VERIFICATION REPORT FOR "UPENERGY- SOCIAL AND CLIMATE IMPACT PROGRAMME- NIGERIA-1"

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Summary:

A description of the verification of the project

The 2nd Verification and methodology change (in line with VCS Methodology Change Project Description Deviation, V4.0) of the project title 'UpEnergy - Social and Climate Impact Programme-Nigeria-1' VCS ID – 2673, have been undertaken by SustainCERT with accordance to the relevant VCS standard, V4.7/1/, VCS Program Guide, V4.4/2/. Relevant requirements of the ISO14064-2 and ISO 14064-3, as well as applicable criteria for consistent project operations, monitoring and reporting have been applied for verification.

The project during the current verification is also applying for the CCP labelling (details are mentioned in appendix 2 of the report). The project VCS 2673 involves dissemination of Improved cook stoves in Nigeria, primarily targeting low-income households to promote cleaner and more efficient cooking solutions. The project is implemented by UpEnergy Group, which also serves as the project proponent, Climate catalyst Limited, Nigeria is also involved in the project as other entity involved. Carbon finance underpins the project's strategy, enabling local engagement in stove distribution, household registration, monitoring, and maintenance activities. The cookstoves, including models like "Smart Home Pro" are charcoal fueled with thermal efficiencies of approximately 37.9%, as verified from registered PD and stove specification. These ICS units replace traditional, inefficient charcoal stoves, improving combustion efficiency and reducing fuel consumption and indoor air pollution.

The Purpose and scope of verification

Purpose:

The verification service provided by SustainCERT for the project activity VCS 2673 is to perform independent verification for the 2nd monitoring period 01-November-2022 to 31-October-2024 and validate the revised Project Description Document/8/ against the new methodology VM0050 V1.0/08/ and CCP labelling requirements (details are mentioned in appendix 2 of the report). The verification of the project is an independent review and ex-post determination by SustainCERT of the monitored reductions in GHG emissions that have occurred, against the VCS standard, V4.7/1/, VCS Program Guide, V4.4/2/, the Project baseline and host party criteria.

Scope of verification

The scope of verification is to establish/verify that:

- The project activity has been implemented and operated as per the approved registered and revised PD[5//8/].
- All the physical features (project technology) of the project are in place in accordance with revised PD and MR[/5/].
- The revised PD, monitoring report[/8/]and other supporting documents provided are complete in accordance with the latest applicable version of VCS standard and methodology change procedure.
- The actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan, any registered monitoring plan[/5/], the approved methodology[/7/] including applicable tool(s) and/or, where applicable, the approved standardized baseline.
- The data recorded and stored as per the monitoring methodology including applicable tool(s) and, where applicable, the standardized baseline

The Monitoring Period:

The project activity VCS 2673 is undergoing 2nd Verification from 01-November-2022 to 31-October-2024 (both days included, as verified from emission reduction calculation sheet), under its seven year, twice renewable crediting period from 07-May-2022 to 06-May-2029[/6/].

The Method and Criteria used for Verification.

Desk Review:

Review of project information, monitoring plan specifically monitoring frequency, quality assurance and quality control system against the registered PD[/5/] and applicable VCS standard/1/ and applied methodology VCS Methodology from Sectoral Scope 3 –VM0050 Energy Efficiency and Fuel-Switch Measures in Cookstoves, V1.0[/08/].

Onsite audit Interview with the relevant personnel to confirm the implementation of the project by paying particular attention to the operational and data collection procedures, in accordance with the registered PD[/5/] and methodology.

- A detailed cross check of the information provided in the monitoring report/10/ against the relevant evidence such as data sources and technical specification of measuring equipment.
- A detailed cross check of the calculations made for the estimation of greenhouse gas emissions.
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emissions reduction.

The number of findings raised during verification:

A risk-based approach has been followed for the verification of the project. During verification, 05 CARs, 12 CL and 02 FAR were raised during verification. All the issues raised were resolved successfully, details of which can be found in appendix 3 of the report.

Any uncertainties associated with the verification:

The assessment team thoroughly reviewed the revised PD/09/ along with ex-ante calculation sheet, monitoring report/8/ and the emission reduction calculation sheet/9/ against the relevant evidence and applicable VCS requirements, VCS standard V4.7/1/ and VCS guideline V4.4. It has been concluded that there are no uncertainties associated with the project verification.

Summary of the project deviation change and verification conclusion:

The review of the revised PD/09/ Monitoring Report/08/, emission reduction calculation sheet, supporting documentation, and the interview with relevant personnel during the on-site audit provided the assessment team with sufficient evidence to confirm compliance with the applicable criteria. SustainCERT confirms that the project activity, VCS-2673, has been successfully implemented in accordance with the revised Project Description Document and the applied methodology, VM0050: Energy Efficiency and Fuel-Switch Measures in Cookstoves, Version 1.0, in alignment with all relevant VCS Program requirements. SustainCERT confirms that the monitoring period from 01-November-2022 to 31-October-2024 (inclusive of both days) has resulted in the generation of 40,188 tCO_2e of emission reductions through the reduction in non-renewable biomass combustion.

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1 INTRODUCTION

1.1 Objective

The 2nd Verification, CCP labelling and methodology change/25/ of the project titled "UpEnergy - Social and Climate Impact Programme- Nigeria-1" VCS ID – 2673, have been undertaken by SustainCERT, as requested by UpEnergy group for the monitoring period 01-November-2022 to 31-October-2024 (including both the days, as verified form emission reduction calculation sheet/11/). The verification of project activity is the 2nd periodic verification for the crediting period 07-May-2022 to 06-May-2029. The purpose of the verification is to conduct an independent review of the project information and confirm:

- The project activity is implemented in accordance with registered monitoring plan as mentioned in the initial Project Description/5/ and revised PD/9/.
- All physical features (project technology) are in place.
- The actual monitoring systems and procedures comply with the monitoring systems and procedures described in the registered monitoring plan/5/, the new applied methodology/8/ including applicable tool(s) and/or, where applicable, the approved standardized baseline.
- The data collection procedures and records are as per the monitoring methodology VM0050 Energy Efficiency and Fuel-Switch Measures in Cookstoves, V1.0/8/
- The project activity complies with CCP labelling criteria.

The verification followed the requirements mentioned in the VCS standard, version 4.7/1/ and VCS guidelines, V4.4/2/ ensuring the quality and consistency of the report.

1.2 Scope and Criteria

The scope of verification for this project activity involves assessing the claims made by the project proponent in the revised PD along with ex-ante calculation sheet, monitoring report/10/, emission reduction calculation sheet/11/ and other supporting evidence (as mentioned in appendix 4) made available to the verifier for this monitoring period from 01-November-2022 to 31-October-2024, in accordance to following documents:

- VCS standard, V4.7/1/
- VCS program guideline, V4.4/2/

- VCS Methodology from Sectoral Scope 3 –VM0050 Energy Efficiency and Fuel-Switch Measures in Cookstoves, V1.0./7/
- VCS Procedure to Change Project Methodology through a Project Description Deviation v4.0/25/
- Other relevant rules and requirements, including host part requirements.

A risk-based approach has been followed for the verification of the project activity. Identifying and assessing the high-risk area and ensuring the reliability of the project's emission reductions generated.

The principles of accuracy, completeness, relevance, reliability and credibility were combined with a conservative approach to establish a traceable and transparent verification opinion. The verification considers both quantitative and qualitative information on emission reductions. The verification is not meant to provide any consultancy towards the client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the monitoring activities.

1.3 Level of Assurance

The verification of the project activity is conducted by doing a detailed assessment of Monitoring report/10/, revised PD against already registered PD, emission reduction calculation sheet/11/ and all the relevant documents, and Distribution Database/16/ (as mentioned in appendix 2) of the report against the applied methodology VM0050 Energy Efficiency and Fuel-Switch Measures in Cookstoves, V1.0./7/ .

The level of assurance achieved for the project verification falls under a reasonable level of assurance. Enough evidence was gathered by the assessment team to reduce the risk associated with the audit process.

1.4 Summary Description of the Project

This is the 2nd monitoring period for the "UpEnergy - Social and Climate Impact Programme-Nigeria-1" (VCS ID 2673), implemented by UpEnergy Group as a Grouped Project aimed at disseminating fuel-efficient improved charcoal cookstoves to local communities across Nigeria. Along with the verification, there is also a methodology change taking place in the project, from VMR0006, 1.1 to VM0050, V1.0, through the VERRA procedure VCS Procedure to Change Project Methodology through a Project Description Deviation v4.0, V4.0/26/ The project is also applying for the CCP labelling, details related to the same can be found in the appendix 2 of the report.

The improved cookstoves disseminated under the grouped project include high-efficiency charcoal stove, the Smart Home Pro/15/, which are engineered with features that enhance fuel combustion and thermal efficiency. The model of stove distributed has thermal efficiencies of approximately 37.9%, as verified from the previous verification reports and registered PD/7/. By replacing traditional inefficient charcoal stoves, these ICS units significantly reduce greenhouse gas emissions through lower charcoal consumption, thereby reducing the use of non-renewable biomass in participating households.

During the current monitoring period (01-November-2022 to 31-October-2024), a total of 29,614 ICS units were distributed to individual households across Nigeria under the grouped project activity, out of which 1,648 are distributed under MP1 and 27,966 are distributed under MP2. Therefore, making total distribution in the project till date (31st October 2024) to 29,614 as verified from distribution database/16/. These ICS units are treated as distinct project activity instances. The implementation status, including stove counts and dates, has been corroborated via the Monitoring Report/10/ and the Project Description/9/. Technical specifications of the ICS technologies were cross verified through the Project Design Document, manufacturer documentation/15/, and field inspections conducted at end-user households.

An onsite audit for the project activity was conducted from 26-May-2025 to 29-May-2025. The start date of the project activity is 07-May-2022, as confirmed through the interview with the Project Proponent, verification of the distribution database, and previous registered verifications. The crediting period for the project activity is from 07-May-2022 to 06-May-2029, as verified from the revised Project Description Document, in line with VERRA rules and requirements.

Based on this, the assessment team confirms that the project activity, VCS 2673: UpEnergy - Social and Climate Impact Programme- Nigeria-1, has been implemented and is operational in accordance with the applied methodology VM0050: Energy Efficiency and Fuel-Switch Measures in Cookstoves, Version 1.0 (Applicability criteria related to methodology can be found in the sections below)/8/, the registered PD/7/, the VCS Standard v4.7/1/, and applicable VCS guidelines/2/. The emission reduction calculations of 40,188 tCO2e for the monitoring period from 01-November-2022 to 31-October-2024 have been found to be conservative and appropriate upon verification.

2 VERIFICATION PROCESS

The grouped Project activity is undergoing 2nd Verification under its seven year, twice renewable crediting period and methodology changed as VCS Procedure to Change Project Methodology through a Project Description Deviation v4.0/26/, the approach adapted to ensure the quality and credibility of emission reduction is described in the following sections.

2.1 Method and Criteria

The method and criteria used for verification consist of following phases.

A risk-based approach has been applied for the process.

Desk review:

- A document review of the revised PD, monitoring report/10/, emission reduction calculation sheet/11/ and other evidence like monitoring survey data/12/, signed user agreements/30/, project distribution database/16/ (as mentioned in Appendix 4 of the report) were strategically reviewed against the applied methodology VM0050, V1.0/8/ and risk assessment was undertaken.
- Project activity sources contributing to the leakage as well as project emissions are assessed inline with applied methodology/08/.
- The frequency of measurements, QA/QC procedures and other relevant documents are verified.
- An onsite audit for the project was conducted from 26-May-2025 to 29-May-2025. Further details regarding the process have been mentioned in sections 2.3 and 2.4 of the report.
- Interviews with the project representatives were conducted to discuss the implementation and operational status of the project with respect to the registered monitoring plan/5/.
- Discussion of QA/QC procedure, data collection, storage and transfer.
- Interview and visual observation on the condition of the project technology stove, baseline stoves, perceived opinion on SDG claims of the projects, grievances if any
- Monitoring period claimed (from 01-November-2022 to 31-October-2024) was verified from the ER calculation/9/, as well as from revised PD, registered PD and all the similar to projects on different registries to ensure, there is no double counting/24/.
- Resolution of all the issues and findings raised, and the final verification statement was issued.

2.2 Document Review

As part of verification of the project, the primary activity performed was the strategic review and risk assessment of the documents. A detailed review of revised PD, MR/8/ and ER calculation/9/ was performed to check:

- The completeness of the information with reference to the register PD[/5/] and revised PD.
- Review of project information, monitoring plan specifically monitoring frequency, quality assurance and quality control system against the registered PD[/5/] and applicable VCS standard[/1/] and applied VM0050 methodology version 1.0[/8/].
- A review of the QA/QC procedures was conducted to make sure the implementation is as per the register PD[/5/].
- Project specific assessment against applicable national framework and legislation requirement[/31/32/33/].

All the other evidence reviewed is mentioned in Appendix 4 of this report. The cross checks between information provided in the Monitoring report[/8/], VCS PD[/5/] 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

During this verification, an on-site visit was performed by the assessment team.

Following is the timeline of the project activity followed:

Opening meeting	6th May 2025
Desk review	12th May 2025
Site visit	26th May to 29th May 2025
Technical review	03rd September 2025

Site visit was emphasized on project technology users with visit to each household for visual observation as well as verbal confirmation on parameter of:

- Project technology usage
- Project technology model and overall condition
- Stove repair mechanism
- Project unique identification number
- Baseline scenario - Baseline stove and baseline fuel
- Confirmation of signing end user agreements
- Perception on smoke level of project technology vs baseline stove

Project technology users interviewed on site for household visit can be found on the table below.

S.No	End user name and serial number	Type of correspondent and Distribution Date	Village/Zone	Details discussed	Auditor
1	Blessing Gabriel VSP22111	Household (08-May-2023)	Karu	Operationality of Project stove, Kitchen observation to understand if project ICS stove was recently used, usage rate, Benefits of using project stoves and related SDGs impact, Repair/maintenance aspect, Feeback opinion on project and related communication channels to address the grievances, baseline stove usage and fuel.	Mr. Jean Bosco
2	Salome Silas Gumut NVSP0240413	Household (07-March-2023)	Garki		
3	Shefiu Adeshina VSP08952	Household (15-December-2022)	Lugbe		
4	Abigail Nga VSP12857	Household (24-August-2023)	Kaduna		
5	Esther Cletus NVSP0268318	Household (05-March-2024)	Kakuri		
6	Chistopher Okpoto NVSP0403375	Household (02-May-2024)	Ungwan gimbiya		
7	Mary Idoko NVSP0055086	Household (28-May-2024)	Mashi Road		
8	Solomon David. NVSP0386692	Household (27-January-2023)	Kakuri		
9	Adolphus Okonkwo VSP20853	Household (17-May-2023)	Kakuri		
10	Esther Akintomide VSP21870	Household (10-August-2023)	Gaurauka		

11	Mary Oghene Brone VSP26988	Household (08-May-2023)	Suleija		

Based on the interviews conducted with project beneficiaries during the onsite visit and kitchen observations by the verifier team, it can be concluded that project ICS are actively used by the households, It was also observed some of the stoves also got replaced during the monitoring period, therefore the ID of the stove differ from initial stove the one mentioned in the distribution database, however, the details are mentioned in the monitoring survey records and grievance records. For these end users further information was cross checked like phone number, coordinates and address to make sure these end users remain same, and the grievance records have also been cross checked to check the grievance recorded for stove replacement (CL 12 was raised and closed after reviewing the appropriate evidences and FAR 2 has also been raised for the next verification). The project activity also involves the change in the methodology from VMR0006, VM0050, V1.0.

Below tables outline the personnel involved in the interviews, along with their respective roles. The interviews specifically targeted individuals responsible for monitoring project activity, data collection and management, as well as those involved in the quality assurance and quality control (QA/QC) procedures. The tables serve to identify the individuals interviewed and provide relevant information regarding their roles within the project.

Name	Designation	Topic Discussed	Name of the auditor
Mukthar Namadi	Managing Director ECOLAB	On ground project implementation, Beneficiary identification, Project stove distribution, grievance mechanism, stakeholder consultation, employee wellbeing, training and employment	Mr. Jean Bosco Rwiyamirira
Victor Tosin	Field Enumerator – North Central		
Patrick Shuaibu Owuno	Field Enumerator		

Abimbola E. Egboola	Data Analyst	Project implementation, QA and QC procedure, Training, employment, Project stove distribution, grievance mechanism, stakeholder identification, repair mechanism, monitoring survey and baseline survey, ICS usage awareness, baseline stove and fuel usage	Mr. Jean Bosco Rwiyamirira
Wise	Women's Initiative for Sustainable Energy		Mr. Jean Bosco Rwiyamirira
Tosin Sunday Olorunmaiye	Carbon Operation Officer		Mr. Jean Bosco Rwiyamirira
Aisna Nabeclu Suleiman	NYSC/National Youth Co-ps INTERIM Working with differenr department		
Mustapha Sodia Olamide	Data Associate and Call Back Officer		
Yussuf Abdulrahman	CEO of Afritaps Technology		Mr. Jean Bosco Rwiyamirira

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

Table 2: Project proponent and Project implementation field team interviewed from 26-May--2025 to 29-May-2025.

S.No	Name of the person Interviewed	Affiliation	Details Discussed	Audit Team

1	Vaishnavi M	UpEnergy Group	Project monitoring survey execution, project distribution mechanism, data collection (distribution database), grievances mechanism, baseline survey and fuel usage in the baseline	Muskan Chawla, Jean Bosco Rwiyamirira
2	Thamizharasi kaliaperumal	UpEnergy Group	Project monitoring survey execution, project distribution mechanism, data collection (distribution database), grievances mechanism	

On the basis of the information collected through above interviews and then further cross checked with the evidence submitted in the Appendix 2 of the report, helped assessment team reach to the conclusion the project is in line with the applied methodology/09/ and VCS rules and requirement, thus, a reasonable level of assurance is met.

2.4 Site Visits

The VVB carried out an on-site visit from 26-May-2025 to 29-May-2025 and physically inspected the project technical design and implementation as specified in the registered PD/5/, revised PD and applied methodology VM0050, V1.0.

The site visit was conducted to verify the accuracy and completeness of the project implementation. The views were obtained during site observation and interactions with project proponent were considered while concluding the verification opinion.

Duration of the Onsite Audit: 26-May-2025 to 29-May-2025			
S.No	**Assessment Criteria**	**Means of Verification**	**Assessment Opinion**
1	The assessment of the implementation and operation of the registered project activity	Registered PD/5/, revised PD with applied methodology VM0050, V1.0 Interviews with PP and onsite visit/10/	The information mentioned with reference to project implementation, efficiency and commissioning in MR is found consistent with the documents and information received during interviews.

2	A review of the monitoring survey for generating, aggregating and reporting the monitoring parameters.	Monitoring survey/12/ and emission reduction/9/ calculation sheet. Interviews with households/10/	The information related to the monitoring survey generating, aggregating and reporting the monitoring parameters mentioned in MR is found to be consistent with documents cross-checked and information received by interviews.
3	Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PD/5/	Interviews with PP/10/ Training records/22/	All the information related to operational and data collection is found to be in line with the PD/5/ and MR/8/.
4	A check of the monitoring equipment including data transfer and observations of monitoring practices against the requirements of the PD, the applied methodology including the tools applied	Interviews with PP/10/	Monitoring practices were verified with interview from PP, and it has been observed that all the practices are found to be in line with the PD.
6	A review on calculation of emission reductions	Monitoring survey/12/ and emission reduction/9/	The values mentioned for ER calculation are found to be in line with the monitoring survey/12/. Methods, formulae, and emission factors for calculating baseline emissions have been followed in accordance with the applied methodology/8/.
7	An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or	Interviews with PP/10/	Methods, formulae, and emission factors for calculating baseline emissions have been followed in accordance with

	omissions in the reported monitoring parameters		the applied methodology[7]. All the QA/AC procedures were also verified on-site.

The sampling plan adopted by the VVB for carrying out the verification assessment is as follows.
During site visit, 11 households were visited for VCS 2673. VVB will be using acceptance sampling during verification for checking the PP's sample size, as PP has already conducted the monitoring survey. In accordance with the para 29-31 of the CDM "Sampling and surveys for CDM project activities and programmes of activities" sampling standard, version 09, a sample size of 11 will required based on an AQL of 0.5 % and UQL of 20 %, producer risk 10% % and consumer risk 10 %. The AQL and UQL selected is based on the Table 2 of the sampling standard, version and complies with the sampling standard.

Therefore, 11 samples have been chosen with 0 acceptance number and sample size 3 is additional as a backup number (Due to high chances of unavailability of users and also risk associated with the project area, this is kept for project technology). Random samples were chosen from the monitoring survey population. Major samples chosen were from North central and Northwest as the most of distribution took place in those regions.

All the households interviewed confirmed that the project stove was operational and in good condition. Fair emission reduction calculations are performed based on appropriately recorded usage during the monitoring survey[12] for the current monitoring period. The Assessment team would like to conclude that based on acceptance sampling approach the project participant's sample record meets the requirements.

2.5 Resolution of Findings

As mentioned above, a risk-based approach has been applied for the verification of the project activity. During the verification, the assessment team identified the issues which could impact the accuracy and the credibility of the emission reduction claimed by the project. The detailed analysis of the issues raised the approach used to resolve these issues can be found in Appendix 4 of this report.

The Corrective Action Request (CAR) was raised if:

- Modifications to the implementation, operation, and monitoring of the registered project activity have 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 number of emission reductions.

The Clarification Request (CL) was raised if:

- Information is insufficient or not clear enough to determine whether the applicable requirements have been met.
  The Forward Action Request (FAR) was raised if:
- If the monitoring and reporting require attention and/or adjustment for the next verification period.

During verification a total of 05 CARs, 12 CLs and 02 FAR were raised. The details of all the issues communicated to the PD can be found in Appendix 3. The issues raised were closed successfully.

