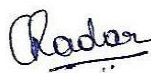


Verification and certification report form for GS project activities

BASIC INFORMATION

Title and reference number of the project activity	Title: Institutional Improved Cook Stoves for Schools and Institutions in Uganda GS Ref. No.: GS 4364
Scale of the project activity	☐ Large-scale ☒ Small-scale
GS Version applicable	GS4GG
Version number and Completion date of the verification and certification report	Version 03, dated 28/02/2025
Monitoring period number and duration of this monitoring period	06 Monitoring period: 01/01/2024 to 31/12/2024 (including both dates)
Version number of the GS monitoring report to which this report applies	04
Crediting period of the project activity corresponding to this monitoring period	01/03/2022 – 28/02/2027 (Renewable)
Project participants	Virginia Echavarria, Simoshi Limited
Host Party	Uganda
Applied methodologies and standardized baselines	Applied methodology: AMS-II.G. (Energy efficiency measures in thermal applications of non-renewable biomass), Version 12.0
Mandatory sectoral scopes	03- Energy Demand
Conditional sectoral scopes, if applicable	N/A
Estimated amount of annual average SDG impact	▪ SDG 1 – 50% firewood savings achieved equivalent to UGX 44,439,500 per year. ▪ SDG 3 – The cleaner and more efficient combustion of IICS and the reduction of at least 50% in fuel consumption are directly related to better air quality in the kitchen environment, ▪ SDG 4 – 235 training sessions conducted. 371 staff trained. 243 kitchen training assessments conducted. ▪ SDG 5 – With improved health, less time spent collecting fuel and faster cooking time, 86 women can pursue income-generating, educational opportunities, or just have more free time, contributing to poverty alleviation. ▪ SDG 7 – 100 schools included, 350 IICS sold.

	▪ SDG 8 – 12 jobs generated in compliance with labour standards. ▪ SDG 13 – 24,972 tCO₂e CDM/VER for annual average. ▪ SDG 15 – 11,025 tons of firewood saved per year ▪ SDG 17 – Partnership with Kampala Capital City Authority to support the Kampala Climate Change Action Strategy
Total amount of certified SDG impact (as per approved methodology) achieved in this monitoring period	▪ SDG 1 – 130,787,333 ¹ Ugandan shillings (firewood saved) ▪ SDG 3 – 218 kitchen staff confirmed better perception (air quality) ▪ SDG 4 – 814 training sessions conducted, 400 kitchen staff trained, 825 kitchen training assessments made (Training sessions Kitchen staff Training assessments) ▪ SDG 5 – 139 Women trained ▪ SDG 7 – 115 schools, 451 IICS ▪ SDG 8 – 6 Jobs ▪ SDG 13 – 13,253 tCO₂e ▪ SDG 15 – 16,258 Tons of firewood ▪ SDG 17 – 4 KCCA school
Name and UNFCCC reference number of the VVB	4K Earth Science Private. Limited UNFCCC Ref No. CDM-E-0069
Name, position and signature of the approver of the verification and certification report	 Chandrakala R. Managing Director

¹Per school term ugx 37,481,944 is saved. There are three school terms per year.

SECTION A. Executive summary

4K Earth Science Private Limited has been commissioned by “Simoshi Limited” to perform an independent GS periodic verification of its registered GS project “Institutional Improved Cook Stoves for Schools and Institutions in Uganda” (GS Ref. No.: GS 4364) for the reported GHG emission reductions for the given 6th monitoring period 01/01/2024 to 31/12/2024 (both dates included). The GS projects must undergo independent third-party verification and certification of emission reductions as the basis for issuance of Emission Reductions (GS VERs).

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

- The project activity has been implemented and operated as per the registered PDD and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place.
- Monitoring report and other supporting documents are complete.
- The actual monitoring systems & procedures and monitoring report conforms with the requirements of the registered monitoring plan and the approved monitoring methodology.
- The data is recorded and stored as per the monitoring methodology and registered monitoring plan.

