



VERIFICATION REPORT FOR “WOMEN LED CLEANER COOKING INITIATIVE IN ODISHA”



Document Prepared by LGAI Technological Center, S.A. (Applus+ Certification)

Report ID	BELL_VCS_VER_13125
Project title	Women led cleaner cooking initiative in Odisha
Project ID	2868
Verification period	01-July-2024 to 30-June-2025 (Both days inclusive)
Original date of issue	26-Nov -2025
Most recent date of issue	16-Mar -2026

Version	02
VCS Standard Version	4.7
Client	SDG13 Ventures Pte Ltd
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Summary:

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by SDG13 Ventures Pte Ltd to conduct the verification of the VCS grouped project - “Women led cleaner cooking initiative in Odisha in India”, VCS ID 2868 regarding the relevant requirements of VCS programme guidelines and standard (VCS standard version 4.7, & VCS program guide version 4.5. Relevant requirements of the UNFCCC for CDM project activities, as well as criteria for consistent project operations, monitoring and reporting has been applied for verification.

The monitoring period covered under this verification is from 01/07/2024 to 30/06/2025 (both days included).

The verification includes confirming the implementation of the monitoring plan of the registered VCS PD (VCS ID 2868) and the application of the monitoring methodology as per “VMR0006 Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1”.

The purpose of the project activity is to provide access to clean cooking technologies to the rural households in Odisha state, India. This grouped project involves promotion and dissemination of efficient cook stoves to households in India and enables the end users to switch from traditional 3-stone fire cookstoves (chulhas) to rural households to a modern energy-efficient stoves.

Replacement of the traditional cooking stoves with ICS will reduce the exposure of the family members, specifically women, to the indoor air pollution and therefore result in reducing risk of health-related issues. Each stove disseminated under the project will potentially reduce the firewood consumption by half. The project involves promotion of improved cooking stoves (ICS) to the people of socially deprived community, in Odisha state. Thus, the project will reduce a significant number of emissions that would have been generated in the baseline scenario, where the traditional cookstoves would have been used.

A risk-based approach has been followed to perform this verification. During verification, 03 Corrective Action request (CARs), 00 Forward Action request (FARs) and 01 Clarification request (CLs) were raised and successfully closed.

The review of the project design documentation, monitoring report and additional documents related to baseline and monitoring methodology; the subsequent background investigation, interviews and stakeholders have provided Applus+ Certification with sufficient evidence to validate the fulfillment of the stated criteria.

Applus+ Certification confirms that the project is implemented in accordance with the registered VCS PD. The monitoring system is in place, and the emission reductions are calculated without material misstatements. Our opinion relates to the project's GHG emissions, and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information seen and evaluated we confirm that the VCUs from the project activity "Women led cleaner cooking initiative in Odisha in India" during the period 01/07/2024 to 30/06/2025 (including both days) amount to 515,782 tons of CO₂e.

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1 INTRODUCTION

1.1 Objective

LGAI Technological Center, S.A. (Applus+ Certification) has been contracted by SDG13 Ventures Pte Ltd, to undertake the verification of the grouped project titled “Women led cleaner cooking initiative in Odisha in India” (VCS ID-2868). The verifiers have reviewed the GHG data collected to date for the monitoring period from 01/07/2024 to 30/06/2025 (both days included) covered in this verification. The objective of this verification is a thorough and independent assessment of registered project activities against the applicable VCS requirement by the VVB. The verification process shall determine whether the proposed project activity complies with the requirements of latest VCS guidelines, applicability conditions of the selected methodology, relevant host country regulations and guidance issued by the VCS Board.

- VCS standard v 4.7 dated 16/04/2024 /19/
- VCS Program Guide v 4.4, dated 29/08/2023 /19/
- Applicability conditions of the selected methodology VMR0006 Methodology for Installation of High Efficiency Firewood Cookstoves, Version 1.1” /18/
- Registration and Issuance Process v 4.5. dated 16/04/2024/20.1/
- Host country (India) regulations (<https://www.ceew.in/sites/default/files/CEEW-Roadmap-for-Access-to-Clean-Cooking-Energy-in-India-Report-31Oct19-min.pdf>)

LGAI Technological Center, S.A. (Applus+ Certification) as the Validation/Verification Body (VVB) for the project activity is accredited as a DOE by UNFCCC and meets the competence requirements as set out in the normative reference ISO 14065:2020.

1.2 Scope and Criteria

The scope of verification is to assess the claims and assumptions made in the VCS monitoring report (MR) against the VCS criteria (See Section 1.1. above), including but not limited to, VCS standard V 4.7, applied methodology and other relevant rules and requirements established for VCS project activities as outlined under section 1.1 above.

The verification has been conducted in accordance with the VCS Standard version 4.7, other valid and applicable VCS Regulatory Documents and templates (see Appendix 2 of this Verification Report below), UNFCCC rules and requirements (where applicable) and associated decisions of the VCS Secretariat and the UNFCCC Executive Board (where applicable) (hereinafter also can be referred to as regulatory documents).

The Verification is not meant to provide any consulting towards the project proponents. However, stated requests for clarification and/or correction actions request may have provided inputs for improvement of the project design.

The only purpose of the verification is its usage during the issuance process as part of the VCS project cycle. Therefore, LGAI Technological Center S.A. (Applus+ Certification) can't be held liable by any party for decisions made or not made based on the verification opinion, which will go beyond that purpose.

1.3 Level of Assurance

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

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

Through an exhaustive process of documentary review, interviews with the project proponents, site visits and sampling and surveying (where applicable), assessment on GHG Emission Reductions calculations against applicable methodology and any other regulatory document and reporting of objective evidence, the VVB is able to reach a reasonable level of assurance on the conduction of the Verification process.

The achieved level of assurance for this verification is thus a reasonable level of assurance as per the requirements set out in the applied VCS Standard version 4.7 clause 4.1.10 (1).

VVB applied a materiality threshold of 1% with respect to omission or misstatements concerning reported quantities as per VCS Standard version 4.7 clause 4.1.10 (4).

Additionally, according to the VCS Validation and Verification Manual version 3.2/19/, while all material errors, omissions and misrepresentations must be addressed for a project to receive a positive validation or verification opinion, when non-material errors have been found in the project documents, the VVB requested the project proponent to correct them and ensured that such errors have been addressed where practicable.

The evidence used to achieve a reasonable level of assurance is specified in section 2.3 and 2.4 of this report. Materiality for the project is 1%.

1.4 Summary Description of the Project

The project activity is a grouped project, which employs the VCS methodology; VMR0006 version 1.1 /18/. The grouped project involves distribution and installation of fuel-efficient improved cook stoves (ICS) in Odisha, India.

During the current monitoring period 12,851 ICS were distributed and since the start date of project until the end of current monitoring period total 102,223 ICS distributed as verified through the sales database/13/. The stoves are operational in 27 districts of Odisha and number of stoves distributed in the individual district is verified and mentioned in the below table:

Sr. No	Name of district	Number of stoves distributed/13/
1	Angul	7,489
2	Balangir	4
3	Baleshwar	2
4	Bargarh	24
5	Bhadrak	6
6	Boudh	2
7	Cuttack	6,431
8	Debagarh	11,118
9	Deogarh	3
10	Dhenkanal	15,446
11	Ganjam	51
12	Jagatsinghpur	12
13	Jajapur	18

14	Jharsuguda	1,339
15	Kandhamal	11
16	Kendrapara	11
17	Kendujhar	11
18	Khorda	11,587
19	Koraput	5
20	Mayurbhanj	8
21	Nayagarh	11,551
22	NUAPADA	1
23	Puri	3,854
24	Rayagada	1
25	Sambalpur	2,385
26	Sonapur	3
27	Sundergarh	30,850
-	Total	102,223

The Greenway Jumbo Cookstove is made of a fuel chamber for combusting the renewable biomass. The pot-rest is above the fuel chamber. The stove has one air inlet and weighs approximately 3.75 kilograms.

The Greenway Jumbo Cookstove will reduce the amount of non-renewable biomass used for cooking. PP has considered each ICS distributed as a project activity instance. The start date for the grouped project is 01/06/2022 /07/ which is the date of installation/registration of the first stove in the grouped project.

The project proponent for the project activity is SDG13 Ventures Pte Ltd and owns the rights to VCU/10/. During the site visit the assessment team has verified the project contribution towards sustainable development is established in line with the sustainable development indicators framed by the host country DNA and has the benefits such as reduction in indoor air pollution, reduction in time spent and distance travelled for fuel wood collection, conservation of forest by reducing rate of forest degradation /deforestation and thereby reducing GHG emissions from the environment. There are other economic benefits such as opportunities for local communities involved in monitoring, training of users, undertaking periodic maintenance and post lifetime replacement.

The assessment team has verified the authorities and responsibilities for monitoring and reporting of all data related to the emission reductions were clearly defined under section 3.1 of the monitoring report. The allocation of the responsibilities is documented in a written form and is followed as described in the VCS PD /03/. Routines for the achieving of data are defined and documented.

The verification team has interviewed the personnel /23/ who are involved in the monitoring of the parameters that are used to determine the emission reductions of the VER project. It is confirmed based on the interviews /23/ that the team is competent enough to monitor the parameters as described in the monitoring plan.

In view of the above discussion, the verification team concludes that the management and operational system of the project is implemented and operated well. Thus, it ensures the quality of data which is required in calculating the emission reductions.

The total VCUs achieved from Project activity instances are 515,782 tCO₂e for this monitoring period from 01/07/2024 to 30/06/2025.

The project activity has been implemented as described in the registered VCS PD and the VCUs are calculated conservatively as per the applied methodologies /18/.

2 VERIFICATION PROCESS

The registered VCS project is undergoing third verification period, the approach adopted to ensure the quality of emission reductions is described in the following sections.

2.1 Method and Criteria

The Verification process has been conducted following the regulatory documents and based on the ISO 14064-3:2019 and ISO 14065:2020 using standard auditing techniques as required by the VCS Standard v4.7.

The Verification process has been conducted through an onsite inspection (see below), thus, no need for a risk analysis for remote inspections has been determined for this Verification.

No ICT means have been used for the conduction of this verification process other than those for the provision of documents and transferring information and undertake normal communications with the PP(s). Those ICT means supporting the process in this sense, have been used to an extent sufficient to cover the background necessities of the verification process and have demonstrated enough effectiveness to conduct it in accordance with the relevant applicable regulatory requirements.

This process has included: the review of data and information presented to verify their completeness; the review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements and the QA/QC procedures; an evaluation of data

management; and an evaluation of the QA/QC system in place in the context of its influence on the generation and reporting of emission reductions.

No virtual sites have been included in the verification process according to the definition in the IAF MD4:2023 document. Instead, the documentation has been provided upon request from the VVB by other means (such as physical documents, mail, transfer applications, etc.)

Before the assessment begins, members of the team covering the technical scope(s), sectoral scope(s), and relevant host country experience for evaluating the VCS project activity are appointed in accordance with the Applus+ Certification's procedures and policies, that are in accordance with the ISO 14065:2020 regulatory provisions.

The verification approach consists of two phases.

