



KENYA JIKO KISASA IMPROVED COOKSTOVE PROGRAM I



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Project title	Kenya Jiko Kisasa Improved Cookstove Program I
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Summary:	
Guangzhou Iceberg Environmental Consulting Services Co., Ltd. has appointed the verification body '4K Earth Science Private Limited' to perform a verification of VCS Project Activity "Kenya Jiko Kisasa Improved Cookstove Program I" in Kenya (hereafter "project activity") for the period from 21-June-2022 to 20-June-2024 (both days included). The project proponent 'Guangzhou Iceberg Environmental Consulting Services Co., Ltd' applied the VCS approved Methodology: VMR0006, version 1.1 "Methodology for Installation of High Efficiency Firewood Cookstoves". In addition, the Standard: Sampling and Surveys in CDM Project Activities and Programme of Activities version 9.0; Guidelines: Sampling and Surveys in CDM Project Activities and Programme of Activities version 4.0 are used; these documents include the requirements for sampling and surveys applied to clean development mechanism projects and programme of activities (PoA) and specifies the reliability requirements and describes appropriate sampling methods and what is expected to be provided in a sampling plan. The verification consisted of the following three phases: i) a desk review of the Monitoring Report ii) On- site Visit; iii) the resolution of outstanding issues and internal technical review followed by the issuance of the final verification report and opinion. During the verification process 00 CARs, 05 CLs and 00 FAR were raised, all the CARs and CLs are closed now and no FAR was raised during this verification. The list of Forward Action Request (FAR), Clarification and Corrective Actions Requests (CL and CAR) is presented in this report.	

‘4K Earth Science Private Limited’ confirms that the project is implemented in accordance with the validated VCS-PD and the monitoring plan; and then, claimed emissions reductions are calculated without material misstatements.

‘4K Earth Science Private Limited’ has performed the verification of ‘Kenya Jiko Kisasa Improved Cookstove Program I’ based on all issues and criteria of VCS Standard version 4.7 and VCS Program Guide version 4.4 for VCS projects and on the criteria given to provide for consistent project operations, monitoring and reporting. Hence, 4K Earth Science Private Limited in opinion that the project correctly applies the baseline and monitoring methodology VMR0006: “Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1” and meets the relevant VCS requirements for the Methodology, Voluntary Carbon Standard requirements and the relevant host country criteria.

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1 INTRODUCTION

1.1 Objective

4K Earth Science Private Limited has been contracted by, “Guangzhou Iceberg Environmental Consulting Services Co., Ltd.” to undertake verification and certification for the greenhouse gas (GHG) emission reductions reported from ‘Kenya Jiko Kisasa Improved Cookstove Program I’ (VCS ID 3197)/09/ for the monitoring period 21-June-2022 to 20-June-2024. (Inclusive of both days), under the crediting period 21-June-2022 to 20-June-2032, in the initial monitoring report version 01 dated 28 June 2024, regarding the relevant requirements of VCS Standard Version 4.7. The VCS projects must undergo an independent third-party verification and certification of emission reductions as the basis for issuance of Voluntary Emission Reductions (VERs).

The objectives of this verification exercise are, by review of objective evidence, to establish that:

- The project activity has been implemented and operated as per the project description (PD) and that all physical features (technology, project equipment, and monitoring equipment) of the project are in place.
- Monitoring report/1/ and other supporting documents/2/10/11/12/08/ are complete.
- The data is recorded and stored as per the monitoring methodology and approved monitoring plan.
- To confirm that the monitoring system is implemented and fully functional to generate Voluntary Emission Reductions (VERs/VCUs) without any double counting, and
- To establish that the data reported are accurate, complete, consistent, transparent and free of material error or omission by checking the monitoring records and the emissions reduction calculation.

1.2 Scope and Criteria

The verification scope is defined as an independent and objective review of monitoring report, VCS project description (VCS PD), including the monitored data, and other relevant documents made available to verifier and information collected through performing interviews during Onsite assessment of the project activity.

The project is assessed against the requirements of VCS standard version 4.7/13/ and related rules and guidance/13/. 4KES has, based on the recommendations in the latest version of Verified Carbon standard, and employed a rule-based approach (as criteria) in the verification, focusing on the identification of significant reporting rules and the reliability of project monitoring.

The aspects to be covered under the purview of verification are:

- Ensure that the project activity has been implemented and operated as per the VCS PD/09/ and that all physical features (technology, project equipment, and monitoring equipment) of the project are in place as per the documents provided by the client and during onsite audit;
- Ensure that the monitoring report/1/ and other supporting documents/2/10/11/12/08/ provided are complete
- Ensure that the practiced monitoring system and procedures comply with the monitoring systems and procedures described in the monitoring plan.
- Evaluate the data recorded and stored are as per the monitoring methodology/13/

1.3 Level of Assurance

The level of assurance of the verification report falls under reasonable assurance engagements as selected by the client. The verification team verified the monitoring data for all the parameters of the monitoring plan and confirms that the reported emission reductions are free from any type of material errors.

1.4 Summary Description of the Project

The proposed project activity aims to increase access of households and communities to improved cookstoves by disseminating high thermal efficiency and low greenhouse gas emitting cooking stoves known as Improved Cook Stoves (ICS) to the rural households of Kenya. The implementation of the project activity will result in replacement of low efficiency and high greenhouse gas emitting stoves in the households, thereby resulting in reduction of firewood consumption & consequent emissions from combustion. Overall objectives through the implementation of the project are reduction of greenhouse gases, conservation of forests leading to climate change mitigation in a sustainable manner, as well as improved health conditions of ICS users due to improved indoor air quality along with drudgery reduction in everyday cooking. The verification team conducted the onsite inspection to confirm the project description, wherein the project stoves were physically verified.

The project has distributed 26,130 ICSs to end users free of charge during this monitoring period, which is from 21/06/2022 to 20/06/2024, verified from the database submitted to the project verification team. Each ICS distributed in this project has a unique identification ID, the distribution date and the user's basic information (e.g. name, address, phone number, unique identification ID) has been recorded in electronic database. The ICS is also labelled with programme's logo. Hence, the above methods can make sure that it will avoid double counting of emission reductions. And the emissions reduction of this monitoring period were calculated precisely based on above data, the calculation has been verified in the subsequent sections of verification report.

From 21/06/2022 to 20/06/2024, 26,130 project ICSs have been distributed, covering 50 villages, located in Kiambu County and Muranga County of Kenya. Acceptance sampling was undertaken during the onsite assessment by the verification team to confirm the project implementation. PP also submitted the supporting document labelled as "20_Map of Distributed villages in Kenya-MP1" for details. The details were validated from the database also.

Before the implementation of the project, local people mostly used three-stone fires and low efficiency traditional stove as well as firewood for cooking according to the baseline survey. They spent plenty of time to collect firewood every day due to low combustion efficiency of baseline cooking devices. In the project scenario, firewood is the main fuel for the project firewood ICS, which has burnt wood more efficiently thereby improving thermal transfer to pots, hence saving firewood. The project has reduced the GHG emission by less non-renewable firewood combustion as well as slowing the rapidly progressing deforestation in Kenya.

Iceberg cooperates with local partners to ensure that the ICSs reach the target communities, the representatives of the local partner were interviewed during the onsite inspection. The local partners are in charge of the distribution. They help Iceberg to gain access to the communities and identify local suppliers. Iceberg has provided enough training to the local partners to ensure that they can implement the project smoothly. The distribution has been on-site supervised by Iceberg. All data are collected by online system.

2 VERIFICATION PROCESS

The verification process was carried out in line with the requirements of VCS Version 4.7/13/. In addition, the verification team followed the guidelines of Standard auditing techniques and VVB's Procedures were also applied during the verification. A risk-based approach was followed to carry

out verification and access all the factors and concerns that relate to the issuance of emission reductions from a project activity.

They include:

- Identification of all the sources contributing to the project emissions and emission reductions.
- Authenticity of the provided data is checked.
- A risk-based analysis is carried out to ensure a clear and transparent assessment. The risks involved in this process are mainly with the informational flows and data recording.

2.1 Method and Criteria

VVB follows a risk-based verification approach, wherein a desk review of the project documentation is undertaken, which is followed by onsite inspection by the members of verification team. The verification protocol is filled by the verification team that is based on standard auditing practices and VCS requirements.

The verification consisted of the following three phases

- Document review;
- On-site assessment;
- Resolution of any material discrepancy and the issuance of the final verification report and certification.

During the on-site verification, a random sampling approach has been used by the verification team to verify the reported values of the monitored parameters as listed in the MR which are determined through sampling by PP.

Sampling approach during verification audit is conducted in accordance with “Guidelines for Sampling and Surveys for CDM Project Activities and Programme Activities, Version 04.0”/13/ and the “Standard for Sampling and Surveys for CDM Project Activities and Programme Activities, Version 09.0”/13/.

The verification team followed the “Standard for Sampling and Surveys for CDM Project Activities and Programme Activities” version 09/13/ (Applicable to the monitoring of this group) esp. for taking samples out of the PP’s sample. Verification team had adopted the acceptance sampling approach to verify the sampling result of the PP for the applied verification period.

For the determination of VVB’s acceptance sample size, verification team assumed the following factors:

1. Acceptable quality level (AQL) - 01%
2. Unacceptable Quality Level (UQL) – 20%
3. Producer risk- 5%
4. Consumer risk- 10 %

Verification team has determined acceptance sample size for all the sample survey parameters based on the “Table. Sample size and acceptance number based on AQL, UQL, and producer and consumer risks” of standard “Sampling and surveys for CDM project activities and programme of activities” version 09.0/13/. From the above assumed factors, the verification team determined the minimum sample size (n) as 18 minimum samples for the project and acceptance number (c) as one as per the chosen AQL/UQL, Consumer/Producer risk. The verification team shared the samples with PP during on-site visit.