2.5.1 Forward Action Requests

The project is undergoing 2nd monitoring period, 1 FAR was raised during the previous monitoring period and 2 forward action request raised under this monitoring period (can be found in appendix 3 of the report).
FAR 01: For future monitoring periods, the project proponent shall submit the updated distribution database (of the other projects implemented by the PP in the same region), for review during each verification to confirm the traceability of devices and to ensure no double counting of PAIs with other projects in the same region. Additionally, the PP shall provide a signed declaration confirming no double counting for each monitoring period to maintain consistency and alignment with verification requirements.
FAR 02 - The VVB, during the next monitoring period, shall cross-check the project database to ensure that a new column has been added for the stove IDs that have been replaced. In addition, the VVB shall verify that the date of replacement is recorded and that the distribution data accurately reflects these updates.

2.6 Eligibility for Validation Activities

During the current monitoring period, the project underwent a methodology update, transitioning from VMR0006: Methodology for Installation of High Efficiency Firewood Cookstoves v1.1 to VM0050: Energy Efficiency and Fuel-Switch Measures in Cookstoves v1.0, through a VCS Procedure to Change Project Methodology through a Project Description Deviation v4.0. As required under VCS rules, a validation of the revised Project Description against the updated methodology was necessary. Accordingly, the VVB confirms that it conducted a validation activity in conjunction with the verification, as documented in Section 3.2 of the Verification Report.

The VVB, SustainCERT S.A., holds active accreditation under the VCS Program for both validation and verification scopes, as confirmed by the Verra VVB eligibility listing[1]. Therefore, SustainCERT is fully eligible and authorized to carry out validation functions, including those triggered by a change in applied methodology.

3 VALIDATION FINDINGS

During this verification (2nd Verification) for the grouped project, the group project underwent a methodology change and is applying for CCP labelling. The group project activity was earlier registered with methodology VMR0006: Methodology for installation of High Efficiency Firewood Cookstoves v1.1. However, now the project is taking a deviation and changing the methodology to VM0050 Energy Efficiency and Fuel-Switch Measures in Cookstoves V 1.0. The following section of the report mentions the detailed assessment of the validation activities performed as a part of verification of the group project.

3.1 Methodology Deviations

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

3.2 Project Description Deviations

In line with the Procedure to change Methodology through a Project Description deviation V4.0, section 2.3, point 2.3.2, the assessment team has conducted the assessment of the project description document with methodology, VM0050 Energy Efficiency and Fuel-Switch Measures in Cookstoves V 1.0. A detailed assessment of the relevant sections can be found below.

A) Project Eligibility:

[1] https://verra.org/validation-verification/sustaincert-sa/

Exclusion under table 2.1 of VCS standard: The grouped project activity is distribution of improved cookstoves in Nigeria. The ICS distributed are energy efficient, reducing GHG emission. The project does not involve any activity that is explicitly excluded under Table 2.1 of the VCS Standard, such as grid-connected electricity generation, waste heat recovery, fossil fuel switching, or hydrofluorocarbon (HFC-23) emission reduction. Thus, the project is not excluded under Table 2.1 and meets the scope requirement of VCS standard v4.7/1/.

Methodology eligibility capacity limits: The project applies VM0050: Energy Efficiency and Fuel-Switch Measures in Cookstoves, v1.0, an approved methodology under the Verra Standard. The methodology is applicable to the project activity; the applicability criteria of the methodology have been verified below. The methodology does not introduce any scale or capacity limits. Additionally, double counting prevention measures have been implemented through the assignment of a Unique Serial Number (USN) for each ICS, recorded in an electronic database. This system ensures that emission reductions are not claimed multiple times. CL12 was raised and closed after reviewing the sufficient evidence. FAR 01 and FAR 02 are raised to verify the details related to double counting in the future verifications. Thus, the criteria have been met.
Each stove distributed under the project bears:
- A physical serial number permanently marked on the body,
- The VVB cross-verified the physical identifiers during on-site household visits and reviewed the backend tracking system through sampled database entries.

The use of permanent, verifiable, and project-specific stove markings, coupled with digital traceability, ensures that each ICS is uniquely tagged to this project and cannot be reused or reassigned elsewhere, thereby eliminating the risk of stove-level double counting.

Therefore, it is concluded by the VVB team that the Project Proponent has implemented comprehensive and verifiable safeguards against double counting of ICS units and associated emission reductions. These include a contractual waiver of carbon rights by the manufacturer, stove-specific identification protocols, and a formal no double counting declaration aligned with VCS Standard v4.7, Section 3.23. All relevant documents were reviewed and validated, and the associated clarification was duly resolved during the verification process.

B) Project start date and crediting period:

The project start date is 07-May-2022, based on the first ICS distributed under the project activity with USN number as VSP00045/21/, the assessment team has verified the end user contract for the 1st ICS distributed and also it was verified using previous registered verifications the start date mentioned for the project activity is in line with VCS standard V4.7/1/, section 3.8. Therefore, the date 07-May-2022 is accepted as the starting date based on the evidence provided. The crediting period for the project is 07-May-2022 to 06-May-2029. Thus, the start date and crediting period of the project is accepted.

C) Project scale and estimate emission reductions:

The group project is calculating emission reductions based on VM0050: Energy Efficiency and Fuel-Switch Measures in Cookstoves, v1.0, and is categorizing the project as large scale in line with VCS standard, section 3.10, “Large projects: Greater than 300,000 tonnes of CO2e per year”.
Based on the assumption values taken by the project to calculate the estimated emission reduction it can be concluded that the project is in line with the methodology and will be able to achieve the emission reductions mentioned.

D) Conditions prior to project initiation

The conditions prior to the project initiation are same as described in the baseline scenario for the project, continued use of charcoal fuel in inefficient stoves. This has been also verified through the onsite visit, including interviews with end users, stakeholders, and the implementation partner (details provided in Section 2.3 of this report) as well as through a review of independent research sources[2]. Accordingly, the previously validated statements related to the conditions prior to project initiation remain valid under the methodology change. More details related to the baseline scenario can be found under the heading H) Baseline Scenario in the same section of this report..

E) Title and reference of methodology

[2] Nigeria Deforestation Rates & Statistics | GFW
https://www.energytransition.gov.ng/cooking/

During the current Monitoring the project undergoing a methodology change from VMR0006 Methodology for installation of High Efficiency Firewood Cookstoves v1.1 to VM0050 Energy Efficiency and Fuel-Switch Measures in Cookstoves, 1.0 in line with the guidelines release by VERRA on 09-October2024 (https://verra.org/verra-releases-new-cookstoves-methodology/) and Correction and Clarification to VM0050 Energy Efficiency and Fuel Switch Measures in Cookstove, V1.0.
Along with the new methodology, project applies the latest version of Tool 30, Calculation of the fraction of non-renewable biomass V4.0 and CDM Guideline: Sampling and surveys for CDM project activities and programs of activities, v4.0 and CDM sampling standard, V9.0, and VT0008 for additionality assessment. CDM tool 33, V3.0 All the applicable tools and methodology apply the latest version therefore, found to be acceptable.

F) Applicability of methodology

The project activity currently applies methodology VM0050 Energy Efficiency and Fuel-Switch Measures in Cookstoves, 1.0. The table below assesses the applicability conditions of methodology:

S. No	Applicability Condition	PP's Justification	Assessment opinion
1.	The project activity corresponds to: a) Replacement of non-renewable biomass (e.g., firewood, charcoal)-fired cookstoves with any of the following: i) More efficient project devices that use the same fuel as in the baseline. ii) Efficient project devices fired by renewable biomass or bioethanol; iii) Efficient project devices fired by liquefied petroleum gas (LPG); or iv) Electric-powered project devices.	The proposed instances will distribute more efficient improved charcoal cookstoves for thermal application, which will replace inefficient traditional charcoal cookstove leading to saving of non-renewable biomass. The ICS to be distributed under the project activity are Smart Home Pro. All ICS in this project will replace existing only traditional charcoal stoves; therefore, no greenfield installations are included. Further, the project activity will utilize non-	The group project activity is located in the Nigeria and is aimed at distribution of more efficient improved charcoal cookstoves (Smart Home Pro) that replace traditional charcoal stoves, these improved cookstoves use the same fuel as in the baseline (charcoal), aligning directly with the criterion for more efficient devices using the same fuel. Evidence: Distribution records/16/, previous verification reports/6/

S. No	Applicability Condition	PP's Justification	Assessment opinion
	b) Replacement of solid or liquid fossil fuel (e.g., coal, kerosene)-fired cookstoves with any of the following: i) Efficient project devices fired by renewable biomass or bioethanol; ii) Efficient project devices fired by LPG; or iii) Electric-powered project devices.	renewable biomass under project scenario. This criterion will be checked from data recorded on the baseline stove used prior to ICS installation. Evidence – Distribution Receipts & Database The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	
2.	Project devices are used in households, communities, institutions, or small or medium enterprises (SMEs),4 collectively referred to in this methodology as the "target population."	The proposed instances involve distribution of ICS in households. Evidence – Distribution Database The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	In accordance with the site visit conducted and the project database submitted/16/, it has been verified that the project activity aims at distributing the ICS to the end users households. Therefore, the condition is found to be met. Evidence: End user agreement/20/, distribution database/16/, VVB onsite visit /12/

S. No	Applicability Condition	PP's Justification	Assessment opinion
3.	Where renewable biomass is used, it is exclusively renewable and qualifies as one of the following: a) A by-product, residue, or waste stream from agriculture, forestry, and related industries; or b) Originating from dedicated plantations that comply with all relevant applicability conditions in the most recent version of CDM TOOL16	Not applicable. The proposed instances will distribute high efficiency improved cook stove for thermal application, which will replace inefficient traditional charcoal cookstove leading to saving of only non-renewable biomass.	The project aims at distribution of the improved ICS. However, the fuel remains the same, continued used of non-renewable biomass as in the baseline, it has been verified from project previous verification as well as on site visit conducted during this monitoring period. Therefore, the criteria does not apply.
4.	Where biomass residues are used, they would have been left to decay or burned without energy recovery before implementation of the project activity, and their use does not involve a decrease in carbon pools – in particular of dead wood, litter, or soil organic carbon – on the land areas from which the biomass residues originate.	Not applicable. The proposed instances will distribute high efficiency improved cook stove for thermal application, which will replace inefficient traditional charcoal cookstove leading to saving of only non-renewable biomass. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	The project activity aims at distribution of the improved ICS. However, the fuel remains the same, continued used of non-renewable biomass as in the baseline, it has been verified from project validation as well as on site visit conducted during this monitoring period, by including in the questionnaire. It has been verified that the project activity does not use biomass residue. Therefore, the criteria is not applicable. Evidence: Monitoring

S. No	Applicability Condition	PP's Justification	Assessment opinion
			survey/11/, distribution database/16/
5	Where biomass residues from a production process are used, project implementation does not result in an increase in the processing capacity of raw input or any other substantial changes (e.g., product change) in this process.	Not applicable. The proposed instances will distribute high efficiency improved cook stove for thermal application, which will replace inefficient traditional charcoal cookstove leading to saving of only non-renewable biomass. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	The project activity aims at distribution of the improved ICS. However, the fuel remains the same, continued used of non-renewable biomass as in the baseline, it has been verified from project previous verifications as well as on site visit conducted during this monitoring period. It has been verified that the project activity does not use biomass residue. Therefore, the criteria is not applicable.
6	Where more than one type of renewable biomass is used, each of the biomass types used complies with the applicability conditions.	Not applicable. The proposed instances will distribute high efficiency improved cook stove for thermal application, which will replace inefficient traditional charcoal cookstove leading to saving of only non-renewable biomass. The grouped project activity is already registered with VCS program and has done	The project activity aims at distribution of the improved ICS. However, the fuel remains the same, continued used of non-renewable biomass as in the baseline, it has been verified from project previous verifications as well as on site visit conducted during this monitoring period. Therefore, the criteria does not apply.

S. No	Applicability Condition	PP's Justification	Assessment opinion
		the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	
7	Where project activities introduce renewable biomass as charcoal, it is renewable charcoal produced by efficient charcoal production processes (e.g., retort sedentary kilns, improved sedentary kilns, Casamance kilns). Methane produced during the charcoaling process is captured and destroyed or combusted for energy purposes.	Not applicable. The proposed instances will distribute high efficiency improved cook stove for thermal application, which will replace inefficient traditional charcoal cookstove leading to saving of only non-renewable biomass. The project activity is already VCS approved till MP2 and VCUs issued by VERRA. It is currently under 3rd monitoring period (01-November-2022 to 31-October-2024).	The improved cookstoves distributed under the project use non-renewable biomass (charcoal). There is no introduction of renewable biomass charcoal produced through efficient systems such as retort kilns or Casamance kilns. As the project does not involve charcoal production, there is no methane to be captured or destroyed, making the condition irrelevant to the project design. Therefore, the criteria is not applicable.
8.	Project devices using renewable biomass (fuel-switch) or non-renewable biomass (improved efficiency) are single-pot, multi-pot portable, or in-situ cookstoves with an initial thermal efficiency8 of at least 25%.	Improved Cookstoves planned to be distributed under this project are SmartHome Pro stove that have an efficiency of 37.9% as per the manufacturer's technical specifications. Evidence	The project involves one improved cookstove models: SmartHome Pro with a thermal efficiency of 37.9% Both values exceed the minimum threshold of

S. No	Applicability Condition	PP's Justification	Assessment opinion
		– ICS Technical Specification The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	25% thermal efficiency set by the methodology. Evidences: manufacture specification/15/, efficiency test report and previous verification reports/6/.
9	Project devices using LPG or bioethanol are single-pot, multi-pot portable, or in-situ cookstoves with an initial thermal efficiency of at least 30%	Not applicable. The proposed instances involve distribution of improved charcoal cookstoves within the project boundary. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	The project activity uses on non-renewable biomass as a fuel source. Therefore, the condition is not applicable.
10	Electric project devices meet the maximum risk factor score of 15 on the Cookstove Durability Protocol and have the following minimum thermal efficiency:	Not applicable. The proposed instances involve distribution of improved charcoal cookstoves within the project boundary.	The project activity uses on non-renewable biomass (charcoal) as a fuel source. Therefore, the condition is not applicable.

S. No	Applicability Condition	PP's Justification	Assessment opinion
	a) Hot plates and electric hobs: 40% Induction stoves and other electric stoves: 70%		
11	Project devices using LPG comply with all of the following conditions: a) The baseline fuel either includes non-renewable biomass or is a more carbon intensive fossil fuel (demonstrated by the baseline survey, see Section 6.2); b) The project has a provision for metering LPG supplied to each consumer at the LPG filling station, in order to determine household LPG consumption; and c) The project does not seek to issue any carbon credits for periods after 31 December 2045	Not applicable. The proposed instances involve distribution of improved charcoal cookstoves within the project boundary. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	The project activity uses on non-renewable biomass (charcoal) as a fuel source. Therefore, the condition is not applicable.
12	Electric project devices use the following electricity sources: a) Decentralized renewable energy systems: Decentralized energy systems using fossil fuels are not eligible, except for backup generators that supply less than 1% of the annual electricity of the decentralized renewable energy system.12 b) Self-generated renewable electricity (with a maximum	Not applicable. The proposed instances involve distribution of improved charcoal cookstoves within the project boundary. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd	The project activity uses on non-renewable biomass (charcoal) as a fuel source. Therefore, the condition is not applicable.

S. No	Applicability Condition	PP's Justification	Assessment opinion
	of 20% electricity from non-renewable sources for backup); or c) National or regional electricity grid.	monitoring period (01-November-2022 to 31-October-2024),	
13	The project proponent designs incentive mechanisms to reduce the use of inefficient baseline devices and practices that can be replaced by the project devices and describes these mechanisms in the project description	The project activity encourages full adoption of project stove distributed to individual beneficiary households and reduce use of baseline devices throughout the crediting period by implementing an incentive scheme. This includes providing a full-year extended warranty in addition to the 5 years initial warranty in exchange for the disposal of a household's traditional stove, verified at the time of ICS distribution. To ensure ongoing replacement and use of project stoves, the project conducts regular monitoring to confirm the continued non-use of inefficient baseline stoves and provides customer support to address any issues with ICS adoption during the crediting period. The grouped project activity is already registered with VCS	Incentive Mechanism Design: The project provides a one-year extended warranty in addition to a standard 5-year warranty in exchange for surrendering the baseline traditional stove at the time of improved cookstove distribution. This mechanism directly supports the replacement of inefficient baseline devices, fulfilling the condition. Continued monitoring and customer support mechanisms are in place to ensure long-term adoption and detect fallback to baseline technologies. Evidence: PP interview/12/. CL02 was raised and closed successfully.

S. No	Applicability Condition	PP's Justification	Assessment opinion
		program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	
14	Where a project device has ended its technical life, the project proponent either replaces it with a comparable or better project device or retrofits its essential components to continue meeting the minimum service level requirements (i.e., thermal energy generation), otherwise no further emission reductions may be claimed for the project device	When the project device has ended its technical life, the project proponent either replaces the stove or shall not claim credits in-line with the methodology, The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	In accordance with the discussion with PP it has been verified that PP will not claim any emission reductions for the stoves that fail to meet the eligibility criteria of technical lifetime. Therefore, the criteria is found to be met.
15	Project proponents implement a method for the distribution and identification of project devices that avoids double counting of emission reductions by other mitigation actions and includes unique product	Each ICS in the project activity will be identified by a unique combination of customer name and geographical location, as well as a serial number. The serial number will be a unique number which will allow	Each ICS is tagged with a unique serial number, combined with customer name and geographical location. The serial number is stated to be non-repeating and linked to end-user and location

S. No	Applicability Condition	PP's Justification	Assessment opinion
	identification on the stove itself at the time of distribution/sale (e.g., program logo, alpha/numeric ID, and end-user location, such as geographic coordinates, complete address information).	for a clear distinction between the stoves. No individual serial number can be repeated within the project, thus ensuring that each stove is counted only once in the proposed project. In addition, the project has been cross-checked against other CDM project activity operating in the country using the UNFCCC, the Gold Standard, and other relevant voluntary carbon schemes to ensure that the ICS is not included in any other CDM project activity or voluntary project activity. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	details, satisfying the condition's requirement for stove-level identification (e.g., alpha/numeric ID and address-level granularity). PP has also submitted declaration stating that there will no double counting. PP also has a project in gold standard with similar location, PP has submitted the database to verify the double counting and it was confirmed that there was no double counting. Evidence: Distribution database/16/, KML file /22/ and declaration for no double counting/23/. FAR01 was raised and closed successfully.
16	The project complies with any national, sub-national, or local regulations or	The project activity complies with the host country's regulations for	It has been verified with the independent research [3] that there

[3] https://nafdac.gov.ng/food/food-regulations/

S. No	Applicability Condition	PP's Justification	Assessment opinion
	guidance for the installation, commercialization, distribution, and use of improved cookstoves and/or fuel supply and use for the target population. National, regional, and local regulatory frameworks for the provision of the type of thermal energy services provided by the project activity must be documented.	the use of improved cookstoves in Nigerian households. The project is a voluntary effort by the project proponent. A review is made on Nigeria environmental laws and regulations as below : 1) National Environmental Standards and Regulation Enforcement Agency (NESREA) Act 2007 2) Environmental Impact Assessment (EIA) Act. Cap E12, LFN2004 3) The Nigerian Urban and Regional Planning Act Cap N138, LFN 2004 There is no specific concern made on improved cookstoves project from the above law and regulation. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-	have been no regulations that is making the use of improved cookstove mandatory. It is confirmed that the project is a voluntary activity by PP. Therefore, the criteria are found to be met.

S. No	Applicability Condition	PP's Justification	Assessment opinion
		November-2022 to 31-October-2024),	
17	Where project activities reduce emissions from non-renewable biomass, including firewood and charcoal, the risk of double counting is assessed on a national basis by evaluating at validation and crediting period renewal whether there are REDD+ projects or jurisdictional REDD+ programs whose project boundary overlaps with the expected fuel source area of the project. The project proponent must report on the findings of this assessment for informational purposes in the project description.	Since the project activity involves reducing emissions from non-renewable biomass i.e., charcoal, an assessment was conducted to identify any overlapping of project boundary REDD+ projects that are currently are active or have been implemented within the project boundary to date. Currently there is no REDD+ projects have been identified as active or implemented within the project boundary i.e., Nigeria till date with any major Carbon Registries viz., VERRA, GS & CDM. While there are two REDD+ projects currently under development under VERRA, but they are not registered and yet operational. Therefore, there are no overlapping boundaries with any active REDD+ projects. The grouped project activity is already registered with VCS program and has done	The project activity is located in Nigeria, and it has been noted that there are no REDD+ project that are operational within the boundary of project activity. CL02 was raised and closed successfully. Therefore, the criteria are met.