In the first phase, Applus+ Certification completed a strategic review and risk assessment of the project's activities and processes in order to gain a full understanding of:

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

Based on the above, the VVB prepared a Verification Plan and applied an evidence-gathering plan designed to collect sufficient and appropriate evidence upon which to base the conclusion and to consider the inherent risk for the verification. The evidence-gathering plan is based on analytical procedures and tests and considers the thresholds for materiality as per the regulatory documents applied for this verification (1% as per the applied VCS Standard version 4.7).

The applied evidence-gathering plan is used by the VVB to determine the conformity of the statements made by the client against the principles and requirements of the applied regulatory documents during this verification.

The evidence-gathering plan designed by the VVB takes into consideration, as a minimum:

- The selection and management of the data and information;
- The processes for collecting, processing, consolidating, aggregating and reporting the data and information;
- Systems and processes in place to ensure the validity and accuracy of the data and information;
- The design and maintenance of the system to control the data and information;

- Systems, processes and personnel that support system in place, including activities for ensuring data quality;
- The plans for instrument maintenance and calibration where appropriate;
- The results of previous validation activities and verifications, where available and appropriate.

At the end of this phase, Applus+ Certification produced a verification plan which, based on the risk assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan (if applicable).

In the second phase using the verification plan, Applus+ Certification verified the implementation of the monitoring plan and the data presented in the VCS MR/05/ for the period in question. This involved on-site visit & interviews of project proponent representative's and a desk review of the Monitoring Report. This verification report describes the findings of this assessment.

The process of verification involved the following relevant milestones:

- The signature of the contract for verification between the PP and the VVB;
- A kick-off meeting/communication to require the documentary material to perform an initial desk review;
- An initial desk review of the documentary evidences prepared by the Project Proponent;
- The issuance of findings coming from this initial desk review (if any);
- The conduction of an onsite audit, including interviews and video-calls in substitution of a site visit (see Sections 2.3 and 2.4 below);
- The issuance of findings from the onsite audit and communication of deviations (if any) to the Project Proponent;
- The assessment of their resolution and closure, when appropriate;
- Once all the findings have been closed, the elaboration of this Verification Report, in which such findings (if any) are described;
- The conduction of an independent Technical Review;
- Upon conclusion of the Technical Review, the VVB may perform a final quality check before the issuance of the Final Verification Report (FVR) and signature of the corresponding Verification Deed.

The process of this verification assessment has implied sampling plan and described under section 4.3 of this report.

Verification schedule is described in the below table:

Sr. No	Date	Milestones
1	01/10/2025	Contract signed

2	01/11/2025	Desk review
3	04/11/2025 to 06/11/2025	Site visit
4.	26/11/2025	Draft verification report

2.2 Document Review

The verification is performed primarily as a document review of the registered VCS PD /03/, previous MRs and Verification reports/06/ and associated documents as stated in detail in appendix 2 of this document. The assessment is performed by a verification team using a protocol. The cross checks between information provided in the Monitoring report, VCS PD and information from sources other than those used, if available, the team's sectoral or local expertise and, if necessary, independent background investigations.

2.3 Interviews

The site visit for the project location, by the assessment team, was conducted on 04/11/2025 to 06/11/2025 and the following stakeholders were interviewed.

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Kazi	Shoeb	Assistant Manager, Greenway Grameen Infra Pvt Ltd	04/11/2025 to 06/11/2025	Project implementation and its development, monitoring report.	Ravi Kant Soni
2	Xalxo	Sarojini	Project Manager, Greenway Grameen Infra Pvt Ltd	04/11/2025 to 06/11/2025	Monitoring, Survey design, QA/QC procedures, analysis of survey results,	Ravi Kant Soni

					sales database, Data entry, reporting	
3	Hussain	Ezaz	Project Manager, Greenway Grameen Infra Pvt Ltd	04/11/2025 to 06/11/2025	Survey Planning, Survey Implementation	Ravi Kant Soni
4	Saraf	Saurabh	Project Manager, Greenway Grameen Infra Pvt Ltd	04/11/2025 to 06/11/2025	ER Calculations, Sample size calculations, monitoring survey results analysis	Ravi Kant Soni
End users interviewed from: 04/11/2025 to 06/11/2025						
Sr.No	Users name	Block	Cookstove ID:	VB survey date	Team member	
1	Raebhari Minz	Rumabahal	J22VI191523	04/11/2025	Ravi Kant Soni	
2	Bahamani Guria	Dahijira	J23VF097714	04/11/2025	Ravi Kant Soni	
3	Turtan Tiru	Kutra	J22VH169975	04/11/2025	Ravi Kant Soni	
4	Alsalma Kujur	Badkuchlu	J22VE039161	04/11/2025	Ravi Kant Soni	
5	Pramila Bahala	Ghoghar	J22VH138553	04/11/2025	Ravi Kant Soni	
6	Anita Dung Dung	Biringatoli	J23VF098482	04/11/2025	Ravi Kant Soni	
7	Aruna Lakra	Bheluadihi	J22VG123395	05/11/2025	Ravi Kant Soni	
8	Sibanarayan Guru	Talpali	J23VB412413	05/11/2025	Ravi Kant Soni	
9	Anil Kumar Meher	Maneswar	J23VD012994	05/11/2025	Ravi Kant Soni	
10	Basant Pasayat	Bhoipali	J23VA377533	05/11/2025	Ravi Kant Soni	

11	Md Asif Hussain	Jharsuguda	J22VC213100	05/11/2025	Ravi Kant Soni
12	Binapani Kalo	durlaga	J22VC218159	05/11/2025	Ravi Kant Soni
13	Prabir Kisan	Durlaga	J22VD000973	05/11/2025	Ravi Kant Soni
14	Budhu Behera	Jharsuguda	J22VC217500	05/11/2025	Ravi Kant Soni
15	Ambika Bhoi	Bhaunrkhol	J23VC453922	05/11/2025	Ravi Kant Soni
16	Dama Behra	Ankol Puri	J23VL346610	06/11/2025	Ravi Kant Soni
17	Sukanti Behra	Jharsuguda	J22VJ259620	06/11/2025	Ravi Kant Soni
18	Sumitra Nair	Jharsuguda	J22VK289601	06/11/2025	Ravi Kant Soni
19	Jharna	Rasol	J23VG115148	06/11/2025	Ravi Kant Soni
20	Majulata Nayak	Joda pada	J22VK267295	06/11/2025	Ravi Kant Soni

The households were asked the following questions.

- Usage and functionality of ICS
- Whether any other type of stove is installed and if yes, its frequency of operation
- Physical condition of stove or if any changes were made by the households after its installation that could affect the stove efficiency and maintenance is done as and when required.
- Do the users aware of grievance mechanism.
- Users were also asked about how the family has benefitted from the installation of Greenway Jumbo Cookstove, for example: reduction in smoke or indoor air pollution, efficient cooking, reduction in time spent for collection of firewood and the quantity of the firewood collected.

In general, the ICS were operational, and the user's informed cooking was much easier and cleaner by improvising the indoor air quality and has also helped in saving the time of the end-user by improvising the efficiency of the cookstoves. This project device has improved the working conditions of the women in the kitchen.

In short, positive feedback was received from the end-users regarding the ICS during the on-site visit conducted by the auditor.

2.4 Site Visits

The onsite visit was undertaken on from 04/11/2025 to 06/11/2025, by the verification team member Ravi Kant Soni (Lead Auditor), to carry out the following.

- a) An assessment of the implementation and operation of the registered project activity as per the registered VCS PD and subsequent MRs.
- b) A review of information flows for generating, aggregating, and reporting the monitoring parameters.
- c) Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PD.
- d) A cross check between information provided in the monitoring report and data from other sources such as plant logbooks, inventories, purchase records or similar data sources.
- e) A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PD (if applicable), the applied methodology including applicable tool(s), and, where applicable, the applied standardized baseline.
- f) A review of calculations and assumptions made in determining the GHG data and emission reductions.
- g) 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.
- h) Assessment of SDGs impact
- i) Assessment of implementation of grievance redress procedure and ongoing communications.

2.5 Resolution of Findings

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

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

Non-compliance with the monitoring plan, the methodology or the standardized baseline are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient.

Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants.

Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions.

Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants. Clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met. All CARs and CLs raised by the Applus+ Certification during verification shall be resolved prior to submitting a request for issuance.

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

During the current verification, 03 Corrective Action request (CARs) , 01 Clarification request (CLs) 00 Forward Action requests (FARs) were raised and successfully closed. All the findings that are raised and communicated to project proponent during the verification are included under Appendix 4. The section also includes the response, if provided, by the project participants and an assessment by the verification team if it was closed out or otherwise.

2.5.1 Forward Action Requests

The project activity is undergoing third verification under VCS; there were no FARs raised during the validation or previous verification/06/.

2.6 Eligibility for Validation Activities

This section is not applicable for present verification, as Applus+ Certification holds the accreditation for Validation of projects under this Sectoral Scope.

3 VALIDATION FINDINGS

There is no project deviations identified during the current and previous monitoring periods.

3.1 Methodology Deviations

There is no methodology deviation identified during the current monitoring period.

3.2 Project Description Deviations

No project deviation identified.

3.3 New Project Activity Instances in Grouped Projects

The purpose of the project (grouped project) is to introduce Improved Cook Stoves (ICS) in household's premises that use traditional 3-stone fire cookstoves for cooking. A total of 102,223 ICS was disseminated by the end of this 3rd monitoring period. However, 97.83% of the total distributed ICS (102,223) were found to be operational during the 3rd monitoring period.

During the current monitoring period there is no new ICS (new instances) distributed to individual households.

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

The assessment team has reviewed the evidence collected by the PP for each of the instances included in this verification and confirmed the following.

- (a) Implementation and operational status of the PAI
- (b) Monitoring and data collection
- (c) Flow of information; generating, aggregating, and reporting of the monitoring parameters
- (d) Conformance of the new project activity instances with the eligibility criteria set out in the project description.