During site visit/interviews, verification team visited sample household using the ICS system applying the random selection technique and considering equal weight to each technology implemented under the grouped project to cross check the data reported by PP. Verification team has checked the PP samples result with the on-site interview and results, monitoring forms, technical details of the project technology/10/, households data base as per the ER sheet/2/ and found no discrepancies. The result of the VVB’s onsite survey is given below:

Parameters	VVB's Sample size (n)	No of PP's record beyond unacceptable level (C) allowed	No of PP's record beyond unacceptable level (C) identified	Accepted/ Rejected
Monitoring parameters as per MR (Proportion)	18 samples	1	0	Accepted

None of the PP’s sampling monitoring records/data results were found discrepant during the VVB’s verification site-visit. All the visited samples by verification team were showing similar result as reported by PP in its monitoring records. Onsite audit results/observation is found to be in line with PP’s survey/06/. Further, the verification team reviewed all the primary monitoring records on-site to assess the consistency of information in MR and ER calculation spreadsheet and found the monitoring data to be correctly transcribed. Based on that, verification team concludes that sampling results and values presented by PP in the MR and spread sheet and results of survey are consistent with the onsite observation and interview with the end users & PP/7/.

Duration of Verification:

Verification Contract	18 -Nov-2024
Onsite audit	17-Dec-2024 & 18-Dec-2024
Draft Verification Report	15-Feb-2025
Final Verification Report	07-July-2025

2.2 Document Review

A desk review is undertaken for the registered VCS PD, VCS MR, emission reduction calculation spread sheet, and supporting documents related to the project implementation, project design, monitoring and baseline were reviewed as per VCS version 4.7/13/ requirements, involving but not limited to:

- A review of the data and information presented to verify their completeness.
- A review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements and the quality assurance and quality control procedures.
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

The list of documents reviewed is included in the section 'References'.

2.3 Interviews

Details of interviews, topics covered, and additional information are presented below:

Dates:	17-Dec-2024 & 18-Dec-2024		Interviewer
Key points discussed:	Name of person, interviewed	Designation, Organization	
The questions asked were following but not limited to: I. Sampling requirements II. Data base maintenance III. Operational data, Calibration, Data collection, QA/QC procedures, Calculation of ERs, IV.	Han Jin	Project Proponent, Guangzhou Iceberg	Sajay Kandari (Remotely)
	Ji Bao	Environmental Consulting Services Co., Ltd.	Martin Luther King (In Person)
	Julius G Gathuru	Jumbo Capital, Project Implementer	Sajay Kandari (Remotely)
	1. Gabriel Gathirimu 2. Cecilia Wambui Mburu	Local Stakeholders	Martin Luther King

V. Methodology of survey and randomization of population.	3. Teresia Wanjiku Ndirangu 4. Margaret Mwihiaki Githae		(In Person)																																																									
VI. Desired con/precession and actual con/precession calculations procedure.																																																												
VII. Double Counting																																																												
Monitoring Survey, Baseline. The questions asked were following but not limited to: I. When did you purchase the ICS. II. Which model you are using. III. What was the baseline technology you were using prior to purchase of ICS. IV. Whether you have been surveyed by the PP or their representative. V. What questions the surveyor asked. VI. Do you still use the baseline stoves? VII. If yes, then how many meals per day you cook in the project stove and how many in baseline stove. VIII. Did you faced any challenges while operating the ICS?	<table><thead><tr><th>Name of User</th><th>Village</th><th>Device ID</th></tr></thead><tbody><tr><td>Emily Wanjui Mutua</td><td>Kanjai</td><td>3965</td></tr><tr><td>Rahab Mumbi Mutua</td><td>Kanjai</td><td>3601</td></tr><tr><td>Damaris Kanini</td><td>Kanjai</td><td>2770</td></tr><tr><td>Ruth Gachambi Kinuthia</td><td>Kanjai</td><td>3822</td></tr><tr><td>Patience Wangari (Mary Njeri Ndungu’s daughter)</td><td>Kanjai</td><td>4170</td></tr><tr><td>Hannah Nyakairu Kangere</td><td>Kanjai</td><td>2981</td></tr><tr><td>Jane Nyambura Mbugua</td><td>Gathieka</td><td>9145</td></tr><tr><td>Ann Njambi Gacheru</td><td>Gathieka</td><td>7483</td></tr><tr><td>Stella Wanjiru Amos</td><td>Gathieka</td><td>7866</td></tr><tr><td>Lydia Njoki Kamiri</td><td>Gathieka</td><td>9382</td></tr><tr><td>Gabriel Karanja (Peter Mwatha Mburu's son)</td><td>Kirwara</td><td>7064</td></tr><tr><td>Joanina Gathoni Gitau</td><td>Kirwara</td><td>7110</td></tr><tr><td>Catherine Wanjiku (Eunice Wathangi Mungai’s house help)</td><td>Kirwara</td><td>7081</td></tr><tr><td>Margaret Wambui Wairire</td><td>Kirwara</td><td>6935</td></tr><tr><td>Faith Wambui Njegegu</td><td>Kirwara</td><td>6791</td></tr><tr><td>Eunice Anyango Ochiel</td><td>Guthuru</td><td>13352</td></tr><tr><td>David Njoroge (Virginia Wanjiru Wainaina’s husband)</td><td>Guthuru</td><td>12455</td></tr><tr><td>Jane Nnyambura Gacutha</td><td>Guthuru</td><td>12600</td></tr></tbody></table>	Name of User	Village	Device ID	Emily Wanjui Mutua	Kanjai	3965	Rahab Mumbi Mutua	Kanjai	3601	Damaris Kanini	Kanjai	2770	Ruth Gachambi Kinuthia	Kanjai	3822	Patience Wangari (Mary Njeri Ndungu’s daughter)	Kanjai	4170	Hannah Nyakairu Kangere	Kanjai	2981	Jane Nyambura Mbugua	Gathieka	9145	Ann Njambi Gacheru	Gathieka	7483	Stella Wanjiru Amos	Gathieka	7866	Lydia Njoki Kamiri	Gathieka	9382	Gabriel Karanja (Peter Mwatha Mburu's son)	Kirwara	7064	Joanina Gathoni Gitau	Kirwara	7110	Catherine Wanjiku (Eunice Wathangi Mungai’s house help)	Kirwara	7081	Margaret Wambui Wairire	Kirwara	6935	Faith Wambui Njegegu	Kirwara	6791	Eunice Anyango Ochiel	Guthuru	13352	David Njoroge (Virginia Wanjiru Wainaina’s husband)	Guthuru	12455	Jane Nnyambura Gacutha	Guthuru	12600	End users	Sajay Kandari (Remotely) Martin Luther King (In Person)
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IX.	If you discontinue the use of project stove then from when?			
X.	Any employment generated by the stove manufacturer (To confirm the SDG)			
XI.	Any training imparted by the stove manufacturer			
XII.	The level of smoke in baseline and project smoke			
XIII.	Does the project use less time in cooking or high compare to baseline?			
XIV.	What activities you do in case of time saving in project activity stove?			
XV.	Have you received any employment.			
XVI.	Whether the project stove consume less firewood or higher firewood than baseline stove?			
XVII.	How much monitory saving you do in case of fuel saving in project stove? (To confirm the SDG)			

2.4 Site Visits

The VVB has conducted the on-site visit for the verification of the project activity. The on-site visit took place between 17-Dec-2024 & 18-Dec-2024 in Kenya. The following was carried out during the on-site visit:

- An assessment of the project design and technical specification, project location, implementation status and operation of the project activity as per the MR;
- A review of information flows for generating, aggregating, and reporting the monitoring parameters.
- Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the MR/1/;
- A cross check between information provided in the MR/1/ and data from other sources such as user/device database, survey records or similar data sources.
- A check of the project stoves (ICS) is working and observations of monitoring practices against the requirements of the MR/1/, the applied methodology including applicable tool(s), and, where applicable, the applied standardized baseline.
- A review of calculations and assumptions made in determining the GHG data and emission reductions.
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.
- The assessment team has verified sufficient appropriate audit evidence, to reduce audit risk to an acceptably low level as requisite to achieve reasonable level of assurance for the current verification.

2.5 Resolution of Findings

The objective of this verification is to resolve any outstanding issues which need to be clarified for 4KES's positive conclusion on the project description. To guarantee transparency a verification checklist 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 validation/verification protocol consists of three tables; the different columns in these tables are described below.

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

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

A clarification request (CL) is raised if information needs to be more to determine whether the applicable VCS requirements have been met.

In summary, 00 CARs, 05 CLs and 00 FAR were raised during this verification which were closed successfully and details are given under Appendix 3 of this report.

2.5.1 Forward Action Requests

No FAR was issued during the current verification, neither any FAR raised during the previous verification.

2.6 Eligibility for Validation Activities

N/A as the assignment is explicit to the verification activity.

3 VALIDATION FINDINGS

3.1 Methodology Deviations

This project did not apply any methodology deviations.

3.2 Project Description Deviations

This project did not apply any deviations from the registered project description.

3.3 New Project Activity Instances in Grouped Projects

N/A as the project is not a grouped project.

3.4 Baseline Reassessment

Did the project undergo baseline reassessment during the monitoring period?

☐ Yes

☒ No

4 VERIFICATION FINDINGS

4.1 Project Details

Item	Evidence gathering activities, evidence checked, and assessment conclusion:
Audit history	The audit history provided in the MR/1/ was verified with the publicly available information on the VCS project webpage/09/ at VERRA registry. The audit history is correct and the VVB rotation is following the VCS requirements.
Double counting and participation under other GHG programs	Assessment team has conducted the web search of various GHG registries to check whether the current project instance is listed/registered with any other GHG schemes. The search revealed that this project instance is not part of any other project. Further, PP has submitted a declaration to confirm that there is no double counting of this project.
No double claiming with emissions trading programs or binding emission limits	N/A as the project is not part of emissions trading programs or binding emission limits.
No double claiming with other forms of environmental credit	N/A as the project activity has not sought, received, or is planning to receive credit from another GHG-related environmental credit system, assess the evidence of no double claiming against VCS Standard/13/ requirements.
Supply chain (scope 3) emissions double claiming	The project proponent has posted a public statement on their website, the link of the website is: http://www.icebergchina.com/ensnew/contents/304/115.html
Sustainable development contributions	Please refer to Appendix 2 wherein each of the SDG has been assessed separately by the verification team.
Additional information relevant to the project	The project data base is submitted on the confidential basis to the verification team. The same has been assessed under Appendix 1.

