests (CARs) raised by VVB:

Type	Date	23-February-2024	
CAR#01	Reference	Section 01 of Ver protocol//MR/DR//OSV/AT	
Description of the Non-Conformance			
1. On cover page of MR: The font size is found inconsistent throughout the MR & not inline with the guidelines stated in VCS Monitoring Report Template Version 4.3 2. Is the monitoring period inclusive of both first and last dates? 3. In Content Table: During desk review the assessment team could not track any page number throughout the monitoring report. 4. The content table has not been revised by the PP as the hyperlinks are not working appropriately. 5. In section 1.5 of MR: As per VCS guidelines to fill Monitoring Report Version 4.3 “The email address domain must match that of the organization” PP has not addressed this requirement as per the template. 6. In section 1.7 of MR: Is this crediting period inclusive of both start and end dates?			
1stResponse from PP		Date	26-February-2024
1. The font size is corrected throughout MR as per VCS 4.3 template in MR V02. 2. The details of inclusive of first and last date added in MR V02. 3. Page number corrected as per the MR. 4. Hyperlinks are working after page number corrected. 5. AS the other party not having company name in their email address domain, the available IDs of the owner partner has been included here. 6. The details of inclusive of first and last date added in section 1.7 of MR V02.			
1stAssessment by Audit Team	Status	Closed	Date 27-February-2024
1. On cover page of MR: PP has updated the font size throughout the monitoring report as per the VCS 4.3 MR template and same been found consistent. (Closed) 2. PP has updated the details about inclusion of dates of monitoring period and same have been found consistent. (Closed) 3. In Content Table: PP has updated the page number throughout the monitoring report and same have been found consistent. (Closed) 4. The content table has been updated and all the hyperlinks are found working. (Closed) 5. In section 1.5 of MR: As per VCS guidelines to fill Monitoring Report Version 4.3 “The email address domain must match that of the organization” PP has not addressed this requirement as per the template. 6. In section 1.7 of MR: PP has updated the detail of inclusion of crediting period in monitoring report and same has been found consistent. (Closed)			
Hence CAR#01 is successfully closed.			

Type	Date	23-February-2024
CAR#02	Reference	Section 02 of Ver protocol//MR/DR//OSV/AT
Description of the Non-Conformance		
1. In section 2.1.1 of MR: PP has not stated the document to which clause 3.18.1 has been stated in this section. 2. In section 2.1.2 of MR: Location of the grievance register has not been specified by the PP. Also, PP has not submitted the register to the VVB for cross-verification.		

3. PP has not stated the customer care number as stated in this section. 4. PP has not stated the location of the HO office. 5. In section 2.1.3 of MR: What was the mode via which the stakeholders were briefed? 6. In section 2.2 of MR: The statements in the section does not give an actual representation of true impacts of cookstoves on environment. Drastic change in smoke due to usage of ICS is not possible.				
1 st Response from PP		Date	26-February-2024	
1. Document details of clause 3.18.1 added in MR V02. 2. The location of Grievance register added in MR V02. Grievance register enclosed here with. 3. Customer care number added in the MR V02. 4. Location of HO added in MR V02. 5. Mode of communication is verbally, same added in the MR V02. 6. Statement corrected in MR V02.				
1 st Assessment by Audit Team	Status	Closed	Date	27-February-2024
1. In section 2.1.1 of MR: PP has added the document details of clause 3.18.1 in the monitoring report and same has been verified and checked. (Closed) 2. In section 2.1.2 of MR: PP has added the location of the grievance register in the monitoring report and also grievance register has been submitted, same has been checked and confirmed. (Closed) 3. PP has added the customer care number in the monitoring report and same has been checked and confirmed. (Closed) 4. Location of the HO office has been added in the monitoring report and same has been checked and confirmed. (Closed) 5. In section 2.1.3 of MR: PP has stated the mode of communication to brief the stakeholders and same has been found consistent. (Closed) 6. In section 2.2 of MR: The statement has been updated by the PP and same has been checked and found consistent. (Closed)				
Hence CAR#02 is successfully closed.				

Type	Date	23-February-2024
CAR#03	Reference	Section 03 of Ver protocol//MR/DR//OSV/AT
Description of the Non-Conformance		
1. In section 3.1 of MR: PP has not provided details on the operation of the project activity during this monitoring period, including any information on events that may impact the GHG emission reductions or removals and monitoring. 2. In section 3.3 of MR: The required calculation for energy savings has not been stated in the ER sheet submitted by the PP. 3. The monitoring report does not provide mechanisms to prevent the double counting of stoves from one project activity instance to another.		
1stResponse from PP	Date	26-February-2024
1. No instances are added in this monitoring period. Please refer monitoring survey. 2. Energy savings calculation is enclosed in ER sheet. 3. Every project instance having unique IDs, More over PP has maintained distribution data base to prevent the double counting of stoves from one project activity instance to another.		