Scope:

The scope of the verification is the independent and objective review and ex post determination of the monitored reductions in GHG emission by the project activity. The verification is based on review of monitoring report, supporting information and

- a) The registered PDD including the monitoring plan and the corresponding validation opinion(s);
- b) Previous verification reports, deviation requests, requests for revision of monitoring plan (if applicable);
- c) Monitoring report for the monitoring period under verification including VER calculations sheet and all supporting documents;
- d) The applied monitoring methodology;
- e) The applied standardized baseline (if applicable);
- f) Relevant decisions, clarifications and guidance from the CMP and the GS/CDM Executive Board;
- g) All information and references relevant to the project activity's resulting in emission reductions

The project is assessed against the requirements of the Kyoto Protocol, the CDM Modalities and Procedures and related rules and guidance and the Gold Standard requirements.

4KES has based on the recommendations in the latest version of CDM Validation and Verification Standard, employed a rule-based approach in the verification, GS Validation and Verification Standard /47/, focusing on the identification of significant reporting risks and the reliability of project monitoring.

Description of project:

The purpose of this project activity is the dissemination of institutional improved cook stoves (IICS) in schools and institutions in Uganda. The IICS disseminated are manufactured by Uganda Stove Manufacturers Limited (Ugastove). The model is the portable rocket firewood IICS of different sizes that meet the minimum thermal efficiency requirement of 20%. The different IICS sizes are conditioned by the saucepan capacity and range from 30 litres and up to 600 litres.

These IICS are more efficient in transferring heat to the cooking pots, thus requiring less fuel to prepare the same meal. This efficiency is translated into fuel savings compared to traditional stoves used in Uganda. By reducing fuel consumption, the project activity reduces greenhouse gas emissions from the use of fuel. This reduction in fuel consumption is estimated and corresponding CO₂ emission reductions are calculated from these savings.

The project boundary of this project includes whole Republic of Uganda (Uganda) including its 111 districts and the city of Kampala.

Methodology:

4KES follows a rule-based verification approach, wherein, as a first step, the contract review is undertaken as per latest version of CDM Accreditation Standard. A desk review of the project documentation is

undertaken, which is followed by an audit by the members of verification team in accordance with the latest version of CDM AS/GS PRINCIPLES & REQUIREMENTS. The verification protocol is filled by the verification team that is based on standard auditing practices and version 03 of CDM VVS for Project Activity, to capture the assessment of applicable CDM requirements as per the version 3 of CDM Project Standard for Project Activity, GS Validation and Verification Standard /47/, registered PDD, applied methodology, applied standardized baseline and/or tools and recent decisions. The verification protocol provides transparent means to record the observations and compliances by the verification team members and the nonconformities, if any. The verification protocol is the document used by the auditors to check on the requirements as per the latest procedures made available. Following is the timeline for the GS verification under consideration.

Verification contract	26/11/2024
Audit	27/01/2025 to 29/01/2025
Draft Verification Report	04/02/2025
Final Verification Report	28/02/2025

4K Earth Science Private Limited confirms that the monitoring system is in place and the emission reductions are calculated without material misstatements.

Based on the information seen and evaluated we confirm that the implementation of the project has resulted in 13,253 tCO₂e (round down) emission reductions during period 01/01/2024 to 31/12/2024 (Including both the days).

Sustainable Development Goals Targeted	SDG Impact	Amount Achieved	Units/ Products
SDG 1 No poverty	Equal rights to economic resources	130,787,333	Ugandan shillings
SDG 3 Good health and well-being	Reduce the number of illnesses from air pollution	218 kitchen staff confirmed better perception	Air quality
SDG 4 Quality education	Provide a safe learning environment	814 training sessions conducted, 400 kitchen staff trained, 825 kitchen training assessments made	Training sessions Kitchen staff Training assessments
SDG 5 Gender equality	Promote women empowerment	139	Women trained
SDG 7 Access to affordable and clean energy services	Double the global rate in energy efficiency	115 schools 451 IICS	Schools IICS
SDG 8 Decent work and economic growth	Achieve full and productive employment and equal pay for all	6	Jobs
SDG 13 Climate action	Integrate climate change measures into national policies, strategies and planning	13,253	tCO ₂ emission reductions
SDG 15 Life on land	Halt deforestation	16,258	Tons of firewood
SDG 17 Partnerships for the goals	Enhance the global partnership for sustainable development	4	KCCA school