The assessment team assessed the appropriateness of project activity instances (against the requirements of the following key elements:

Key Criteria	Requirements	VVB Assessment
The geographical boundary of the project instances includes any time- induced boundary. consistent with the geographical boundary set in the Project Description	VVBs must ensure that the project description clearly identifies the geographic areas within which new instances may be added. Geographic areas must be defined using geodetic polygons and provided in a KML file. Such geographic areas need not be contiguous and may be large or small, noting the grouped project	The verification team reviewed the sales record database /13/ and by further conducting interviews with representatives of PP to confirm that all project activity instances are located within the geographical area identified in the registered VCS PD /03/. All project activity instances are located within the state of Odisha. This is deemed appropriate to the verification team. Thus, the

		requirement of this key element is met.
Conditions that avoid double counting of emission reductions like unique identification of product and end-user locations	A unique numbering system for ICS will be applied in each project stances, assigning a unique number to each ICS and allowing to clearly identify for each ICS to which project instance/cluster it belongs. Provisions will be made to collect geo- coordinates.	During the site visit, it was confirmed that each ICS has unique serial number encrypted on the jumbo cookstove and is visible. Further, PP has the tool to enter the geo co-ordinates of the stove location. Hence, it complies with the required criteria.
The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications	Project instances under this project will consist of the distribution of ICS with a thermal efficiency of at least 25% efficiency as per water boiling test or compliance with Tier II and above as per ISO to household users cooking with non- renewable biomass in the baseline scenario. The project instances will involve replacement of conventional firewood cook-stoves for biomass fired ICS as defined in the VCS PD. Stove types replaced and implemented is defined in the VCS PD, and hence appliances involving the efficiency improvements in the thermal applications of non-renewable biomass as per VMR0006.	The assessment team has checked the ICS test report /09/ and confirmed that the distributed single pot Green Jumbo cookstove has certified efficiency of 38%. Since the efficiency of the ICS is more than 25%, hence eligibility criteria are met.
The conditions that ensure that the project instances meet the requirements pertaining to the demonstration of additionality.	Have characteristics with respect to additionality that are consistent with the initial instances for the specified project activity and geographic area.	The verification team reviewed the sales record database /13/, conducted interviews with representatives of PP and further based on its sectoral expertise confirms that baseline scenario for each project technology and geographic area, as identified in section 3.4 of the VCS PD /03/, is applicable to the corresponding new project activity instances under the specific technology. During the site visit the assessment team has observed that some households still make partial use

		of baseline stoves due to the following reasons. (a) Cultural and religious norms lead the households to cook vegetarian food on one stove device and non-vegetarian food on another, (b) Community functions, guests' gatherings, religious and cultural events require the households to cook more and during those days/time periods they tend to use the baseline stoves. The verification team assessed that the project incorporates a screening process for potential beneficiaries. This step is for ensuring alignment with the baseline and additionality conditions. The screening is enabled by demonstration events held in villages prior to ICS distribution. These events are held by the operations team (or Grameen Sahayaks) and serve the purpose of generating awareness and identifying potential beneficiaries. The potential beneficiaries are requested to register their interest in receiving the ICS, and this request is further approved or rejected by the Project Manager(s). The approval is based on the beneficiary household's adherence to baseline conditions. The PP is distributing ICS at a subsidized rate. The ICS were distributed with more than 60% subsidy. This has been established through site visits, beneficiary interviews and the latest agreements signed between the Project Proponent and the beneficiary/10/. The verification team can confirm that each new project activity instance included within
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		the grouped project follows the additionality. Thus, it has been demonstrated that for each project activity instance included in grouped project. - Baseline scenario exists (corresponding to the project technology) - the requirements of additionality are being complied with for the entirety of geographic area (Odisha) within which they are installed. This is deemed appropriate to the verification team. Thus, the requirements of this key element have been met by all the new project activity instances added to the grouped project.
Where applicable, the conditions related to sampling requirements for the project in accordance with the “Standard for sampling and surveys for CDM project activities and Programme of Activities”.	VVBs must ensure that the project has an appropriate monitoring plan that includes a sampling plan to collect data from all project activity instances and information systems, allowing for centralized data collection. VVBs must ensure the sampling plan is able to generate statistically significant results.	The verification team reviewed the VCS MR /01/ and further conducted interviews with representatives of PP to confirm that the monitoring plan and procedures mentioned therein (which includes the sampling plan) is in conformance to the requirements laid out in the VCS PD /03/. Moreover, according to the monitoring plan the PP is responsible for collecting and storing data. The verification team further confirms that new project activity instances will conform to the monitoring plan requirements and procedures stated therein.
VER ownership	VVBs must ensure that a default distribution agreement for end users including the provision that emission reductions generated by the stove are owned by the PP is being signed by each individual end users.	During the on-site visit the assessment team verified that an agreement between the beneficiary households and the PP was available at the sampled beneficiary households. Hence, eligibility criteria are met.
Where a capacity limit applies to a project activity included in the	Applied methodology VMR0006, ver. 1.1 does not define any specified capacity limits for the	Based on the assessment of registered PD/03/, applied methodology and on-site visit. It

project, no Project instance shall exceed such limit. Further, no single cluster of project activity instances shall exceed the capacity limit, determined as follows: a) Each project activity instance that exceeds one percent of the capacity limit shall be identified. b) Such instances shall be divided into clusters, whereby each cluster is comprised of any system of instances such that each instance is within one kilometre of at least one other instance in the cluster. Instances that are not within one kilometre of any other instance shall not be assigned to clusters. c) None of the clusters shall exceed the capacity limit and no further project activity instances shall be added to the project that would cause any of the clusters to exceed the capacity limit	grouped project, hence this eligibility criteria are not applicable.	can be confirmed that the stated eligibility criteria are not applicable.
Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance	The new project instance shall be required to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance	The assessment team interviewed the project representatives during the site visit and confirmed that no ODA is involved. Furthermore, the PP has submitted the declaration confirming that no funding from Annex-1 parties is received
The Grouped project-specific requirements stipulated by the project proponent including any conditions related to undertaking local	The local stakeholder consultation was conducted at a group project. Each new project instance/project will be implemented in a similar social economic context. The key	The assessment team has checked the registered PD and confirmed that the stakeholder consultation was conducted at project level. The project database confirms that the new

stakeholder consultations and environmental impact analysis, have been met	stakeholders of the program both at group project activity and new project instance level are the same. To check for actions needed at the new project instance level for satisfying this eligibility criteria.	project instances are implemented in a similar social economic context, Hence, hence eligibility criteria are met.
Have a start date that is the same as or later than the grouped project start date	All future instances shall have the start date after the date of first instance.	The assessment team reviewed the MR, sample electronic sales records for new project activity instances, sales database and further conducted interviews with representatives of PP to confirm that start dates of new instance is after the date of first instance. Hence, hence eligibility criteria are met.
Applicability of VCS methodology	All future instances shall fulfil all-applicability criteria of VCS methodology VMR0006, v1.1.	The assessment team has reviewed the MR, registered PD and it can be confirmed that the new project activity instances comply with the requirements of applied methodology VMR0006, v1.1. Hence, hence eligibility criteria are met.
Are subject to the baseline scenario determined in the project description for the specified project activity and geographic area	The new instance shall adhere the baseline requirements of the VMR0006, v1.1.	The assessment team reviewed the sales database conducted interviews with representatives of PP and further based on its sectoral expertise confirms that baseline scenario and geographic area, as identified in section 3.4 of the registered VCS PD, is applicable to the new instances under the grouped project. Hence, hence eligibility criteria are met.
Be eligible for crediting from the start date of the project activity instance through to the end of the project crediting period (only).	The project instance will be only eligible for the crediting from its start date through to the end of the project crediting period (only).	The crediting period for the grouped project starts on 01/01/2022, that is the project start date as stated in the VCS PD/03/. PP has considered the start date of commissioning of first ICS as project start date and hence the start date of crediting period. The assessment team confirms that the crediting period

		of the project activity instances lies within the lifetime of the grouped project activity. Hence, hence eligibility criteria are met.
Not be or have been enrolled in another VCS project	No project instance to be included which is part of another grouped or standalone VCS project	The assessment team has physically checked the ICS & sales database & confirmed that the ICSs distributed having unique identification number along with the end users name, address, geographical location and are clearly identifiable. Hence chances of enrolment of project instance with another VCS project can be ruled out. Hence, hence eligibility criteria are met.

In view of the above assessment the verification team confirms that inclusion of project activity instances in the grouped project is valid.

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:
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Audit history	The audit history table is provided below:				
	Audit Type	Period	Program	VVB Name	Number of years
	Validation	13/05/2022 to 15/11/2022	VCS	KBS Certification Services Pvt. Ltd.	0.5
	Verification	01/06/2022 to 30/06/2023	<u>VCS</u>	4K Earth Science Pvt. Ltd.	1.08
	Verification	01/07/2023 to 30/06/2024	<u>VCS</u>	LGAI Technological Center S.A. (Applus + Certification)	1 year 0 months
	Verification	01/07/2024 to 30/06/2025	<u>VCS</u>	LGAI Technological Center S.A. (Applus + Certification)	1 year 0 months
	Total	01/06/2022 to 30/06/2025	=	-	3.08 years
The assessment team has checked the information about the audit history as provided in the above table and confirmed that the information provided is accurate.					
Double counting and participation under other GHG programs	The project activity is registered under the VCS only (VCS Project ID 2868) and is not registered under any other emissions trading program or any other mechanism that includes GHG allowance trading.				
	The VVB assessed potential overlaps by reviewing the project boundary against national and international carbon registries/28/ and conducting stakeholder interviews. It is confirmed that the project area does not				

	overlap with any other registered project. The assessment team has physically checked the ICS & sales database & confirmed that the ICSs distributed having unique identification number along with the end users name, address, geographical location and are clearly identifiable. Hence chances of enrolment of project instance with another project can be ruled out. The PP also confirms that net GHG emission reductions or removals generated during this monitoring period shall not be used for compliance under any such programs or mechanisms. This was confirmed through a declaration/15/ submitted by the PP and hence accepted by the assessment team. The PP has submitted the declaration/15/ which states that the net GHG emission reductions generated by the project activity will not be used for compliance with any other emissions trading program or to meet binding limits on GHG emissions for the same monitoring period. The project is exclusively registered under VCS only and has not been rejected by another GHG program/28/.
No double claiming with emissions trading programs or binding emission limits	The PP has submitted the declaration/15/ which states that the net GHG emission reductions generated by the project activity will not be used for compliance with any other emissions trading program or to meet binding limits on GHG emissions for the same monitoring period.
No double claiming with other forms of environmental credit	The project has not sought, received, or is planning to receive credit from another GHG-related environmental credit system. The PP has submitted the declaration/15/ which states that the net GHG emission reductions generated by the project activity will not be used for compliance with any other emissions trading program or to meet binding limits on GHG emissions for the same monitoring period.
Supply chain (scope 3) emissions double claiming	The project involves distribution of energy efficient improved cook stoves (ICS) and does not involve any supply chain involved in the project such as manufacturers, wholesalers, distributors, and retailers. So, no indirect upstream and downstream GHG emissions are not involved in the project activity. Thus, the Scope 3 emissions are not applicable in this project activity.

Sustainable development contributions	The project contributes to environmental, social, economic and technological benefits which lead to the sustainable development of the local area and country. PP has mentioned that the PA contributes to 7 SDGs and the same has been assessed as under the Appendix-6 of this report.
Additional information relevant to the project	No commercially sensitive information has been excluded from the public version of the project description.

4.2 Safeguards and Stakeholder Engagement

4.2.1 Stakeholder Identification

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Stakeholder identification	Stakeholder identification involves identifying individuals, groups, communities, or organizations who have a vested interest in the ICS project. The PP had conducted pre-baseline surveys across to identify all eligible households, relevant government bodies, NGOs and agencies. There are multiple beneficiary stakeholder meetings are held to further engage with eligible ICS beneficiaries and convey more detailed information. Additional project stakeholders are directly employed or partnered with at the design and planning phase of a project activity. The assessment team has checked the attendance sheet, MoM and photographs/27/ of the people present during the LSC meetings and verified that different categories of the people as mentioned by the PP were present.
Legal or customary tenure/access rights	The project involves distribution of energy efficient improved cook stoves (ICS) and does not interfere with any legal or customary rights to territories and resources held by project stakeholders. During the onsite visit a few stakeholders were interviewed on this, and no issues identified in this regard.