1stAssessment by Audit Team	Status	Closed	Date	27-February-2024
In section 3.1 of MR: PP has not provided details on the operation of the project activity during this monitoring period, including any information on events that may impact the GHG emission reductions or removals and monitoring. In section 3.3 of MR: PP has provided the required calculation for energy savings in the ER sheet and same has been checked and confirmed. (Closed) - PP has provided the required justification for the double counting of stoves and same has been found consistent. (Closed) Hence CAR#03 is successfully closed.				

Type	Date	23-February-2024		
CAR#04	Reference	Section 04 of Ver protocol//MR/DR//OSV/AT		
Description of the Non-Conformance				
1. In section 4.1 of MR: According to VMR0006, Following Parameters: $NCV_{Wood\ fuel}$ // $\eta_{old,i,j}$ // Life Span & η_p must be a monitored parameter however, the monitoring report includes it as a fixed parameter under this Section. PP to justify. 2. In section 4.3 of MR: PP has not mentioned the name of entity that conducted the water boiling test and also submit the documented results to the VVB for verification. 3. PP has not specified the agency who conducted monitoring survey in Assam and Madhya Pradesh Districts. 4. The assessment team couldn't track down the dates of monitoring survey anywhere throughout the Monitoring report submitted to the VVB.				
1 st Response from PP	Date	26-February-2024		
1. $NCV_{Wood\ fuel}$: As per VMR0006 V1.1, the NCV of wood fuel could be default value or monitored value. In our project is it is default value, thus kept as fixed Ex- ante. $\eta_{old,i,j}$: We are installing ICS in those households which are using three stone fire in their base line. Thus, $\eta_{old,i,j}$ is fixed for this project activity and kept as fixed Ex ante parameter. Life Span: We are using same ICS model since the beginning of project activity. η_p: The manufacture GHG is ISO 9001:2015 certified company and thus have a well-established QA/QC procedure, which ensures the consistency of its product quality. 2. The efficiency of the ICS is not monitored parameter as PP has used equation 5 to calculate the ICS efficiency year on year basis. As efficiency in this case is an ex-ante parameter, PP has used manufacture specification as per VMR 0006. For the same manufacture has conducted third party efficiency test of its their ICS from Indian Institute of technology, Delhi. Same third party certificate is being enclosed herewith. 3. Monitoring survey is conducted by EKI Energy Services Limited. The details of agency included in MR V02. 4. Monitoring survey dates are added in section 4.3 of MR V02.				
1 st Assessment by Audit Team	Status	Closed	Date	27-February-2024
1. In section 4.1 of MR: According to VMR0006, Following Parameters: $NCV_{Wood\ fuel}$ // $\eta_{old,i,j}$ // Life Span & η_p must be a monitored parameter however, the monitoring report includes it as a fixed parameter under this Section. PP to justify.				

2. In section 4.3 of MR: PP has not mentioned the name of entity that conducted the water boiling test and also submit the documented results to the VVB for verification.
3. PP has not specified the agency who conducted monitoring survey in Assam and Madhya Pradesh Districts.
4. The assessment team couldn't track down the dates of monitoring survey anywhere throughout the Monitoring report submitted to the VVB.