Vintage-wise Emission reductions

		Amount Achieved		
Start Dates	End Dates	GS VERs	...	...
01/01/2024	31/12/2024	13,253		

SECTION B. Verification team, technical reviewer and approver

B.1. Verification team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Verification findings
1.	Team Leader (GS Approved Auditor)	IR	Acharya	Swati S	4KES-Central Office	✓		✓	✓
2.	Technical Expert (TA 3.1) (GS Approved Auditor)	EI	Kandari	Sanjay	4KES-Central office	✓			
3.	Technical Expert (TA 3.1) and Local Expert	EI	Alweny	Salome	4KES-Central office	✓	✓	✓	
4.	Trainee	IR	Pandey	Vikas	4KES-Central office	✓			

B.2. Technical reviewer and approver of the verification and certification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)
1.	Technical Reviewer (TA 3.1)	IR	S	Stalin	4KES-Central office
2.	Approver	IR	R	Chandrakala	4KES-Central office

SECTION C. Application of materiality

C.1. Consideration of materiality in planning the verification

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	The IICS/Institutions registration is done through sales agreement. Error can be perceived during registration by PP and during transfer of data from paper to ER sheet by PP.	Medium	PP collects the IICS/Institutions registration data and transfer to ER sheet. Error can be perceived during registration by PP and during transfer of data from paper to ER sheet by PP.	To mitigate the risk, Verification team has checked the IICS/institutions registration data in the ER sheet /04/ through the acceptance sampling of the IICS/institutions and from the registration records /10/. The registration data was found consistent. Further verification team has also checked the ER calculation sheet /04/ thoroughly to mitigate the risk.
2.	Monitoring parameters are monitored by PP and errors can be perceived during the	High	There are multiple monitoring parameters (As per registered PDD) which	1. To mitigate the risk, DOE has checked the monitoring data for 5 applicable

	information transfer from monitoring forms to the emission reduction sheet.		are directly used for the baseline emission calculation. The data monitoring for these monitoring parameters is done by PP and errors can be perceived during the information transfer from monitoring forms to the emission reduction sheet.	monitoring parameters (as given below) through acceptance sampling. Monitoring parameters: 1. $t_{fraction\ i}$ 2. Date of commissioning of project device i 3. $N_{y,inst}$ 4. μ_y 5. $U_{y,inst}$ For all the selected samples, the monitoring data (for the 5 monitoring parameters) has been checked by DOE from the interview. Also, all the monitoring forms /10/, /11/, /12/ were also checked along with ER sheet /04/. The data was found consistent. Further verification team has also checked the ER calculation sheet /04/ thoroughly to mitigate the risk. 2. To mitigate the risk, DOE has checked the monitoring data for 1 applicable monitoring parameter (as given below) through checking qualifications/capability of tester /39/ and /40/, test method /22/, all the WBT monitoring data for 11 IICS /09/ and the ER sheet /04/. The data was found consistent. Monitoring parameters: 1. $\eta_{new,i,j}$ Further verification team has also checked the ER calculation sheet /04/ thoroughly to mitigate the risk.
3.	Errors can be perceived during the information transfer (Ex-ante parameters) from registered PDD to the emission reduction sheet.	Medium	There are multiple ex-ante parameters in the Monitoring report which are used for the Baseline GHG emission calculation. Errors can be perceived during the information transfer (Ex-ante parameters) from registered PDD to the emission reduction sheet.	To mitigate the risk, verification team has checked all the Ex-ante parameters under the ER sheet /04/ with the monitoring report /02/ and PDD /25/ and found consistent.

C.2. Consideration of materiality in conducting the verification

The prescribed thresholds for materiality, as per §326 of “CDM validation and verification standard for project activities” Version 03.0 /27/.

Prescribed range of ERs/annum	500,000+	300,000+ to 500,000	300,000	SSC Pas	MSC PAs
Prescribed Threshold	0.5%	1.0%	2.0%	5.0%	10.0%

The identified/selected materiality threshold for the project activity under current monitoring period is 5.0% as the project activity is a small-scale project activity.