S. No	Applicability Condition	PP's Justification	Assessment opinion
		the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	

Correction and clarification to VM0050 energy efficiency and Fuel switch Measures in Cookstove, V 1.0

S.no	Clarification	PP Justification	Assessment Opinion
1.	As a cross-check, baseline fuel consumption results must be compared with data from reputable sources, including government publications, peer-reviewed literature, third-party studies, or official data and statistics. The sources must be relevant to the context of the project activity, reflecting baseline cookstove types, types of users, and cooking practices. Where used for cross-checks, these sources must reflect data collected no more than five years ago.	The baseline fuel consumption results have been compared with data from reputable sources. A recent scientific research work by Ibrahim Sufiyan, Muhammad K.D, Umar Musa U (2021) *4* establishes the per capita charcoal consumption as 224.4 kg/capita/annum, this translates to 6.05 tonnes wood equivalent for charcoal/HH/annum considering the average HH size of Nigeria to be 4.5 capita/HH*5*. Hence the baseline fuel consumption value of 5.46 tonnes / HH/ annum (using CF as 6),	The baseline fuel consumption value has been compared with the reputable source, a research conducted by Ibrahim Sufiyan, Muhammad K.D, Umar Musa U (2021). The comparison aligns with the requirement to use relevant, recent, and peer-reviewed or official data. The conservative baseline fuel consumption values used in the project are demonstrably lower

[4] https://jwbm.com.my/archives/1jwbm2021/1jwbm2021-22-26.pdf last accessed on 13-June-2025

[5] https://www.africageoportal.com/maps/fbb3c5c5fa9f4429be56af8b11ef4643/about last accessed on 13-June-2025

		determined through the baseline KPT study conducted by the PP is found to be conservative as compared with scientific studies. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	than those reported in the referenced study, providing a credible and transparent cross-check. CL 02 was raise and closed successfully. Therefore, the condition has been met.
2.	For projects using direct measurement techniques (such as stove use monitors or electricity meters), usage rates are not capped. For projects employing surveys, the usage rate is capped at 90% where all of the following customer support actions are undertaken across the entire target population and demonstrated at verification: 1) Selection of technologies and fuels that fully meet the cooking needs of the target population, demonstrated by citing robust research or conducting an investigation	According to Clarification 2 of VM0050 v1.0 Corrections and Clarifications, the project activity shall adopt SUMs or usage survey-based monitoring during the course of verification. While utilizing survey-based monitoring, the usage rate will be capped at 90% and all of the following customer support actions shall be implemented as outlined below: 1.The project activity involves the distribution of efficient improved charcoal cookstoves that will replace inefficient traditional charcoal stoves across the project	The project applies a 90% usage rate cap (actual achieved is 89.7 (which is used for the calculation of ERs) and implements all three mandatory customer support actions across the target population. The cap has been applied in line with the methodology requirement of 90%. However, the value applied is average of all the 3 vintages that is 89.7% which is below the 90% cap. The project deploys efficient charcoal-based Improved Cookstoves (ICS)

	of cooking practices and attitudes 2) Implementation of support activities to assist the target population in effectively operating and maintaining their cookstoves. These may include providing materials (print, in-person, or video) on how to operate the cookstove to prepare common local foods, how to troubleshoot common operational issues, and how to make minor repairs (including obtaining necessary replacement parts). All such communications and materials must be provided in local language(s) commonly used in the project area. 3) Provision of a commonly used, toll-free communications channel through which the target population can contact the project proponent to access support (e.g., maintenance and repair services) For projects employing surveys and that do not implement all of these customer support actions across the entire target	boundary. In Nigeria, where nearly 30 million households uses biomass fuels as their primary fuel for cooking as per National Clean Cooking Policy 2024, the proposed project activity promotes ICS as a practical and culturally accepted solution to replace traditional stoves. The stove "Smart Home Pro" model have been shown through field research and pilot studies to significantly reduce charcoal consumption, lower cooking times, and improve household air quality. With features like insulated combustion chambers and better airflow control, they meet the cooking needs of Nigerian families preparing staples. User feedback from various on-field activities indicates strong acceptance and willingness to continue use, citing cost savings and ease of use. Locally manufactured and widely available, these stoves not only support health and environmental goals by reducing emissions and deforestation but also create local jobs and align	"Smart Home Pro", replacing traditional inefficient stoves in Nigeria. Evidence: Baseline survey data showing widespread use of non-renewable charcoal stoves in the region. The stoves distributed ("Smart Home Pro" ICS) have been field tested, shown to meet local cooking needs, and align with Nigeria's National Clean Cooking Policy 2024. 2. The project provides comprehensive support to help users adopt and sustain ICS use. Evidence: Flyers in local languages explaining stove usage, safety, maintenance, and do's & don'ts. Awareness campaigns 3. A toll-free number has been established to assist households with support requests.

	population, the usage rate is capped at 75%.	with Nigeria's climate commitments. 2. The project activity shall implement support activities to assist the target population in effectively operating and maintaining their Improved Cookstoves (ICS). Awareness campaigns and training sessions shall be conducted to provide guidance on operating the cookstoves for preparing common local foods, troubleshooting operational issues, and performing minor repairs. Materials, including printed guides and in-person demonstrations shall be distributed in local language, to ensure accessibility and understanding. These efforts are ongoing to support sustained ICS adoption and maintenance throughout the project duration. 3. The project has implemented a toll-free communications channel to support the target population in accessing assistance for their Improved Cookstoves (ICS). A dedicated toll-free number has been established and widely	evidence: Toll-free number (07041007012/07011111384) provided in all user materials. Grievance procedure mentioned across channels CAR 02 was raised and has been closed successfully. All these evidence have been verified by the assessment team. Therefore, clarification has been met.

		communicated to households, enabling them to contact the project proponent for maintenance, repair services, and other support needs. This channel is operational and accessible, ensuring effective communication and ongoing support throughout the project duration. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	
3	For usage rate monitoring, the project proponent must collect photographic evidence in the following manner: Take photographs of the stove(s), its components, and the cooking areas. The physical condition of the stove(s) and the cooking areas will help determine stove functionality and use	The project activity shall capture photographs of the project stove ICS, its components, and the cooking areas as part of the monitoring surveys during verification stage. These photographs shall be shared with VVB as evidence to help determine stove functionality and use. The grouped project activity is already registered with VCS program and has done the	During the current monitoring period, a site visit was conducted to verify the details related to usage of the stove and PP has collected the stove photograph while conducting the survey. The evidence has been assessed and found to be appropriate. Therefore, the criteria is found to be met.

		issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	
4	The project stove efficiency ($\eta_{new,avg,y}$) must be determined using one of the following methods (options 1–3 prescribed in the methodology) and the corresponding documentation must be provided: 1) Water Boiling Test campaigns achieving 90/10 confidence and precision levels as per the most recent version of the CDM Standard for Sampling and Surveys for CDM Project Activities and Programmes of Activities 2) Manufacturer-certified value that is determined via the Water Boiling Test, with the test results made available for validation by a VVB 3) Certification from the host country's national standards body or certifying agency based on the Water Boiling Test For all three options, cookstove efficiency must be determined based on the Water Boiling Test	The project activity shall determine the stove efficiency (ηnew,avg,y) of the Improved Cookstoves (ICS) using either of the options 1 and 2, as prescribed in the methodology. Corresponding documentation shall be provided during verification to comply with the methodology's requirements. The project activity is already VCS approved till MP1 and VCUs issued by VERRA. It is currently under 2nd monitoring period (01-November-2022 to 31-October-2024),	PP has chosen method 1 and 2 for determining the value of stove efficiency. More details can be found in section 4.3.

	following the most recent version of the Water Boiling Test Protocol or equivalent national standard/protocol. While carrying out the tests, the low and high power (not simmer) efficiencies must be used to calculate the average thermal efficiency.		
5.	The following requirements must be applied in addition to the Controlled Cooking Test Protocol when conducting Controlled Cooking Tests (CCTs): 1) A minimum of 15 CCTs by five different cooks (three repeats per cook) must be conducted per cookstove model. 2) The CCTs must be alternated between the baseline and project cookstoves to limit potential bias caused by increased cook efficiency over repeats. For artisanal cookstoves, at least three randomly selected samples of each cookstove model must be tested.	The project activity involves the distribution of Improved Cookstoves (ICS) to households; thus this clause is not applicable to this project activity. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	The project activity is aimed at distribution of improved cooking devices in Nigeria, using fuel as charcoal. No electric stove has been distributed. Therefore, the condition does not apply.
6.	The following values of equivalent standard male adults must be applied when determining the parameters Hh_i and $Hh_{j,k}$ (instead of the references provided in Section 9.1 of	The project activity shall apply the specified values of equivalent standard male adults when determining the parameters Hhi and Hhj,k,.	The project has applied values inline with the values mentioned in the clarification for methodology, more

<table>
<tr>
<td></td>
<td>VM0050, v1.0, parameter table for Hh_i and $Hh_{j,k}$):
<table>
<tr><th>Gender and age</th><th>Fraction of standard adult</th></tr>
<tr><td>Child 0–14 years</td><td>0.5</td></tr>
<tr><td>Female over 14 years</td><td>0.8</td></tr>
<tr><td>Male 15–59 years</td><td>1.0</td></tr>
<tr><td>Male over 59 years</td><td>0.8</td></tr>
</table>
</td>
<td>The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),</td>
<td>details can be found in section 4.3.</td>
</tr>
<tr>
<td>7.</td>
<td>For the wood-to-charcoal conversion factor (CF), in addition to government approved/ endorsed national or regional values, the following source of data is accepted for claiming values of up to six tonnes of dry wood input per tonne of charcoal output:

• Published, peer-reviewed literature specific to the project region and context</td>
<td>The project activity shall apply a wood-to charcoal conversion factor (CF) in accordance with the methodology's requirements. Although several scientific literatures has confirmed the CF in Nigeria is more than 6 tonnes of dry wood input per tonne of charcoal output, however in compliance with CCP requirement and the methodology default as most conversative CF value of 4 has been applied in the project activity. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently</td>
<td>The project has applied values inline with the values mentioned in the clarification for methodology, more details can be found in section 4.3.</td>
</tr>
</table>

		undergoing verification for 2nd monitoring period (01-November-2022 to 31-October 2024),	
8..	Footnote 35 must be read as follows: The project proponent may rephrase the question keeping in mind the objective (i.e., whether or not the project cookstove is in good condition). Where the project cookstove is not in good condition, the project proponent must exclude such stoves from the project database for the whole crediting year and subsequent years. The project proponent may include such stoves again on replacing them with new cookstoves of similar efficiency.	The project activity shall adhere to the requirements outlined in footnote 35 of the methodology. During monitoring, the project proponent shall assess whether or not the project stove is in good condition, based on appropriately phrased questions as part of the monitoring survey questionnaire. Any project stove, if found not in good condition, shall be replaced with new cookstoves of similar efficiency. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring	From the monitoring survey submitted, It has been verified that PP has included the survey question as per footnote 35, and stove not in good conditions have been excluded. Therefore, condition is found to be met.
9	The third paragraph on page 14 should be read as follows: The initial baseline survey must be performed prior to validation. The project proponent may employ local third-party agencies to carry out the baseline	The project activity shall comply with the revised baseline survey requirements outlined in the third paragraph on page 14 of the methodology. An initial baseline survey was conducted prior to	PP has met with the requirement and made the required revisions to the monitoring plan. Therefore, the criteria is found to be met.

	survey. Follow-up baseline surveys must be conducted at most every five years from the date of the last survey in control households that do not participate in the project. The project proponent may conduct additional surveys at any time, including at crediting period renewal.	validation, and follow-up baseline surveys shall be performed at most every five years from the date of the last survey in control households that do not participate in the project. Additional surveys may be conducted as needed, including at crediting period renewal. The grouped project activity is already registered with VCS program and has done the issuance till MP1 from VERRA. It is currently undergoing verification for 2nd monitoring period (01-November-2022 to 31-October-2024),	

In accordance with above assessment, it is concluded that methodology is rightly applied.

G) Project boundary

Project activity has determined the project boundary inline with, VM0050 Energy Efficiency and Fuel-Switch Measures in Cookstoves, V1.0, section 5, project boundary includes the project devices, the geographical site where they are located, and the locations from which baseline and project fuels are sourced, which is found to be inline with methodology VM0050, V1.0

Evidence verified:

- Project description - Section 3.3 explicitly outlines the project boundary, confirming that both baseline and project fuels are locally sourced charcoal. No cross-border fuel sourcing was observed.
- KML files- Spatial data submitted indicates the exact locations of ICS deployment during the monitoring period. This validates stove placements within the national boundary.
- Distribution database - The stove distribution records, including household addresses and GPS coordinates, align with the declared project area.

CAR 02 was raised and closed successfully.

The assessment team was able to ensure that the approved methodology addresses all the identified emission sources that are impacted by the project activity as mentioned in section 3.3 of revised PD.

H) Baseline scenario

The baseline scenario of the projects remains the same as validated during the initial validation of the project. The baseline scenario remains valid inline with section 6 of the applied methodology VM0050: Energy Efficiency and Fuel-Switch Measures in Cookstoves, v1.0. The baseline scenario defined is continued use of inefficient cooking stove in the project area with high dependency on use of inefficient traditional cookstoves by the target population The baseline scenario i.e., continued use of inefficient traditional charcoal cookstoves primarily using non-renewable biomass (charcoal), remains valid and consistent with section 6 of VM0050 v1.0.

STEP 1: PP identified the baseline scenarios in line with the methodology and additionally the baseline KPT (survey conducted in November 2021 and KPT in February 2022) results were also shared with the assessment team. A detailed verification was done by the assessment team and it was verified that the population used the inefficient (charcoal) stoves in the baseline.

Evidence: Baseline usage is substantiated by a baseline survey conducted in 2021, aligning with the start of the crediting period. Baseline scenario was also discussed with PP and its representatives, Implementation partners and the end users to verify the stove they were using in the baseline.

The assessment team has reviewed and verified the baseline scenario using onsite visit as

well by interview end users and stakeholders, research paper[6], field-level consultations, and the project's baseline KPT survey conducted in 2022. Based on these evidence, the team confirms that the baseline scenario is conservatively and accurately defined, consistent with the requirements of Section 6 of VM0050 v1.0. It was confirmed that baseline established is correct and inline with the methodology requirement.
The thermal efficiency and emissions data used in the baseline come from standard performance testing (KPT and WBT results), and are consistent with VM0050 requirements.
Control households: PP has mentioned that 45 households in which baseline KPT was conducted in year 2022 have been kept aside as control households for the project, as per the methodology requirement. PP has confirmed that these households have not received the stove, this has also been confirmed form the distribution database, coordinates for these households have also been provided in the KPT sheet. KPT sheet also demonstrate that baseline for these households continues to be the use of inefficient charcoal-based stoves, as set in the baseline for the project.
The assessment team verified the continued validity of the control household group using the following means of verification:
- Baseline survey records from 2022, including household identifiers and survey responses;
- On-site verification activities, including interviews with project end users, stakeholders, and the implementation partner, confirming that baseline cooking practices and fuel use patterns remain unchanged;
- Spatial verification using KML files, which allowed the VVB to confirm that baseline survey households are distinct from households that have received project cookstoves, thereby mitigating the risk of overlap between control and project households;
The VVB further notes that the project has documented procedures to address cases where control households may later adopt improved stoves with or without benefit of carbon associated from developers other then UpEnergy or become untraceable, including replacement or adjustment of the control group during future baseline reassessment exercises, in line with VM0050 requirements.
Therefore, it has been verified that project has met the requirement of control households. The follow up baseline survey will be conducted at an interval of 5 years as per the methodology in the control households.

Step2: Considering existing and forthcoming Government policies and legal regulations:
- National Environmental Standards and Regulation Enforcement Agency (NESREA) Act 2007

[6] APPRAISAL OF PER CAPITA CONSUMPTION OF CHARCOAL AND FIREWOOD AS AN ALTERNATIVE ENERGY SOURCES FOR DOMESTIC USAGE IN KEFFI NASARAWA STATE NIGERIA

https://www.sciencedirect.com/science/article/pii/S2211467X24000737

- Environmental Impact Assessment (EIA) Act. Cap E12, LFN2004
- The Nigerian Urban and Regional Planning Act Cap N138, LFN 2004
- National Clean Cooking Policy, 2024[7]
- Nigeria's Nationally Determined Contribution (NDC 3.0)[8]

The assessment team has verified that neither of these policies imposes mandatory requirements for the adoption of improved cookstoves, nor do they mandate the implementation of the project activity.

Based on the document review, the assessment team further confirms that the project activity remains voluntary and is in compliance with current applicable laws and regulations, as well as any identified upcoming policies.

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Step3- Assess Financial, Institutional and informational barriers
It was verified that these improved cookstoves have high cost associated with them therefore, become difficult to afford and additionally the there is low awareness in the area. CL 01, CL 03, CL 06 and CL 11 was raised related to the procedure of baseline survey and meeting the requirements as mentioned in the methodology, upon review of responses, documents the finding was closed.
Thus, during the methodology change there is no change in the baseline scenario for the project. The baseline scenario defined is also appropriate inline with the VCS standard 3.13, and through independent research it has been verified that there are no laws and regulations in Nigeria related to the project activity such as minimum product efficiency standards, air quality requirements, carbon taxes, and subsidies. Therefore, the baseline scenario for the project is applicable.

I) Additionality

[7] https://fscluster.org/sites/default/files/2024-05/National%20Clean%20Cooking%20Policy%20v2_113112.pdf (last accessed on 12/DEC /2025)

[8] https://unfccc.int/sites/default/files/2025-09/Nigeria%20NDC%203.0%20-%20Transimission%20Version%202.pdf (last accessed on 12/DEC /2025)

The group project has demonstrated additionality inline with the methodology VM0050 Energy Efficiency and Fuel-Switch Measures in Cookstoves, V1.0 and tool VT0008 Additionality Assessment Tool.

1. **Regulatory surplus:** the project activity is located in Nigeria, which is included in annex 1 country, And it has been verified with the help of independent research that there is no law or regulation enforced which mandates the project activity.

A review of national laws and regulations (National Clean Cooking Policy 2024–2030) confirms that there is no legal obligation for households to transition to ICS. The PD explicitly states the voluntary nature of the project and includes references confirming the absence of enforcement. The details have been verified from the previous verification and interview with PP.

2.Positive List : Project aims at distribution of improved cookstoves replacing the inefficient charcoal based cookstove, as the project does not distribute cookstove free to cost, therefore, additionality has been described through financial means as described below.

3. Financial additionality: The project uses the investment analysis approach, applying the VT0008 Tool.

The investment decision date and financial assumptions (e.g., stove cost, distribution expenses, revenue from carbon credits) are disclosed in the Project Feasibility Report and validated through the “VCS 2673 Additionality Tool.xlsx”.

Key inputs are linked to market conditions at the time of investment and found reasonable upon review.

FAR was raised during previous verification regarding the cost of the stove – “The ICS distributed revenue demonstration in the IRR sheet considers the sale price as 6000 Naira per unit however the PP declares that the prices will be reduced further. Since only 1,648 stoves were distributed during the current joint validation & verification the sale price of 6000 Naira was confirmed by the VVB, and further subsidy provided by the PP could not be confirmed by the VVB. The verifying VVB shall confirm the sale price of ICS included under the Grouped project activity for monitored samples and for a few instances of non-monitored samples. PP shall provide the sales price of the ICS distributed monitored and few of non-monitored samples.”
However, upon the detailed review and cross verification it has been observed that the price of the cookstove has been decreased by the PP to 3.9 USD from 12.6 USD which comes out to be 6,000 Nira as per the current value of the currency. As per the assessment it has been observed that price of cookstove remains the same in terms of Nigeria currency, Nira. However, In terms of USD the price has been decreased to below 5 USD as mentioned in PDMR. More details are mentioned in appendix 3 of the report.

The project does not meet the benchmark rate for acceptable returns without carbon finance.
Therefore, it has been concluded that financial additionality has been appropriately demonstrated.

4.Common practice analysis:
The project includes a Common Practice Analysis comparing ICS deployment across Nigeria.
The analysis considers VCS-registered cookstove projects and government/NGO initiatives.
It concludes that ICS adoption remains low, with the proposed project exceeding common practice in scale and structure (e.g., sustained monitoring, usage-based crediting, warranty-backed distribution).
Geographic region used is appropriate and sectoral context well-defined.
Therefore, it is concluded that the project is not a common practice.
Financial and technical assumptions are clearly stated and linked to documented sources, such as the feasibility study, MNRT charcoal study, and stove specification sheets.
Conservative estimates are used in calculating emissions and financial viability.
CL 04 was raised and closed successfully.

Therefore, in line with the applied methodology and tool requirement and with clear justifications across regulatory, financial, and common practice dimensions, project technology is deemed additional.

J) **Quantification of GHG emission reductions and carbon dioxide removals**

The project activity is quantifying the emission reductions based on methodology VM0050: Energy Efficiency and Fuel-Switch Measures in Cookstoves, v1.0, the assessment team has assessed the details it has been observed that it conservatively estimated. Further details related to the calculation can be found in section 4.4 of this report.

Leakage assessment: The PD has assessed the leakage on the basis of methodology VM0050: Energy Efficiency and Fuel-Switch Measures in Cookstoves, v1.0, In line with section 8.3, based on the association with reduced or avoiding the use of non-renewable biomass, the leakage has been correctly applied as 0.95. There it is acceptable.

K) Methodology deviations

Methodology deviations are described in section 3.1 of the report. There is no methodology deviation applied in the project.

L) Monitoring plan

The assessment team reviewed the monitoring plan described in the Project Design Document and confirms that it clearly identifies all relevant parameters to be monitored as per the applied methodology VM0050: Energy Efficiency and Fuel-Switch Measures in Cookstoves, Version 1.0.
Fixed parameters as per the PD:

S.No	Parameter	Value	Means of verification
1	EFb,i,CO2 CO2 emission factor for fuel used by baseline device type i in the baseline scenario.	112 tCO_2/TJ	Default value from 2019 IPCC Guidelines, Stationary Combustion, Chapter 2, inline with methodology option 3, therefore acceptable.
2	EFb,i,non-CO_2 (CH_4 and N_2O expressed as CO_2e)	9.46 tCO_2e/TJ	Same as above. IPCC values used for the project.
3	NCVb,i / NCVp,j (Net Calorific Value of wood fuel)	0.0156 TJ/tonne	Default from 2019 IPCC Guidelines based on air-dried wood fuel. Applied consistently for both baseline and project fuel use.
4	BCex-ante,b,i	3.64 tonnes/year	Determined through baseline KPT and baseline survey conducted by

	(Baseline fuel use per household)		the project in year 2022 (taking the CF value as 4)
5	$\eta_{old,avg}$ (Efficiency of baseline stoves)	0.165	WBT test results as conducted by the ICEED-owned Clean Cookstoves Development and Testing Laboratory in Ebonyi State, Nigeria same has also been verified form the previous registered documents.
7	fNRB (Fraction of non-renewable biomass)	0.38	Original fNRB calculated as 91%, the value taken is in line with default value from CDM tool 33, V3.0 discounted by 26% in this monitoring period.
8	Household size (Hhi)	4.64 equivalent male adults	Parameter has been determined ex ante via the baseline survey based on the adult equivalent method. During the current verification, It has been rechecked to make sure it is in line with the Clarification 6 provided in the "Correction and Clarifications to VM0050 Energy Efficiency and Fuel Switch Measures in Cookstoves, v1.0
	CF (Wood to Charcoal conversion factor)	4 tonnes of dry wood per tonne of charcoal output	Value of 4 has been applied as per methodology default and inline with CCP labelling requirements.