4.2 Safeguards and Stakeholder Engagement

4.2.1 Stakeholder Identification

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Stakeholder identification	The process used to identify stakeholders likely impacted by the project shows below: 1. Initial Scoping and Community Engagement: Conduct preliminary research to identify target communities and hold initial meetings with local leaders for preliminary feedback. 2. Stakeholder Mapping: Identify key groups including households, community organizations, local businesses, government agencies, and NGOs, ensuring vulnerable groups are considered. 3. Detailed Stakeholder Analysis: Perform social and economic impact assessments to evaluate how different groups will be affected. 4. Documentation and Communication: Document all findings and clearly communicate project objectives and potential impacts using various channels. Then the following stakeholders have been identified: (a) The ICS end-users (b) Stove manufacturer (c) Local authorities (d) Local NGOs The validation report and the registered PD were reviewed to confirm the same as the local stakeholder identification was carried out at the time of validation and the stakeholder make up has not been changed since then. The verification team undertaken the interviewees during the onsite assessment.

Legal or customary tenure/access rights	The project does not involve local people's tenure rights as this includes the distribution of improved cookstoves to the villagers.
Stakeholder diversity and changes over time	Social Diversity: The ICS end-users vary widely in terms of family size, education levels, and gender roles. Women often play a central role in cooking and are thus primary users of cookstoves, whereas men might be more involved in decision-making processes regarding household purchases. Local NGOs also differ in their structure and influence, often shaped by local social hierarchies and leadership dynamics. Economic Diversity: Economically, stakeholders range from low-income households struggling with daily subsistence to local businesses. Local authorities and NGOs also vary in their financial resources and capacity to support the project. Cultural Diversity: Cultural diversity is evident in the varying customs, traditions, and practices related to cooking and fuel use. The project proponent respects and integrates local knowledge and cultural practice. Differences and Interactions The interactions between these diverse groups are complex. Households rely on local authorities and NGOs for support, while local authorities and NGOs act as intermediaries between households and project implementers. Stove manufacturer interact with households to provide new technologies and technical support. Local authorities and NGOs interact with all these groups to provide regulatory support and technical assistance. Changes Over Time No obvious change in the make-up of stakeholder groups, economic development, social behaviour or culture practice happened in this monitoring period according to the project survey. The validation report and the registered PD were reviewed to confirm the same as the local stakeholder identification was carried out at the time of validation and the stakeholder make up has not been changed

	since then. The verification team undertaken the interviewees during the onsite assessment.
Expected changes in well-being	The project reduces the burden of firewood collection, the time to collect firewood, the cost to buy firewood. Especially for women and girls. Prior to the project, Prior to the Project, the production capacity of the factory is 10200 devices per month. After the implementation of the Project, the production capacity expanded to 16,800 devices per month. The surveys undertaken by the verification team during the onsite assessment and confirmed the monitory saving.
Location of stakeholders	The end users who use ICS from the project are rural people in Thika County, Kenya. The stove manufacturer locates in Kenya itself, Kampong Chhnang Province in Kenya. Local authorities are leaders of local villages and representatives of national government. And local NGOs are national NGO in Kenya. The validation report and the registered PD was validated to confirm the same as the local stakeholder identification was carried out at the time of validation and the stakeholder make up has not been changed since then. The representation from the local authorities, NGOs, users inter alia was confirmed during the onsite assessment. The verification team undertaken the interviewees during the onsite assessment.
Location of resources	The end users usually collect firewood near their villages.

4.2.2 Stakeholder Consultation and Ongoing Communication

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Ongoing consultation	The project proponent has provided different measures to communicate and consult with stakeholders during this monitoring period: 1. Put a hard copy of opinion book in each village to record any incidences or occurrences.

	2. A email address that could be used to complain any problems concerning the project. 3. Ensure that a close collaboration is groomed and maintained between the representatives of JCI and Iceberg with the users and the village elders.
Date(s) of stakeholder consultation	16/05/2022 in Kiambu County and on 19/05/2022 in Murang'a County at the time of validation/registration.
Communication of monitored results	The email has been checked every day, and the opinion book has been checked every month. The project monitoring was conducted by trained local staff, and the results were communicated by them to ensure transparency and timeliness. The verification team witnessed the procedure during the onsite assessment in presence of the top management of the PP and it's implantation partner.
Consultation records	The email has been checked every day, and the opinion book has been checked every month. The project monitoring was conducted by trained local staff, and the results were communicated by them to ensure transparency and timeliness. The verification team witnessed the procedure during the onsite assessment in presence of the top management of the PP and it's implantation partner.
Stakeholder input	They all expressed their like to the project and thought the project would help a lot of local people. So, there is no need for any updates to the project design.

4.2.3 Free, Prior, and Informed Consent

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	The local people were informed and fully explained about the project in advance during the stakeholder consultation meeting. They were happy for the implementation of the project.
Outcome of FPIC discussion	The project proponent has signed carbon transfer agreements with the end users, CCERA and cookstove manufacturer to confirm that PP is authorized to develop the project as the sole project proponent and

	has the sole ownership of all the carbon credits generated from the project.
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4.2.4 Grievance Redress Procedure

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Grievance received and steps taken to resolve the grievance including the outcomes of the resolution	PP has maintained a register as a part of on-going communication with local stakeholders and end users are informed about grievance register. PP shall encourage the stakeholders to provide feedback/grievance as part of continuous ongoing stakeholder communication. The stakeholders shall be communicated through the house visits. The project proponent/local partners have the responsibility to take grievances regarding the project activity and same will be considered during operation of project activity. Thus, ongoing communication of stakeholders is followed through grievance mechanism.
Grievance redress procedure	Stakeholders can submit their opinions to the project through phones, emails, and opinion books, it is easy for them to conduct ongoing consultation.

4.2.5 Public Comments

This project was open for public comment from 21/09/2022 to 21/10/2022 when the PD was made available at VERRA registry, no comments received during that period.

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
N/A	N/A	N/A

4.2.6 Risks to Local Stakeholders and the Environment

4.2.6.1 Management Experience

The project proponent is committed to developing high quality greenhouse gas emission reduction projects via distributing the improved cook stoves in developing countries through carbon finance. The company's core staffs have more than 10 years of experience in developing CDM, VCS and GS projects. And the project proponent has successfully developed community projects in 7 countries in Africa and Asia. The top management was interviewed during the onsite assessment and they explained their experience in the similar projects in Asia and Africa.

To make sure the project can operate well, the project proponent has cooperated with an experienced local NGO Kenyan Chinese Evolution Researcher Association, which has operated similar projects in Kenya. They are very familiar with the communities, language and local culture

4.2.6.2 Risk Assessment

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Natural and human induced risks to stakeholders' wellbeing	The Local stakeholder consultations were conducted by the PP in accordance with the requirements of VCS. The local stakeholder consultation meetings were held with participants representing rural Kenya with an objective of gathering comments and concerns of the stakeholders on the proposed VCS project titled "Kenya Jiko Kisasa Improved Cookstove Program I" implemented by 'Guangzhou Iceberg Environmental Consulting Services Co., Ltd/22/. The project will be implemented in different counties of Kenya. The dates and attendance list of the various meetings that have been conducted are as follows: The physical consultation was conducted on 16/05/2022 in Kiambu County and on 19/05/2022 in Murang'a County. Various inviting methods were applied for the stakeholder consultation meeting. For the convenience of stakeholders, the invitations were in both English and Swahili. The invitation was sent to villagers through broadcast in villages to make sure everyone can understand. Some local people were invited by phone call. For local officers and entrepreneurs, invitation letters were sent to them as formal invitation. National government officials, local and international NGOs were invited by email. Validation team met with the government authorities who were part of the local stakeholder consultation process along with the other attendees. It was informed by the government authorities that the LSC was undertaken at the office of

	the Chief (government officer) and the adequate information was provided to the attendees. The information is already validation at the time of registration of the project under VCS.
Risks to stakeholder participation	No risk identified as the stoves are distributed free of cost to the end users.
Working conditions	The project needs periodic surveys only, there is no risk identified for working conditions. The employees were interviewed and found that they have no complaints in terms of working conditions.
Safety of women and girls	Awareness and training are provided regarding the prevention of sexual harassment at regular intervals to all ground team members. Female workers were interviewed during the onsite assessment and they were satisfied with the safety.
Safety of minority and marginalized groups, including children	The project activities do not pose any risk to minorities or marginalized groups. In fact, it uplifts them by ensuring better access to cleaner cooking technology. Therefore, verification team agrees with the PP that the project technology has no risk in this category.
Pollutants (air, noise, discharges to water, generation and release of hazardous materials and chemical pesticides and fertilizers)	The project activity provides clean cooking technology; hence it does not create any pollution in the project area.

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	No discriminations have been reported to occur in the monitoring period among the employees. Awareness and training regarding prevention of sexual harassment are continuously provided to the ground team members. Training records were verified, and it was concluded based on the training records, interview of the employees that the project proponent works as the laws of land. The HR manager is responsible for the inter complaints, and no such cases identified during the monitoring period.
Sexual harassment	The PP has established system. The staff has been trained about harassment prevention and reporting. The same was confirmed by the employees and the top management during the onsite assessment.
Gender equity in labor and work	Equal opportunity is provided for work. Equal pay and wages have been provided to all employees, irrespective of gender. According to the data provided by the ICS producer, After the implementation of the project, it has 7 full-time employee and 30 part-time employees, and 18 of them are women, 1 is with disabilities. The Deputy General Manager Mr. Han Jin and Mr. Ji Bao confirmed that the project has no discrimination in terms of Gender equity in labour and work. Women workers were interviewed and found satisfied.
Forced labor	The project does not use victims of human trafficking, forced labour, and child labour and follows a strict onboarding procedure compliant with the laws of the land. The same was verified by the interview of top management.
Child labor	No child labour involved, the same was verified during the onsite assessment.
Human trafficking	No human trafficking involved, the competent personnel were employed and same was verified during the onsite assessment.