Stakeholder diversity and changes over time	following types of Stakeholders were identified: • Beneficiaries: Those directly impacted by ICS adoption (e.g., households using the stoves). • Suppliers and Manufacturers: Involved in production and distribution. • Government Agencies: Responsible for policy, regulation, and funding. • NGOs and Community Groups: Engaged in awareness, training, and implementation. • Researchers and Academia: Provide technical expertise and evaluation. The assessment team has verified the attendance sheet/27/ of LSC meetings conducted and interviewed stakeholders/users during the site visit. It is confirmed that all the stakeholders are in India, and no changes identified over the time.
Expected changes in well-being	Through the feedback received from the end users during the site visit, the assessment team can confirm that the project has a positive impact on stakeholder wellbeing and the social and economic benefits of the project as follows: Social Benefits: - Health Improvement: Clean and improved cookstoves reduce indoor air pollution, benefiting women and children. This leads to fewer respiratory illnesses and better overall health. - Empowerment: Women, who often bear the burden of cooking, gain time for education, income-generating activities, and leisure. - Community Well-Being: Reduced smoke exposure positively impacts the entire household and community. Economic Benefits: - Household Savings: Efficient cookstoves decrease fuel consumption, resulting in cost savings for households. - Local Employment: Locally produced cookstoves create jobs for artisans, technicians, and salespeople within the informal sector. - Productivity: Time saved from cooking can be reallocated to income-generating endeavours.

	The PP has appropriately described the relevant SDG target and provided the detailed explanation for achieving these targets in the MR/01/ which is found to be acceptable.
Location of stakeholders	The assessment team has observed that most of the stakeholders are the ICS beneficiaries, and the remaining are also people from the in the rural and peri-urban areas of Odisha/13/.
Location of resources	Not applicable as the project involves distribution of ICS.

4.2.2 Stakeholder Consultation and Ongoing Communication

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Ongoing consultation	The assessment team has interviewed project personnel and end users/ stakeholders during the site visit, and the project proponent has appropriately communicated and informing the stakeholders about the project before verification and during this monitoring period through multiple awareness events and product demonstrations. The PP has regularly organized community product demonstration events in the project location among the concerned stakeholders. During the on-site visit it is verified that the people from the local area are employed as field staff (Grameen Sahayaks or Cluster In charges) and the end users/local stakeholders are in contact with the local coordinators where end users/local stakeholders can raise any comments or concerns to them.
Date(s) of stakeholder consultation	Local stakeholder consultation has been conducted at the time of project registration/27/. The PP conducted a consultation meeting with the local stakeholders on 15/12/2021 at Adhikar Microfinance Pvt. Ltd. in Kalinga Nagar, Bhubaneswar, Odisha. The project is undergoing a second periodic verification. The PP has organized the stakeholder engagement meetings (awareness generation events) on 30/10/2024 in Sundergarh and on 06/01/2025 in Angul, Odisha.

Communication of monitored results	(i) <i>The assessment team has interviewed field staff and end users. It is observed that stakeholders were communicated about the monitored results through engagement events that are conducted from time to time in the project location. The assessment team verified the list of participants who attended the stakeholder engagement meetings/27/. There are some comments received during engagement meetings (outside of the public commenting period) and listed below: Beneficiaries wanted to know when PP will be distributing more stoves to them.</i> (ii) Beneficiaries wanted to understand how to maintain the stoves for better performance and longevity of the product. The field coordinator explained the concerned beneficiaries that: • The distribution of improved cookstoves is carried out in planned phases based on project design. Community members were informed that any future distribution rounds would be communicated in advance through local coordinators. • Greenway Jumbo stoves are more efficient, and efficiency is 38%. The improved cookstoves require only simple, routine maintenance to ensure performance and long life. Beneficiaries were advised to regularly remove ash buildup, prevent water on the device, and use dry wood to maintain efficient combustion. The meeting records confirmed that the beneficiaries are informed about the fuel savings, positive climate impact and time savings due to the project activity.
Consultation records	Minutes of meeting, photographs, stakeholder feedback and attendance list of stakeholders /27/ are checked and found to be appropriate.
Stakeholder input	During the stakeholder consultation some questions were related to, access of cookstoves, employment opportunities, smoke reduction benefits from project to villagers and the project proponent has appropriately answered the same as described in section 2.2 of the registered PD/03/ and MoM/27/.

	The assessment team checked the grievance register provided by PP and found that some comments/feedback/complaints were received during the current monitoring period and the PP has appropriately responded/resolved the same/24/. Thus, verification team is of the opinion that the ongoing stakeholder mechanism is adequate and appropriate.
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4.2.3 Free, Prior, and Informed Consent

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	The project team conveys the advantages of ICS devices and provides a practical demonstration of their safe usage during regular stakeholder engagement meetings. It is to be noted that as part of the ICS distribution process, a formal agreement is executed between the Project Proponent and each beneficiary/10/ is known as end users' agreement or carbon-waiver agreements. The end users confirmed that during the interviews that the terms of the agreement are broadly outlined during stakeholder engagement meetings at the time of ICS distribution.
Outcome of FPIC discussion	This is not relevant for project activity as the project activity involves distribution of energy efficient improved cook stoves (ICS). No resettlement/ forced physical or economic displacement was required without consent.

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	The assessment team checked the grievance records provided by PP and found that grievances/feedback were received during the current monitoring period and appropriately addressed by the project proponent /24/. Most of the complaints received during the monitoring period were related to maintenance of the project device and got resolved appropriately by the project staff.
Grievance redress procedure	The local implementation partners have the responsibility to take grievances regarding the project activity and same will be conveyed to

	PP during operation of project activity. Thus, ongoing communication of stakeholders is followed through grievance mechanism. The audit team has checked through onsite audits with the end users. The Project Proponent has reported its feedback and grievance redressal procedure under Appendix-V of the MR /01 /, and the policy is outlined in the document “Project Grievance Redress Mechanism” /24/. In the opinion of the assessment team, based onsite interviews and observations, the grievance redressal procedure will address issues that may arise during project planning and implementation. The grievance redressal process/24/ has been designed where beneficiaries and stakeholders have PP contact information and the understanding that they should contact the organization with any problems, questions, or grievances. The assessment as confirmed that the PP has implemented the appropriate grievance redressal process as part of ongoing communication with stakeholders in line with clause 3.18.4 of VCS Standard, v.4.7.
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4.2.5 Public Comments

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
No comments received.	Not applicable	The assessment team has checked the project view page/35/ and confirmed the same.

4.2.6 Risks to Local Stakeholders and the Environment

4.2.6.1 Management Experience

Greenway has significant management experience in implementing Improved Cookstove (ICS) projects, particularly through its carbon credit and gender finance initiatives in India. Their work demonstrates strong organizational capacity in scaling community-based ICS programs, ensuring environmental and social compliance, and leveraging international carbon markets for sustainable financing.

4.2.6.2 Risk Assessment

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Natural and human induced risks to stakeholders' wellbeing	The project activity involves distribution of improved cook stoves to households and based on the site visit observation and consultation with residents, it can be confirmed that the project activity does not pose any known risks to community health, safety, or environment/23/. No natural hazards or human-related impacts have been found that would affect your wellbeing.
Risks to stakeholder participation	No risk is identified concerning the participation of stakeholders. The stakeholders were informed by press release published in the local newspaper/27/ and detailed contact information such as phone number and email address of the representative of the project implementor were also made available in the newspaper for the stakeholders who could not physically attend the local stakeholder consultation.
Working conditions	During the onsite visit the assessment team observed that improved Cookstove (ICS) introducing cleaner combustion characteristics and heightened thermal efficiency, it not only avoids disrupting traditional practices but significantly enhances the working conditions and livelihoods of end users. This positive impact has been thoroughly verified by the assessment team during end-user interviews conducted.
Safety of women and girls	The Project Proponent (PP) has positively identified a reduced risk compared to the baseline scenario. This reduction is attributed to the significant decrease in fuel collection time resulting from the lowered fuel consumption facilitated by the project activity. The PP has organized regular awareness and training to team members for the prevention of sexual harassment.
Safety of minority and marginalized groups, including children	The project device (ICS) has generally been designed to be more compact and safer to ensure that there is minimal risk of burn or injury to users/08/. Hence do not pose any risk to minorities or marginalized groups and supports them by ensuring better access to cleaner cooking technology.

Pollutants (air, noise, discharges to water, generation and release of hazardous materials and chemical pesticides and fertilizers	The cookstove project (ICS) significantly reduces toxic indoor air pollution through its improved design, thermal efficiency and cleaner combustion characteristics. The project activity does not create any pollution in the project area/23/.
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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	As part of the project activities, a training program is implemented for all field staff and coordinators employed/14/. The training enforces strict rules regarding harassment and discrimination. Should any allegations be made by beneficiary families or other villagers, the specific employed individuals will be evaluated and immediately removed from the programme if found to be at fault.
Sexual harassment	The HR policy is adhered to national and local rules and regulations and provides an understanding of the following: • Retrenchment and dismissal • Work ethics and code of conduct. • Non- tolerance of child labour, forced labour and worker exploitation • Attendance and leave policy • Non-discrimination • Reference to applicable labour regulations and monitoring procedures of the contractors. The assessment team has interviewed the end users during the onsite visit and can confirm that no project stakeholders have reported any form of discrimination or sexual harassment to date.
Gender equity in labor and work	The Project does not reduce access to or control of resources for women. Also, the PP have HR policy/25/ which clearly mention that

	women are treated equally. No, the project does not adversely affect men and women in marginalised or vulnerable communities. Employment opportunities have been provided by the PP to the local people from the nearby villages around the project site which in turn has improved the livelihood and living standards of the local people. The project applies the principles of non-discrimination, equal treatment, and equal pay for equal work. The project has equal opportunity for both men and women. The Policy/25/ outlines company's expectations from its employees with respect to treating co-workers with courtesy, dignity, and respect irrespective of their gender, race, caste, creed, religion, place of origin, sexual orientation, disability, economic status or position in the hierarchy. India ratified the International Convention on the Elimination of All Forms of Racial Discrimination on 03/12/1968 with certain reservation(https://nhrc.nic.in/documents/india_ratification_status.pdf) /32/,/33/. The project activity is in line with strategy of elimination of discrimination.
Forced labor	India is a party to ILO and forced labour is illegal in India/34/. PP and their subcontractors comply with all relevant national laws regarding child labour. India has ratified ILO "C138 – Minimum Age Conventions" and "C182 – Worst Forms of Child Labour Convention". India has laws in place for prohibiting forced and compulsory labour https://labour.gov.in/. Project developer has the Policies in place aligned with the national laws.
Child labor	The project proponent prefers the local employment, and culture is maintained at project site. The country has strict prohibition for child labour/32/ https://labour.gov.in/whatsnew/child-labour-prohibition-and-regulation-amendment-act-2016 .
Human trafficking	Human trafficking is strictly forbidden in the project. Background checks are conducted on all staff. A strict 18+ age policy is also followed. No activities causing such things were found from interviews with the end users and local stakeholders during onsite visits/23/.