Key monitored parameters include (more details related the parameter can be found in section 4.3 of the project report):
- Number of stoves distributed and operational
- Thermal efficiency of project devices
- Usage rate of the improved cookstoves
- Baseline and project scenario fuel consumption
-Leakage emissions (via applied adjustment factor)

It has been verified by the assessment team that monitoring procedures outlined in the PD ensure traceability, consistency, and conservativeness based on the onsite visit and the evidence submitted.
Equipment and procedures used:
Survey-based monitoring is employed, with random and representative sampling methods (stratified across regions, stove types, and user demographics).
Enumerators are trained, and data collection tools include both paper-based and electronic forms.- training and awareness records along with Do's and Don't flyers have been verified.
Surveys capture quantitative and qualitative data (e.g., stove usage frequency, maintenance needs) – results and original forms have been verified.
A dedicated grievance and repair system (including a toll-free hotline) ensures ongoing user feedback is integrated into monitoring.
CAR 05 was raised and closed successfully.

Monitoring equipment and methods, including household surveys, field verification, and sampling protocols, are designed in accordance with the methodological guidance. Internal quality assurance protocols and field team training further enhance data credibility.

Based on document review and site audit findings, the assessment team concludes that the monitoring plan has been effectively implemented and is fully in adherence with the requirements of the applied methodology and the referenced tools. No deviations were noted, and the system is capable of ensuring accurate and consistent monitoring throughout the crediting period.

Thus, it has been concluded that the project activity meets all the requirements mentioned in the section 2.3.2 of Procedure to Change Methodology through Project Description Deviation. Therefore, the assessment team concludes that the project activity is eligible to apply the methodology VM0050, V1.0.

3.3 New Project Activity Instances in Grouped Projects

The assessment team reviewed the procedures and evidence submitted to validate the inclusion of new project activity instances under the grouped project activity, During, this monitoring period, PP has added 27,966 under the group project activity. Table below mentions the assessment criteria for each of the conditions specified:

Criteria	PP's Explanation	Assessment opinion
Methodology Meets the applicability conditions set out in	The project activity instances (ICS) added to this grouped project will	All the new ICS distributed are within the boundary of Nigeria are verified from distribution

the methodology applied to the project	meet the applicability conditions set out in Section 3.2 of this document, where the target end-users are households, and the thermal efficiency of the stoves deployed is at least 25%.	database and KML files and meet the efficiency criteria of above 25% efficiency, based on the stove model distributed. The detail assessment of methodology applicability criteria can be found in section 3.1 of the report[/4/]. Evidence: Distribution database, monitoring survey and sample basis on-site visit
Technology Use the technologies or measures specified in the project description.	The project activity instances added to this grouped project are efficient improved cookstoves (ICS) being distributed within the project's pre-defined geographical boundary.	The assessment team reviewed the stove models distributed under the grouped project from the distribution database and also sample households were visited during onsite visit[/12/]. Smart home pro with efficiencies above 37%. ICS units, which are explicitly listed and approved in the project description, were distributed to households. The ICS replace traditional charcoal stoves prevalent in Nigeria households, which represent the baseline scenario. Stove replacement activities are supported by distribution records, photographic evidence, and serial tracking to ensure traceability and avoid double counting. The thermal efficiency improvement from baseline to project stove is clearly demonstrated and backed by manufacturer data and field performance testing. Therefore, the criteria are found to be met.

Technology Applies the technologies or measures in the same manner as specified in the project description.	The project activity instances added to this grouped project are Improved Cookstove being distributed in the project scenario to replace traditional cookstoves in households. All the project technologies distributed under the project will have a unique identification serial number in order to curb double counting of the stoves under the project.	The assessment team has verified the distribution database/16/, and also during onsite visit it has been confirmed that project has been distributed as per the description in the PD and the same model has been distributed throughout having traditional cookstove in the household. All cookstove have an unique serial IDs/16/. Therefore, the condition is found to be met. Evidence: Distribution database and end user interview on sample basis
Baseline Scenario Are subjected to the baseline scenario determined in the project description for the specified project activity and geographic area.	This project activity instances added to this grouped project will be distributed at subsidized value and more details on additionality and NPV have been added in the section 3.5 below.	The assessment team has gone through the monitoring survey report/16/ and conducted onsite visit to verify the baseline. Additionally, as during this verification Project is applying the procedure to change the project methodology, interview with the stakeholders, implementation partner and end users were conducted (detail of which can be found in section 2.3 of the report) to verify the baseline, and it was concluded that baseline is correctly defined. Therefore, the criteria are found to be met.
Additionality Have characteristics with respect to additionality that are consistent with the	This project activity instances added to this grouped project will be distributed at subsidized value and more details on	The assessment team has verified the project detail for additionality in line with the criteria mentioned/26/. It has been confirmed that here

initial instances for the specified project activity and geographic area.	additionality and NPV have been added in the section 3.5 below.	is no government-mandated policy or regulation in Nigeria requiring the distribution or adoption of improved cookstoves such as those implemented under the project. PP has incorporated an entity in project boundary[/22/]. The assessment team has reviewed the eligibility of new project instances, It was confirmed that the new ICS units conform to the conditions outlined in the methodology and share the same characteristics such as scale, technology, and financial/investment barriers as the initial instances. Therefore, the criteria are found to be met. Evidence: distribution database, additionality assessment sheet, already validated data
Project Boundary Occur within one of the designated geographic areas specified in the project description.	The new project instances to be added to this grouped project will be only within Nigeria	The assessment team has verified that distribution database and also conducted onsite visit (more detail in section 2.3 of the report) it has been verified that the project is implemented within the project boundary, therefore the criteria is found to be met.
Be included in the monitoring report with sufficient technical, financial, geographic, and other relevant information to demonstrate conformance with the	The monitoring report for this grouped project activity includes details of the new project activity instances added i.e., new ICS added to this grouped project. This includes Name of ICS user, Address/Village/	The assessment team has verified the details in the monitoring data and distribution data, it has been verified that the data complies with the relevant requirement eligibility criteria for the project. All the information related to the ICS user,

applicable set of eligibility criteria and enable evidence gathering by the validation/verification body.	Geographical coordinates of ICS household, Contact Details, Stove model Distributed, Date of distribution/installation, Unique ICS serial, technical specification etc. Further the monitoring report demonstrates conformance of the new project instances to the applicable set eligibility criteria such as applied technology, ICS minimum efficiency level, geography of implementation, baseline scenario and additionality criteria, thus providing requisite evidence to VVB	Address/Village/ Geographical coordinates of ICS household, Contact Details, Stove model Distributed, Date of distribution/installation, Unique ICS serial, technical specification have been mentioned has been cross checked doing onsite visit and relevant evidence. Therefore, the criteria is found to be met.
Be included in an updated project description, with updated project location information (as set out in Section 3.11), which shall be validated at the time of verification against the applicable set of eligibility criteria.	The new project instances to be added to this grouped project will be only within Nigeria as highlighted in section 1.12. Further the geographical coordinates of new project instances will be furnished in the project distribution database.	PP has provided the geo coordinates of the project instances included in the project, it has been found to be inline with the project boundary and location. Therefore, the criteria is found to be met.
Ownership Have evidence of project ownership, in respect of each project activity instance, held by the project proponent from the respective start date of each project activity	The distribution receipts for the new project activity instances will be made available for verification wherein the project ownership (carbon waiver) and start date of crediting period (ICS distribution / installation date) are recorded	The assessment team has verified the end user agreements on the sampled basis. Carbon wavier forms have also been verified[/21/], therefore, it has been confirmed that PP has the ownership of the GHG emission reductions.

instance (i.e., the date upon which the project activity instance began reducing or removing GHG emissions).		
Start date Have a start date that is the same as or later than the grouped project start date.	The new project activity instances has been started on the start date of this grouped project i.e., 07-05-2022 or later.	The assessment team has verified the start date if the project activity as 07-May-2022 by the end user agreement/21/ also confirmed during the PP interview therefore, the criteria is met.
Crediting period Only be eligible for crediting from the later of start date of the project activity or the start of the verification period in which they were added to the grouped project, through to the end of the project crediting period.	The crediting period for the new project activity instances will only be eligible to start on 07-05-2022 and end till 06-05-2029 in the first crediting cycle. (Crediting period will be renewed maximum for 2 times) – Please refer section 1.9 for further details	With respect to crediting eligibility, the assessment team confirms that the new ICS units are eligible to generate emission reductions only from the start date of their inclusion and through to the end of the project crediting period. No emission reductions have been claimed for any period prior to their inclusion.
Double Counting Not be or have been enrolled in another VCS project.	The new project instances added to this grouped project will have unique identification serial number and shall not be enrolled in any VCS or other Carbon Standards, thus avoiding double counting of credits generated. No double counting declaration has been duly provided by the project proponent.	The assessment team confirms that all newly included project instances have not been part of any other project, all project currently in Nigeria have been checked/24/ (A FAR has also been raised for the double counting during next verification), PP has submitted a formal declaration stating that they have not been previously enrolled in any other VCS project activity. This declaration along with the assessment conducted by the assessment ensures

		compliance with Verra's requirements to prevent double counting or double issuance of emission reductions.
Capacity Limits Adhere to the clustering and capacity limit requirements for multiple project activity instances set out in 3.6.8 - 3.6.9 of the VCS Standard.	Not applicable, since it is a large-scale project.	PP has provided the GPS coordinate and KML files, The assessment team has assessed details, it has been confirmed the details are appropriate and No project activity instance shall exceed the applicable limit also, the project is large scale project activity/19/.

Based on the above assessment, it has been verified that all the new ICSs added in the project meets the eligibility criteria of inclusion of the new PAI in line with VCS standard requirement/1/, Therefore, a reasonable level of assurance is achieved.

3.4 Baseline Reassessment

Did the project undergo baseline reassessment during the monitoring period?

☐ Yes ☒ No

The project is undergoing methodology change from VMR0006 V1.1 to VM0050 V1.0 as well during this verification, the baseline was assessed against the new methodology, and it has been verified that the original baseline remains valid. Details of the verification of baseline scenario and household control have been added in section 3.2 of the report.

4 VERIFICATION FINDINGS

4.1 Project Details

The project “UpEnergy - Social and Climate Impact Programme- Nigeria-1” (VCS ID 2673) falls under sectoral scope 03 – Energy Demand, as appropriately identified in the registered and new VCS Project Description and Monitoring Report. The project activity is implemented within the national boundary of Nigeria during the monitoring period as verified through the project database and also onsite visit (more detail in section 2.3 and 2.4 of the report) was conducted, sample households were visited to confirm the Implementation. The project proponent is UpEnergy group, which is correctly listed in the VCS PD. Climate Catalyst Limited, Nigeria is the other entities involved in the project implementation, Inclusion letter has been verified. This was verified against the information published on the Verra Registry.

The start date for the grouped project is 07-May-2022 which is the date of installation of first stove in the grouped project[21/]. Assessment team would like to mention here that the project proponent has considered each ICS distributed as a project activity instance. The selected crediting period for the grouped project activity is a seven year, twice renewable period, commencing on 07-May-2022 to 06-May-2029, which is consistent with the project start date and conforms with the provisions of the VCS Standard (v4.7)/1/. The project is correctly classified as a large project as per revised PD/9/ and VCS Standard[/1/] as the average annual emission reductions are more than 300,000 tCO2e. Project design, including eligibility criteria for grouped projects, are assessed in section 3.4 of the report.

The grouped project activity includes the implementation of improved cookstove models such as the “Smart Home Pro”, which are designed with insulated combustion chambers and demonstrate thermal efficiencies exceeding 25% i.e., 37.9%, as required under VM0050. The technical specifications of these stoves, as well as the performance results from Water Boiling Tests, have been submitted by the project proponent and reviewed. These efficiencies have also been verified and confirmed through manufacturer datasheets and laboratory test reports provided as part of the supporting documentation.

ITEM	Evidence gathering activities, evidence checked, and assessment conclusion:

Audit history	The project activity is undergoing 2nd Verification during its seven year, twice renewable crediting period. The assessment team has verified that audit history using the Project webpage/4/, the project has been registered under VERRA. First verification –VCS – 07-May-2022 to 31-October -2022 Second verification – VCS – 01-November-2022 to 31-October-2024 (current) It has been concluded that the information presented in section in 1.2 Audit history section of MR is appropriate. Link to project webpage - *https://registry.verra.org/app/projectDetail/VCS/2673*
Double counting and participation under other GHG programs	The project activity is not registered under any other GHG and non-GHG program or registry. This has been confirmed by assessment team by means of declaration submitted by PP and research on relevant applicable registries and available information in public domain and through declaration from the Project Owner. The assessment team has searched for similar projects having same nature, project technology, location and project proponent as well as legal owner. It was concluded that no such projects having same location and geo-coordinates, technology or project/legal owners are registered in various carbon schemes like CDM, GCC, and Gold Standard. However, It has been observed that there has been a another project by the PP in the same region, A FAR 01 has been raised related to that for the next verification, more details related to which can be found in appendix 1 of the report.
No double claiming with emissions trading programs or binding emission limits	The project activity has been thoroughly searched on the various websites of various emission trading programs and or ETS programs running in various counties, using nature, project technology, location and project proponent as well as legal owner as the search option.

No double claiming with other forms of environmental credit	As mentioned above the, the project has been thoroughly searched in the currently active environment schemes and found that the project is not registered with any other environmental credits. PP has also submitted a declaration stating that the project is not registered with any other registry. Therefore, it can be concluded that the project is not claiming any credits from other programs/schemes.
Supply chain (scope 3) emissions double claiming	The grouped project activity which aims at distribution of ICS to households does not result in any Scope 3 emissions in its supply chain. The stoves are of brand UpEnergy and purchase agreement with Fati Stoves ACTIVE have been cross verified to check the double counting.
Sustainable development contributions	As claimed in section 1.12 of the monitoring report, the project is claiming positive impact for the following: SDG 1 (SDG Target 1.1and 1.4): The distribution of energy efficient stoves helped save $0.21 per day per household during this monitoring period and a total 26,564 operational stoves distributed (based on the usage rate) under the project. SDG 5 (SDG Target 5.1, 5.4 and 5.5): Engagement of women in project implementation, with 36% of the trained workforce being female and 33% of the women are the int managerial position during this monitoring period. Verified using employment records/14/. Approx 0.90 hrs/household/day cooking time has been saved from the project activity/11/. SDG 7 (SDG Target 7.1): Increased access to clean and efficient cooking technology through widespread ICS deployment. Verified using distribution database that 26,564 operational ICS (based on usage rate) have been stoves have been distributed /16/

	SDG 8 (SDG Target 8.b, 8.5): Creation of 111 local jobs, 8 Training have been provided new in the current monitoring period, (with fair compensation and ongoing capacity-building activities. Verified using employment records/14/. Further a total of 8 trainings conducted during the current monitoring period. /11/,/17/ SDG 12 (SDG Target 12.2): Project activity reduced the consumption of non-renewable biomass by 1.99 tonnes of eq. firewood/household/annum in the project area during the monitoring period. /11/ SDG 13 (SDG Target 13.0): Total GHG emissions reductions of 40,188 tCO_2e during the monitoring period, directly attributable to reduced fuelwood usage/11/. SDG 15 (SDG Target 15.1): An estimated 52,729 tonnes of non-renewable biomass saved during the monitoring period, supporting forest conservation efforts. Verified from the survey records and emission reduction calculation sheet/11/. The reported SDG impacts were supported by quantitative data (e.g. fuelwood savings, emission reductions, training numbers), field monitoring results, and documented stakeholder consultations. The assessment team reviewed these claims against the Monitoring Report, sampling records, and supporting documentation, and found the information to be consistent and credible. Based on this review, the assessment team concludes that the reported SDG contributions are valid, appropriately monitored, and substantiated for the current monitoring period. CAR 06 is raised by assessment team in regard to SDG claim for this monitoring period and closed successfully.
Additional information relevant to the project	No commercially sensitive information has been excluded by the PP.

4.2 Safeguards and Stakeholder Engagement

4.2.1 Stakeholder Identification

Stakeholder Identification	Stakeholders were identified through a structured stakeholder mapping process conducted during project design. Evidence reviewed includes registered verification report, grievance report and onsite interview with stakeholders (more details in section 2.3) which lists participants from local households, village leaders, local government, and NGOs. Conclusion: Stakeholder identification was comprehensive and in line with VCS Program requirements
Legal or customary tenure/access rights	The project activity does not involve land use, land access, or biomass harvesting rights. Cookstoves are distributed for voluntary use within individual households. No changes to legal or customary tenure or access rights were observed or reported. The verification team concludes that this requirement is not applicable to this project.
Stakeholder diversity and changes over time	The project targets a diverse range of households, including women and vulnerable groups. Reviewed documents include the UpEnergy Gender Policy and stakeholder feedback forms. No significant change in stakeholder makeup since validation. Conclusion: Stakeholder diversity considerations are adequately addressed
Expected changes in well-being	Evidence from the SDG Impact Monitoring Sheet and end-user interviews show improvements in household air quality, fuel savings, and reduced cooking time. The same was also verified during the onsite interviews conducted by the assessment team. Conclusion: Project is contributing positively to the well-being of stakeholders.
Location of stakeholders	Stakeholders are located in various regions across Nigeria, confirmed via the distribution database and KML file (Nigeria.kml). Conclusion: Locations are accurately mapped and covered by the project's geographic boundary.

Location of resources	The key resources (non-renewable biomass) are sourced within Nigeria. ICS units are also locally manufactured/distributed. Confirmed through PD section 3.3 and supporting documents (Purchase agreement with Fati stoves). Conclusion: Resource locations align with project boundary and are well documented.

4.2.2 Stakeholder Consultation and Ongoing Communication

Ongoing consultation	The project proponent has established ongoing engagement channels, including a toll-free hotline, community visits by field officers, and awareness campaigns. Flyers and posters in local languages have been distributed. Conclusion: Continuous communication and consultation mechanisms are active and inclusive.
Date(s) of stakeholder consultation	Stakeholder consultation events were conducted prior to project start and during implementation. Dates verified from the previous verification report and also the supporting material submitted by the PP/20/. Conclusion: Consultations were conducted in line with VCS requirements.
Communication of monitored results	End-users are informed about stove performance, maintenance, and carbon benefits via flyers and verbal updates. Verified through grievance logs, training reports, and flyers. The grievance record/13/ has also been shared by the PP to the verification team. Conclusion: Communication of monitoring outcomes is active and appropriate.
Consultation records	PP has shared the grievance records for year 2022- 2024 and 2025. The record has been verified for all the grievances received; it has been observed that there has been no negative opinion regarding the project form the evidences submitted. Conclusion: Records are well maintained and verifiable.

Stakeholder input	Stakeholders expressed positive feedback regarding fuel savings, reduced smoke, and improved cooking efficiency. Issues raised (e.g., repair requests) were addressed via the toll-free hotline. Input gathered through direct interviews and feedback logs. Conclusion: Stakeholder input has been effectively incorporated into project planning and support activities.

4.2.3 Free, Prior, and Informed Consent

ITEM	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	Evidence of consent was reviewed through signed carbon waiver forms collected from end users at the time of ICS distribution. These forms explain the project's carbon credit mechanism and confirm that the end users voluntarily transfer rights to the project proponent. Supporting documentation includes sample signed forms, flyers explaining the project benefits, and interview records from field visits. Also, it has been noted that stakeholder makeup has not changed since initial validation. Conclusion: FPIC was obtained in a transparent and voluntary manner.
Outcome of FPIC discussion	End users demonstrated understanding of the project objectives and benefits, including reduced fuel costs and improved air quality. Stakeholders were informed prior to participation and provided consent without coercion. Field interviews and grievance records confirm there was no opposition and that participants understood the implications of participation. Conclusion: The outcome of the FPIC process is positive and fully aligned with VCS requirements.

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 project proponent maintains a grievance log which includes entries of complaints received from users regarding stove repairs, functionality, and other operational concerns. Evidence reviewed includes the Grievance Records.xlsx and supporting screenshots of complaint tracking. Most grievances were resolved within a reasonable timeframe via on-site visits, phone support, or part replacements. Conclusion: The grievance system is active, responsive, and resolution outcomes are properly documented.
Grievance redress procedure	The grievance mechanism includes a toll-free number (+234-09099999227 / 0706879780), widely communicated to end users via flyers and during distribution. Complaints can be submitted via phone or through local field staff. The procedure is explained in local language and includes documentation, tracking, and follow-up protocols. Verified through submitted flyers, training materials, and staff SOPs. Conclusion: The grievance redress procedure is accessible, well-communicated, and conforms to VCS requirements.

4.2.5 Public Comments

Through onsite visit call[/10/,/12/], confirmation is obtained from Project Proponent that no public comment received for this grouped project. Through virtual demonstration, it is confirmed that no email communication is received from Verra in relation to this aspect till date. The same claim is confirmed in section 2.1.5 of the monitoring report[/8/].

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
From the evidence gathered, no public comment has been received	N/A	N/A

4.2.6 Risks to Local Stakeholders and the Environment

4.2.6.1 Management Experience

Evidence gathering activities: Evidence gathering activities included the review of the project proponent's organizational structure, employee list, staff policy documents, and submitted partner credentials. Documents reviewed include:

- Employee List
- UpEnergy Group Staff Handbook V2_2023
- Purchase agreement with Fati stoves
- Code of Ethics and Gender Policy
- Certificate of Incorporation – Climate Catalyst limited

The management and implementation of the project are led by UpEnergy Group in partnership with Climate catalyst all of whom bring extensive experience in managing cookstove distribution and carbon offset projects.
UpEnergy has demonstrated operational capacity through field teams, training programs, technical specialists, and dedicated monitoring staff. Climate catalyst provides in-country coordination, logistics, and stakeholder engagement. The combined experience ensures adequate technical, social, and logistical capacity.
The staff structure includes professionals with backgrounds in carbon project management, monitoring and evaluation, gender-inclusive outreach, and local capacity building. The project also has policies in place to ensure ongoing recruitment and skill development to address any expertise gaps.

Assessment conclusion: The project's management team possesses relevant experience and capacity, and partnerships are well-established to ensure successful project implementation and risk mitigation. This criterion is met in full.