4.2.7.2 Human Rights

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
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Human rights	The project activities are compliant with all applicable human right laws, and during the project activity, there has been no recorded cases where human rights were infringed upon by the project participant. The HR manager was interviewed along with the top management that human rights are ensured as per the land of the law.
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4.2.7.3 Indigenous Peoples and Cultural Heritage

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
Preservation and protection of cultural heritage	The project activities do not interfere with any indigenous people's cultures, traditions and lifestyles. In fact, the project ensures that these indigenous groups have access to better technologies such as improved cooking technologies to improve their overall well-being. Since the project is the implantation of energy efficient stoves, therefore it is only replacing the baseline technology with the more efficient technology.

4.2.7.4 Property Rights

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
Disputes over rights to territories and resources	Not applicable as the project is the implantation of energy efficient stoves, therefore it is only replacing the baseline technology with the more efficient technology.
Respect for property rights	-

4.2.7.5 Benefit Sharing

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Summary of the benefit sharing plan	The project involves distributing ICS to local people free of charge only. The question was explicitly asked by the verification team during the interviews with the users of project. The users/beneficiary confirmed that the ICS they received under the VCS project are free of cost.
Benefit sharing during the monitoring period	The project involves distributing ICS to local people free of charge only.

4.2.8 Ecosystem Health

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Impacts on biodiversity and ecosystems	Not applicable as the project is the implantation of energy efficient stoves, therefore it is only replacing the baseline technology with the more efficient technology. The project has resulted in the firewood saving and reported under SDGs, which has the positive impact.
Soil degradation and soil erosion	Not applicable as the project is the implantation of energy efficient stoves, therefore it is only replacing the baseline technology with the more efficient technology.
Water consumption and stress	Not applicable as the project is the implantation of energy efficient stoves, therefore it is only replacing the baseline technology with the more efficient technology.

4.2.8.1 Rare, Threatened, and Endangered species

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Species or habitat	The project involves distributing ICS to local people free of charge only. The project is not located in, or adjacent to habitats for rare, threatened, or endangered species.
Areas needed for habitat connectivity	The project involves distributing ICS to local people free of charge only. The project has not adversely impacted areas needed for habitat connectivity during the monitoring period.

4.2.8.2 Introduction of Species

Not applicable as the project is the implantation of energy efficient stoves, therefore it is only replacing the baseline technology with the more efficient technology.

4.2.8.3 Ecosystem conversion

Not applicable as the project is the implantation of energy efficient stoves, therefore it is only replacing the baseline technology with the more efficient technology.

4.3 Accuracy of Reduction and Removal Calculations

The verification team has reviewed the emission reduction (ER) spread sheet/2/ and checked all the formulae and verified them to be correct and in line with the monitoring plan of the VCS PD and the applied monitoring methodology.

The monitoring system and all applied procedures are in compliance with the monitoring plan contained in the registered VCS-PD and the applied methodology VMR0006 “Methodology for Installation of High Efficiency Firewood Cookstoves” Version 1.1/13/, based on the information included in the final monitoring report, there are several procedures for data collecting depending on the methodology applicable for each step of the project. Organizational Structure has been provided in the MR/1/ along with the roles and responsibilities.

The verification team has checked the ex-ante parameters and data stated in MR and compared with relevant section of the validated VCS PD that whether all parameters fixed ex-ante for the crediting period have been applied correctly.

The Ex-ante parameters are as follows:

S. No.	Ex-ante Parameter and unit	Description	Value	Consistent with the respective VCS PD
1.	$f_{NRB,y}$ (Percentage)	Fraction of woody biomass saved by the project activity during year y that can be established as non-renewable biomass	0.89	The value is fixed ex-ante and considered at validation/registration. Therefore, the value has been fixed at the time of validation, subsequently applied for all the instances. The verification team has reviewed the f_{NRB} calculations and found them to be credible.
2.	$NCV_{biomass}$ (TJ/tonne)	Net calorific value of the non-renewable woody biomass that is substituted	0.0156 (TJ/tonne)	Default value (IPCC) as per the methodology/13/ is applied which is in accordance with the requirements as verified by the verification team. The values were fixed at the time of validation. Hence accepted by the verification team.
3.	η_P	Efficiency of project stove at the start of project activity	27.2%	Validated ex-ante and verified from the data source at the time of validation/06/. All models included in the project are 'Prey Moan Khmer' models therefore the same data source remains valid for the verification.
4.	EF_{wf,CO_2}	CO ₂ emission factor for the use of wood fuel in baseline scenario	112 tCO ₂ /TJ	Default value in methodology. The values were fixed at the time of validation of validation. Hence accepted by the verification team.
5.	$EF_{wf,non\ CO_2}$	Non-CO ₂ emission factor for the use of wood fuel in baseline scenario	26.23 tCO ₂ /TJ	Default value in methodology. The values were fixed at the time of validation of validation. Hence

				accepted by the verification team.
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Monitored Parameters (Ex-Post)

The parameters and sampling measures taken are detailed below:

Parameter	Description of Parameter	Verified Value	Sampling approach (outcome in brackets)	Verification Approach by VVB
$N_{y,i,j}$	Number of project devices of type i and batch j operating during year y	26,130 project ICSs have been distributed based on Kenya ICS distribution database, and according to monitoring survey conducted by local partners from 01/09/2023 to 14/11/2023, the usage rate is 99.38%. Hence, $N_{y,i,j} = 26,130 \times 99.38\% = 25,966$ The number of operation days of stove use is calculated according to the actual number of ICS distributed in one day and date of receipt, and then the overall average operating days is reflected through a weighted average. The calculation process is in Grid L53 of submitted spreadsheet labelled as “8_ICS distribution statistic form” is attached. The ICS distribution	Visual inspection of the premises to see if the project stove is operational and in use. Interview with end user if required to verify that project stove is still in use (Yes/No)	The total distribution data has been recorded and submitted as document “13_Kenya ICS distribution database” to VVB. The database includes the date of distribution of each ICS, and basic information of the receiving household. The date of receipt is the date they started using ICS. A village is usually distributed together on one day, some are distributed in two days. Therefore, the date of distribution, the number of households, and the number of persons in the households receiving ICSs are summarized in the submitted document “8_ICS distribution statistic form”. The number of operational days falling in this monitoring period is calculated based on the number of days from the

		database records the unique ID, date of receipt and end user information for each stove, supporting refined statistics. Since the project stoves are portable and do not require installation, they are ready for use by the user upon receipt. Considering the lag, the calculated time of use was modified to start from the next day after receipt. The ER calculation sheet and MR has been modified by the PP and the same has been assessed correct by the verification team.	date of receipt to the end date of the monitoring period. Which are calculated in Column L of document “8_ICS distribution statistic form”. And the weighted average operational days is calculated in Grid L53. Then it is used in Grid C24 of ER calculation sheet “1_MR-ER calculation sheet”. Then the number of devices still operating was obtained by multiplying the total number and usage rate. The usage rate survey was included in the Monitoring Survey. Multi-stage sampling was applied in the Monitoring Survey during this monitoring period. 8 villages were randomly chosen in the first stage of the sampling process. Then 20 households were randomly chosen from each of the 8 villages. PP has demonstrated in the ER spreadsheet that required 90/10 confidence precision was met. PP has used the multi sampling approach to compute the parameter as per the registered monitoring plan.
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				The approach of calculating sample size, actual precession test inter alia was found meeting the CDM sampling guidance. PP also submitted the supporting document labelled as “20_Map of Distributed villages in Kenya-MP1” for details. The details were validated from the database also. By educating the energy efficiency of the project ICS and the benefits to the end users, end users are encouraged to use the project stoves and stop using the baseline stoves. This was also verified during the onsite assessment wherein no baseline stove was found as part of the acceptance sampling. VVB verified that it has been specified in the Improved Cookstove User Manual distributed to households under the "Important Requirements" section: "Do Not Use Traditional Stoves" and requires users to "stop using them completely". During the stove distribution process, it was verified that the PP's
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				staff conducted face-to-face training for households, emphasizing the mandatory decommissioning of traditional stoves (three-stone fires/open fires) through verbal explanations and manual guidance. It was also verified that this requirement in the project participation agreement signed with users, which serves as written evidence of their commitment to discontinue baseline stoves. PP had submitted the documents labelled as “21 _Improved Cookstove User Manual-Kenya”/14/ and “22_Training to users when distributing”/14/. The manual and training records verified that the baseline stove decommissioning was part of the training. Moreover, during the households visit by the VVB for the sampled houses none of the user was found using the baseline device.
By=1,new,I,j,survey	Annual quantity of woody biomass used by improved cookstoves	0.5452 kg/person/day	The quantity of woody biomass used by project devices per device	Determined in the first year of project implementation and the value was verified during the first verification by the then VVB and same results