4.2.7.2 Human Rights

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risk identified	The assessment team during the onsite visit confirms that Project activities are not expected to cause any human rights abuse. As a

	member of United Nations/30/ and part of UN Agreement on Human Rights (https://www.ilo.org/newdelhi/lang-en/index.htm), it is ensured by law in India that no action can be taken against human rights. As India is signatory to International Human right under UN resolution and the project proponent is abiding by the law and regulation of the Host country. Out of Indigenous Peoples (IPs), local communities (LCs), customary rights holder's groups, only local communities are the stakeholders. It is observed that people from local communities are provided with employment, and the local farmers get the bio-fertilizer from the project. The local labor laws are applicable with 48 hours working week with casual leaves and sick leaves and the employees are paid as per the minimum wages act of the state government. The lunch facilities are provided by the project proponent. The assessment team was introduced to these facilities by the project proponent during the site and through interactions with employees and contract workers. Thus, human rights are respected at work.
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4.2.7.3 Indigenous Peoples and Cultural Heritage

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risk identified	The improved cookstoves are distributed to the socio-economically disadvantaged communities such as Scheduled Tribe/Adivasi or Scheduled Caste/Dalit communities/13/, the assessment team has verified this through the project database and interviews of end users during the on-site visit/23/. The monitoring activities conducted following local customs/traditions, respecting the area's cultural heritage. The assessment team has checked the stakeholder engagement meetings and surveys records and confirmed that for end users' convenience local language was refereed by the team members employed from the local community. The assessment team interviewed the end users during the site visit/23/ and confirmed that all the meetings were undertaken and in the local language. No monument of cultural or historical importance is affected due to the project activity.

4.2.7.4 Property Rights

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risk identified	The project involves dissemination of improved cookstoves and fully respects all property rights and does not impact them. There are no uncertainties regarding land tenure, access rights, usage rights or land ownership. The ICS are provided at subsidized cost with a licensing agreement /17/.

4.2.7.5 Benefit Sharing

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Summary of the benefit sharing plan	The project involves distribution of improved cookstoves; hence this section is not applicable. .
Benefit sharing during the monitoring period	The project involves distribution of improved cookstoves; hence this section is not applicable. .

4.2.8 Ecosystem Health

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Impacts on biodiversity and ecosystems	Through the improved design and increased thermal efficiency of the ICS, there is a reduced firewood requirement. This results in reduced deforestation/forest degradation and a positive impact on biodiversity and ecosystems. VVB believes that the implementation of the project leads to a positive impact on local biodiversity.
Soil degradation and soil erosion	There is no risk of soil degradation and soil erosion identified. The reduced deforestation/forest degradation resulting from the lower firewood requirement leading to less soil degradation and erosion.
Water consumption and stress	The project activity reduces deforestation/forest degradation and does not involve water consumption.

Due to cleaner combustion and reduced smoke, the amount of water used to cleaning utensils is reduced.

4.2.8.1 Rare, Threatened, and Endangered species

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Species or habitat	The project involves distribution of improved cookstoves; hence this section is not applicable. .
Areas needed for habitat connectivity	The project involves distribution of improved cookstoves; hence this section is not applicable. .

	Evidence gathering activities, evidence checked, and assessment conclusion
Habitats for rare, threatened, and endangered species	The project involves distribution of improved cookstoves; hence this section is not applicable. .
Areas for habitat connectivity	The project involves distribution of improved cookstoves; hence this section is not applicable. .

4.2.8.2 Introduction of Species

Species introduced	Evidence gathering activities, evidence checked, and assessment conclusion
Not applicable	The project involves distribution of improved cookstoves; hence this section is not applicable. .

Existing invasive species	Evidence gathering activities, evidence checked, and assessment conclusion
Not applicable	Not applicable

Evidence gathering activities, evidence checked, and assessment conclusion
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Invasive species	Not applicable
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4.2.8.3 Ecosystem conversion

Item	Evidence gathering activities and evidence checked
Ecosystem conversion	Not applicable as the project activity involves distribution of energy efficient improved cook stoves (ICS).

4.3 Accuracy of Reduction and Removal Calculations

The equations and choices provided in the methodology as well as all other methodological tools, are correctly quoted in the Monitoring report /01/. The emission reductions of the project instances of the grouped project and project activity instance are calculated using the formulae mentioned in the applied methodology; VMR0006 version 1.1/18/. The verification team reviewed the emission reduction spread sheets (ER sheets) and checked all the formulae, concluding that they are correct and in accordance with the monitoring plan of the PD and the applied monitoring methodology.

According to applied methodology VMR0006 (version 1.1) /18/the emissions are calculated as below:

Baseline emission:

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

Where,

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

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

ER_y = Emission reductions during year y in t CO₂e

$ER_{y,i,j}$ = Emission reductions by improved cookstove of type i and batch j during year y in tCO₂e

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

Where,

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

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

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

EF_{wf,CO_2} = CO₂ emission factor for the use of wood fuel in baseline scenario (IPCC default for wood fuel, 112 tCO₂/TJ)

$EF_{wf,non\ CO_2}$ = Non-CO₂ emission factor for the use of wood fuel in baseline scenario (IPCC default for wood fuel, 26.23 tCO₂/TJ)

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

0.95 = Discount factor to account for leakage

The quantify of woody biomass saved ($B_{y,savings,i,j}$) due to implementation of improved cook stoves can be estimated using the following equation:

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

Where,

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

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

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

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

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

Leakage Emissions: In accordance with methodology VMRO006 version 1.1, leakage is considered as default 0.95.

Sampling approach:

PP's Sampling Approach:

The monitoring of the project for verification includes parameters which require data related to operations of the cookstoves. The monitoring survey is conducted from 25/09/2025 to 10/10/2025 as verified through the survey records/12/. Since it is not feasible to monitor all the cookstoves, the sampling-based approach is adopted by the PP. For sampling, the PP has followed the CDM guidelines for Sampling and surveys for CDM project activities and Programmes of activities version 4.0 which is in line to the registered PD. The confidence precision level applied by the PP for the sampling is 95/10, which is appropriate as per the requirement of cross-VPA sampling.

The project proponent has applied simple random sampling approach for different monitoring parameters. As the population is relatively homogeneous (same stove type, population, and cooking habits) with respect to the object of the sampling effort, simple random sampling method was found appropriate for the survey. The PP demonstrated to the satisfaction of the verification team that the survey conducted was free of any bias, calculation errors or any misinterpretation/misrepresentation of recorded data.

- (i) The proportional parameter ($N_{y,i,j}$) is estimated through a simple random sampling survey. To estimate the sample size for this parameter the following equation is used:

$$n \geq \frac{1.96^2 N \times p(1-p)}{(N-1) \times 0.1^2 \times p^2 + 1.96^2 p(1-p)}$$

Where:

n= Sample size

N = Total number of ICS installed under the project

p = expected proportion (0.5)

The PP has determined the sample size as 21 considering the values as provided in the below table:

Expected proportion, p	0.95
Confidence level	95%
z multiplier	1.960
Relative precision	10%
Population size, N	102,223

Predicted sample size, n	21
--------------------------	----

It is noted that the resulting sample size to achieve the desired confidence/precision levels is smaller than 30 ICSs, as per the applied methodology a minimum sample size of 30 is to be considered.

(ii) Sample size for the parameter (**Parameter $\mu_{y,l,j}$**)

Following the conservative approach, the PP has considered expected proportion (p) for $\mu_{y,l,j}$ parameter was considered as 0.90.

The PP has determined the sample size as 43 considering the values as provided in the below table:

Expected proportion, p	0.90
Confidence level	95%
z multiplier	1.960
Relative precision	10%
Population size, N	102,223
Predicted sample size, n	43

According to paragraph 10 of the Sampling and surveys for CDM project activities and programmes of activities Version 04.0, *if there is more than one parameter to be estimated, then a sample size calculation should be done for each of them. Then either the largest number for the sample size is chosen as sampling effort with one common survey, or separate sampling efforts and surveys are undertaken for each parameter*".

It is to be noted that both the parameters share similar units, hence the PP decided to have one common survey for these two parameters, with the highest number of sample size between these two parameters. The PP has referred the Research Randomizer (<https://www.randomizer.org/>) and 250 samples selected for the monitoring survey were obtained through randomly selecting 250 samples, considering no response 20% units as buffer.

The PP has surveyed 250 samples and ICS of different age groups are considered as:

Age Group	No. of stoves
1-2 years	38
2-3years	185
3-4 years	27

The reliability test results for applied sample size by the PP are summarized below:

Parameters	$N_{y,i,j}$
Sample size	250
Precision achieved	1.94%

Parameters	$\mu_{y,i,j}$
Sample size	250
Precision achieved	3.96%

The assessment team reviewed the sample size determination and Reliability Calculation of the surveys and reproduced the same result as per the Standard: Sampling and surveys for CDM project activities and programme of activities /20/, Guideline: Sampling and surveys for CDM project activities and programme of activities /21/, and Sample Size Calculator.

The actual number of ICS covered by the PP sample were clearly larger than the minimum size required. The precision achieved for the confidence level 95% is within the limit (<10%) for the parameter of interest. For the sampling of parameters “ $N_{y,i,j}$ and $\mu_{y,i,j}$ ” simple random sampling has been applied, and 250 ICS have been randomly selected. The randomization was undertaken using Research Randomizer, and the same has been verified by the verification team. The samples were drawn from the database. Hence the verification team was able to confirm that the samples were representative of the total population. It is verified during the site visit that within the selected ICS, 250 household have been surveyed.

The reliability (demonstration of precision achieved after the survey results) is depicted in the ER spreadsheet /02/ corresponding to final Monitoring Report /01/, which were also found correct. Based on the verified results the assessment team found that the required precision was met and therefore the results were directly used in the calculation of ERs. The assessment team can conclude that the sampling approach complied with requirement of the Sampling and surveys for CDM project activities and programmes of activities guideline.

VVB sampling approach:

To meet the requirements of Standard for Sampling and surveys for CDM project activities and Programmes of activities version 09.0, the verification team applied acceptance sampling in the verification (in accordance with para 28). The verification team selected random samples of PP’s sampled records, checked the acceptability (or otherwise) of the data for each such record with

PP's sample records, and then based on the number of records where there is an agreement, determined if the CME's sample records meet the requirements.

The verification team has thus determined the sample size for acceptance sampling by evaluating the following, using guidance in the Standard 'Sampling and surveys for CDM project activities and programme of activities':

- The proportion of discrepancies between the PP's data and verification team's (field or onsite inspection results) data that can be considered acceptable. This is referred to as the AQL (Acceptable Quality Level): 1% was considered in this verification.
- The proportion of discrepancies between the PP's data and verification team's (field or onsite inspection results) data that would be considered unacceptable. This is the UQL (Unacceptable Quality Level): 20% was considered in this verification.
- The producer risk: 5% was considered.
- The consumer risk: 10% was considered.