4.2.6.2 Risk Assessment

ITEM	Evidence gathering activities, evidence checked, and assessment conclusion
Natural and human induced risks to stakeholders' wellbeing	No significant natural or human-induced risks have been identified by the project proponent. The project involves the household-level use of improved cookstoves, which reduces fire-related risk and improves indoor air quality. Reviewed documentation: PD section 4.2, WBT Report, and Stakeholder Feedback. Conclusion: No adverse impacts observed; project contributes positively to well-being.
Risks to stakeholder participation	Stakeholder participation risks are minimal. Participation is voluntary, and support (training, repair services) is accessible. Flyers and a toll-free number are provided. Documents checked include training records and grievance logs. Conclusion: Risks are negligible and effectively mitigated.

Working conditions	The project provides fair labor conditions for staff and field agents. The UpEnergy Staff Handbook and Code of Ethics outline worker protections. No child labor or hazardous working conditions were reported. Conclusion: Working conditions are aligned with best practices, therefore, no risk has been identified.
Safety of women and girls	Improved cookstoves reduce exposure to indoor smoke and lower the need for fuel collection, directly benefiting women and girls. Materials are provided in local languages to support safe stove use. Reviewed: Gender Policy, field photos, stakeholder input. Conclusion: The project enhances safety for women and girls.
Safety of minority and marginalized groups, including children	The project proponent has demonstrated inclusive targeting and equitable stove distribution. No discrimination or exclusion of vulnerable groups was reported. Verified through consultation records and grievance system. Conclusion: No risks identified; inclusivity measures are in place.
Pollutants (air, noise, discharges to water, generation and release of hazardous materials and chemical pesticides and fertilizers	The project does not use or release hazardous materials. ICS models improve combustion efficiency, reducing emissions. Evidence includes lab test reports, PD Section 3.4, and WBT data. Conclusion: No pollutants generated; project results in environmental improvement.

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	The project proponent has policies in place prohibiting discrimination based on gender, ethnicity, age, or disability, as outlined in the UpEnergy Code of Ethics and Staff Handbook. Review of staff onboarding materials and consultation with field teams showed no instances of discrimination. Conclusion: No risk identified; policies and practices in place to prevent discrimination.

Sexual harassment	The Staff Handbook includes provisions addressing workplace harassment, including sexual harassment. Field training sessions include a code of conduct, and grievance mechanisms are in place to address violations. Conclusion: Preventative measures are implemented, and no reported cases were found.
Gender equity in labor and work	The project proponent promotes gender inclusion in staffing and implementation. The UpEnergy Gender Policy encourages female recruitment and leadership roles. 37% of the total employees working are females. Field records confirm active participation of women in distribution and training roles. Conclusion: Gender equity is actively promoted; no risk identified.
Forced labor	Staff are employed under voluntary contracts with clearly defined terms and conditions. The Employee List and contracts reviewed show compliance with fair labor practices. Conclusion: No risk of forced labor exists.
Child labor	Project documentation and field verification confirm that all employees are above the legal working age. The project does not employ minors in any capacity. Conclusion: Child labor risk is not present.
Human trafficking	There is no indication or evidence of human trafficking linked to the project. Staff are locally recruited through a transparent and documented process. Conclusion: No risk identified; recruitment procedures are robust and ethical.

4.2.7.2 Human Rights

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion

No risks to human rights were identified during this monitoring period.	The project proponent conducted stakeholder consultations to assess any potential risks to the rights of Indigenous Peoples local communities, or other customary rights holders. The project is implemented in areas where no Indigenous Peoples are present as per self-identification and national classification. The activity does not involve land acquisition or restriction of access to resources. Documentation reviewed includes the Stakeholder Consultation Report, Code of Ethics, and Grievance Procedure, all of which reinforce the protection of human rights. No complaints or concerns were raised during the consultation process or via the grievance channel. Conclusion: No human rights risks have been identified during the monitoring period; project activities are fully aligned with international human rights principles and VCS Program safeguards. Therefore, no risk has been identified Indigenous people or local community.

4.2.7.3 Indigenous Peoples and Cultural Heritage

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risks related to Indigenous Peoples or cultural heritage were identified.	The verification team reviewed Section 2.3.3 of the Monitoring Report, which confirms that the project is implemented in areas predominantly inhabited by Indigenous Peoples, and that no displacement, land-use change, or interference with cultural practices has occurred. Stakeholder consultations were carried out in local languages with support from community leaders, and the project activities, distribution and use of ICS units, do not impact sacred sites, traditional land, or cultural heritage. The project was welcomed by local communities and aligns with customary norms. The verification team confirms that no adverse impacts on Indigenous rights or cultural heritage were identified and that the project complies with the VCS safeguard requirements for Indigenous Peoples and cultural heritage.

4.2.7.4 Property Rights

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion

No risks related to property rights were identified.	The verification team reviewed Section 2.3.4 of the Monitoring Report/10/ and verified that the project does not involve land acquisition, land use changes, or the use of shared community resources. The distribution and use of improved cookstoves take place entirely within individual households and do not involve collective or customary land or territorial access. There is no restriction on resource access, and ICS distribution was conducted on a voluntary basis. During field visits, no disputes or grievances related to property rights were raised. The verification team concludes that the project does not pose any risk to legal or customary property rights and complies with VCS safeguard requirements.

4.2.7.5 Benefit Sharing

ITEM	Evidence gathering activities, evidence checked, and assessment conclusion
Summary of the benefit sharing plan	This section is not applicable as per MR and assessment conducted by the team as the project activity focus on distribution of improved cookstoves. All the end users have signed a agreement to transfer the carbon rights to PP.
Benefit sharing during the monitoring period	During the current monitoring period, the project implemented the plan by distributing ICS to households across Nigeria , offering training and repair support via a toll-free hotline, and conducting outreach through local partners. Evidence reviewed includes distribution logs, grievance records, training photos, and community feedback. Local employment opportunities were created through field teams and stove logistics. Stakeholders reported reduced fuel costs and time savings, as confirmed through feedback forms and follow-up interviews. Conclusion: The benefit sharing plan outcomes align with project objectives and were positively received by stakeholders.

4.2.8 Ecosystem Health

ITEM	Evidence gathering activities, evidence checked, and assessment conclusion

Impacts on biodiversity and ecosystems	The verification team assessed Section 2.4 of the MR. The ICS technology reduces the use of non renewable biomass, leading to reduced pressure on local forests. As the project does not involve land-use change, infrastructure development, or introduction of invasive species, no adverse impacts on biodiversity and ecosystems were identified.
Soil degradation and soil erosion	The ICS technology is deployed at household level without disturbing soil or vegetation. No construction or large-scale ground disturbance was observed. Thus, the project has no negative impact on soil degradation or erosion.
Water consumption and stress	The ICSs do not consume or discharge water as part of their operation. There is no infrastructure in place requiring water usage. Therefore, no additional water consumption or stress was observed during the monitoring period

4.2.8.1 Rare, Threatened, and Endangered species

ITEM	Evidence gathering activities, evidence checked, and assessment conclusion
Species or habitat	N/A. The nature of the project implementation is through the dissemination of improved cookstove to replace the traditional baseline stove which does not present risk for local species or habitat
Areas needed for habitat connectivity	NA

4.2.8.2 Introduction of Species

Species introduced	Evidence gathering activities, evidence checked, and assessment conclusion
NA	

Existing invasive species	lence gathering activities, evidence checked, and assessment conclusion
NA	

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Invasive species	**Evidence gathering activities, evidence checked, and assessment conclusion**
NA	

4.2.8.3 Ecosystem conversion

ITEM	Evidence gathering activities and evidence checked
Ecosystem conversion	N/A. The nature of the project implementation is through the dissemination of improved cookstove to replace the traditional baseline stove which does not present as risk to local ecosystem.

4.3 Accuracy of Reduction and Removal Calculations

The monitoring has been carried out in accordance with the provision of monitoring plan; the assessment team reviewed if:

- The monitoring of reductions in GHG emissions resulting from the VCS project activity is verified against the monitoring plan contained in the registered and revised VCS-PD/5//9/ and the applied methodology/8/.
- All parameters stated in the monitoring plan, the applied methodologies and relevant standards and requirements have been sufficiently monitored and updated.
- The responsibilities and authorities for monitoring and reporting were in accordance with the responsibilities and authorities stated in the monitoring plan.

The monitoring system and all applied procedures are in compliance with the monitoring plan contained in the revised VCS-PD/8/ and the applied methodology VM0050 V1.0/8/, based on the information included in the final monitoring report, there are several procedures for data collecting depending on the methodology applicable for each step of the project.

PP Sampling procedure: The verification team assessed the sampling plan and implementation as carried out by the project proponent during the current monitoring period. The sampling was conducted in accordance with the CDM Sampling Standard and guidelines and the requirements of methodology VM0050 v1.0.

The Sampling Frame:
The project sampling frame is based on a population of 29,614 distributed Improved Cookstoves (ICS). The frame is stratified by:

Stove vintage (2022, 2023, 2024)

Stove model (SmartHome Pro)

This stratification ensures adequate representation of ICS variability across geography, model types, and distribution cohorts, supporting a homogeneous sampling unit. Therefore, it is concluded that sampling frame is logically constructed and methodological appropriate.

Sampling methodology:
The sampling method used for the monitored parameters (usage rate and fuel consumption) is Simple Random Sampling, applied across each defined stratum. The project uses:

Unique ID allocation for each ICS

Random number generation for household selection

Visual inspection, photo documentation, and end-user interviews during fieldwork

This method ensures non-biased, repeatable, and statistically representative selection.

Sample size:
The project calculated minimum sample sizes based on a 95% confidence level and 10% relative precision, using a standard equation suitable for proportion estimates. The sample sizes for the current monitoring period are as follows:
Total number of households : 29,614
Sample size for the current monitoring period:

Usage Rate	KPT
172 (Minimum sample size = 32)	55 (minimum sample size = 7)

It has been noted that relative precision has been met, details related to sampling are met.

It has been verified through records that Enumerators were trained on survey protocols and deployed across all relevant strata.

Data collected included stove presence, usage verification, household responses, and observational photos.

The sampling plan and its execution during the third monitoring period is well within the precision demonstrate strong compliance with VM0050, the CDM Sampling Guidelines, and the VCS Program rules. The sampling approach is statistically robust, stratified to account for stove type and vintage, and implemented with traceable, verifiable methods.

Emission reduction (ER)

The Grouped project activity calculates emission reductions inline with the applied methodology VM0050,v1.0

Baseline emissions are calculated using equation 1:

$BE_y = \sum_{i,j,k} EC_{i,y} \times N_{j,k,y} \times n_{j,k,y} \times (EF_{b,i,CO2} \times f_{NRB,y} + EF_{b,i,nonCO2})$

Where:

$EC_{i,y}$ = Average energy consumption of baseline device type i in year y (TJ) $N_{j,k,y}$ = Number of commissioned project devices of type j from batch k in year y, $n_{j,k,y}$ = Proportion of commissioned project devices of type j from batch k that remain operating in year y (fraction), EF_{b,i,CO_2} = 112 tCO_2/TJ and $EF_{b,i,non\text{-}CO_2}$ = 9.46 tCO_2e/TJ (IPCC 2019), fNRB (fraction of non-renewable biomass) = 0.38, conservatively calculated based on CDM tool 33, Version 3.0. The average household charcoal fuel consumption in the baseline scenario (OFC) was determined through a KPT measurement campaign conducted in year 2022. The energy consumption ECi,y was derived using:

Equation 2:

$EC_{i,y}$ = $BC_{b,i,y} \times NCV_{b,i}$

= 3.64t[9] × 0.0156 TJ/t = 0.0562 TJ/HH/year

Project emissions:

Project emissions reflect the emissions from improved cookstove (ICS) use. These are calculated using:

Equation 7:

$PE_{energy,y} = \sum_j \sum_k BC_{p,j,k,y} \times N_{j,k,y} \times NCV_{p,j} \times n_{j,k,y} \times (EF_{p,j,CO2} \times f_{NRB,y} + EF_{p,j,nonCO2})$

Leakage:

As per VM0050, leakage due to fossil fuel displacement was addressed using a default deduction factor:

ER_y = $(BE_y - PE_y) \times 0.95 - LE_{RB,y}$

i.e., 5% deduction applied.

$LE_{RB,y}$ = 0 for this project activity (Since, this project focusses on distribution of improved cookstoves within the project boundary, which will replace inefficient traditional charcoal stoves in the Nigerian households.

Emission Reductions (ERy)

[9] Based on CCP labelling

Net GHG emission reductions are calculated using:
Equation 11:

$ER_y = (BE_y - PE_y) \times 0.95 - LE_{RB,y}$

Where $LE_{RB,y} = 0$ (no renewable biomass leakage)

Vintage period	Baseline emissions (tCO2e)	Project emissions (tCO2e)	Leakage emissions (tCO2e)	Reduction VCUs (tCO2e)
01-Oct-2022 to 31-Dec-2022	6,532	3,002	-	3,353
01-Jan-2023 to 31-Dec-2023	39,086	17,963	-	20,067
01-Jan-2024 to 31-Oct-2024	32,661	15,010		16,768
Total	78,279	35,976	-	40,188

The data and parameters fixed (the project during this verification is undergoing CCP labelling, so the parameters are applied as per the CCP labelling requirements (more detail assessment can be found in appendix 2 of the report):

S.No	Parameter	Value	Means of verification
1	**$EF_{b,i,CO2}$** CO2 emission factor for fuel used by baseline device type i in the baseline scenario.	112 tCO_2/TJ	Default value from 2019 IPCC Guidelines, Stationary Combustion, Chapter 2, inline with methodology option 3, therefore acceptable.
2	**$EF_{b,i,non\text{-}CO_2}$** (CH_4 and N_2O expressed as CO_2e)	9.46 tCO_2e/TJ	Same as above. IPCC values used for the project.
3	**$NCV_{b,i}$ / $NCV_{p,j}$** (Net Calorific Value of wood fuel)	0.0156 TJ/tonne	Default from 2019 IPCC Guidelines based on air-dried wood fuel. Applied consistently for both baseline and project fuel use.

4	**$BC_{ex\text{-}ante,b,i}$** (Baseline fuel use per household)	3.64 tonnes/year	Determined through baseline KPT and baseline survey conducted by the project in year 2022 (detailed assessment can be found in section 3.4).
5	**$\eta_{old,avg}$** (Efficiency of baseline stoves)	0.165	WBT test results as conducted by ICEED-owned Clean Cookstoves Development and Testing Laboratory in Ebonyi State, Nigeria same has also been verified form the previous registered documents.
7	**fNRB** (Fraction of non-renewable biomass)	0.38	Value 0.38 has been derived from the CDM tool 33, version 3.0
8	**Hhi** (Household size)	4.64 equivalent male adults	Parameter has been determined ex-ante via the baseline survey based on the adult equivalent method. During the current verification, It has been rechecked to make sure it is in line with the Clarification 6 provided in the "Correction and Clarifications to VM0050 Energy Efficiency and Fuel Switch Measures in Cookstoves, v1.0
	CF (Wood to Charcoal conversion factor)	4 tonnes of dry wood per tonne of charcoal output	Tool 33 methodology default value and CCP label requirement

The assessment team confirms that:

- All fixed parameters are derived from credible sources, either default values in the methodology/IPCC guidelines or conservatively calculated based on verifiable national or project-level studies.

- Their use was consistent with the applied methodology and sampling standard (CDM v9.0).
- Where statistical uncertainty existed, conservative bounds were applied to ensure the environmental integrity of the reported emission reductions.

The data and parameters monitored (ex-post):

1. Parameter: Nj,k,y : Number of commissioned project devices of type j from batch k in year y

Means of verification	Measuring /Reading /Recording frequency	The monitoring frequency is Continuous, whenever a new ICS will be distributed.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The frequency applied aligns with the plan stated in the PD and methodology. Value = 29,614
	Monitoring equipment	Not applicable. Value is determined sales database consisting of information related to the address and geo coordinates of the recipients.
	Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	Not applicable – no monitoring equipment involved. Accuracy relies on documentation.
	Calibration frequency /interval:	Not applicable.
	Is the calibration interval in line with the monitoring plan and/or	Not applicable.

	methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	
	Is the calibration of measuring equipment carried out by an accredited person or institution?	Not applicable.
	Is(are) calibration(s) valid for the whole reporting period?	Not applicable.
	How were the values in the monitoring report verified?	Distribution records Cross-checked with the cumulative stove distribution list maintained by the project proponent which include the household details and location and confirmed during field audit for the sample end users.
	If applicable, has the reported data been cross checked with other available data?	Yes. Verified against distribution database, invoice records, and field visit observations.
	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 include maintaining electronic and physical distribution records, verified by the in-country field coordinator and checked by the verification team. Consistent with MR QA/QC description
	In case project participants have Temporarily not monitored the parameter, has either deviation?	No deviation. The parameter was monitored and reported in accordance with the plan.
Findings	No finding was raised.	

Conclusion	The verification team concludes that the parameter $\mathbf{N_{j,k,y}}$ has been correctly monitored and reported. The data source is valid, the reporting frequency aligns with the methodology and PD, and adequate QA/QC measures are in place. The value is accepted for use in emission reduction calculations without any corrective action.

2. Parameter:

nj,k,y - Proportion of commissioned project devices of type j from batch k that are still being used regularly in year y

Means of verification	Measuring /Reading /Recording frequency	Annually, as per Option 2 (surveys) of the monitoring methodology
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes, monitoring frequency is in line with the registered methodology. PP conducted the monitoring survey in 2024. Also verified during VVB onsite visit.
	Monitoring equipment	Not applicable – usage rate determined through household survey (visual inspection + interview)
	Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	Not applicable
	Calibration frequency /interval:	Not applicable

	Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	Not applicable
	Is the calibration of measuring equipment carried out by an accredited person or institution?	Not applicable
	Is(are) calibration(s) valid for the whole reporting period?	Not applicable
	Monitored value	0.897 is the applied value, however as per registered PD the value has been caped to 90% in line with the point 2 of clarification related to methodology, More details related to meeting of criteria 2 mentioned in methodology clarification document can be found in section 3.2 of the report.
	How were the values in the monitoring report verified?	Usage rate was derived through statistically valid household surveys with visual stove inspections. Also, project has met the clarification 2 requirement of all the 3 points, therefore, applying the 90% usage rate. Results were calculated using sample survey data in compliance with 95/10 precision requirements.

	If applicable, has the reported data been cross checked with other available data?	Yes – cross-verified with stove distribution database, stove ID records, and photographic evidence collected during surveys.
	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 include: enumerator training, random sampling with ID-linked stove records, data validation, and review of survey photos. Monitoring spreadsheets and ER calculations are checked for consistency.
	In case project participants have Temporarily not monitored the parameter, has either deviation?	No such deviation occurred – monitoring was completed as scheduled and documented.
Findings	No finding raised.	
Conclusion	The parameter is accurately determined and reported. It is compliant with the methodology's requirements for batch grouping and device commissioning, and no discrepancies or deviations were noted during verification.	

3. Parameter

ηnew,avg,y - Weighted average efficiency of project devices in year y

Means of verification	Measuring /Reading /Recording frequency	Annually.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. Frequency is inline with methodology requirements
	Monitoring equipment	WBT conducted by an independent third-party laboratory using calibrated equipment as per WBT protocol

	Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	Yes – testing procedures and equipment conform with the latest WBT protocol v4.2.3 and CDM sampling guidelines
	Calibration frequency /interval:	Equipment used by the third-party lab is calibrated as per manufacturer or lab-specific internal schedules
	Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	
	Is the calibration of measuring equipment carried out by an accredited person or institution?	Not applicable
	Is(are) calibration(s) valid for the whole reporting period?	Not applicable

	How were the values in the monitoring report verified?	Efficiency data was derived from WBTs conducted on a random sample of stoves (n=35.90%), in accordance with the CDM sampling standard. Data was reported in a third-party lab report and reviewed against methodology and protocol requirements
	If applicable, has the reported data been cross checked with other available data?	Yes – cross-referenced with stove model specifications and prior monitoring period results to confirm consistency.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes – the efficiency values were checked, validated, and directly used in the ER spreadsheet. QA/QC includes spot checking of calculations, sampling method, and lab reports.
	In case project participants have Temporarily not monitored the parameter, has either deviation?	No deviation.
Findings	No finding raised.	
Conclusion	The verification team confirms that the parameter $n_{j,k,y}$ was appropriately monitored, sampled, and conservatively applied. The value used in emission reduction calculations is justified and compliant with VCS standard.	

4. Parameter:

BCp,j,k,y : Average quantity of fuel used by project device type j from batch k during year y

Means of verification	Measuring /Reading /Recording frequency	Biennial or annual (as per Option 1 – Kitchen Performance Test (KPT))

	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The frequency is compliant with VM0050.
	Monitoring equipment	Moisture meter and weighing scale. KPT have been conducted in 2025
	Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	Not applicable – no specialized monitoring equipment specified; measurements are done using calibrated kitchen/digital weighing scales in field surveys
	Calibration frequency /interval:	Not specified, but weighing instruments used during KPTs are assumed to follow standard practice (initial and periodic checks by field teams)
	Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	Yes – as per field protocol adopted under the KPT and CDM sampling guidance
	Is the calibration of measuring equipment carried out by an accredited person or institution?	Calibration in line with ECOLAB

	Is(are) calibration(s) valid for the whole reporting period?	Yes – based on KPT protocol compliance and quality control of test implementation
	How were the values in the monitoring report verified?	KPTs were conducted on 3 consecutive normal days, under standard cooking conditions for selected households. Fuel usage was weighed and recorded. The average result was scaled using household size data to arrive at the reported value of 1.655 tonnes/year.
	If applicable, has the reported data been cross checked with other available data?	Yes – compared with past monitoring periods and manufacturer fuel use benchmarks to ensure consistency
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes. Data entry and reporting follow the QA/QC plan outlined in the MR.
	In case project participants have Temporarily not monitored the parameter, has either deviation?	No deviation. The parameter was monitored before the start of crediting and is valid for up to five years, as per the methodology.
Findings	No finding raised.	
Conclusion	The parameter BCp,j,k,y was appropriately derived, verified using supporting data, and applied conservatively in accordance with methodology VM0050 and CDM Sampling Standard v9.0. The verification team accepts the use of 1.655 as valid and robust.	

Full assessment of value and data used in ER calculation is verified as detailed above. Clarifications and inconsistencies raised, as CLs and CARs have been resolved as provided in each specific parameter.