	in tonnes per device of type i and batch j, determined in the first year of the implementation of the project through a sample survey.		day has been surveyed by Fuel Consumption Survey. The Fuel Consumption Survey was included in the Monitoring Survey.	are used in the subsequent verifications as per the applied methodology VMR0006, v 1.1. The value has been used correctly during the current monitoring period. The application of the parameter was found correct by the verification team based on following assessment. - VVB would like to clarify the baseline firewood consumption has to be determined at the first year of implementation as per the methodology and the appropriateness of the same was assessed during the first verification by then VVB. - The sample size calculated for 90/10 confidence/precession by using the multistage sampling and verified during the first verification by then VVB and approved by VERRA. Same results are used in subsequent verification. - Please note that the project is implemented in the Kenya, the samples were chosen to take representativeness within the provinces as verified from the results of field performance verified
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			Multi-stage sampling was applied in the Monitoring Survey during this monitoring period. 8 villages were randomly chosen in the first stage of the sampling process. Then 20 households were randomly chosen from each of the 8 villages. According to Equation 33 of Guideline for Sampling and surveys for CDM project activities and programmes of activities, Version 04.0, to achieve 90/10 confidence/precision, the minimum number of the sampled villages is 6.	during the first verification. Age must be 1 year as per the methodology therefore the tests were undertaken for the year 1 stoves only, which comply the requirement of methodology. d. Specific dates are chosen as the measurement campaigns were to be undertaken in the first year of implementation. Fuel Consumption Survey was conducted by trained local staff from 03/05/2023 to 06/06/2023, within a year of the start date i.e. 21/06/2022. Quantity of woody biomass used by project devices is 0.5452kg/person/day according to the result of the fuel consumption survey. And the average number of persons in household is 4.18 according to the ICS distribution statistic form. Therefore, the quantity of woody biomass used by project devices in tonnes per device per year is 0.83 tonnes/device/year ($0.5452 \times 4.18 \times 365 / 1000 = 0.83$). tonnes/device/year according to monitoring survey.
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			As the project proponent and its local partner has surveyed 8 villages, the 90/10 confidence/precision has been met. Please refer to Section 4.3 of the MR and the submitted spreadsheet “2_Data recording of Monitoring Survey” for details. . The parameter was determined in the first year of the introduction of the devices. The samples were tested in line with the Standard for sampling and surveys for CDM project activities and programme	
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			of activities or guidelines provided in methodology Section 8.4 Option (b).							
$\eta_{new,i,j}$	Efficiency of the improved cookstove type i and batch j implemented as part of the project activity	At the start of project: 27.2% <table> <tr> <th>Age(y)</th> <th>$\eta_{nwe,y,i,j}$</th> </tr> <tr> <td>1</td> <td>25.57%</td> </tr> <tr> <td>2</td> <td>25.31%</td> </tr> </table>	Age(y)	$\eta_{nwe,y,i,j}$	1	25.57%	2	25.31%	“Efficiency of the improved cookstoves to be estimated using equation 5 of applied approved methodology where loss in efficiency per year is calculated, and therefore this parameter does not need to be monitored”	The monitoring of the parameter has been conducted following the VCS PD. Each age group efficiency has been correctly applied in the ER sheet. The application was found complying the requirements of equation 5 of the methodology. The verification team determined the implementation and operation management system through the audit interview with the PP. During onsite audit interview, verification team checked the procedures implemented for inclusion of project instances, roles and responsibilities, quality check etc. The verification team confirms that the implementation and operation of the project management system, including the record-keeping system, complies with the registered PD. Verification team has further checked the monitored data through
Age(y)	$\eta_{nwe,y,i,j}$									
1	25.57%									
2	25.31%									

				onsite assessment interview, all the Efficiency test reports for ICS and the ER sheet. The data was found consistent. Based on local and sectoral expertise; verification team found the test reports in compliance with the requirements.
η_{old} (Percentage)	Efficiency of baseline cookstove	0.1 for wood fuel project recorded in database	0.1 is applied based on baseline survey	Verification team applied the acceptance sampling during the onsite inspection and found all the HHs were using the three stone or the conventional mud stove. The same has the default 10% efficiency as per the methodology. It was found all the users were using the traditional three stone stoves in the baseline.
Life Span	-	7 Years	As per the technical details provided by the Technology supplier.	The operating lifetime of the project device. The lifespan should be reported if the methodology equation 5 is adopted to determine the project stove efficiency. The technical specification sheet provided by the manufacturer was verified by the verification team. The models are same which were part of previous verification therefore the lifetime is also same.

Multi stage type of sampling surveys were performed: one gathered information needed for the monitoring of $N_{y,i,j}$.

Sampling captured information on monitoring variables with required confidence/precision (in that case as a single project is sampled, it is required a 90/10 confidence/precision for biennial monitoring). A simple random sampling was used.

Emission reduction (ER)

The methodology does not calculate baseline and project emissions separately. The steps taken and the equations and parameters applied in the VCS-PD to calculate the project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected methodology including applicable tool(s).

Quantification of Emission Reductions emissions:

According to methodology VMR006, version 1.1, emission reductions shall be calculated as:

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

Where;

i = Indices for the situation where more than one type of project device is introduced to replace the pre-project devices

j = Indices for the situation where there is more than one batch of project device

ER_y = Emission reductions during year y in tCO_{2e}

$ER_{y,i,j}$ = Emission reductions by project device of type i and batch j during year y in tCO_{2e} LE_y = Leakage emissions in the year y

Since the grouped project activity involves the deployment of improved cookstove, the following equation is applicable as per VMR0006 version 1.1:

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

$B_{y,savings,i,j}$: Quantity of woody biomass that is saved in tonnes per cookstove device of type i and batch j during year y.

$f_{NRB,y}$: Fraction of woody biomass that can be established as non- renewable biomass (fNRB)

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

$EF_{\text{projected fossil fuel}}$: Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers.

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

μ_y : Adjustment to account for any continued use of pre-project devices during the year y when applying equations 6 and 8 (fraction). Use 1.0 in other cases

$B_{y,\text{savings},i,j}$ is calculated using the following formula in accordance with equation 6 of the approved methodology:

$$B_{y,\text{savings},i,j} = B_{y=1, \text{ new}, i, \text{ survey}} \times ((\eta_{\text{new}, i, j, (\text{weighted average})}) / \eta_{\text{old}}) - 1) \dots \text{Equation (4)}$$

Where,

η_{old} = efficiency of baseline cookstove (fraction)

$\eta_{\text{new}, i, j}$ = efficiency determined using equation 5 of applied approved methodology (%)

$B_{y=1, \text{ new}, i, \text{ survey}}$ = annual quantity of woody biomass used by improved cookstove in tonnes per device of type i and batch j , determined in the first year of the implementation of the project through a sample survey (tonnes/year/stove)

The efficiency of the project stoves can be estimated using the equation below.

$$\eta_{\text{new}, i, j} = \eta_P \times (DF_n)^{y-1} \times 0.94 \dots \text{Equation (5)}$$

Where:

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

$(DF_n)^{y-1}$ = discount factor to account for efficiency loss of project cookstove per year of operation (fraction).

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

Determination of the fraction of non-renewable biomass:

The fraction of woody biomass that can be established as non-renewable, is:

$$f_{NRB} = NRB / (NRB + RB)$$

Where:

f_{NRB} = Fraction of non-renewable biomass in the country/region or project area (fraction or %)

NRB = Quantity of non-renewable biomass (t/yr) in the country/region or project area

RB = Quantity of renewable biomass in the country/region or project area.

Project Emissions:

The applied methodology does not account for project 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.

Leakage:

As per the methodology, N/A (Leakage is already accounted in baseline emission as 5% in accordance with the methodology).

Summary of ERs calculated by PP is demonstrated in below table and verified as per the ER spread sheet submitted:

26,130 project ICSs have been distributed based on Kenya ICS distribution database, and according to monitoring survey conducted by local partners from 01/09/2023 to 14/11/2023, the usage rate is 99.38%.

The survey results were submitted to the VVB and were verified through the acceptance sampling test during the onsite assessment.

$N_{y,i,j}$ is applied as below after applying the discount factor:

Hence, $N_{y,i,j}=26,130*99.38\%=25,966$.

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

The Fuel Consumption Survey was conducted by trained local staff from 03/05/2023 to 06/06/2023. Quantity of woody biomass used by project devices is 0.5452kg/person/day according to the result of the fuel consumption survey. And the average number of persons in household is 4.18 according to the ICS distribution statistic form. Therefore, the quantity of woody biomass used by project devices in tonnes per device per year is 0.83 tonnes/device/year ($0.5452*4.18*365/1000=0.83$). tonnes/device/year according to monitoring survey.

GHG emission reductions of the monitoring period is shown below:

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Reduction VCU's (tCO ₂ e)	Removal VCU's (tCO ₂ e)	Total VCUs (tCO ₂ e)
21/06/2022-31/12/2022	N.A.	N.A.	0	18,214	0	18,214
01/01/2023-31/12/2023	N.A.	N.A.	0	48,112	0	48,112
01/01/2024-20/06/2024	N.A.	N.A.	0	28,422	0	28,422

As per the Standard for Sampling and Surveys for CDM Project Activities and Programmes of Activities, Version 09.0:

Sampling design

(1) Objectives and reliability requirements

The objective is determining the value of parameter $N_{y,i,j}$ and $B_{y=1,new,i,survey}$ during the monitoring period, and with a 90/10 confidence/precision compliance with the applied methodology.

The following parameters may be determined by sampling:

Parameter	Description	Frequency
$N_{y,i,j}$	Number of project devices of type i and batch j operating during year y	Biennial
$B_{y=1,new,i,survey}$	Quantity of woody biomass used by project devices in tonnes per device of type i and batch j	Determined in the first year of project implementation

(2) Target population

The target population are the households who have received the project ICSs.

(3) Sampling method and size

Multi-stage sampling was applied in the project survey during this monitoring period. 5 villages were randomly chosen in the first stage of the sampling process. Then 20 households were randomly chosen from each of the 6 villages. The equation 16 and 33 of “Guideline for Sampling and surveys for CDM project activities and programmes of activities” (version 04.0) were used to determine the above sample size:

$$c \geq \frac{\frac{SD_B^2}{\bar{p}^2} \times \frac{M}{M-1} + \frac{1}{\bar{u}} \times \frac{SD_w^2}{\bar{p}^2} \times \frac{(\bar{N} - \bar{u})}{(\bar{N} - 1)}}{\frac{0.1^2}{1.645^2} + \frac{1}{M-1} \times \frac{SD_B^2}{\bar{p}^2}} \quad \text{Equation (16)}$$

Where:

C	=	Number of villages that should be sampled
M	=	Total number of villages in the population
$\bar{u}$	=	Number of households to be sampled within each village
$\bar{N}$	=	Average households per village

SD_B^2	=	variance between villages
SD_W^2	=	average within village variation
p	=	Overall proportion
1.645	=	Represents the 90% confidence required
0.1	=	Represents the 10% relative precision

$$c \geq \frac{\left(\frac{SD_B}{Clustermean} \right)^2 \times \left(\frac{M}{M-1} \right) + \left(\frac{1}{u} \right) \times \left(\frac{SD_W}{Overallmean} \right)^2 \left(\frac{\bar{N}-u}{\bar{N}-1} \right)}{\left(\frac{0.1}{1.645} \right)^2 + \frac{1}{M-1} \left(\frac{SD_B}{Clustermean} \right)^2} \quad \text{Equation (33)}$$

Where:

M	=	Total number of villages in the population
$\bar{N}$	=	Average households per village
u	=	Number of households that have been pre-specified to be sampled per village
1.645	=	Represents the 90% confidence required
0.1	=	Represents the 10% relative precision

To achieve 90/10 confidence/precision, for $B_{y=1, \text{new}, i, \text{survey}}$, the minimum number of the sampled villages is 6; for $N_{y, i, j}$, the minimum number of the sampled villages is 1. As the project proponent and its local partner has surveyed 8 villages, the survey met the required 90/10 confidence/precision.