Considering the above input values, a sample size of 18 was required as per Table (Sample size and acceptance number based on AQL, UQL, and producer and consumer risks) in the referred Standard.

Accordingly, the acceptance number (c) thus determined for the sample size is 01.

AQL	AQL:1%
UQL	UQL:20%
Producer risk	5%
Consumer risk	10%
Sample size	18
Acceptance Number (c)	01

The VVB has picked 20 samples from the household user category for verification sampling. The samples to be surveyed by the verification team were randomly selected from the list of monitored samples using the random sample generator on Microsoft excel.

It was observed that out of the 20 samples, all the 20 stoves were found to be operational, and this matched with the PP's records and hence no discrepant records were observed with the MR /01/ and ER sheet/02/ and thus c=0. Thus, CME's set of records has been accepted in line with § 33 of the sampling standard, version 09 /20/. Verification team has cross verified these sample documents.

The monitoring parameters required to be monitored through the sampling plan are:

1. Number of project devices operating during year y ($N_{y,j,i}$)
2. Adjustment to account for any continued use of pre-project devices during the year ($\mu_{y,i,j}$)
3. Quantity of woody biomass used by project devices in tonnes per device of type i and batch j ($B_{y=1,new,i,j,survey}$)

Simple random sampling was applied by the PP for selection of the monitoring samples with

90/10 confidence/precision for determining the sampling for all the parameters which is deemed acceptable as per the VCS PD /15/.

As per paragraph 25 of the Sampling Standard, version 09 /B04/, the verification team has to verify whether the project participants entity have implemented the sampling and surveys according to the sampling plan in the registered monitoring plan. The verification includes determining:

- (a) Whether the required confidence/precision has been met.
- (b) Whether the selected sample was representative of the population.

The sampling plan implemented by the PP is in accordance with the applied approved monitoring methodology /18/ and the VCS PD /03/. The PP has appropriately performed Simple random Sampling procedure in line with the applied methodology. As the VCS PD /03/ mentions the option for Simple random Sampling procedure, it is acceptable to the verification team.

The necessary confidence / precision of 95/10 each of the parameters are met. This has been cross verified by the verification team from the supporting documents submitted.

Emission reductions have been calculated in accordance with the applied methodology VMR0006 version 1.1 /18/, and VCS PD /03/. The PP has used monitored data and ex -ante fixed data including default values as mandated/permitted by the applied methodology. The values used for calculation of GHG emission reductions have been thoroughly checked by the verification team and was found appropriate and correct.

4.4 Quality of Evidence to Determine Reductions and Removals

During the verification, all relevant monitoring parameters of the registered monitoring plan have been verified regarding the appropriateness of the verification method; the correctness of the values applied for ER calculation, the accuracy and applied QA/QC measures. All monitoring parameters have been measured / determined without material misstatements and are in line with all applicable standards and relevant requirements. It is confirmed that the monitoring mechanism is effective and reliable.

Parameters monitored ex-post:

The following parameter has been verified for current monitoring period:

Parameter 1: Number of project devices of type I and batch j operating during year y ($N_{y,I,j}$)

Means of verification	Criteria/Requirements			Assessment
	Measuring frequency	/Reading	/Recording	At least once every two years

	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes, the measuring and reporting frequency are in line with the registered VCS PD/03/ and applied methodology/18/.
	Monitoring equipment	NA
	How were the values in the monitoring report verified?	The total number of ICS reported in the monitoring report is 102,223. PP keeps records of sale of each system on its online portal as checked during the current audit through the review of online systems. Each ICS has unique ID, which is listed in the database, the entries in database were checked to confirm the total number of project devices presented in the MR. Also, the assessment team interviewed 20 samples to confirm that the details of the end-users in the database/13/ are correct.
	If applicable, has the reported data been cross-checked with other available data?	Yes. The sampled entries (20) were checked with the installation invoices /17/ and the details were found to be consistent.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, QA/QC procedures were found to be appropriate and reliable.
Findings	CAR #1 was raised and resolved	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan/03/ (as per measurement methods and procedures to be applied) and applied methodology/18/. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan/03/.	

Parameter 2: Efficiency of the device of each type i and batch j implemented as part of the project activity ($\eta_{new,i,j}$)

Means of verification	Criteria/Requirements	Assessment
	Measuring /Reading /Recording frequency	Annually
	Is measuring and reporting frequency in accordance with the monitoring plan and	Yes, the measuring and reporting frequency are in line with the registered PD/03/ and applied methodology/18/.

	monitoring methodology? (Yes / No)	
	Monitoring equipment	NA
	How were the values in the monitoring report verified?	Value of the parameter is 38 % (As per WBT result and used for the current monitoring period. Efficiency is determined using equation 5 of the applied methodology (VMR0006). $\eta_{new,i,j} = \eta_P \times (DF_n)^{y-1} \times 0.94$ Value is calculated in the ER spread sheet and found to be in line with the procedure as described in the registered monitoring plan.
	If applicable, has the reported data been cross-checked with other available data?	Yes, the reported data in MR has been compared with the ER sheet.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, the data management ensures correct transfer of data and reporting of emission reductions and all necessary QA/QC processes are in place.
Findings	No finding was raised	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan/03/ (as per measurement methods and procedures to be applied) and applied methodology/18/. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan/03/.	

Parameter 3: Life Span

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 (Years)

Means of verification	Criteria/Requirements	Assessment
	Measuring /Reading /Recording frequency	Once at the time of installation of batch of type of stove
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes, the measuring and reporting frequency are in line with the registered VCS PD/03/ and applied methodology/18/.
	Monitoring equipment	Value obtained from Manufacturer specification/08/.
	How were the values in the monitoring report verified?	Value of the parameter is considered as 7 years.
	If applicable, has the reported data been cross-checked with other available data?	Yes, the reported data in MR has been compared with the ER sheet and manufacturer specification.

	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, QA/QC procedures were found to be appropriate and reliable.
Findings	No finding was raised.	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan/03/ (as per measurement methods and procedures to be applied) and applied methodology/18/. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan/03/.	

Parameter 4: Date of commissioning of batch j

To establish the date of commissioning, the PP may opt to group the devices in “batches” and the latest date of commissioning of a device within the batch shall be used as the date of commissioning for the entire batch.

Means of verification	Criteria/Requirements	Assessment
	Measuring /Reading /Recording frequency	Once at the time of commissioning/distribution of the last project device in the batch
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes, the measuring and reporting frequency are in line with the registered VCS PD/03/ and applied methodology/18/.
	Monitoring equipment	Not applicable
	How were the values in the monitoring report verified?	First batch was commissioned on 01/06/2022 as verified through the project database /07/,/13/.
	If applicable, has the reported data been cross-checked with other available data?	Yes, the reported data in MR has been cross checked with the installation invoices /17/ and found to be consistent.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, the data management ensures correct transfer of data from monitoring survey /12/ and reporting of emission reductions and all necessary QA/QC processes are in place.
Findings	CL #1 was raised and resolved.	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan/03/ (as per measurement methods and procedures to be applied) and applied methodology/18/. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan/03/.	

Parameter 5: Adjustment to account for any continued use of pre-project devices during the year y (μ_y)

Means of verification	Criteria/Requirements	Assessment
	Measuring /Reading /Recording frequency	At least once every two years
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes, the measuring and reporting frequency are in line with the registered VCS PD/03/ and applied methodology/18/.
	Monitoring equipment	Not applicable
	How were the values in the monitoring report verified?	This parameter is determined based on the monitoring survey and in line with the registered PD/03/ the sample size was calculated as per the latest version of Standard for sampling and surveys for CDM project activities and programme of activities. As demonstrated in the ER sheet the samples size is 43 and was determined with 95% confidence level and 10% precision. However, the PP has taken a sample of 250 which is more than the required sample size. Value of this parameter is verified as 0.914.
	If applicable, has the reported data been cross-checked with other available data?	Yes, the reported data in MR/ER sheet has been cross checked with the monitoring survey records and found to be appropriate.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, the data management ensures correct transfer of data from monitoring survey /12/ and reporting of emission reductions and all necessary QA/QC processes are in place.
Findings	CAR #3 was raised and resolved.	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan/03/ (as per measurement methods and procedures to be applied) and applied methodology/18/. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan/03/.	

Parameter 5: Annual quantity of woody biomass used by improved cookstoves in tons per device of type i and batch j ($B_{y=1,new,i,j,survey}$)

Means of verification	Criteria/Requirements	Assessment
	Measuring /Reading /Recording frequency	In the first year of project implementation
	Is measuring and reporting frequency in accordance with the monitoring plan and	Yes, the measuring and reporting frequency are in line with the registered

	monitoring methodology? (Yes / No)	VCS PD/03/ and applied methodology/18/.
	Monitoring equipment	Not applicable
	How were the values in the monitoring report verified?	1.406 tonnes/ device /year (As per survey report and KPT conducted from 22/12/ 2022 to 06/01/2023. As per the applied methodology the parameter is determined during the first year of the introduction of the devices (e.g. during the first year of the crediting period, $y=1$). Hence In line with methodology requirements for the parameter, the PP has used the value of parameter $B_{y=1,new,i,j,survey}$ 1.406 tonnes/ device /year for the current verification.
	If applicable, has the reported data been cross-checked with other available data?	Yes, the reported data in MR/ER sheet has been cross checked with the KPT survey records and found to be appropriate.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, the data management ensures correct transfer of data from monitoring survey /12/ and reporting of emission reductions and all necessary QA/QC processes are in place.
Findings	No finding was raised.	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan/03/ (as per measurement methods and procedures to be applied) and applied methodology/18/. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan/03/.	

Parameters Determined ex-ante:

The following parameters are determined ex-ante and mentioned in the registered VCS PD:

Parameter	Unit	Value	VVB Assessment
NCV _{wood fuel}	TJ/tonne	0.0156	Default values from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 1 Introduction have been used/22/.
f _{NRB}	fraction	0.714	The value is referred from registered PD/03/ and determined in line with the applicable methodological CDM Tool 30, version 4.0.

EF _{wf,non CO2}	tCO ₂ e/TJ	26.23	Default values from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 2 Stationary Combustion have been used/22/.
EF _{wf,CO2}	tCO ₂ e/TJ	112	Default values from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 2 Stationary Combustion have been used/22/.
η_{old}	fraction	10%	Default values as per the methodology/18/.
$\eta_{new,ij}$	fraction	38%	The disseminated cookstoves were found to be more efficient than the traditional stoves. The thermal efficiency as per the KIRDI test report/09/ was found to be 38%.

The spread sheet submitted by the PP clearly and transparently mentions values of the data parameters used for calculation of emission reductions. The input values have been verified from reliable and authentic sources including monitoring records (distribution records) /13/, Monitoring Report /01/, and applied methodology /18/. The emission reductions calculated were compared with the emission reduction spread sheet /02/ and found to be correct. No significant reporting risks have been identified for the data reported.

4.5 Non-Permanence Risk Analysis

Not applicable for the project activity.