The assessment team has thoroughly verified the calculation done for the quantification of the emissions reduction for the project activity, under this monitoring period from 01-November-2022 to 31-October-2024.

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

4.4 Quality of Evidence to Determine Reductions and Removals

The verification team has assessed the evidence sources, data quality, and procedural controls used in calculating emission reductions during the monitoring period 01-November-2022 to 31-October-2024. The following aspects were examined in line with the guidance:
1. Reliability of Evidence

The evidence submitted comprises survey data, field monitoring reports, third-party laboratory test results, and documented procedures, all of which are traceable to original sources. Specifically:

Usage rate data was obtained through statistically valid household surveys supported by photographs and stove condition records.

Fuel consumption was assessed through Kitchen Performance Tests conducted under controlled and standardized field conditions in February 2025.

Stove efficiency was measured by an independent third-party laboratory using Water Boiling Tests with documented calibration and protocol adherence.

These data sources are internally consistent, verifiable, and supported by clear documentation trails.
The reliability and credibility of the evidence are deemed high, with both internal and third-party documented sources used for emissions determination.

2. Information Flow from Data Generation to Monitoring Report:
The project has demonstrated a robust system for data generation, aggregation, and transfer. The process includes:

Use of unique stove IDs and GPS-linked records to track distributions and survey samples.

Consolidation of survey and test data in structured databases and spreadsheets (e.g., “Sample Size Cal and Results” and “Monitoring Results” tabs).

Review and validation of field entries by the project proponent prior to emission reduction calculation.

Quality control steps include enumerator training, random spot checks, and data consistency checks between input sheets and ER calculation spreadsheets.
The data flow process is transparent, systematic, and minimizes error risk in data transposition.
The assessment team has verified that stove breakdown days were appropriately identified and conservatively accounted for the emission reduction calculations. The VVB reviewed the grievance register maintained by the PP/13/, which records stove breakdown incidents and associated non-operational days, and cross-checked this information against the ER Calculation Sheet. The review confirmed that stove breakdown days are captured in the "NG Database" tab and deducted through the deployment-adjusted stove quantities used in the calculation of the Year Equivalent Fraction, thereby ensuring a conservative estimation of emission reductions.
The evidence used to determine the emission reductions is sufficient in quantity, appropriate in quality, and verifiably reliable. It is based on a combination of field-collected survey data, third-party lab results, and methodologically compliant procedures, all of which were properly managed and transferred into the monitoring report/10/ with traceability and integrity.
CAR 4 and CAR 5 was raised and closed successfully.
The verification team concludes that the quality and sufficiency of the evidence for determining reductions and removals are appropriate and acceptable under the VCS program. Thus a reasonable level of assurance is achieved.

4.5 Non-Permanence Risk Analysis

VCS standard/1/ section 2.4, non-permanence risk analysis is applicable for Agriculture, Forestry, and Other Land Use (AFOLU) and Geologic Carbon Storage (GCS) projects. Therefore, this section is not applicable for the project activity.

5 VERIFICATION OPINION

5.1 Verification Summary

The project activity VCS – 2673, "UpEnergy - Social and Climate Impact Programme-Nigeria-1" has undergone 2nd Verification with monitoring period from 01-November-2022 to 31-October-2024 (including both days). PP is responsible for the collection, analysis, aggregation, preparation (conversion factors, assumptions, methodology, calculations) and presentation of activities and related GHG data in its public disclosures (including but not limited to monitoring report, emission reduction calculation sheet, submitted documents/ emails/ communications). Our responsibility for performing this work is to the management of PP and in accordance with terms of reference agreed with the PP in the master service agreement. The verification engagement assumes that the GHG data provided to us is complete, sufficient, true and free from material misstatements. SustainCERT disclaims any liability or co-responsibility for any decision a person or an entity would make based on this verification statement towards the issuance and utilization of VCUs hereby verified and certified. The verification was carried out during May 2025 – October 2025 by a team of qualified GHG auditors.

SustainCERT applies its own quality management system and compliance policies for quality control, in accordance with ISO/IEC 17029:2019 – Conformity Assessment Requirements for Validation and Verification bodies providing environmental information (ISO 14065:2020) and greenhouse gas audit (ISO 14064-3:2019) and certifications, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal & regulatory requirements.

We have complied with the VCS standard/1/ and other requirements mentioned, during the verification engagement and maintained independence. SustainCERT was not involved in the preparation of any statements or reports or data except for this Verification Statement and Report. SustainCERT maintains complete impartiality toward stakeholders interviewed during the verification process. SustainCERT did not provide any services to PP Group and its subsidiaries in the scope of verification that could compromise the independence or impartiality of our work.

5.2 Verification Conclusion

The Verification of the project titled VCS – 2673, "UpEnergy - Social and Climate Impact Programme- Nigeria-1", have been undertaken by SustainCERT, as requested by project proponent UpEnergy for the monitoring period 01-November-2022 to 31-October-2024 (including both the days) as reported in monitoring report[/8/]. The project activity is implemented in accordance with the registered monitored plan in PD[/5/] and the emission reduction from the project activity from the project activity. During the current verification the project is undergoing methodology change and applying for CCP labelling.

SustainCERT confirms that level of assurance for this verification is reasonable, with respect to material errors, omissions and misrepresentations.

In our opinion, the GHG emissions reductions reported for the project activity for the period 01-November-2022 to 31-October-2024 are fairly stated in the project monitoring report[/8/]. The GHG emission reductions were calculated correctly based on the approved baseline and monitoring methodology VM0050 Energy Efficiency and Fuel-Switch Measures in Cookstoves, V1.0 and the monitoring plan contained in the PD[/5/].

Verification period: 01-November-2022 to 31-October-2024

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

Vintage period	Baseline emissions (tCO_2e)	Project emissions (tCO_2e)	Leakage emissions (tCO_2e)	Reduction VCUs (tCO_2e)	Removal VCUs (tCO_2e)	Total VCUs (tCO_2e)
01-November-2022 to 31-December-2022	6,532	3,002	-	3,353	-	3,353
01-January-2023 to 31-December - 2023	39,086	17,963	-	20,067	-	20,067

01-January-2024 to 31-October-2024	32,661	15,010	-	16,768	-	16,768
Total	78,279	35,976	-	40,188	-	40,188

5.3 Ex-ante vs Ex-post ERR Comparaison

Vintage period	Ex-ante estimated reductions/ removals	Achieved reductions/ removals	Percent difference	Explanation for the difference
01-November-2022 to 31-December-2022	5,700	3,353	-41.2%	
01-January-2023 to 31-December - 2023	225,724	20,067	-91.1%	In accordance with the records, It has been observed that the total distribution till now has been only 5% of the envisaged distribution that was supposed to happened till end of MP2. Therefore, the emission reductions achieved are
01-January-2024 to 31-October-2024	435,275	16,768	-96.1%	
Total	666,699	40,188	-94.0%	

				lower than estimated.

APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

Use the table below to describe the commercially sensitive information included in the monitoring report to be excluded in the public version.

Section	*Information*	*Justification*	*Assessment method and conclusion*
	N/A		

APPENDIX 2: CCP ELIGIBILITY VERIIFCATION REPORT CHECKLIST

CCP eligibility criteria and summary	Relevant section of the methodology	Project document and section where the requirement is addressed	Evidence-gathering activities, evidence checked, and assessment conclusion
For the determination of f_{NRB}, the source of data must either be: a) the default f_{NRB} value from the latest version of CDM Tool 33 for emission reductions achieved on or before 31st December 2025 or b) the most recent national default value(s) published by UNFCCC based on the MoFuSS model.	Table for parameter "f_{NRB}" in section 9.2 of VM0050 methodology	Section 4.1 of the Monitoring Report Table for parameter fNRB (Data and Parameters Available at Validation)	Evidence Gathering: CDM Tool 33, Version 3 Evidence Checked: Verified use of the latest version (v3) of CDM Tool 33 for fNRB Assessment Conclusion: The applied value of 0.38 for Nigeria aligns with CDM Tool 33, v3 and has been correctly used.
The baseline fuel consumption must be determined by either of the following two methods with cross-checks on fuel savings:	Section 8.1.1 and table for parameter $BC_{ex-ante,b,i}$ in Section 9.1 of VM0050 methodology	Section 4.1 of the Monitoring Report Table for parameter $BC_{ex-ante,b,i}$ (Data and Parameters Available at Validation)	Evidence Gathering: Baseline KPT survey sheet Evidence Checked: KPT conducted in accordance with official KPT guidelines Literature review: https://jwbm.com.my/archi

CCP eligibility criteria and summary	Relevant section of the methodology	Project document and section where the requirement is addressed	Evidence-gathering activities, evidence checked, and assessment conclusion
a) Kitchen Performance Test (KPT) or b) The default values of 0.5 (for air-dried fuelwood) and 0.13 (for charcoal) tonnes/capita/year or equivalent			ves/1jwbm2021/1jwbm2021-22-26.pdf Assessment Conclusion: Fuel consumption value of 3.64[10] tonnes/year/household has been correctly applied
The baseline specific energy consumption must be determined using a Controlled Cooking Test with cross-checks on fuel savings	Section 8.1.1.1 and table for parameters "$SC_{b,i}$, $SC_{p,j}$" in Section 9.1 of VM0050 methodology	Parmeter is not applicable for the project	
For charcoal projects, either one of the following two methods must be used for calculation of baseline or project emissions (as applicable): a) direct charcoal emission factor (which	Table for parameters "$EF_{b,i,CO2}$, $EF_{p,j,CO2}$" and "CF" in Section 9.1 of VM0050 methodology	Section 4.1 of the Monitoring Report Table for parameter CF (Data and Parameters Available at Validation)	Evidence Gathering: CDM Tool 33, Version 3 Evidence Checked: Verified use of the latest version (v3) of CDM Tool 33 for CF Assessment Conclusion: The applied value of 4 aligns with CDM Tool 33,

[10] Value is based on KPT, using CF value as 4

CCP eligibility criteria and summary	Relevant section of the methodology	Project document and section where the requirement is addressed	Evidence-gathering activities, evidence checked, and assessment conclusion
may include production emissions) or b) a wood to charcoal conversion factor of 4:1 must be used			v3 and has been correctly used.

APPENDIX 3: PROJECT FINDINGS

Rule	Assessment Question	Findings/Comments FAR -1 (from previous verification)	Developer Response
Procedure to Change Methodology through a Project Description Deviation	FAR from previous verification	The ICS distributed revenue demonstration in the IRR sheet considers the sale price as 6000 Naira per unit however the PP declares that the prices will be reduced further. Since only 1,648 stoves were distributed during the current joint validation & verification the sale price of 6000 Naira was confirmed by the VVB, and further subsidy provided by the PP could not be confirmed by the VVB. The verifying VVB shall confirm the sale price of ICS included under the Grouped project activity for monitored samples and for a few instances of non-monitored samples. PP shall provide the sales price of the ICS distributed monitored and few of non-monitored samples.	The PP would like to clarify that earlier the stoves were sold at USD 12.6 per unit, which was equivalent to 6000 Naira during MP1, whereas under the current circumstances the stoves are being sold at around USD 3.9 (as per the conversion rates 3.9 USD is equivalent to 6000 Naira) per unit. This clearly demonstrates that the PP has not increased the cost of ICS despite the increase in manufacturing and maintenance costs, thus fully in line with the project's commitment to provide stoves at a subsidized price in subsequent monitoring periods. To substantiate this, the PP has attached the relevant sales receipts reflecting the current sale price. In addition, it has been demonstrated in the additionality tool shared that ICS distribution revenue at full scale (95% of the volume) will remain at 6000 Naira, thereby confirming the project's consistency with its stated pricing approach. This has also been explicitly mentioned in the additionality tool. The PP will share the additionality tool along with this response as evidence to further substantiate the justification.

Rule	Assessment Question	Findings/Comments FAR -1 (from previous verification)	Developer Response
			Further, this approach is in line with the PDMR, which states: “Project ICS are planned to be distributed at a subsidized price up to USD 5 to promote clean cooking technology at Nigerian households; the initial pilot distribution (about 5% of the projected ICS volume) has been planned to be distributed at USD 12.6” (Section 3.5).
	Round-2	PP has provided the explanation, since the initial few stoves were distributed at the price of USD 12.5 and the current is distributed at USD 3.9, which is equivalent to 6000 Nigeria Nira(which is the current price), it is been demonstrate that project stoves are provided at the subsidised price to the end users. Additionally, the sales receipts have been verified to check the information provided. Therefore, the FAR is closed. #closed.	

Rule	Assessment Question	Findings/Comments #CAR1	Developer Response
Procedure to Change	Check if revised version of the project description prepared using the most recent effective version of the VCS Project Description Template.	PD Section 1.8: 1. No double counting declaration by the cookstove manufacturer shall be submitted. PD section 1.13:	1. PD has shared the carbon waiver agreement duly signed by the ICS manufacturers for VVB’s reference along with the response. 2. PP would like to clarify that the entity name "Climate Catalyst Nigeria Ltd" stated in the Joint PD&MR document was a typographic error. This has now been corrected to "Climate Catalyst

Rule	Assessment Question	Findings/Comments #CAR1	Developer Response
Methodology through a Project Description Deviation		2) PP shall submit the name change of Climate Catalyst Nigeria Ltd to Climate Catalyst Limited. PD section 1.18: 3) As per PD filling template guide, section 1.18 description has no more than 500 words.	Limited" in the revised PD & MR. The "Certificate of Incorporation" document has also been attached herewith as evidence of VVB's reference. 3. PP would like to clarify that the VCS Project Description Template is guideline document, which is not a mandatory requirement to be adhered. It is also to be noted that the content of section 1.18 is originally sourced from the registered PD & MR. Hence PD would like to retain the original content and for sake of a better clarity and transparency.
	Round-2	1. Agreement between PP and ICS manufacture related to carbon rights is provided. The information found to be justified and acceptable. **Finding Closed.** 2. The information found to be inline with the incorporation certificate, therefore the changes are accepted. **Finding Closed.** 3. As the information mentioned is found to be inline with the registered and approved PD. Therefore finding stands closed. **Finding Closed**	

Rule	Assessment Question	Findings/Comments #CL 1	Developer Response
VM0050	Check for projects employing surveys, the usage rate is	PD Section 2.1.2 Stakeholder Consultation and Ongoing Communication	1) PD would like to clarify that the contact numbers (+2347041007012 & +2347011111384) provided in the revised PD are the toll-free numbers, and this has now been explicitly stated in section

Rule	Assessment Question	Findings/Comments #CL 1	Developer Response
ver.1.0	capped at 90% if all of the customer support actions are undertaken across the entire target population as per VM0050.	1) As per VM0050 and related clarification/correction for projects with usage rate capped at 90% shall have all of the following customer support actions are undertaken across the entire target population incl. provision toll-free communications channel through which the target population can contact the project proponent to access support. However, this information is not reflected in this section. Clarify.	2.1.2 of the updated PD to ensure clarity and compliance with the requirements under VM0050 and the related clarification/correction.
	Round-2	1. As per the clarification 2, there are other 2 requirements as well which shall be met: 1. Selection of technologies and fuels that fully meet the cooking needs of the target population, demonstrated by citing robust research or conducting an investigation of cooking practices and attitudes 2. Implementation of support activities to assist the target population in effectively operating and maintaining their cookstoves, how to troubleshoot common operational issues, and how to make minor repairs (including obtaining necessary replacement parts). All such communications and materials must be provided in local language(s) commonly used in the project area. Toll-free number as only support action doesn't fully comply the requirements.	PP would like to clarify that the project has addressed both requirements outlined in the clarification. 1) Regarding the selection of technologies and fuels, a detailed baseline study was conducted which included surveys and field investigations to understand the cooking practices, fuel usage patterns, and preferences of the target population in Nigeria. The study helped identify local cooking habits, types of fuel used, types of foods prepared, and stove usage behaviours. In addition to primary data collection, relevant secondary sources, including studies conducted by the World Bank and other reputable institutions on Nigeria's household energy use, were referred to ensure that the selected ICS fully meet the cooking needs of the target communities. 2)The grouped project has implemented multiple support activities to ensure the target population can effectively operate and maintain their ICS. As mentioned in Section 2.1.2 of the PD, awareness campaigns and training sessions have been conducted to provide practical guidance on stove use, troubleshooting commonly faced

Rule	Assessment Question	Findings/Comments #CL 1	Developer Response
			issues, and carrying out minor repairs. These sessions were complemented by the distribution of printed guides and in-person demonstrations delivered in local languages to ensure effective reach and clarity. Furthermore, during the stakeholder consultation process, UpEnergy provided local communities with project information, a summary of the anticipated social, economic, and environmental benefits, and accessible contact details, all in local language formats to promote informed participation. In addition to these measures, regular field visits are undertaken by the project team to provide ongoing technical support and to address any user-reported issues, which are recorded and followed up through the grievance redressal process. These comprehensive support mechanisms demonstrate full compliance with the stated requirements. PD has included these details in section 2.1.4 for a better visibility.
	Round -3	PP has conducted detailed assessment of the cooking practices and need with the help of baseline survey conducted by the PP, research of world bank has been referred to build more trust in the research. PP has provided the tool free number for communication and also regular training are provided for the trouble shoot of the Stove. Appropriate evidences have been provided, upon assessment it has been confirmed that Clarification 2 has been met. Therefore, the finding is closed.	

Rule	Assessment Question	Findings/Comments #CL 1	Developer Response
		Finding closed.	

Rule	Assessment Question	Findings/Comments #CL 2	Developer Response
VM0050 ver.1.0	Demonstrate and justify how the project activity(s) meets each of the applicability conditions of the methodology(s), tools, and modules applied by the project (where applicable). Address each applicability condition separately.	PD, section 3.2 (Applicability) 2) Under section 3.2 the justification compliance statement details may be corrected/updated based on the current status of the project, i.e., registration/issuances already done. 3) For applicability condition no.13 PP shall include additional justification as to how incentive scheme are implemented during the stove/project life to ensure inefficient baseline stoves are replaced with project stove during the crediting period. Further, the record submitted "First Sales vsp00045.jpeg" has fuel type "wood". The baseline fuel type is charcoal. PP shall explain. 4) For applicability condition-17 the project proponent must report on the overlapped boundaries of REDD+ projects in Nigeria falling with the project boundary for informational purposes in the project description. 5) Section 3.2 of the PD shall include the methodology related clarification/ corrections and its associated justification applicable for the project.	PD, section 3.2 (Applicability) 2) PP would like to clarify that Section 3.2 has already been updated to reflect the current status of the project, including relevant details on registration and issuances. The justification of compliance statement has been revised accordingly for the applicable rows. 3) The project activity encourages full adoption of project stove distributed to individual beneficiary households and reduce use of baseline devices throughout the crediting period by implementing an incentive scheme. This includes providing a full-year extended warranty in addition to the 5 years initial warranty in exchange for the disposal of a household's traditional stove, verified at the time of ICS distribution. To ensure ongoing replacement and use of project stoves, the project conducts regular monitoring to confirm the continued non-use of inefficient baseline stoves and provides customer support to address any issues with ICS adoption during the crediting period. This justification has been already provided in Applicability Condition 13 under Section 3.2 that includes the additional details on

Rule	Assessment Question	Findings/Comments #CL 2	Developer Response
			how the incentive scheme is implemented throughout the stove/project life. This is also reflected in the Sales receipts given at the time of distribution With regards to the receipt of the first ICS distribution, PD would like to clarify that the initially submitted receipt titled "First Sales vsp00045.jpeg" was the one prior to the completion of the data Quality Check (QC) process and during the data QC process it is revealed that the fuel type is incorrectly mentioned as "wood" due to a clerical error. Following a reconfirmation with the end user, the correct baseline fuel type is found to be "charcoal". The receipt was then revised and reissued accordingly. The updated receipt has been shared along with this response, which has been duly verified during the time of registration by the VVB. 4) PP would like to clarify that no REDD+ projects have been identified as active or implemented within the project boundary to date with major Carbon Registries viz., VERRA, GS & CDM. While there are two REDD+ projects currently under development under VERRA in Nigeria, but they are not registered and yet operational. Therefore, there are no overlapping boundaries with any active REDD+ projects. This clarification has been included in the justification for Applicability Condition 17 in the Project Description. 5) The section 3.2 of the PD has been updated to incorporate all relevant methodology-related

Rule	Assessment Question	Findings/Comments #CL 2	Developer Response
			clarifications and corrections, along with the corresponding justifications applicable to the Grouped Project activity.
	Round-2	2. The current status of project is added to the PD section 3.2, **Finding closed**. 3. The updated receipt has the correct information of the baseline file. **Finding Closed.** 4. There are two REDD project is project boundary which are under development in Verra registry. **Finding closed.** 5. Methodology related clarification and correction are added to section 3.2 of PD. The explanation found to be justified. **Finding Closed.**	

Rule	Assessment Question	Findings/Comments #CAR 2	Developer Response
VM0050 ver.1.0	Check if diagram or map is added of the project boundary, showing clearly the physical locations of the various installations or management activities taking place as part of the project activity based on the description provided in Section 1.12	PD section 3.3 Project Boundary 6) As per section 5 of VM0050 the project boundary shall include the location from which baseline and project fuel i.e., charcoal sourced. However, this info is missing form this section. This finding will be applicable for the monitoring report as well, therefore, PP shall update the monitoring report in response to this finding.	6) PP would like to clarify that the source of charcoal, both for baseline and project fuels, has already been included in Section 3.3 of the PD. PP wants to clarify that both the baseline and project fuel are same i.e., charcoal and it is sourced locally within the geographical scope of the project activity, i.e., the entire country of Nigeria. Further, this is also mentioned in the MR. Additionally, PP has now submitted a KML file depicting the actual distribution implemented as of current monitoring period.

Rule	Assessment Question	Findings/Comments #CAR 2	Developer Response
	Round-2	6. Fuel sourcing information added to the revised PD. **Finding Closed**.	