Minimum number of sampled villages for $B_{y=1, \text{new}, i, \text{survey}}$:

Overall Mean		0.5355
Cluster Mean		1153.3702
SD_B	Standard deviation between 6 villages	172.1400
SD_W	Average within village standard deviation	0.0308
SD_B /Cluster Mean		0.1492
SD_W /Overall Mean		0.0576
M	Total No. of villages	50
u	No. of households sampled for each village	20
$\bar{N}$	Average No. of households per village	497.25
C_{min}	Minimum No. of villages to be sampled	6

Minimum number of sampled villages for $N_{y,i,j}$:

Village	Proportion of cookstoves in operation(π)	Variance within village ($\pi(1-\pi)$)
Kiyo	1.00	0
Manyungu	0.95	0.0475
Guthuru	1.00	0
Kirwara	1.00	0
karembu	1.00	0
Komo	1.00	0
kanjai	1.00	0
Giathieko	1.00	0
p	Overall proportion	0.99
SD_B^2	variance between villages	0.0003
SD_W^2	average within village variation	0.0059
M	Total No. of villages	50
u	No. of households sampled for each village	20
$\bar{N}$	Average No. of households per village	497.25
1.645	Represents the 90% confidence required	
0.1	Represents the 10% relative precision	
C_{min}	Minimum No. of villages to be sampled	1

The start date of the project is 21/06/2022. According to the applied methodology, the fuel consumption survey must be done in first year of implementation. The project Fuel Consumption Survey was conducted by local staff from 03/05/2023 to 06/06/2023, thus it has met the requirement of applied methodology. The Project Survey, which including Usage Survey was conducted from 01/09/2023 to 14/11/2023. A spreadsheet titled “2_Data recording of Monitoring Survey” was verified and found the survey comply with the monitoring plan laid down in the registered VCS PD.

4.4 Quality of Evidence to Determine Reductions and Removals

All relevant documents were checked to assess the correctness and quality of data submitted by the project participants, which are used to determine emission reductions.

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 onsite audit discussion and inspection. Hence, the verification team confirms that the monitoring system ensures required quality of the monitoring system to ensure the quality of the monitored data. All internal data are subjected to QA/QC measures.

The verification team can confirm that sufficient evidence is available for the whole monitoring period and the same is verifiable and that the data collection system meets the requirements of the monitoring plan and the applied methodology according to the assessment carried out on site and in the document review

Verification team confirms that the quality of evidence to determine the GHG reductions and removals produced was found satisfactory. The detailed information flow with the roles and responsibilities of the individuals and the monitoring system have been provided in the VCS- MR.

It was also verified through onsite audit inspection that the team involved in the monitoring of project activity is well experienced. Hence, the verification team concludes that competent staff is employed by the project proponent to carry out the relevant tasks with sufficient accuracy.

4.5 Non-Permanence Risk Analysis

As the project activity is a non-AFOLU project activity no risk related to non-permanence has been identified for the project activity.

5 VERIFICATION OPINION

5.1 Verification Summary

'Guangzhou Iceberg Environmental Consulting Services Co., Ltd.' has appointed the verification body '4K Earth Science Private Limited' to perform a verification of VCS Project Activity "Kenya Jiko Kisasa Improved Cookstove Program I" for the period from 21-June-2022 to 20-June-2024 (both days included).

The calculation and determination of GHG emission reductions from the project is the responsibility of the management of the PP. The development and maintenance of records and reporting procedures are in accordance with the Monitoring Report version.2.

As a result of the verification, the verification team confirms that:

- All operations of the project are implemented and installed as planned and described in the project description.
- The monitoring system is in place and functional.
- The installed equipment essential for generating emission reductions runs reliably.
- The GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner.

5.2 Verification Conclusion

Based on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these, '4K Earth Science Private Limited' planned and performed our work to obtain the information and explanations that we considered necessary to provide sufficient evidence for us to give reasonable assurance that this reported amount of GHG emission reductions for the period is fairly stated.

Verification period: From 21-June-2022 to 20-June-2024 (Inclusive of both days)

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

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Reduction VCU (tCO ₂ e)	Removal VCU (tCO ₂ e)	Total VCUs (tCO ₂ e)
21 June 2022-31 Dec 2022	N.A.	N.A.	0	18,124	0	18,124
01 Jan 2023-31 Dec 2023	N.A.	N.A.	0	48,033	0	48,033
01 Jan 2024-20 June 2024	N.A.	N.A.	0	28,422	0	28,422
Total	N.A.	N.A.	0	94,580	0	94,580

5.3 Ex-ante vs Ex-post ERR Comparaison

Vintage period	Ex-ante estimated reductions/removals	Achieved reductions/removals	Percent difference	Explanation for the difference
21 June 2022-31 Dec 2022	23,340	18,124	-22.35%	There are three main reasons: 1) Due to a lack of funds, only 26,130 ICSs have been distributed during this monitoring period, which is the first two years of the project, and the project proponent planned to distribute 100,000 ICSs as described in registered PDD. The actual distribution quantity only counts about a quarter of the planned distribution quantity. 2) For ex-ante emission reduction calculation, it was assumed that 1.16tonnes/device/year. But the value applied in this monitoring period is only 0.83tonnes/device/year according
01 Jan 2023-31 Dec 2023	160,369	48,033	-70.05%	
01 Jan 2024-20 June 2024	128,145	28,422	-77.82%	
Total	311,854	94,580	-69.67%	

				to the survey, which is 28.27% less than the former. 3) The average operation days of all devices during the first year of this monitoring period is 202.97, which only accounts 55.61% of one whole year.
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APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

<i>Section</i>	<i>Information</i>	<i>Justification</i>	<i>Assessment method and conclusion</i>
	The user details submitted as part of ER sheet	The ER sheet has a database, which is commercially sensitive, therefore ER sheet shall be excluded as part of the public version.	The verification team has access to all data and therefore the ERs were verified based on full set of data availability. MR has no confidential information therefore can be made publicly available. ER sheet shall be submitted on confidential mode.

APPENDIX 2: REFERENCES

Ref	Document
/01/	Monitoring Report titled: 1. Kenya Jiko Kisasa Improved Cookstove Program I, Version 01 dated 02 Sept 2024 2. Kenya Jiko Kisasa Improved Cookstove Program I Version 02 dated 27 Jan 2025 3. Kenya Jiko Kisasa Improved Cookstove Program I Version 03 dated 17 March 2025 4. Kenya Jiko Kisasa Improved Cookstove Program I Version 04 dated 23 May 2025
/02/	ER sheet corresponding to: 1. /01/ 2. /02/ 3. /03/
/03/	Project Distribution Database
/05/	1. Sample Household Survey Questionnaire and survey Forms 2. Excel sheet screenshot for Randomization of raw data for the project survey
/06/	Technical specifications (including thermal efficiency, lifetime) of the ICS stoves distributed in the project activity, Test Report from KIRDI Stove Testing Centre dated 28th Jan 2022
/07/	- End User distribution records/ carbon waiver (labelled as 14_Donation and carbon transfer agreements of households that visited) - Monitoring/Survey and installation reports. - Declaration that project is not claiming ERs under any other GHG mechanism - Spreadsheet for the ex-ante ER demonstration.
/08/	VCS PD for “Kenya Jiko Kisasa Improved Cookstove Program I”, version 6.0 dated 04/10/2023 (Final)
/09/	- Ex-ante ER sheets - Validation Report - Verification Report of Previous Verification Under VERRA - Fnr spreadsheet (as part of registered documents) https://registry.terra.org/app/projectDetail/VCS/3197
/10/	- Stoves Technical Specifications - Life Time Certificate by the stove manufacturer - Grievance mechanism - Employment contracts details including the bifurcation of male and female

/11/	• Training Records and Training Material for Monitoring Personnel • Baseline Survey Forms and photos of baseline measurement campaign
/12/	• Training Records of surveyors. • Training records • Employment records/contracts • Opinion Book as part of ongoing feedback
/13/	• Methodology VMR0006: Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1 • Standard: Sampling and surveys for CDM project activities and programme of activities, Version 9 • Guideline: Sampling and surveys for CDM project activities and programme of activities, Version 04 • VCS Standard, Version 4.7 • VCS MR Template, Version 4.4
/14/	• “21 _Improved Cookstove User Manual-Kenya” • “22_Training to users when distributing”.

APPENDIX 3: VERIFICATION OF SDGS

Row number	SDG target	SDG indicator	Net impact on SDG indicator	Current project contributions	Contributions over project lifetime	Verification Remarks
1)	1.4	<i>Project-specific indicator:</i> Number of households with access to basic services	Implemented activities to increase	According to the ICS distribution database and monitoring survey, 26,130 households have received ICSs, and 25,966 are still operating.	According to the ICS distribution database and monitoring survey, 26,130 households have received ICSs, and 25,966 are still operating.	According to the ICS distribution database and project survey, 26,130 households have received ICSs, and 25,966 are still operating. The survey results verified the verification team and found the number correct.
2)	2.1	2.1.1 Prevalence of undernourishment.	Implemented activities to decrease	The project is implemented in rural area of Kenya, where the income of the local population is generally low. The ICS reduces time on cooking and collecting firewood, saves money on buying firewood. This allows for more time and money for	The project is implemented in rural area of Kenya, where the income of the local population is generally low. The ICS reduces time on cooking and collecting firewood, saves money on buying firewood. This allows for more time and money for productive work. According to the ICS distribution database and monitoring survey, 26,130 households have received ICSs,	According to the ICS distribution database and project survey, 26,130 households have received ICSs, and 25,966 are still operating. The survey results verified the verification team and found the number correct. Therefore, the project contributes to 25,966 HHs in prevalence of undernourishment due to

				productive work. According to the ICS distribution database and monitoring survey, 26,130 households have received ICSs, and 25,966 are still operating, which help them improve their nutrition status.	and 25,966 are still operating, which help them improve their nutrition status ¹ .	improved cooking conditions as less smoke. The verification team undertaken the acceptance sampling in the 18 HHs to confirm the same. Vulnerable populations often face significant risks to their health and nutrition due to inadequate access to the means of cooking their food, the project will improve food security and nutrition status for people in rural area of Kenya by reducing inadequate cooking due to fuel-saving cooking practices ² . VVB confirms the same based on it's sector expertise.
3)	3.9	<i>Project-specific indicator:</i> Number of households experiencing health	Implemented activities to decrease	According to the monitoring survey, all users admitted that the project cookstove had improved indoor air quality and	According to the monitoring survey, all users admitted that the project cookstove had improved indoor air quality and reduced air quality related diseases, like cough or trachitis	According to the ICS distribution database and project survey, 25,966 are still operating. The survey results verified the verification team and found the number correct.