5 VERIFICATION OPINION

5.1 Verification Summary

LGAI Technological Center S.A. (hereinafter referred to as (Applus+ Certification), contracted by SDG13 Ventures Pte Ltd, to perform the independent verification of the emission reductions for the VCS grouped project activity “Women led cleaner cooking initiative in Odisha” (VCS ID- 2868) in India for the monitoring period 01/07/2024 – 30/06/2025 as reported in the Monitoring Report Version 02.1 dated 10/03/2026 .The SDG13 Ventures Pte Ltd is responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions

reductions from the project activity. GHG statement is the responsibility of the project proponent, whether the project conforms with the verification criteria for projects and their GHG emission reductions or carbon dioxide removals set out in VCS Version 4.

It is our responsibility to express an independent verification statement on the reported GHG emission reductions from the project activity. Applus+ Certification commenced the verification based on the baseline and monitoring methodology VMR0006 version 1.1, the monitoring plan contained in the registered VCS PD Version 03.1, dated 24/05/2023 and VCS program guide version 4.5, Monitoring Report Version 02.1 dated 10/03/2026 as per the process described under Section 2 of this report. Applus+ Certification approach is based on the understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these.

Applus+ Certification planned and performed the verification by obtaining evidence and other information and explanations that Applus+ Certification considered necessary to give reasonable assurance that reported GHG emission reductions are stated.

5.2 Verification Conclusion

In our opinion the GHG emissions reductions reported for the project activity for the period 01/07/2024 to 30/06/2025 (both days included) are fairly stated in the Monitoring Report 02.1 dated 10/03/2026. The GHG emission reductions were calculated correctly based on the approved baseline and monitoring methodology VMR0006 version 1.1, and the VCS standard version 4.7.

As summary the verification team able to conclude that:

- The project is in line with all relevant host country criteria (India) and all relevant VCS version 4 program guidelines requirements.
- Verification of the GHG statement was conducted in accordance with ISO 14064-3:2019.
- A reasonable level of assurance has been applied.

Verification period: 01/07/2024 to 30/06/2025 (including 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's (tCO ₂ e)	Removal VCU's (tCO ₂ e)	Total VCUs (tCO ₂ e)
01-July-2024	260,011	0	0	260,011	-	260,011

to 31-Dec-2025						
01-Jan-2025 to 30-June -2025	255,771			255,771		255,771
Total	515,782	0	0	515,782	-	515,782

5.3 Ex-ante vs Ex-post ERR Comparison

Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PD:

Vintage period	Ex-ante estimated reductions/removals	Achieved reductions/removals	Percent difference	Explanation for the difference
01-July-2024 to 31-Dec-2025	255,202	260,011	1.85%	Below this table.
01-Jan-2025 to 30-June -2025	251,042	255,771	1.85%	Below this table.
Total	506,244	515,782	1.85%	-

The actual emission reduction achieved during the current monitoring period are 1.85% greater than the estimated amount of emission reductions at the time of validation. The ex-ante estimates for the wood saving per year was based on the assumed value of $B_{y=1, new, i, survey}$ value as 1.350 tonnes/household/year. However in line with the requirement of applied methodology the KPT was conducted during the first verification and value of the parameter $B_{y=1, new, i, survey}$, determined as 1.406 tonnes/household/year resulting the more wood savings during the monitoring period leading to higher emission reductions.

The assessment team has considered the variations is reasonable and concluded the increase in emission reduction of the project activity is justified and acceptable.

APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

Section	Information	Justification	Assessment method and conclusion
1	Not applicable	Not applicable	Not applicable

APPENDIX 2: DOCUMENT REFERENCES

S. No	Title of Document	Version	Date
1.	Monitoring report	Version 01	01/11/2025
		Version 02	17/11/2025
		Version 02.1	10/03/2026
2.	ER calculation spread sheet (corresponding to final MR)	Version 02.1	10/03/2026
3.	Registered VCS-PD	Version 03.1	24/05/2023
4.	Declaration of ICS life	-	-
5.	ICS installation database	-	-
6.	Verification report (MP03: 01/07/2023 to 30/06/2024)	Version 02	18/10/2024
7.	Evidence for the start date of the grouped project		
8.	Technical specifications of the Greenway Jumbo Stove including the life span.	-	-
9.	Result of performance test of ICS (Greenway Jumbo Stove)	-	-
10.	Sample copies of end user agreement between PP and end user (Proof of right of VCU.)	-	-
11.	Monitoring survey questionnaire template	-	-
12.	Monitoring Survey records	-	-
13.	ICS sales Database	-	-
14.	Employment records	-	-
15.	Declaration regarding no participation in other GHG program for the concerned monitoring period	-	-
16.	Evidence for the random sample selection for the parameters opted for monitoring survey	-	-
17.	Sample sales records/warranty cards for the stove	-	-
18.	Applied baseline and monitoring methodology. VMR0006. "Methodology for Installation of High Efficiency Firewood Cookstoves"	Version 1.1	-

19.	VCS Standard	Version 4.7	16/04/2024
	VCS Program Guide	Version 4.5	15/04/2024
	VCS Validation and Verification Manual version	v3.2	19/10/2016
20.	“Standard for sampling and surveys for CDM project activities and programme of activities”	Version 09.0	-
20.1	Registration and Issuance Process	v 4.5	16/04/2024
21.	Guidelines for sampling and surveys for CDM project activities and Programme of Activities	Version 04	-
22.	2006 IPCC Guidelines for National Greenhouse Gas Inventories volume 2, chapter 1 https://www.ipccnggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf	-	-
23.	On-site visit observation and interviews with PP, ICS users	-	04/11/2025 to 06/11/2024
24.	Grievances Redressal policy	-	-
25.	HR policy Greenway Grameen Infra Pvt Ltd	-	-
27.	Stakeholder consultation documents e.g attendance sheet, MoM and photographs	-	-
28.	Registry Websites checked: CDM: Project Activities (unfccc.int) GSF Registry (goldstandard.org) Renewable Energy Certificate Registry of INDIA (recregistryindia.nic.in)	-	-
29.	Employees training and engagement meeting records	-	-
30.	Universal Declaration of Human Rights https://www.un.org/en/about-us/universal-declaration-of-human-rights	-	-
31.	Ratification of the International Convention on the Elimination of All Forms of Racial Discrimination https://nhrc.nic.in/documents/india_ratification_status.pdf	-	-
32.	Law of prohibition for child labour https://labour.gov.in/whatsnew/child-labour-prohibition-and-regulation-amendment-act-2016	-	-

33.	Law for prohibiting forced and compulsory labour https://labour.gov.in/	-	-
34.	ILO ratification (India) India & ILO Ministry of Labour & Employment Government of India	-	-
35.	Project view page Verra Search Page	-	-

APPENDIX 3: ABBREVIATIONS

Abbreviations	Full texts
BEF	Baseline Emission Factor
BM	Build Margin
CAR	Corrective Action Request
CL	Clarification Request
CO2	Carbon dioxide
EB	Executive Board
FAR	Forward Action Request
GHG	Green House Gas
ICS	Improved Cookstove
IPCC	Intergovernmental Panel on Climate Change
ISO	International Standards Organization
MR	Monitoring Report
MWh	Megawatt-hour
PD	Project Description
PLF	Plant Load Factor
PP	Project Proponent
QA/QC	Quality Assurance and Quality Control
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Voluntary Carbon Standard
VCSA	Voluntary Carbon Standard Association
VCUs	Voluntary Carbon Units

APPENDIX 4: FINDINGS OVERVIEW

Remaining FAR from validation and/or previous verification

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

Table 2. CL from this verification

CL ID	01	Section no.	2.2	Date : 12/11/2025
Description of CL				
- End date of the monitoring period as mentioned in the MR is inconsistent with the signed contract. - Please submit KML file and project database				
Project participant response				Date : 17/11/2025
The PP will continue the same dates (01-July-2024 to 30-June-2025) for monitoring period. The extra month (July 2025) which is mentioned in the contract will be covered in the next monitoring. The project database is a part of the emission reduction calculation excel, kindly refer the worksheet ' Distribution Database'. The identities of the beneficiaries have been masked in adherence to data privacy laws and provisions. The KML file for the project has been shared.				
Documentation provided by project participant				
- KML file of the project location - Project database				
DOE assessment				Date: 20/11/2025
The PP has clarified the reason for considering end date of monitoring as 30/06/2025 and found it to be satisfactory. The PP has submitted KML file and is found to be appropriate. CL #1 is closed.				

Table 1. CAR from this verification

CAR ID	01	Section no.	3.2	Date : 12/11/2025
Description of CAR				
- Section 2.3 MR: It is mentioned that no other entity is involved, however the detail of other entity is provided in the table under section 1.5. - Monitoring survey dates are not mentioned in the ER calculated sheet. Kindly clarify the reason. - Number of women employed during the current monitoring period as reported under Table-1 are inconsistent with section 2.3.1. Please submit the employment records. - Section 1.1 MR : It is stated that stoves have been in operation in 27 districts of Odisha. However, in Table 1 (p.5) there are only 10 districts listed.				

Project participant response	Date : 17/11/2025
- The entity referenced in Section 1.5 is an investor and offtaker, not an implementing or managing entity for the project. Therefore, the reference as now has been omitted from the Section 2.3. The PP confirms that SDG13 Ventures Pte Ltd is the manager and implementer of the project activities. - The monitoring period remains 01 July 2024 to 30 June 2025, consistent with the dates mentioned in the MR. The additional month referenced in the contract (July 2025) will be included as part of the next monitoring period and not in the current one. - The employment records have been reviewed, and the data has been made consistent across the MR. The project has 3 women employed, within a total workforce of 15 employees during the current monitoring period. Supporting documentation has been updated and is being submitted. - Table 1 has been updated to reflect the correct information. It now includes the full list of 27 districts where stoves were distributed.	
Documentation provided by project participant	
<i>Employment record declaration</i>	
DOE assessment	Date: 20/11/2025
The PP has appropriately clarified about involvement of other entities and found it to be appropriate. Monitoring survey dates are mentioned in the revised ER calculated sheet. Number of women employed during the current monitoring period as reported under Table-1 are corrected and found consistent with section 2.3.1.and employment records. The PP has provided the details of distribution in 27 districts of Odisha and found it to be consistent with the project database. CAR #1 is closed.	

CAR ID	02	Section no.	4.2	Date : 12/11/2025
Description of CAR				
(i) Please provide the information (inputs/feedback) on stakeholder's consultation done during the monitoring period as part of ongoing communication. (ii) Please provide the details of stakeholders (location ,name, ICS ID) who raised complaint under section 2.1.4 of the MR. (iii) The PP is requested to clarify if any comments received outside the 30-days commenting period (Ref : clause 3.18.14 and 3.18.16 of VCS standard v 4.7)				
Project participant response				Date : 17/11/2025
- The inputs or feedback from ongoing stakeholder consultation has been updated in section 2.1.2 - The mentioned details have been provided in section 2.1.4 - No comments were received outside the 30-day comment period, and the section 2.1.5 has been so updated.				
Documentation provided by project participant				
Revised MR				
DOE assessment				Date: 20/11/2025
(i) The PP has provided information (inputs/feedback) on stakeholder's consultation done during the monitoring period as part of ongoing communication and found to be appropriate. (ii) The PP has provided the background details of stakeholders to clarify diversity and justification regarding the change to stakeholder diversity is mentioned in the MR. (iii) The PP has clarified that no comments received outside the 30-days commenting period CAR #2 is closed.				