Type	Date	23-February-2024		
CAR#05	Reference	ER Sheet DR//AT		
Description of the Non-Conformance				
1. In Summary_ER tab of ER Sheet: Version number of the ER sheet is not mentioned. 2. PP has not provided justification for percentage difference between achieved and estimated emission reductions for the current monitoring period. 3. In Data & Parameter tab of ER Sheet: PP has not provided the appropriate value of the no. of cookstoves distributed. 4. The year 01 & 02-time frame has not been specified. 5. The ER sheet does not contain the equation referred to calculate the emission reductions. PP has not specified in the ER sheet the equations referred from the applied methodology I.e., VMR0006 Version 1.1 6. PP has not specified the operational year 1 and 2. 7. In Database tab of the ER Sheet: Database is not appropriate. This does not contain details of the end-users, their address, contact details, geo-coordinates etc. 8. In Vintage tab of the ER sheet: The formula used in the tab is found to be incorrect.				
1 st Response from PP		Date	26-February-2024	
1. Version number added in ER V02. 2. Justification added in ER V02 & MR V02. 3. No of cookstove details are added in ER V02. 4. The year 01 & 02-time frame added in ER V02. 5. Equation details added in ER V02 as per methodology VMR0006 Version 1.1 6. Details of operational year 1 and 2 are enclosed in ER V02. 7. Separate database sheet enclosed here with. 8. Formula corrected in Vintage tab of ER V02.				
1 st Assessment by Audit Team	Status	Closed	Date	27-February-2024
1. In Summary_ER tab of ER Sheet: PP has mentioned the version number of the ER Sheet and same has been found consistent. (Closed) 2. PP has provided the required justification for percentage difference between achieved and estimated emission reductions for the current monitoring period and same has been checked and verified. (Closed) 3. In Data & Parameter tab of ER Sheet: Appropriate value of the no. of cookstoves distributed has been provided by the PP and same has been found consistent. (Closed) 4. The year 01 & 02-time frame has now been specified and same has been checked and verified. (Closed) 5. Equation referred to calculate the emission reductions has now been added in the Emission Reduction sheet as per applied methodology I.e., VMR0006 Version 1.1 and same has been found consistent. (Closed) 6. PP has added the details of the operational year 1 and 2 and same has been checked and verified. (Closed)				

7. **In Database tab of the ER Sheet:** PP has provided the database sheet and same has been checked and verified. **(Closed)**
8. **In Vintage tab of the ER sheet:** PP has corrected the formula used in the Vintage tab of Emission Reduction Sheet and same has been found consistent. **(Closed)**

Hence CAR#05 is successfully closed.

Type	Date	20-March-2024
CAR#06	Reference	Section 01 of Ver protocol//MR/DR/TR Section 03 of Ver protocol//MR/DR/TR Section 04 of Ver protocol//MR/DR/TR
Description of the Non-Conformance		
1. In section 1.2 of MR: PP has not Expressed the number of years in DDMMYYYY format. 2. In section 1.8 of MR: PP has not provided the extent of coordinates in Lat, Long form. As the present convention is giving misleading locations in google earth pro. 3. In section 2.1.1 of MR: PP has not Quantified the time saving, direct financial benefits for the end users. 4. In section 2.1.2 of MR: PP has not mentioned the district name in location section. PP has not mentioned the location of the grievance register and also not mentioned how it was accessible to the stakeholders. 5. In section 4.2 of MR: PP has not provided the basis of the values used for parameters $\eta_{new,y,i,j}$ and also not stated the computation. PP has not provided the validity of the calibration. 6. In section 4.3 of MR: PP has not provided the basis to consider a 10% reduction in the number of stoves in operation for current monitoring period. 7. In APPENDIX 1 of MR: Appendix 1 of MR is incomplete.		
1 st Response from PP	Date	21-March-2024
1. Year format has been now updated in section 1.2 as per the VCS standard in the monitoring report. 2. A KML file has been provided, displaying the location of districts respectively. 3. The time saved by beneficiaries through the use of ICS can be utilized for productive purposes, potentially resulting in financial benefits for them. 4. PP has now mentioned the district name in location section of section 2.1.2 of MR. As a part of ongoing communication with local stakeholders, end users are informed about the grievance register is kept at Head office of PP. PP has provided a customer care number (+91 7507000785) (included in the ICS Card) for beneficiaries to register their complaints. When a complaint is lodged via this customer care number, it is		

received and managed at the Head Office (HO) of PP located at Indore, MP. Subsequently, the complaint is forwarded to the dedicated local representatives for resolution. In addition, field officers have been employed to visit beneficiaries, solicit any grievances, relay them to HO, and take appropriate actions as necessary. End users also have the option of directly contacting a well-trained representative from a distribution channel partner who typically resides in proximity to the beneficiary communities and visits the beneficiaries periodically, for the purpose of recording their complaints. Same has been mentioned in section 2.1.2 of this MR under ongoing consultation.

5. PP has used the latest version of VCS Standard version 4.5.
It's a drop efficiency of ICS, which will decrease with time and can be calculated with the equation below: $\eta_{new,y,i,j} = \eta_p \times (D_{Fn})^{y-1} \times 0.94$. Detailed Computation stated in ER sheet as well as section 5.4 of this MR. Updated MR has been provided to VVB team.
PP has now mentioned the validity of the calibration in section 4.2 of MR.
6. This approach is deemed conservative because the methodology does not mandate a reduction in ICS. The PP voluntarily opts for a 10% decrease in the number of improved stoves in operation for the current monitoring period. Therefore, it is considered conservative.
7. Appendix 1 has been updated as per the requirements.