Rule	Assessment Question	Findings/Comments #CL 3	Developer Response
VM0050 ver.1.0	Check if explanation and justification is provided for key assumptions, rationale, and methodological choices. Provide all relevant references	PD, Section 3.4 (Baseline Scenario): 9) As per information added in section 3.4 from the originally registered PP shall add footnote justification as to why baseline reassessment is not required or applicable for the project undergoing methodology change to VM0050 via project description deviation. 10) Section 3.4 of the PD doesn't include the baseline scenario as per steps included in section 6.1 of the methodology VM0050. Clarify.	9) PP would like to highlight the following clauses with regards to the baseline reassessment: i) As per Correction 1 of "Corrections and Clarifications to VM0050 Energy Efficiency and Fuel Switch Measures in Cookstoves, V1.0", follow-up baseline surveys must be conducted at most every five years from the last survey date. As the initial baseline survey was conducted in January 2022, so a baseline reassessment is not needed at this point. ii) Secondly, as per footnote 3 in section 2.1.3 of the "Procedure to Change Methodology through a Project Description Deviation", a baseline reassessment is not required for the project activity, which involves distribution of improved cookstoves across the project boundary. The same has now been added as a footnote (footnote no. 19) in section 3.4 of the updated project description.

Rule	Assessment Question	Findings/Comments #CL 3	Developer Response
			10) PP would like to highlight that the baseline scenario has already been included in Section 3.4 of the Project Description including steps 1, 2 & 3 as outlined in Section 6.1 of the VM0050 methodology.
	Round-2	9. The baseline reassessment is not required is adequately justified that baseline survey must be conducted at every five years and not required reassessment now. **Finding Closed.** 10. The added information found to be justified. **Finding Closed.**	

Rule	Assessment Question	Findings/Comments #CL 4	Developer Response
VM0050 and VT0008 tool.	Check if sufficient information (including all relevant data and parameters, with sources) is included so that a reader can reproduce the additionality analysis and obtain the same results.	PD, section 3.5.2: 11) Additionality Supporting evidences, excel sheet is not opening. 12) PP shall justify as to why step 5.4.1 (5) of the tool (VT0008) is not addressed in section 3.5.2 of the revised PD. 13) As per Step 3: Project method of the methodology project proponent must also demonstrate that the project activity is not a common practice as per the most recent version of VT0008. VCS and non VCS project shall be compiled for the common practice analysis.	11) PD has reshared the additionality excel sheet along with the response. 12) PP would like to highlight that Sensitivity Analysis as per step 5.4.1 (5) has been already included in section 3.5.2 of the revised PD. 13) The Common Practice Analysis has been already added under Step 4 in Section 3.4 of the revised PD, consistent with the most recent version of VT0008. Further PD has shared the backup working sheet for common practice analysis for

Rule	Assessment Question	Findings/Comments #CL 4	Developer Response
			VVB's review, based on this there is a minor change in the analysis in the revised PD.
	Round-2	11. The additionality files found to be operational. **Finding closed.** 12. The common practice analysis shall include identification project which are not registered. The assessment included projects which are registered only. There are projects from D.light, Abatable, Lagos State Goveremnet, ICS Outsourcing Nigeria Limited etc. The few references Christian Aid Nigeria, Improved Cookstoves for Community Development (ICCD) pilot project implemented with JDPC Jos and Sosai Renewable Energy in Plateau State (2014) Link to PDF case study Also available at Clean Cooking Alliance resource page: https://cleancooking.org/bcc-resources/improved-cookstoves-for-community-development-iccd-nigeria/ And evaluation report by Health Systems Consult Limited: https://hscgroup.org/our-work-endline-evaluation-for-the-improved-cookstove-for-community-development-iccd-project/ Roshan Renewables and Agasco's Access to Clean Cookstoves in Rural Nigeria project	12) PP has reassessed the common practice analysis to ensure completeness and has expanded the scope by including additional relevant non-registered projects. It is noted that some of the projects mentioned such as Roshan Renewables and Agasco's Access to Clean Cookstoves in Rural Nigeria project (GS11729), and d.light (VCS 4225) have already been considered in the original analysis. Following this reassessment, it is confirmed that there is no change in the outcome of the common practice analysis. The revised common practice analysis has been shared with this response.

Rule	Assessment Question	Findings/Comments #CL 4	Developer Response
		https://roshanrenewables.com/portfolio/clean-cooking/21-access-to-clean-cookstoves-in-rural-nigeria.html Nigeria ICAT Project Inception Report by Federal Ministry of Environment supported by EU and UNOPS https://climateactiontransparency.org/wp-content/uploads/2021/07/ICAT-Nigeria-Inception-Report.pdf BURN Manufacturing's large-scale clean cooking and electric cooking carbon project certified by Gold Standard https://www.burnstoves.com/media/newsroom/burn-launches-africas-first-large-scale-electric-cooking-carbon-project Nigerian Institutional Clean Cookstove Acceleration Scheme (NICCAS) supported by Federal Ministry of Environment, EU, and German government through Nigerian Energy Support Programme (NESP) https://ng.boell.org/sites/default/files/2021-05/FINAL_Strengthening%20the%20Nigerian%20Clean-Cooking%20Bus.pdf PD shall reassess the assessment. Finding open	

Rule	Assessment Question	Findings/Comments #CL 4	Developer Response
	Round 3	Based on the assessment it has been confirmed that PP has demonstrated the additionality inline with the VT0008 tool. Therefore, the finding stands closed. **Finding closed**	

Rule	Assessment Question	Findings/Comments #CL 5	Developer Response
VM0050 and procedure of methchange	Check if deviation relates only to the criteria and procedures for monitoring or measurement and does not relate to any other part of the methodology	PD, section 3.6: 14) Section 3.6 of the PD shall include and justify methodology deviation from VMR006 to VM0050 related to the criteria and procedures for monitoring or measurement of emission reductions for the project.	14) PD would like to clarify that the methodology deviation from VMR0006 to VM0050 has already been included and justified in Section 3.6 of the Project Description. PP has followed the procedures for the methodology change in accordance with the "Procedure to Change Methodology through a Project Description Deviation, Version 4.0" and the VCS Standard, Version 4.7, ensuring full compliance with the applicable requirements.
	Round-2	14. The information included in section 3.6 was found to be justified. **Finding closed.**	

Rule	Assessment Question	Findings/Comments #CAR 2	Developer Response
VM0050	Check if deviation relates only to the criteria and procedures for	PD, section 4.4: 9) Section 4.4 shall include a sample year calculation of emission reduction.	9) PP has included the sample ER calculation for vintage 2022 in section 4.4 of the PD based on VVB's comment.

Rule	Assessment Question	Findings/Comments #CAR 2	Developer Response
and procedure of methchange	monitoring or measurement and does not relate to any other part of the methodology		
	Round-2	9. Sample calculation has been added and found to be as the formula used as prescribed in the methodology. **Finding Closed.**	

Rule	Assessment Question	Findings/Comments #CAR 3	Developer Response
VM0050 and PD template.	Check if tables are filled for all data and parameters that will be monitored during the project crediting period as per applied methodology and practices on followed onsite for raw data collection and date flow reporting in ER sheet.	PD section 5 and MR section 4 10) PP shall include the date/duration of the source of data for all the monitoring parameters included section B.5 of the PD. Also, PP shall include the equation number for the parameters as given for the parameters in the methodology. 11) In MR ER sheet: Under tab "Ex-ante Parameters" and "ER Calculation" source of the data shall also include the original reference/source of the parameter value e.g., some of the parameter value directly taken from applied methodology VM0050. 12) Under description of measurement methods and procedures applied PP has mentioned the recommendation from the methodology however, PP shall include the actual measurement method and procedure followed onsite in field to monitor/calculate the parameter. E.g., for BCex-ante,b,j it says "*A*	10) PP would like to clarify that the date/duration of the source of data for all monitoring parameters has already been included in Section B.5 of the Project Description. Additionally, the relevant equation numbers from the applied methodology have also been added under the 'Comments' section of the parameters table, ensuring full alignment with the methodological requirements. 11) The tabs "Ex-ante Parameters" and "ER Calculation" of ER sheet has been updated with the original reference/source of the parameter value, such as the applied methodology VM0050 or IPCC, wherever applicable. 12) PP has already incorporated detailed

Rule	Assessment Question	Findings/Comments #CAR 3	Developer Response
		measurement campaign following the Kitchen Performance Test Protocol must be designed" therefore PP shall correct the statement as the measurement method/procedure shall be defined and implemented. 13) PD section 5.1: Under section 5.1 for parameter fNRB,y PP has used the fNRB value from registered PD however, PP shall confirm if the input values used at the time of validation are still valid if not then PD shall update the calculations based on latest available data sources as per tool-30. While doing so, PD shall refer to page/34/62 of VM0050 to ensure that value is correctly calculated leading to conservative estimation of emission reduction. 14) The parameter report of "CF" shall be provided. Reference: Footnote 36. 15) Monitoring parameter nj,k,y: PP shall include and the update the measurement method and procedure as per VM0050 and associated rule clarification/correction for capped on usage rate of 90%. This finding will be applicable for the monitoring report as well, therefore, PP shall update the monitoring report in response to this finding.	descriptions of the actual measurement methods and procedures implemented in the field, including those for parameters such as BCex-ante,b,j. These updates align with the Kitchen Performance Test Protocol and other relevant guidelines, ensuring that the measurement methods and procedures are clearly defined and executed. The revised details have been included in the updated PD for clarity and compliance. 13) At the time of validation, the fNRB value was calculated using CDM Tool 30, Version 4.0, which is the latest version available at that point in time. The input values used for the fNRB calculation in section 5.2 of the Project Description (PD) are as per Tool 30 V4.0 and remain valid. Furthermore, PP has now added the options for estimating the fNRB value, as per the applied methodology. However, for the ex-ante estimation as well as for the current monitoring period, the fNRB value has been calculated based on CDM TOOL30 and applying an uncertainty discount of 26%. 14) The parameter report of "CF" has been enclosed herewith for VVB's reference. 15) PP would like to clarify that the measurement method and procedure for monitoring parameter nj,k,y have already been included and updated in accordance with VM0050 and the associated

Rule	Assessment Question	Findings/Comments #CAR 3	Developer Response
			clarification/correction related to the 90% usage rate cap. The current version of the PD reflects these requirements.
	Round-2	10. The source of data and description are being added to the emission reduction sheet. **Finding Closed**. 11. The source of data and description are being added to the emission reduction sheet. **Finding Closed**. 12. The actual KPT protocol has been defined as per the actual practice. The revision found to be accepted. **Finding Closed.** 13. The discount factor 26% as precebied in the Verra methodology has been applied to fnrb that was calculated at the time of registration, the fnrb ration found to be calculated correctly. **Finding Closed.** 14. Report provided has file size zero and not opening. 15. Justification provided by PP is accepted and incorporated in the PD. **Finding closed.**	14. PP has reshared the document separately with this response.
	Round 3	PP is requested to provide a detailed explanation of the calculation methodology used to derive the CF value of 6 from the referenced report. The PP shall also demonstrate how the selected value is conservative within the context of the report's data and the project's operational conditions to ensure transparency and justification of the applied factor in the calculation.	PP has opted to use the CF as "4" (methodology / CDM tool 33 v3.0 default value) for the current monitoring period to fulfil the CCP eligibility criteria to obtain the CCP labelling for the claimed ERs. The revised ER sheet and MR is shared for VVB's review.

Rule	Assessment Question	Findings/Comments #CAR 3	Developer Response
	Round 4	PP has updated the value as per the CDM tool 33, a default value of 4 for the project. Therefore, the finding is closed. **#closed.**	

Rule	Assessment Question	Findings/Comments #CL 6	Developer Response
VM0050 ver.1.0	Applicability of methodology	Section mentions, "The baseline fuel consumption results have been compared with data from reputable sources. A recent scientific research work by Ibrahim Sufiyan, Muhammad K.D, Umar Musa U (2021)[1] establishes the per capita charcoal consumption as 224.4 kg/capita/annum, this translates to 6.05 tonnes wood equivalent for charcoal/HH/annum considering the average HH size of Nigeria to be 4.5 capita/HH[2]. Hence the baseline fuel consumption value of 5.46 tonnes / HH/ annum, determined through the baseline KPT study conducted by the PP is found to be conservative as compared with scientific studies" PP shall substantiate the statement demonstrating how to value obtained by the KPT survey for baseline fuel is conservative compared to the value mentioned in the research study for calculation of emission reductions.	PP would like to clarify that the baseline fuel consumption value of 5.46 tonnes of wood equivalent per household per year, as determined through the baseline KPT survey, is indeed conservative when compared to values reported in external studies. As per the cited scientific study by Ibrahim Sufiyan et al. (2021)[11], the per capita annual charcoal consumption in Nigeria is 224.4 kg, which translates to approximately 6.05 tonnes of wood equivalent per household per annum, assuming an average household size of 4.5 persons. The applied baseline value of 5.46

[11] https://jwbm.com.my/archives/1jwbm2021/1jwbm2021-22-26.pdf

		Addiotinally, PP shall submit baseline KPT survey calculation results.	tonnes/HH/year will yield a lesser emission reductions when compared to the literature value of 6.05 tonnes wood equivalent/HH/year, and hence the applied value of 5.46 tonnes/HH/year is conservative. This demonstrates that the value obtained through our KPT is lower than the value derived from peer-reviewed scientific literature, indicating that the project has adopted a conservative and evidence-based approach. By using actual field data that reflects real user behavior within the project boundary, while still being lower than external estimates, the project ensures that the emission reduction calculations are grounded in localized conditions and not based on potentially inflated or generalized figures from broader studies. This reinforces the credibility and reliability of the monitoring results. The baseline KPT survey calculation results have been submitted along with this response for the reference.
	Round-2	PP has provided the explanation and appropriate research evidences to demonstrate that the Baseline KPT values are conservative in nature, Additionally, KPT sheet has also been provided therefore, the finding	

		stands closed. **Finding closed**	

VCS Monitoring Report

Rule	Assessment Question	Findings/Comments #CAR 4	Developer Response
VCS standard	Check if a summary description of the implementation status of the technologies/measures (e.g., plant, equipment, process, or management or conservation measure) included in the project, including relevant implementation dates (e.g., dates of construction, commissioning, and continued operation periods) is included.	MR Section 1.1 1) As per the Monitoring Report Template filing guidelines, section 1.1 shall not be more than one page. 2) Section 1.1 reports emission reduction value in current monitoring period is 96,199 tCO_2e, whereas the submitted ER calculation sheet mentions 97,292 tCO_2e. Further, vintage wise emission reduction shall be rounded down. Ref "ER calculation" D45 cell. Further, MR section 5.4 values shall be corrected. PD shall correct the inconsistency. 3) Section 1.1 PP to add number of devices distributed in current monitoring perio, further PP shall clarify and confirm if there is any design change in the product design and manufacturing after the last monitoring period resulting in efficiency changes of the cookstove models. 4) MR Section 1.7 shall update Organisation name as per the revised PD. The name change reference can be also added. 5) MR Section 1.6 shall update date format of project start date. The format shall be as per the MR template filing guidelines.	1) PP would like to clarify that the VCS MR Description Template is a guideline document, which is not a mandatory requirement to be adhered. Hence PD would like to retain the detailed content for sake of a better clarity and transparency. 2) PP would like to clarify that it was a typographic error, and the MR has been updated to reflect the correct values as per VVB's comment. It is to be noted that the final ER value for the MP#2 has already been rounded down (Ref cell D41 of ER Calculation Tab) in the ER sheet and yielded "97,289 tCO_2e", based on which the vintage wise values are derived, hence there is no further requirement to round down the vintage wise ER values. 3) PP would like to clarify that the number of devices distributed during the current monitoring period has been included in Section 1.1 of the Project Description. Furthermore, PP confirms that no changes have been made to the product design or manufacturing process since the last monitoring period that would result in any efficiency changes to the cookstove models.

Rule	Assessment Question	Findings/Comments #CAR 4	Developer Response
			4) PP has updated organization name in sections 1.1, 1.5, 2.1.2 & 2.1.4 of the MR as per VVB's comment in line with the latest version of PD. The "Certificate of Incorporation" document has also been attached herewith as evidence for the review. 5) PP has updated the date formatting in section 1.6 of the MR as per VVB's comment.
	Round-2	1. The template guide is designed to instruct the preparation of a document. Following these guidelines is essential for better alignment with requirements. Therefore, revision is desired.	1. PP would like to clarify that section 1.1 has been revised and the character count has been reduced to a possible extent as per the VVB's comment.
	Round 3	Relevant section of the monitoring report has been revised therefore, the finding stands closed. **Finding closed**	2.

Rule	Assessment Question	Findings/Comments #CAR 5	Developer Response
VCS Standard requirement	Check if project proponent able to demonstrate the avoidance of double counting for the project and various interested parties associated with project.	MR section 1.10 6) During site visit, PP stated another project in same boundary by Gold Standard. Project proponents must demonstrate that the project prevents double counting of GHG emission reductions by any actor (in project context the stove manufacturer and other entities involved) who may wish to claim reductions from project devices. Ownership of the reductions resulting from the project activity must be clearly	6) PP would like to clarify that a distribution and tracking system is in place to prevent double counting of GHG emission reductions. For each device distributed, end-user information is collected, including name, contact number, address, and GPS coordinates of the distribution site. This information is verified before distribution to confirm the identity of each recipient.

Rule	Assessment Question	Findings/Comments #CAR 5	Developer Response
		communicated by contract or clear written assertions in the transaction paperwork to all involved parties. Users must be notified that they are not permitted to claim reductions from the project. PP shall submit supporting evidence for the same.	Each device is assigned a unique serial number, which is recorded and tracked throughout the project. These serial numbers are cross-checked during verification to prevent duplication and ensure that no individual receives more than one device across different projects or a single project device is being credited in two different carbon registries. Ownership of the emission reductions is communicated through contracts or written assertions in transaction paperwork, and users are informed that they are not permitted to claim reductions from the project. Most importantly during the time of ICS distribution the existing cooking method of the beneficiary will be captured to ensure the ICS is not distributed to households that already possess any improved cooking technology through a Carbon Program or otherwise. Further PD has shared the carbon waiver agreement duly signed by the ICS manufacturers for VVB's reference along with the response.
	Round-2	6. The devices having unique serial number verified across the project boundary that is found to be satisfactory and demonstrate a robust mechanism for stove identification and uniqueness; however, we would request PP to submit the distribution database (as a confidential document) for the other project under gold standard in the similar region and also submit a signed declaration that there no double	6. PP has shared the distribution database along with the responses. Also, the no double counting declaration has been already shared with the VVB (Please refer Appendix 3 of the PD).

Rule	Assessment Question	Findings/Comments #CAR 5	Developer Response
		counting of any PAI in between 2 projects implemented under same location.	
	Round 3	The assessment team has reviewed and checked the distribution database shared by the project proponent for the current monitoring period and found it to be satisfactory. The signed declaration on no double counting has also been verified as provided. However, for future verifications, a FAR will be raised to ensure the submission and review of the updated distribution database and no double counting declaration to maintain consistency across monitoring periods. This finding is therefore considered closed for the current monitoring period. **Finding closed.**	

Rule	Assessment Question	Findings/Comments #CAR 6	Developer Response
VCS Standard requirement.	Check if the evidence of the project's SD contributions is provided as appendices to this report and submitted for VVB's crosscheck.	MR Section 1.12 table-1 7) Calculation of monitored values reported under "*Current project contributions*" and "Contributions over project lifetime" for SDG target by PP is not traceable. PP may summarize them in ER excel sheet for VVB verification and easier reproduceable by third reader.	7) PD has already submitted the SDG sheet reflecting the calculations of monitored values under "Current project contributions" and "Contributions over project lifetime" for each SDG target along with the SD VISta document submission. 8) PD has updated the MR as per VVB's comments.