¹ <https://www.sciencedirect.com/science/article/pii/S2468227620301551#bib0021>

² <https://www.fao.org/3/I9967EN/i9967en.pdf>

		benefits due to reduced exposure to indoor air pollution		reduced air quality related diseases, like cough or trachitis according to the monitoring survey. Thus, 25,966 households experiencing health benefits due to reduced exposure to indoor air pollution.	according to the monitoring survey. Thus, 25,966 households experiencing health benefits due to reduced exposure to indoor air pollution.	Therefore, the project contributes to 25,966 HHs in reducing the PM2.5 and high CO compared to baseline cooking practices. The verification team undertaken the acceptance sampling in the 18 HHs to confirm the same.
4)	4.3	<i>Project specific indicator:</i> Number of persons who received any informal training	Implemented activities to increase	According to the training record, 8 staff have received training about the survey method and monitoring plan etc.	According to the training record, 8 staff have received training about the survey method and monitoring plan etc.	According to the training record, 8 staff have received training about the survey method, monitoring plan etc. The personnel were interviewed during the onsite inspection to confirm the trainings they received.
5)	5.4	5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age, and location.	Implemented activities to decrease	According to the monitoring survey, the time spent on cooking and collecting firewood every day for women and girls who use ICSs has	According to the monitoring survey, the time spent on cooking and collecting firewood every day for women and girls who use ICSs has decreased about 27%.	According to the monitoring survey, the time spent on cooking and collecting firewood every day for women

				decreased about 27% ³ .		and girls who use ICSs has decreased about 27% ⁴ . The verification team undertaken the acceptance sampling in the 18 HHs to confirm the same.
6)	6.6	<i>Project specific indicator:</i> Quantity of non-renewable biomass in forest, which is a water-related ecosystem, saved by reducing fuel consumption	Implemented activities to increase	According to the result of calculation of emission reductions, the project has saved 46,169 tonnes of non-renewable biomass ⁵ during this monitoring period.	According to the result of calculation of emission reductions, the project has saved 46,169 tonnes of non-renewable biomass during this monitoring period.	According to the result of calculation of emission reductions, the project has saved 46,169 tonnes of non-renewable The same was verified as part of the SDG#13 verification and reported in the mains section of the verification report.
7)	7.1	7.1.2 Proportion of population with primary reliance on clean fuels and technology.	Implemented activities to increase	According to the ICS distribution database and usage survey (including in the monitoring survey), 26,130 households	According to the ICS distribution database and usage survey (including in the monitoring survey), 26,130 households have received ICSs, and 25,966 are still operating, which are	According to the ICS distribution database and usage survey, 26,130 households have received ICSs, and 25,966 are still operating, which are primary

³ Compared between baseline survey and monitoring survey, the result is calculated in Grid AV165 and AZ165 of the submitted spreadsheet “2_Data recording of Monitoring Survey”.

⁴ Compared between baseline survey and monitoring survey, the result is calculated in Grid AV165 and AZ165 of the submitted spreadsheet “2_Data recording of Monitoring Survey”.

⁵ The result is recorded in Grid B25 of the submitted document “1_MR-ER calculate sheet”.

				have received ICSs, and 25,966 are still operating, which are primary reliance on clean fuels and technology.	primary reliance on clean fuels and technology.	reliance on clean fuels and technology. The verification team undertaken the acceptance sampling in the 18 HHs to confirm the same.
8)	8.3 8.5	8.3.1 <i>Proportion of informal employment in total employment, by sector and sex.</i> 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities	Implemented activities to increase	According to the data provided by the ICS producer, before the implementation of the project, the manufacturer and distributor had 5 full-time employee and 20 part-time employees, and 8 of them were women, 1 was with disabilities. After the implementation of the project, it has 7 full-time employee and 30 part-time employees, and 18 of them are women, 1 is with disabilities. ⁶ .	According to the data provided by the ICS producer, before the implementation of the project, the manufacturer and distributor had 5 full-time employees, and 8 of them were women, 1 was with disabilities. After the implementation of the project, it has 7 full-time employee and 30 part-time employees, and 18 of them are women, 1 is with disabilities.	The employment records were verified during the onsite audit and also the employed personnel interviewed.

⁶ Please refer to appendix 1 "Statement about outcomes of SDGs"

9)	9.3	9.3.1 Proportion of small-scale industries in total industry value added	Implemented activities to increase	According to the data provided by the ICS producer, prior to the Project, the production capacity of the factory is 10200 devices per month. After the implementation of the Project, the production capacity expanded to 16800 devices per month ⁷ .	According to the data provided by the ICS producer, prior to the Project, the production capacity of the factory is 10200 devices per month. After the implementation of the Project, the production capacity expanded to 16800 devices per month.	According to the data provided by the ICS producer, prior to the Project, the production capacity of the factory is 10200 devices per month. After the implementation of the Project, the production capacity expanded to 16800 devices per month. The representative of the stove manufacturer confirmed the same during the interviews with the verification team.
10)	13.0	Tonnes of greenhouse gas emissions avoided or removed	Implemented activities to increase	By saving 46,169 tonnes of non-renewable biomass, the project has prevented the release of 94,580 tonnes of CO ₂ emissions into the atmosphere.	By saving 46,169 tonnes of non-renewable biomass, the project has prevented the release of 94,580 tonnes of CO ₂ emissions into the atmosphere.	By saving 46,169 t non-renewable biomass, the project has prevented the release of 94,580 tonnes of CO ₂ emissions into the atmosphere by calculated with the applied methodology. The same has been verified in the main section of the report.
11)	15.1 15.2	15.1.1 Forest area as a proportion of total land area	Implemented activities to increase	According to the result of calculation of emission reductions,	According to the result of calculation of emission reductions, the project has saved 46,169 tonnes of non-	According to the result of calculation of emission reductions, the project has

⁷ Please refer to appendix 1 "Statement about outcomes of SDGs".

		15.2.1 Progress towards sustainable forest management		the project has saved 46,169 tonnes of non-renewable biomass during this monitoring period.	renewable biomass during this monitoring period.	saved 46,169 tonnes of non-renewable biomass during this monitoring period. The same has been verified in the main section of the report under the ER verification.
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APPENDIX 4: ABBREVIATIONS

CAR	Corrective Action Request
CL	Clarification Request
CO ₂	Carbon dioxide
CO _{2e}	Carbon dioxide equivalent
CRF	Carbon Rights Form
EB	Executive Board
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
GPS	Global Positioning System
GS	Gold Standard
HH	Household
IPCC	Intergovernmental Panel on Climate Change
KPT	Kitchen Performance Test
MKS	Monitoring Kitchen Survey
MP	Monitoring Plan/Period
MR	Monitoring Report
NGO	Non-governmental Organization
NRB	Non-renewable biomass
OSV	On-site visit
PP	Project proponent
QA/QC	Quality Assurance/Quality Control
SC	Sustain Cert
SD	Sustainable Development

SDG	Sustainable Development Goals
UNFCCC	United Nations Framework Convention on Climate Change
VVB	Validation and Verification Body
VCS	Voluntary Carbon Standard
VER	Voluntary Emission Reduction

APPENDIX 5: FINDINGS

CL from this validation

CL ID	01	Section no.	1.10	Date: 20/01/2025
Description of CL				
The PP shall provide a declaration to cover all aspects of the double counting provided in the section 1.10 of the submitted VCS MR.				
Project participant response				Date: 27/01/2025
The PP has made a declaration to cover all aspects of the double counting. Please refer to document “16_Uniqueness Statement _Kenya” submitted this time.				
Documentation provided by project participant				
16_Uniqueness Statement _Kenya				
VVB assessment				Date: 14/02/2025
The declaration to various requirements has been submitted as annexure to the finding and labelled as 16_Uniqueness Statement _Kenya. The declaration adequately covers all the requirements of double counting as per the section 1.10 of the MR. Finding is closed.				

CL ID	02	Section no.	1.12	Date: 20/01/2025
Description of CL				
1. Submit the training records which includes the content of training, number of participants, outcome of training etc as per the claimed SDG under 1.12. of the VCS MR. 2. Kindly clarify how the number of ICSs are aligned to the chosen SDG impact i.e. Prevalence of undernourishment, under section 1.12 of the VCS MR. 3. Submit the employment records to verify the claimed SDG 8, and corresponding to each of the chosen indicators as 8.3.1 & 8.5.1				
Project participant response				Date: 27/01/2025
1. Please refer to submitted document “12_Training records”, the content of training, number of participants, outcome of training has been added in it. 2. The project is implemented in rural area of Kenya, where the income of the local population is generally low. The ICS reduces time on cooking and collecting firewood, saves money on buying firewood. This allows for more time and money for productive work. Thus, the number of ICSs are aligned to the chosen SDG impact i.e. Prevalence of undernourishment. The				

clarification has been added in revised MR. The clarification has been added in Table 1 of Section 1.12 of revised MR. 3. It is included in the submitted document “10_Statement about outcomes of SDGs”. Please refer to it.	
Documentation provided by project participant	
12_Training records 10_Statement about outcomes of SDGs	
VVB assessment	Date: 14/02/2025
1. Training records pertaining to the MP of the project, which has been submitted as annexures to finding response. The training records labelled as 12_Training records, reveals the training participant details, training items, training dates etc. The details of the same will be used as part of the verification in main sections of the verification report. Finding is closed now. 2. The MR has been revised and the clarification has been added in the SDG table to this effect. PP clarified that the ICS reduces time on cooking and collecting firewood, saves money on buying firewood. This allows for more time and money for productive work. The argument seems reasonable based on the interviews undertaken by the verification team during onsite assessment. Finding is closed now. 3. The employment records have been submitted as annexure to the response of this finding and labelled as ‘10_Statement about outcomes of SDGs’. The outcome of SDG 8 was found consistent with the record furnished in terms of total employments and the number of female employments. Finding is closed now.	