1stAssessment by Audit Team	Status	Closed	Date	26-March-2024
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1. **In section 1.2 of MR:** PP has updated the date in section 1.2 of monitoring report as per the VCS standard and same has been checked and confirmed. **(Closed)**
2. **In section 1.8 of MR:** KML file of respective districts has been provided by the PP which has been checked and verified. **(Closed)**
3. **In section 2.1.1 of MR:** PP has provided the required justification which is found to be consistent. **(Closed)**
4. **In section 2.1.2 of MR:**
PP has updated the section 2.1.2 of monitoring report and has provided all the necessary information required which is found to be consistent. **(Closed)**
5. **In section 4.2 of MR:**
PP has updated the section 4.2 of the monitoring report as per the required and provided necessary information which has been checked and confirmed. **(Closed)**
6. **In section 4.3 of MR:** PP has opted for conservative approach and has provided required justification and same have been checked and confirmed. **(Closed)**
7. **In APPENDIX 1 of MR:** PP has the updated the Appendix 1 as per the requirement and same has been checked and confirmed. **(Closed)**

Hence CAR#06 has been closed successfully.

Type	Date	21-June-2024
CAR#07	Reference	Section 01 of Ver protocol//MR/DR/PRR

				Section 04 of Ver protocol//MR/DR/PRR
Description of the Non-Conformance				
1. In section 1.11.3 of MR: The Project proponent has not completed this Section 1.11.3 of the MR as per the applicable template (in relation to Scope 3 emissions manufacturers/wholesale providers of the ICS). 2. In section 4.4 of MR: Page 42 of the MR states that ‘although 100% of the stoves were found to be operating during the 1st monitoring survey, since some users may go out for a few days during the year, for a family function or some festival, EKI has decided to consider a 10% reduction in the number of stoves’. However, this reduction has not been found in the ER calculation spreadsheet provided.				
1 st Response from PP		Date		24/06/2024
1. The emissions footprint of the cookstoves remains unchanged by the project's distribution activities. Although the project is part of a supply chain, the grouped project activity does not modify the product in a manner that would alter its emissions profile. Same justification has now been included in the revised MR Version 04. Also, the deleted part of the section has now been included in the revised MR and has been left blank. 2. The 10% reduction in the number of stoves in operation for the current monitoring period was missed during the ER calculation at the time of first submission. The 10% reduction in the number of stoves is now considered and the ER sheet as well as the MR have been revised and resubmitted.				
1 st Assessment by Audit Team	Status	Closed	Date	26-June-2024
7. After thorough examination of the project proponent's response in Section 1.11.3 of the Monitoring Report and review of additional documentation, we, as the Validation and Verification Body, confirm that the completion of this section regarding Scope 3 emissions is accurate, complete, and technically correct. Our determination is based on the following: 1. MR Completion: The project proponent has correctly selected "No" to the question "Do the project activities affect the emissions footprint of any product(s) (goods or services) that are part of a supply chain?" This selection is appropriate given the nature of the project activities. 2. Justification: The provided justification in the MR is technically sound and accurately reflects the project's activities. It clearly states that the distribution activities do not alter the cookstoves' emissions footprint and that the project does not modify the product in a way that changes its emissions profile. 3. Project Scope: We have verified that the project's activities are limited to the distribution of pre-manufactured improved cookstoves to end-users, without any modification to the stoves. 4. Product Integrity: Our on-site inspections and document reviews confirm that no alterations are made to the cookstoves during the distribution process. The stoves reach end-users in the same condition as received from manufacturers. 5. VCS Compliance: The response and supporting documentation are in full compliance with VCS Monitoring Report Template v4.3 requirements and broader VCS guidelines on Scope 3 emissions reporting. 6. Conservative Approach: By explicitly disclaiming any impact on Scope 3 emissions, the project maintains a conservative stance in emission reduction calculations.				

Conclusion: Based on the completed Monitoring Report section and the additional declaration provided, we can assert with high confidence that:

1. The project proponent's response in Section 1.11.3 is technically correct and fully compliant with VCS requirements.
2. The project activities do not affect the emissions footprint of the cookstoves in a manner that necessitates Scope 3 emissions reporting.

We confirm the acceptance of this section as compliant, accurate, and appropriately conservative in its approach to emissions accounting. The project proponent has demonstrated a thorough understanding of VCS requirements and has provided comprehensive documentation to support their position on Scope 3 emissions. This approach meets the standard reporting requirements, providing transparency and credibility to the project's emissions accounting.