Rule	Assessment Question	Findings/Comments #CAR 6	Developer Response
		8) As per MR template filing guidelines section 1.12 description shall not exceed 100 words. PP shall revise.	
	Round-2	*16.* PP has share the SDG tool information and assessment team has verified the details, it is found to be appropriate. Finding stands closed. Inline with the MR template guidelines, PP shall also mention Identification of which SD contributions described in Table 1 of this report contribute to achieving any nationally stated sustainable development priorities, including any provisions for monitoring and reporting these.	16) PP would like to clarify that the SD contributions outlined in Table 1 of this MR align with Nigeria's nationally stated sustainable development priorities as outlined in the its Voluntary National Review (VNR), 2025 and the National Development Plan (2021–2025). Specifically, the project supports, SDG 3 (Good Health and Well-being), SDG 5 (Gender Equality) and SDG 8 (Decent Work and Economic Growth), which were identified as key priority areas in the 2025 VNR based on Nigeria's development agenda and the cardinal objectives of the government. In addition, the project contributes to SDG 13 (Climate Action), which is considered a cross-cutting issue in the National Development Plan alongside SDG 12 (Responsible Consumption and Production). The Nigeria SDGs Implementation Plan (2020–2030) provides the framework for mainstreaming all 17 SDGs into national and subnational development plans and ensures alignment with sectoral policies and budgetary processes. The project's SD contributions are therefore in line with this national roadmap. The project also incorporates a various monitoring framework, including periodic usage and SDG

Rule	Assessment Question	Findings/Comments #CAR 6	Developer Response
			monitoring surveys including kitchen performance test, to assess and report on progress towards these SDG contributions. These monitoring provisions ensure transparency and provide valuable inputs that can support national SDG reporting and policy evaluation efforts.
	Round 3	The assessment team has reviewed the additional details provided by the project proponent regarding the alignment of the SD contributions with Nigeria's nationally stated sustainable development priorities and the National Development Plan (2021–2025). The explanation, including the project's contribution towards SDG monitoring and reporting provisions, is found to be satisfactory and in line with the MR template guidelines. This finding is therefore considered closed. **Finding closed.**	

Rule	Assessment Question	Findings/Comments #CL 7	Developer Response
VCS Standard	Whether PP has included all the relevant information for stakeholder engagement incl. ongoing communication during	MR section 2.1 9) PP shall update section 2.1.2 of the monitoring report as per requirement specified in VMOO50/correction/clarification no.2 related to customer support actions that shall be undertaken	9) PP would like to clarify that additional justification has been provided and this has now been explicitly stated in the section 2.1.2 of the MR to ensure clarity and

Rule	Assessment Question	Findings/Comments #CL 7	Developer Response
ver.4.5	the monitoring period. PP shall also explain the grievance procedure and how it has been implemented in the project.	across the entire target population and demonstrated at verification in-order to claim usage cap of 90%. 10) PD shall submit the grievance register and/or the service log summary details of minor/major repair and maintenance of project technology.	compliance with the requirements under VM0050 and the related clarification/correction. 10) PP has attached the grievance register along with this response. Also, PP has discounted the stove breakdown days sourced from the grievance's records for the conservative ER calculation.
	Round-2	17. As per the requirement, customer support action shall be undertaken across the entire population and demonstrated at verification. Only one support action is mentioned i.e. grievance redressal procedure is mentioned. PP to clarify other support action for the entire target population. 18. The grievance register cum service log is submitted. The review team find out the proper resolution procedure. Therefore **Finding Closed.**	17. PP would like to clarify that several customer support actions have been implemented across the entire target population, as detailed in Section 2.1.2 of the MR. In addition to the grievance redressal mechanism, the project has conducted awareness campaigns and training sessions to educate end users on the proper use of ICS, including guidance on cooking common local foods, troubleshooting commonly operational faced issues, and performing minor repairs. These sessions are supported by printed guides and in-person demonstrations in local languages to ensure effective reach and clarity. Furthermore, PP also conducts impact monitoring through telephonic surveys as part of the QA/QC process to ensure continued usage of the stoves by end users. Any issues observed during these surveys are documented and included in the grievance record, which is then followed up for resolution. In addition, community cooking sessions are held to demonstrate proper stove use, share tips, address user issues, and gather feedback helping reinforce good practices and build a sense of ownership among users. These combined efforts demonstrate that customer support is

Rule	Assessment Question	Findings/Comments #CL 7	Developer Response
			actively extended to the entire target population and maintained throughout the project duration.
	Round 3	PP has conducted detailed assessment of the cooking practices and need with the help of baseline survey conducted by the PP, research of world bank has been referred to build more trust in the research. PP has provided the tool free number for communication and also regular training are provided for the trouble shoot of the Stove. Appropriate evidences have been provided, upon assessment it has been confirmed that Clarification 2 has been met. Therefore, the finding is closed. **Finding closed.**	

Rule	Assessment Question	Findings/Comments #CL 8	Developer Response
VM0050 and VCS Standard requir	Whether PP has quantified the baseline/project/leakage emissions for the monitoring period in accordance with the applied methodology. Check if PP has included all relevant equations and provided sufficient information to allow	MR section 4 and Emission Reduction sheet: 11) PP shall clarify if the replacement of project technology is done for the any of the household. While doing so, PP shall also clarify if any other end-users directly/indirectly reported the broken status of the project technology during the monitoring period. If yes, kindly share the details for VVB review. 12) In ER sheet under tab “Monitoring survey results” one of the households reported to have 12 number of household size serial number	11) PP would like to clarify that replacement of project stoves was carried out for households from which complaints regarding broken or malfunctioning stoves were received. Additionally, some users reported the broken status of their stoves during the monitoring period, and these stoves were subsequently replaced. All such cases are documented in the grievance records, which have

Rule	Assessment Question	Findings/Comments #CL 8	Developer Response
ement .	the reader to reproduce the calculation. PP shall also include all calculations in the emission reduction calculation spreadsheet.	”Nvsp0092685”. PP shall clarify if cookstove apart from project cookstove are ICS and how PP has confirmed it is part of other GHG cookstove program active in the region.	been shared along with this response for VVB review. With the regards to the monitored samples, none of the users have done the stove replacement as can been seen from the monitoring survey Q2.11 to Q2.11.2 12) PP would like to clarify that the ICS model distributed under this project is designed to accommodate larger household sizes and can support the use of bigger vessels suitable for cooking for more people. In the case of the household with serial number “Nvsp0092685,” no additional stove from the project-distributed cookstove was reported. PP would like to clarify that, prior to the sale and distribution of the project cookstove, the project team confirms that the household is not part of any other GHG cookstove program active in the region. Additionally, the type of cooking technologies currently in use by the household are recorded and verified during the monitoring survey, which also confirms the household is not part of any carbon program (Ref Q4.8 of Monitoring Survey). This process ensures that there is no overlap or double counting of emission reductions and that the distributed cookstove is not associated with any other climate mitigation initiative.
	Round-2	19. The submitted replacement data is found to be as per the grievance procedure defined in the PD. **Finding Closed.**	

Rule	Assessment Question	Findings/Comments #CL 8	Developer Response
		20. 12. Stove dimension (ø 28 * 26 H) cms found to be in line with the Justification provided by the PP. **Finding Closed.**	

Rule	Assessment Question	Findings/Comments #CL 09	Developer Response
VM0050 ver.1.0	Stakeholder Wellbeing	In line with section 2.3 stakeholder risk analysis: PP shall submit the following document: • HR policy demonstrating there is no discrimination. • Pay equal to demonstrate there is equal pay provided to the employee regardless of gender. • Under the child labor it mentions, "*The project is carried out with the full consent of participating households, ensuring it is voluntary and free from forced labour. Community Carbon prioritizes hiring local community members that is locals residing in area of project implementation and offers new opportunities to project beneficiaries as Community Carbon expands operations and job openings arise*." PP shall confirm if any child labour involved in the project. Relevant policies shall be shared. • PD to share stove photographs in which serial number shall be visible and the user signed declaration for VSP23284, VSP19413, VSP20619, NVSP0159890, NVSP0192743, NVSP0092210, NVSP0084581 and NVSP0213912.	• HR policy document, i.e., Group Team Handbook (Systems, Procedures and Ways of Working) has been submitted which demonstrates that there is no room for discrimination and forced labor in the project's employment. • Gender Policy 2025 has been submitted and in the section 4 (f) of this document it demonstrates the process of equal pay regardless of gender. • PP confirms that no child labour is involved in the project since inception of the project activity. Section 10.2 of the Group Team Handbook (Systems, Procedures and Ways of Working) can be referred, stating our policy in compliance with International Labour Organization (ILO) conventions and national laws in the countries we operate in. • PD has shared the stove photographs and user signed declaration for the given serial numbers along with the responses.

	Round-2	HR policiees, gender policy handbook found to be in place and no child found to be working. Therefore **finding closed**. The distribution ID mentioned in the ER database does not match with the sales receipt document. These are the ICS serial number VSP19413, VSP20619, NVSP0159890, NVSP0192743, NVSP0092210, NVSP0084581 and NVSP0213912, PD shall clarify.	PP would like to clarify that during the initial stages of distribution; records were maintained manually and subsequently transitioned through a couple of data collection platforms starting with ONA/ODK then Salesforce and later migrating to SurveyCTO. Owing to these transitions in data management systems had contributed to inconsistencies or mismatches in the distribution IDs, since each data platforms will have their individual IDs. It is important to note that the distribution IDs are used purely for internal reference and tracking purposes, and they do not affect or correspond directly to the ICS serial numbers or the end users. The serial numbers remain unique identifiers for each stove and are consistently documented in the sales receipts, ensuring traceability and verification.
	Round 3	The assessment team has checked the serial numbers on the stoves against the sales receipts and confirmed that they match. The project proponent has provided an explanation regarding the internal distribution ID inconsistencies, clarifying that these IDs are used solely for internal tracking and do not affect the serial numbers recorded on the sales receipts or the traceability of stoves to end users. The explanation provided by the project proponent is found to be satisfactory, and this finding is therefore considered closed. **Finding closed.**	

Rule	Assessment Question	Findings/Comments #CL 10	Developer Response
VM0050 ver.1.0	Monitoring survey and KPT	Project activity monitoring period is from 01-November-2022 to 31-October-2024, however, Monitoring survey for the project was conducted from December 2024 to January 2025 & KPT Assessment was conducted in February 2025. PP shall clarify the reason for conducting a KPT survey 3 months after the monitoring period.	PP would like to clarify that the KPT survey was conducted in February 2025 due to a combination of practical and project-related considerations. Following the end of the monitoring period in October 2024, the PP required time in November to finalize the distribution database, sampling plan, and other preparatory activities essential for survey execution. The months of December and January coincided with major festive holidays such as Christmas, and New Year, which significantly impacted the availability of end users and could possibly have affected the reliability of KPT data. As per the latest KPT protocol (Page 14, Points 2 and 3), it is advised to avoid holiday periods and to ensure that household cooking practices remain as close to normal as possible during testing. Furthermore, during this time, the applicable methodology transitioned from VMR0006 to VM0050, effective from October 2024, which required careful internal assessment and decision-making by the PP. In light of these factors, conducting the KPT in February 2025 ensured adherence to protocol requirements while maintaining data quality and survey integrity.

	Round 2	The assessment team acknowledges the justification provided by the project proponent regarding the timing of the KPT survey, including considerations related to protocol guidance, seasonal impacts on data reliability, and the methodology transition. Based on the information provided, the timing of the KPT survey conducted in February 2025 is considered acceptable, provided that all other monitoring and survey protocol requirements have been met and documented accordingly. **Finding closed.**	

Rule	Assessment Question	Findings/Comments #CL 11	Developer Response
VM0050 ver.1.0	Baseline assessment	Under section 2.1.3(2) of the Procedure to Change Methodology through a Project Description Deviation For projects that are not subject to baseline reassessment requirements: Where the baseline scenario requirements in the new methodology are new or revised from the current methodology, the project proponent shall apply the new methodology to determine the most plausible baseline scenario and calculate the baseline emissions." PP shall clarify the requirements of the new methodology have been met with the previous baseline survey conducted and also shall substantiate how the	PP would like to clarify that, as confirmed and closed during previous VVB rounds, a baseline reassessment is not required for this project activity. The initial baseline survey was conducted in January 2022, and therefore remains valid till January 2027, as per the requirement in Correction 1 under the methodology, which states that baseline surveys must be conducted at most every five years from the date of the last survey.

		prevailing fuel consumption data has been taken without conducting a new Baseline KPT survey. Additionally, PP shall also clarify how the baseline survey conducted for the project activity is inline with methodology VM0050 V.1, Appendix 3 questionair For parameter H_{hi} PP shall clarify how the value has been made sure as the surveys have been conducted before the release of methodology and clarification documents, PP shall substantiate in details how it is inline with the New methodology requirements	Additionally, as per Footnote 3 in Section 2.1.3 of the Procedure to Change Methodology through a Project Description Deviation, a baseline reassessment is not required for project activities involving the distribution of improved cookstoves across the project boundary. Therefore, the current project activity falls within the scope of exemption from baseline reassessment. PP also confirms that the requirements of Section 6.2 of VM 0050 is being met using the already validated baseline survey. The prevailing fuel consumption data used was obtained from this survey, which was designed to reflect actual field conditions and cooking behaviour. With respect to parameter Hhi (average household size), PP clarifies that household size details were already captured during the baseline KPT survey conducted in February 2022 is in accordance with the KPT Protocol. This same set of survey documents was reviewed and validated during project registration. As required by the KPT Protocol, household size data was collected with age and gender-wise stratification. Accordingly, the average household size was calculated using the Adult Equivalent Method, aligning with Clarification #6 under VM0050. Additionally, PP has now explicitly demonstrated

			the calculation of parameter Hhi in the Baseline KPT Results, which is being shared with the VVB for reference. Therefore, PP confirms that the baseline survey approach and results remain valid and in full alignment with the applied methodology.
		PP has provided the explanation related to the baseline scenario and survey requirements, inline with the methodology requirement and clarification, feb 2025, baseline survey needs to be redone every 5 years, and as the initial survey was done in 2022 and it remains valid till 2027. The assessment team verified the details and it was found to be inline with the requirements set in methodology VM0050, v1.0, there is was accepted. The household size calculation was also done inline with KPT protocol which is found to be inline with the methodology requirement. Therefore, finding for the project is closed. **#Closed.**	

Rule	Assessment Question	Findings/Comments #CL 12	Developer Response
Procedure to Chang	Monitoring survey	In the emission reduction sheet, Monitoring survey tab it has been noted in CC, replace stoves serial numbers are provided, however the serial numbers have not been updated in the distribution database.	PD would like to clarify that, for the first household (Esther Cletus), the replacement of the stove occurred after the monitoring survey visit. The survey for this household was conducted in December 2024.

<table>
<tr><th>Rule</th><th>Assessment Question</th><th>Findings/Comments #CL 12</th><th>Developer Response</th></tr>
<tr><td>e Methodology through a Project Description Deviation</td><td></td><td>PP shall clarify the reason for not updating the revised stove ID in the distribution database. Additionally, PP shall submit the revised stove contracts for the following Stove ID and end users:

<table><tr><td>End users</td><td>Previous stove ID</td><td>Revised Stove ID</td></tr><tr><td>Esther Cletus</td><td>Nvsp0162548</td><td>NVSP0268318</td></tr><tr><td>Salome Silas Gumut</td><td>VSP23104</td><td>NVSP0240413</td></tr><tr><td>Aende Achir</td><td>NVSP0219785</td><td>Nvsp0141307</td></tr><tr><td>Trikania Bus Stop Chikun</td><td>NVSP0202428</td><td>NVSP0411943</td></tr></table></td><td>Subsequently, a complaint regarding a broken liner was received in February 2025, and the stove was replaced in the same month. This has been duly recorded in the grievance register for the month of February 2025, with the complaint documented under row number 8. Accordingly, the replacement was not reflected in the monitoring survey results. PP has shared the grievance record for the month of February 2025 for VVB’s reference.

For the second household (Salome Silas Gumut), the project stove was picked for WBT after the monitoring survey, and the discrepancy in the records was due to a clerical error. The "Monitoring survey results" tab has been updated, and we are attaching the updated ER sheet along with the response. This change will not affect the ER calculation.

For the third and fourth households (Aende Achir and Angela Owuno) the original stoves are picked for WBT during the monitoring survey and issued new sets of stoves. The revised stove serial numbers have already been reported in the monitoring survey results (please refer Q7.3).</td></tr>
</table>

Rule	Assessment Question	Findings/Comments #CL 12	Developer Response
			Furthermore, the revised serial numbers are not updated in the main distribution database as per PP's internal practise. It is to be noted that the replaced stoves are brand new ones and altering the database entries would modify the stove distribution dates since the date of new serial number issued needs to be recorded. This in turn would affect the calculation of stove age (considering new stove age) and consequently the crediting period for the respective household must be extended. To avoid thus issue, PP retains the database with original stove IDs, while the grievance registers and monitoring survey records the replaced stove serial numbers separately. Additionally, the monitoring survey questionnaire includes fields to record both the original stove serial number (please refer Q2.11 & Q2.12) and the serial number observed at the time of the monitoring visit. This ensures that any replacements are adequately captured without altering the distribution database.
	Round-2	PP shall clarify, as mentioned in their explanation, that the monitoring survey records the replaced stove serial numbers. Since the monitoring survey is conducted only for a subset of stoves within the entire distribution, PP shall clarify how the stove ID database is maintained for the complete distribution records. Additionally, PP shall confirm whether end users are required to sign a new end user agreement	The PP would like to clarify that all stove replacements are systematically recorded in the grievance register, which serves as the central record for capturing updates to stove serial numbers across the entire distribution. This ensures that replacements are consistently documented beyond the subset of households included in monitoring.

Rule	Assessment Question	Findings/Comments #CL 12	Developer Response
		upon receiving replacement stoves. In case such agreements are executed, PP shall provide the corresponding evidence. #open	As per PP's internal practice, the main distribution database is retained with the originally distributed stove IDs. This avoids altering database entries, since assigning new serial numbers would reset the stove age and affect the calculation of the crediting period. Instead, all replacements are captured separately in the grievance register and monitoring survey records. The monitoring survey additionally records both the originally distributed serial number and the serial number observed at the time of the visit, ensuring that any replacements are identified for all monitored households. While the WBT is conducted only for selected households, the survey data on serial numbers ensures comprehensive tracking. Finally, the PP confirms that end users are not required to sign a new end user agreement upon receiving replacement stoves, as the original agreement remains valid. It is also emphasized that the tracking of replacements is not limited to the monitoring survey alone but is consistently maintained through a well-kept grievance register covering the entire distribution.
	Round 3	PP has provided information related to the new stove IDs. The grievance registers and monitoring survey sheets mention the data related to the new stove IDs, and cross-checks of these IDs have also been	

Rule	Assessment Question	Findings/Comments #CL 12	Developer Response
		conducted on-site. The information has been verified. However, a FAR has been raised, please refer FAR 02. #closed.	

Rule	Assessment Question	Findings/Comments #FAR 01	Developer Response
VM0050 ver.1.0	Double counting	For future monitoring periods, the project proponent shall submit the updated distribution database for review during each verification to confirm the traceability of devices and to ensure no double counting of PAIs with other projects in the same region. Additionally, the PP shall provide a signed declaration confirming no double counting for each monitoring period to maintain consistency and alignment with verification requirements. FAR 02- The VVB, during the next monitoring period, shall cross-check the project database to ensure that a new column has been added for the stove IDs that have been replaced. In addition, the VVB shall verify that the date of replacement is recorded and that the distribution data accurately reflects these updates.	

APPENDIX 4: REFERENCES

S. No	Document Title	Version	Date
1	VCS standard https://verra.org/documents/vcs-standard-v4-7/	4.7	16-April-2024
2	VCS guidelines https://verra.org/wp-content/uploads/2023/08/VCS-Program-Guide-v4.4.pdf	4.4	29-August - 2023
3	Validation and Verification Manual https://verra.org/wp-content/uploads/2018/03/VCS_Validation_Verification_Manual_v3.2.pdf	3.2	19-October-2016
4	VCS Project Webpage, VCS ID – 2673 https://registry.verra.org/app/projectDetail/VCS/2673	-	-
5	Initial PDMR https://registry.verra.org/app/projectDetail/VCS/2676	2.5	21-March-2024
6	Validation report and verification report https://registry.verra.org/app/projectDetail/VCS/2676	1.3	21-March-2024
7	Previous Applied Methodology VMR0006 https://verra.org/methodology/vmr0006-methodology-for-installation-of-high-efficiency-firewood-cookstoves/	1.1	-
8	New methodology applied VM0050 Energy Efficiency and Fuel-Switch Measures in Cookstoves	1.0	-
9	Revised Project Description Document Ex-ante calculations (corresponding to PD)	7.4	14-January-2026
10	Monitoring report	5.4	27- January-2026
11	Emission reduction calculation		Corresponding to MR
12	Onsite audit report of the VVB done	-	26-May-2025 to 29-may-2025
13	Local Stakeholder records: - Grievance records	-	2022 - 2024
14	Employment records: HR policy and records Gender policy	-	24-April-2025
15	Smart Home pro Stove Lab test report	-	-
16	Distribution database ER Sheet with distribution database & monitoring survey	-	-

17	Training 1) Technical Training – Repairs 2) Distribution Agent Training 3) Carbon Training 4) Operation Training 5) SUM Training 6) WBT training attendance list.pdf	-	-
18	Baseline survey Report Baseline KPT VCS2673 Monitoring Survey Records	-	2021 2022
19	fNRB fNRB calculation sheet	-	Tool 33 Tool 30
20	Evidence End user Receipt and Warranty Cards ICS Flyer	-	-
21	Certificate of Incorporation Community Carbon Code of Ethics UPEnergy Group Team handbook Gender Policy	-	-
22	Nigeria KML MP3.kml	-	-
23	No double counting declaration No double counting declaration with manufacture Purchase Agreement Fati Stoves ACTIVE.pdf	-	-
24	Incentive mechanism document	-	-
25	VCS Methodology change project description Deviation	4.0	-
26	VCS pipeline listing records and details	-	-
27	Additionality Common Practice Analysis VCS 2673 Additionality Tool	-	-
28.	Certificate - Climate Catalyst Limited (1).Pdf		
29	ilide.info-charcoal-production-and-methods-nigeria-pr_f208993e7308852b41e3791db4f35fff.pdf Nigeria CF report https://www.researchgate.net/publication/325973641_Demand_for_charcoal_among_petty_traders_in_Oyo_state_Nigeria_a_paradox_of_survival_and_environmental_degradation https://www.mdpi.com/1996-1073/16/12/4722		
30	End user support material inline with clarification 2		
31	End user receipts and photos ICS Photographs during Monitoring		

32	Policies in Nigeria brochure.cdr Nigeria NDC 3.0 - Transimission Version 2.pdf		
33	Conditions Prior to project initiation Nigeria Deforestation Rates & Statistics | GFW https://www.energytransition.gov.ng/cooking/		

APPENDIX 5: ABBREVIATIONS

MR	Monitoring report
PD	Project description
MP	Monitoring Period
PP	Project Proponent
PAI	Project Instances
ICS	Improved Cook Stove
VCS	Verified Carbon Standard
SDG	Sustainable Development Goals
VCU	Verified Carbon Unit
IPCC	Intergovernmental Panel on Climate Change
Aql	Acceptable Quality Level
UQL	Unacceptable Quality Level
GP	Grouped Project
CHW	Community Health Worker

APPENDIX 6: COMPETENCE OF TEAM MEMBERS AND TECHNICAL REVIEWERS

Competency Statement	
Name	Muskan Chawla
Years of Experience	2.5+
Qualifying Roles	
Team Leader	Yes
Auditor	Yes
Country Expert	Yes, CE Region 1 (English) / CE Region 6 (Hindi)
Technical Expert	Yes (1.2, 3.1)
Financial Expert	No
Independent Reviewer	Yes
Approval	
Approved by	Head of Quality and Compliance, SustainCERT
Date	5/9/2023

Competency Statement	
Name	Jean Bosco Rwiyamirira
Years of Experience	-
Qualifying Roles	
Team Leader	No
Auditor	Yes
Country Expert	Yes, Nigeria

Technical Expert	Yes (3.1)
Financial Expert	No
Independent Reviewer	No
Approval	
Approved by	Head of Quality and Compliance, SustainCERT
Date	03/02/2025

Competency Statement	
Name	Atul Takarkhede
Years of Experience	16+
Qualifying Roles	
Team Leader	Yes
Auditor	Yes
Country Expert	Yes, CE Region 1 (English) / CE Region 6 (Hindi)
Technical Expert	Yes (TA 1.1,1.2,3.1 and 13.1)
Financial Expert	No
Independent Reviewer	Yes
Approval	
Approved by	Head of Quality and Compliance, SustainCERT
Date	22/05/2025