CL ID	03	Section no.	2.1	Date: 20/01/2025
Description of CL				
PP shall clarify whether there is any change in the stakeholder makeup since the LSC undertaken, kindly confirm the same as per the MR filling guidelines pertaining to this section.				
Project participant response				Date: 27/01/2025

No obvious change in the make-up of stakeholder groups, economic development, social behavior or culture practice happened in this monitoring period according to the project survey. It has been clarified in section 2.1.1 of MR:	
and technical assistance. Changes Over Time No obvious change in the make-up of stakeholder groups, economic development, social behavior or culture practice happened in this monitoring period according to the project survey.	
Documentation provided by project participant	
Revised MR.	
VVB assessment	Date: 14/02/2025
PP clarified that the stakeholder makeup was not changed since the initial LSC undertaken at the time of validation, the same was also witnessed by the validation team during the onsite audit. Finding is closed based on the clarification added in the revised MR and observations made by the verification team during the interviews as part of onsite assessment.	

CL ID	04	Section no.	3.1	Date: 20/01/2025
Description of CL				
- Evidence to establish the ownership rights as per the VCS standard 4.7 is mentioned as the carbon waiver agreements with the households (n VCS PD). PP shall submit the sample evidence to VVB to verify the same for the distributed cook stoves. - The project database shall be submitted to the verification team to verify the total number of ICS distributed with the details of each of the end user.				
Project participant response				Date: 27/01/2025
- PP has submitted samples of signed ICS Donation and Carbon Transfer Agreements this time, please refer to document “18-Samples of ICS Donation and Carbon Transfer Agreements”. - PP has submitted project distribution database this time, please refer to document “13_Kenya ICS distribution database”.				
Documentation provided by project participant				
18-Samples of ICS Donation and Carbon Transfer Agreements 13_Kenya ICS distribution database				

VVB assessment	Date: 14/02/2025
1. The submitted samples of signed ICS Donation and Carbon Transfer Agreements with response, labelled as “18-Samples of ICS Donation and Carbon Transfer Agreements” verified. The agreements reveal the carbon waiver clauses, the finding is closed. HHs were interviewed and they also confirmed that the ICS are free of cost and the carbon right transfer has been explained to them before signing the form. 2. The database has been attached with the response and labelled as “13_Kenya ICS distribution database”. The database has all the details of customers that includes name, address, sr. no. inter alia, The total numbers of distributions were found consistent with the MR and ER spreadsheet. Finding is closed now.	

CL ID	05	Section no.	4.2	Date: 20/01/2025
Description of CL				
1. It is not clear how the stove operational days falling in the monitoring period were calculated? Explicitly the number of crediting days of each stove in the monitoring period shall be calculated separated, the same is not linked with the ER sheet. 2. When the project monitoring survey was undertaken, the dates of the surveys shall also be part of the MR, on what confidence/precision the sample size were drawn. For the monitored parameter $B_{y,newsurvey}$, the measurement campaign has to be undertaken within first year of implementation. PP shall clarify how the adherence of the requirement was met. The photograph of the measurement campaign shall also be provided for verification.				
Project participant response				Date: 27/01/2025
1. The total distribution data has been recorded and submitted as document “13_Kenya ICS distribution database”. The database includes the date of distribution of each ICS, and basic information of the receiving household. The date of receipt is the date they started using ICS. A village is usually distributed together on one day, some are distributed in two days. Therefore, the date of distribution, the number of households, and the number of persons in the households receiving ICSs are summarized in the submitted document “8_ICS distribution statistic form”. The number of operational days falling in this monitoring period is calculated based on the number of days from the date of receipt to the end date of the monitoring period. Which are calculated in Column L of document “8_ICS distribution statistic form”. And the weighted average operational days is calculated in Grid L53. Then it is used in Grid C24 of ER calculation sheet “1_MR-ER calculation sheet”. The clarification has been added in revised MR. 2. The Fuel Consumption Survey was conducted by local staff from 03/05/2023 to 06/06/2023. According to Equation 33 of Guideline for Sampling and surveys for CDM project activities and programmes of activities, Version 04.0, to achieve 90/10 confidence/precision, the minimum number of the sampled villages is 6. As the project proponent and its local partner has surveyed 8 villages, the 90/10 confidence/precision has been met. Please refer to Section 4.3 of the MR				

and the submitted spreadsheet “2_Data recording of Monitoring Survey” for details. The start date of the project is 21/06/2022. According to the applied methodology, the fuel consumption survey has to be done in first year of implementation. The project Fuel Consumption Survey was conducted by local staff from 03/05/2023 to 06/06/2023, thus it has met the requirement. The clarifications have been added in Section 4.2 and Section 4.3 of revised MR. The photograph of the measurement campaign has been submitted as document “19_Photos of fuel consumption survey”, please refer to it.	
Documentation provided by project participant	
13_Kenya ICS distribution database 8_ICS distribution statistic form 1_MR-ER calculation sheet 19_Photos of fuel consumption survey	
VVB assessment	Date: 14/02/2025
1. PP clarified that the database includes the date of distribution of each ICS, and basic information of the receiving household, which the verification team verified from the database. The date of receipt is the date they started using ICS. A village is usually distributed together on one day, some are distributed in two days, fact verified during the verification site audit. The number of operational days falling in this monitoring period is calculated based on the number of days from the date of receipt to the end date of the monitoring period. Which are calculated in Column L of document “8_ICS distribution statistic form”, the document has now been verified by the verification team. The weighted average operational days is calculated in Grid L53, now verified with database. The finding is closed after reviewing database, ER sheet and clarification provided by the PP. 2. PP clarified that Fuel Consumption Survey was conducted by local staff from 03/05/2023 to 06/06/2023, which has to be undertaken in the first year as per the methodological requirements therefore the dates of survey are complying the requirements of VMR0006, v1.1. Equation 33 of Guideline for Sampling and surveys for CDM project activities and programmes of activities, Version 04.0, to achieve 90/10 confidence/precision, the minimum number of the sampled villages is 6, the sample calculation verified correct. The photograph of the measurement campaign has been submitted as document “19_Photos of fuel consumption survey”, please refer to it. Based on the detailed calculation submission of evidence and methodological requirements, the finding is closed now.	

Table 2. CAR from this validation

CAR ID	xx	Section no.		Date:
Description of CAR				
Project participant response				Date:
Documentation provided by project participant				
VVB assessment				Date:

Table 3. FAR from this validation

No FAR raised during this validation.

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

APPENDIX 6: TEAM COMPETENCE

<u>Certificate of Competence</u>							
Name	☒ Mr. ☐ Ms.	Sanjay Kandari					
Qualification Procedure	Fulfils the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GCC/GHG Projects.						
Appointed to work as:							
	Validator/ Verifier	Team Leader	Trainee	Technical Expert	Technical Reviewer	Financial Expert	Approver
<i>Appointed</i>	Yes	Yes	No	Yes	Yes	No	No
<i>Appointed Date</i>	29-08-2023						
Authorized to work as Technical Expert for:							
<i>Authorized Technical Area</i>	Sectoral Scope		TA Code		Technical Area within the scope		
	Energy industries (renewable - / non-renewable sources)		1.1		Thermal energy generation		
	Energy industries (renewable - / non-renewable sources)		1.2		Renewables		
	Energy distribution		2.1		Energy distribution		
	Energy demand		3.1		Energy demand		
	Waste handling and disposal		13.1		Solid waste and wastewater		
	Waste handling and disposal		13.2		Manure		
Authorized to work as Local Expert for:							
<i>Country/Countries</i>	India						
<u>Compliance check by:</u>				Anand S. R.			

<u>Certificate of Competence</u>							
Name	☒ Mr. ☐ Ms.	Martin Luther King Okore					
Qualification Procedure	Fulfils the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GCC/GHG Projects.						
Appointed to work as:							
	Validator/ Verifier	Team Leader	Trainee	Technical Expert	Technical Reviewer	Financial Expert	Approver
<i>Appointed</i>	No	No	No	No	No	No	No
<i>Appointed Date</i>	30-08-2023						
Authorized to work as Technical Expert for:							
<i>Authorized Technical Area</i>	Sectoral Scope		TA Code		Technical Area within the scope		
	-		-		-		
Authorized to work as Local Expert for:							

Country/Countries	Kenya
<u>Compliance check by:</u>	Anand S R

<u>Certificate of Competence</u>							
Name	☒ Mr. ☐ Ms.	Stalin S					
Qualification Procedure	Fulfils the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GCC/GHG Projects.						
Appointed to work as:							
	Validator/ Verifier	Team Leader	Trainee	Technical Expert	Technical Reviewer	Financial Expert	Approver
<i>Appointed</i>	Yes	Yes	No	Yes	Yes	Yes	Yes
<i>Appointed Date</i>	30-08-2023						
Authorized to work as Technical Expert for:							
<i>Authorized Technical Area</i>	Sectoral Scope			TA Code	Technical Area within the scope		
	Energy industries (renewable - / non-renewable sources)			1.1	Thermal energy generation		
	Energy industries (renewable - / non-renewable sources)			1.2	Renewables		
	Energy distribution			2.1	Energy distribution		
	Energy demand			3.1	Energy demand		
	Waste handling and disposal			13.1	Solid waste and wastewater		
	Waste handling and disposal			13.2	Manure		
Authorized to work as Local Expert for:							
Country/Countries	India						
<u>Compliance check by:</u>	Anand S. R.						