CAR ID	03	Section no.	4.4	Date : 12/11/2025
Description of CAR				
(i) During the onsite visit usage of baseline stove is observed, however percentage of baseline stoves used during the monitoring period is not reported. Further clarify how the project meets the baseline given that there is continued use of baseline stoves. (ii) Please submit the evidence to justify that the cookstoves were sold at the agreed upon subsidized rate.				
Project participant response				Date : 17/11/2025
- The PP has opted to calculate the By savings using equation (4) of the VMR0006, v1.1 methodology, where the annual quantity of woody biomass used by improved cook stoves in tonnes per device of type i and batch j, is determined in the first year, where the usage of baseline is already accounted for. The ICS usage rate is 91.4% as calculated in cell 'R238' in the Survey Responses tab of the ER sheet. It was found through the monitoring survey that the project device was the main technology, which was used to cook meals, at 91.4%. - Carbon waiver agreements have been submitted as evidence to justify that the ICS devices were sold at the subsidized rate.				
Documentation provided by project participant				
Revised ER sheet				
DOE assessment				Date: 20/11/2025
During the onsite visit usage of baseline stove is observed, however the PP has used the equation (4) of the applied methodology VMR0006, v1.1, to determine the parameter $B_{y\ savings}$ and the usage of baseline stoves accounted appropriate, hence the baseline does not get impacted. The PP has submitted sample copies of carbon waiver agreements, and it can be confirmed that the cookstoves were sold at subsidized rate. CAR #3 is closed.				

Table 2. FAR from this verification

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

APPENDIX 5: COMPETENCY STATEMENTS

According to the applicable sectoral scope / technical area and experience in the sectoral or national business environment, Applus+ Certification has composed an assessment team in compliance with the Contract Review and Assessment Team appointment rules in the internal Quality Management System of Applus+ Certification as well as in compliance with the applicable requirements in the Accreditation Standard.

The composition of the Assessment Team (Applus+ Certification's validation team) has been approved by Applus+ Certification during the Contract Review process ensuring that the required skills and capabilities are covered.

The qualification levels for Assessment Team members that are assigned by aforementioned appointment rules are as presented below:

- Lead Auditor (LA).
- Auditor (A).
- Technical Expert (TE).
- Technical Reviewer (TR).
- Any of the above-mentioned roles in training (iT, e.g. AiT for auditor in training).

The Sectoral Scopes / Technical Areas required knowledge linked to the applied methodology(ies) is covered by the Assessment Team as shown below:

Name	Qualification	Coverage of scope	Coverage of technical Area	Financial aspect	Host country Experience	Attendance to the On-Site Assessment
Ravi Kant Soni	Lead Auditor (LA)	Yes (1)	Yes (1.2)	N/A	Yes	Yes
Ravi Kant Soni	Technical Expert (TE)	Yes (1)	Yes (1.2)	N/A	Yes	Yes
Simon Shen	Technical Reviewer (TR)	Yes (1)	Yes (1.2)	N/A	N/A	N/A

Ravi Kant Soni is a certified for Lead Auditor ISO 17029:2019, ISO 14065:2020 & Lead Auditor ISO 14064:2019 GHG Inventory and verification. He has more than 10 years of work experience across Climate Change, Environmental Management & Monitoring, Health & Safety Management, and Statutory Compliance. He was involved in more than 150 CDM validation and verifications activities and Gold Standard, VER projects in India, Malawi, Uganda, Kenya, Morocco, Togo, South Africa, & Caledonia as a

team leader/technical reviewer / validator / verifier covering the sectoral scope 1 (technical area 1.1 & 1.2), scope 3 (technical area 3.1). He has done Master in Technology (Energy Management) from a premier institute, School of Energy & Environmental Studies, DAVV, Indore (M.P.), India and Bachelor of Engineering (Mechanical Engineering) from M.I.T. S Gwalior Jiwaji University Gwalior, India.

Ravi Kant Soni is based in Indore, India.

Simon Shen (master's degree in Thermal Energy Engineering, bachelor's degree in environmental engineering) is a Lead Auditor appointed by Applus+ Certification for the GHG project assessment. He is based in Shanghai. He has several years of work experience in environmental protection field. Before he joined Applus+ Certification, he had been worked for TÜV SÜD as a GHG Validator/Verifier and ISO 9001/14001 Lead Auditor for 5.5 years.

APPENDIX 6: SDGS CONTRIBUTIONS

SDG	SDG target	SDG indicator	SDG impact	VVB assessment
1	1.4	1.4.1 Proportion of population living in households with access to basic services	Implemented activity to increase access of households to clean cooking as a basic service through increased investment	Through review of project database, user beneficiary agreements and interviews of end users during the site visit, it is confirmed that, the project activity promotes the increased investment in clean cooking technology and will enable greater access to basic clean cooking service to the households. During the current monitoring period, the PP has distributed 12,851 ICS to the households in rural and semi-urban areas within the project boundary.
3	3.4	3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	Implemented activity to decrease the mortality rates associated with chronic respiratory disease	The assessment team interviewed end users and confirmed that all the users were using traditional 3 stone fire stoves for cooking in baseline. Traditional cooking methods, such as open fires or inefficient stoves, release harmful pollutants like particulate matter (PM), carbon monoxide (CO), and volatile organic compounds (VOCs) into the indoor air. These pollutants contribute to chronic respiratory diseases (CRDs) and other health issues. The project involves dissemination of ICS to the households and efficient

				cookstoves significantly decrease indoor air pollution by burning fuel more cleanly and efficiently. This leads to better air quality within households, reducing the risk of CRDs.
3	3.9	3.9.1 Mortality rate attributed to household and ambient air pollution	Implemented activity to decrease household air pollution through use of ICS among the beneficiary households	The ICS distributed under the project activity play a crucial role in reducing mortality rates associated with air pollution, particularly indoor air pollution. The end users confirms that they experienced reduction of smokes in kitchen during the cooking after adoption of project device (ICS). During the current monitoring period, 100,001 ICS were operational in the households in rural and semi-urban areas within the project boundary. Therefore, it can be confirmed that the project activity has resulted in reduction of household air pollution in the households, and thereby mortality rate attributed to household air pollution.
5	5.4	5.4.1 Proportion of time spent on unpaid domestics and care work, by sex, age and location	Implemented activity to decrease time spent on cooking by women members of the households under the project	Traditional stoves often require women to spend hours collecting firewood or other cooking fuel. With efficient cookstoves, fuel consumption decreases, reducing the time needed for fuel collection. Improved cookstoves cook food faster due to better combustion efficiency. This saves time during meal preparation.

				They have saved an average of 2.31 hours daily from spending on cooking and 4.18 hours per week in fuelwood collection and have been able to engage in other employment opportunities. The assessment team has checked the monitoring survey results and interviewed end users and confirmed the same. Women can use the time saved from fuel collection and shorter cooking durations for other activities. Hence it can be confirmed that the efficient cookstoves not only improve health and safety but also contribute to women's empowerment by reducing time spent on cooking-related tasks.
7	7.1	7.1.2 Proportion of population with primary reliance on clean fuels and technology	Implemented activity to increase the proportion of population with primary reliance on clean technology	The project activity involves dissemination of efficient cookstoves (ICS), contribute to increasing the proportion of the population relying on clean technology for cooking. The indicator is calculated as the ratio of people using clean fuels to the total population reporting any cooking, heating, or lighting, expressed as a percentage. Till the current monitoring period, the PP has distributed 100,001 ICS to the households in rural and semi-urban areas within the project boundary, hence it can be

				confirmed that increases the proportion of population with primary reliance on clean technology.
8	8.3	8.3.1 Proportion of informal unemployment in total employment, by sector and sex	Implemented activity to increase the proportion of informal employment	The project involves dissemination of ICS, manufactured in India. The cookstoves can indirectly impact informal employment in several ways: - Since the cookstoves are locally produced and distributed, they create jobs for artisans, technicians, and salespeople. These roles often fall within the informal sector. - Informal employment increases as more people engage in stove manufacturing, assembly, and sales. - The cookstove value chain involves various activities: raw material collection, transportation, production, and retail. - These activities generate informal employment opportunities, especially in rural areas. - Women involved in cookstove promotion and distribution may operate informally, organizing awareness campaigns or selling stoves within their communities.

				- This grassroots approach contributes to local employment. During the current monitoring period total 36 people based in and around the project areas have been employed. The assessment team has interviewed the management personnel, project staff involved in the implementation and monitoring of the project. It can be confirmed that project activity indirectly enhances informal employment by creating local jobs and empowering communities.
10	10.1	10.1.1 Growth rates in household expenditure or income per capita among the bottom 40 percent of the population	Implemented activity to increase income per capita amongst the beneficiary households through financial and time savings	The efficient cookstoves have a positive impact on household savings and can enhance economic well-being at the community level. The project activity contributes to increased income per capita in following ways: - Improved cookstoves cook food faster, saving time compared to traditional stoves. - Monthly cooking time savings translate into monetary benefits by considering the opportunity cost of time. - Efficient cookstoves consume less fuel, leading to cost savings for households. - Cleaner stoves reduce indoor air pollution, lowering health

				expenses related to respiratory illnesses. - Women, who often bear the burden of cooking, can allocate saved time to income-generating activities. During the current monitoring period, the PP has distributed 12,851 ICS to the households in rural and semi-urban areas within the project boundary, hence it can be confirmed that has increased the financial savings through reduction in fuelwood purchase and time savings through reduction in time spent for fuelwood collection. The assessment team interviewed end users and confirmed the same.
10	10.2	10.2.1 Proportion of people living below 50 percent of median income, by sex, age and persons with disabilities	Implemented activity to increase employment	During the on-site visit the assessment team interacted the personnel involved at various level (Project Manager, Cluster In charge, Grameen Sahayaks) and checked the employment records. During the current monitoring period 9 local female partners have been employed in the project implementation. It can be confirmed that efficient cookstoves not only improve health and reduce environmental impact but also contribute to economic well-being by creating jobs and empowering communities.

13	13.2	13.2.2 Total greenhouse gas emissions avoided or removed per year	Implemented activity to result in decrease of greenhouse gas emissions	Efficient cookstoves play a crucial role in reducing greenhouse gas emissions, particularly carbon dioxide (CO₂) emissions. -Efficient cookstoves burn fuel more cleanly and completely, minimizing CO₂ emissions during cooking. -Reduced fuel consumption directly translates to lower emissions. The assessment team has reviewed the ER calculation sheet, supporting documents and found to be appropriate. It can be confirmed that the efficient cookstoves contribute to a cleaner environment by decreasing greenhouse gas emissions, benefiting both health and climate. During the current monitoring period, the PP has distributed 12,851 ICS to the households in rural and semi-urban areas within the project boundary, which have replaced the use of inefficient traditional cookstoves, the project has prevented release of 529,504 tonnes of CO₂ in the atmosphere.
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