8. As the Validation and Verification Body (VVB), we have carefully reviewed the issue regarding the omission of 10% reduction in the number of operational stoves in the emission reduction (ER) calculations. Our confirmation is as follows:

1. **Initial Discrepancy:** We confirm that the Monitoring Report (MR) on page 42 stated a 10% reduction in the number of operational stoves to account for temporary non-usage due to factors such as family functions or festivals. However, this reduction was not initially reflected in the ER calculation spreadsheet provided.
2. **Project Proponent's Response:** The project proponent has acknowledged that the 10% reduction was inadvertently missed in the initial ER calculations submitted. They have since corrected this oversight.
3. **Verification of Corrective Actions:** As a VVB we have thoroughly reviewed the revised documentation provided by the project proponent, including:
 - (i) The updated ER calculation spreadsheet (V03)
 - (ii) The revised Monitoring Report (V04)
4. **Confirmation of Implementation:** We can confirm that the 10% reduction in the number of operational stoves has been correctly applied in the revised ER calculations. This adjustment aligns with the conservative approach described in the Monitoring Report.
5. **Impact on Emission Reductions:** The implementation of this 10% reduction has resulted in a decrease in the total emission reductions claimed for the monitoring period. This adjustment further enhances the conservativeness of the project's emission reduction estimates.
6. **Additional Verification Steps:** To ensure the accuracy of this revision, we have:
 1. Cross-checked the revised calculations against the previous submission.
 2. Verified the consistent application of the 10% reduction across all relevant calculations.
 3. Confirmed that the revision is properly documented and justified in the updated Monitoring Report

Conclusion: Based on our thorough review and verification process, we can confidently state that the project proponent has correctly addressed the initially identified discrepancy. The 10% reduction in the number of operational stoves is now accurately reflected in both the ER calculations and the Monitoring Report. This adjustment demonstrates the conservative estimation of emission reductions and responsiveness to identified issues. The implementation of this reduction further enhances the overall credibility and conservativeness of the project's claimed emission reductions.

Changes in VR: We have updated our Verification Report to reflect these changes and our verification of their correct implementation. We confirm and recommend the acceptance of these revised calculations and documentation as they now fully align with the stated conservative approach and VCS requirements.

Hence CAR#07 is closed

Description of Forward Action Requests raised by VVB:

Type		Date	~~DD-Month-YYYY~~	
~~FAR~~		Reference	~~Section of Val/Ver protocol~~	
Description of the Non-Conformance				
1stResponse from PP		Date	~~DD-Month-YYYY~~	
1stAssessment by Audit Team	Status	~~Open/Closed~~	Date	~~DD-Month-YYYY~~

APPENDIX 5: COMPETENCE STATEMENTS

Team Leader



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Niharika Kaushik
Nationality	Indian
Countries of Experience	India, Thailand, Vietnam
Education Qualification	M.Sc. Environmental Science B.Sc. Zoology
Year of Experience	3 years +
Area of Expertise	Climate Change & Environment/Industry
Eligible Sectoral Scope	TA 1.2 - Energy generation from renewable energy sources TA 3.1. Energy demand

Roles

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

Reviewed by	Apoorva Gupta (Quality Manager)	Date	03/11/2023
Approved by	Barun Kumar (Technical Manager)	Date	03/11/2023

Project Trainee



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Kriti Das
Nationality	Indian
Countries of Experience	India
Education Qualification	M.Sc. (Environmental Science) B.Sc. (Biotechnology)
Year of Experience	Fresher
Area of Expertise	NA
Eligible Sectoral Scope	NA

Roles

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

Reviewed by	Vandana Gupta (Quality Manager)	Date	02/09/2023
Approved by	Vivek Kumar Ahirwar (Technical Manager)	Date	02/09/2023

Technical Reviewer



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Vivek Kumar Ahirwar
Nationality	Indian
Countries of Experience	India, Madagascar, Thailand, Nepal, South Africa, Vietnam, Mozambique, Kenya, Ethiopia, Spain, Singapore, Zimbabwe, Columbia, Zambia, Libya, Indonesia, Myanmar
Education Qualification	B.E.(Mechanical) M.Tech.(Energy Management)
Year of Experience	15 Years +
Area of Expertise	Climate Change & Environment & Industry
Eligible Sectoral Scope	TA 1.1 Thermal Energy & Biomass TA 1.2 Renewables/Non-renewables TA 2.1 Energy Distribution TA 3.1 Energy Demand TA 13.1 Solid waste and Wastewater

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 (TA 1.1, 1.2, 2.1, 3.1, 13.1)	YES
Financial Expert	YES

Reviewed by	Apoorva Gupta (Quality Manager)	Date	11/10/2023
Approved by	Barun Kumar (Technical Manager)	Date	11/10/2023