	MR Version (Draft) /01/	MR Version (Final) /02/
Emission reductions	13,467 tCO ₂ e	13,253 tCO ₂ e
Identified Threshold	5.0%	5.0%

During the verification, the emission reduction has been decreased because of the raised CARs. Refer Appendix 4 of this report for more details. The complete dataset for the project activity was checked and it can be confirmed that the values are consistent with their sources. The assessment team confirms that the reported emission reductions are free from material errors, omissions or misstatements.

SECTION D. Means of verification

D.1. Desk/document review

A desk review was undertaken on the information provided, involving but not limited to,

- A thorough review of the data and information presented in the monitoring report and excel sheet to verify their completeness;
- A review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements, the quality of measuring equipment including calibration requirements, and the quality assurance and quality control procedures;
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

The complete list of documents reviewed and verified is included in the section ‘Appendix 3’ of this report.

D.2. Interviews

Verification team has conducted the physical site visit interviews of the project beneficiaries by Technical Expert and Local Expert along with other remote interviews. This is in line with para 8.3.1.2 of the VALIDATION/VERIFICATION BODY REQUIREMENTS, Version 3.0 which specify that Team Leader is not mandatory to visit the site however Technical Expert should visit the site. Along with desk review, audit team has conducted interview (Skype and physical interview) as follows

- A complete desk review of the MR, as well as all applicable country legal requirement and supportive evidence have been checked by the verification team.
- Verification team has performed interviews in order to check implementation, project boundary, current situation, evaluation of data management, QA/QC system, monitoring equipment, monitoring procedures, calibration etc.
- Cross checks between information provided by interviewed personnel (i.e. by checking sources) to ensure that no relevant information has been omitted.
- Cross-check evaluation, for information received from interviews, under the scope of all information and references provided in MR and supporting documents.

Details of interviewees, topics covered, and additional information presented in the below section “D.3 Interviews”.

D.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Echavarria	Virginia	Managing Director, Simoshi Limited	29/01/2025	General aspects of the project, Changes since 5 th verification, Quality management system, Monitoring data management, Data analysis, Implementation of the monitoring plan, GHG emission reduction calculation, Involved personnel and responsibilities, Training and practice of the operational personnel, Monitoring data management, Maintenance, Sales/Distribution records, Survey records, Qualification, Grievance Mechanism, SDGs, Safeguarding principles etc.	Ms. Swati S Acharya - Skype Interviews Ms. Salome Alweny - Physical site visit interviews
2.	Mutengeke	Robert	Project Officer and Maintenance, Simoshi Limited	29/01/2025		
3.	Laugner	Markus	Engineer, Simoshi Limited	29/01/2025		
4.	Nyadoi	Anna	Administrator, Simoshi Limited	29/01/2025		
5.	Nakyazzi	Rehema	CEO, Ugastove	29/01/2025		
6.	Mustapha	Kawenja	Sales Officer, Ugastove	29/01/2025		
7.	Musa	Muwanya	Operations Manager, Ugastove	29/01/2025		
8.	Simon	Kizito	Stove Builder, Ugastove	29/01/2025		

Institutions sampled during on-site audit by VVB for the monitoring parameters (t_{fraction i}, Date of commissioning of project device I, $N_{y,inst}$, μ_y , $U_{y,inst}$):

S. No.	SCHOOL NAME	Team member
1	St. Dominic Kigo Lunya Primary School	Ms. Salome Alweny– Physical site visit interviews From 27/01/2025 to 29/01/2025
2	Kitebi Primary School	
3	Seguku Primary School	
4	Cornerstone Parents School	
5	Bethel Covenant College	
6	St. Lawrence Kigowa Primary School	
7	Kawempe Muslim Primary School	
8	St. Paul's Primary School Banda	
9	Naguru Katali Primary School	
10	St. Jude Primary School	
11	Ntinda Primary School	
12	Kalinaabiri Primary School	

13	Bbira Primary School	
14	Namungoona Orthodox Primary School	

Verification team cross verified SDGs. Some of the questions asked and reply during interview are as follows:

Reduction of smoke levels, incidents of coughing, respiratory illness, eye infections.? (project stove users)

Reply: Yes

People were directly employed and income generated by the project.? (from Simoshi employees)

Reply: Yes

All necessary personal protective equipment were provided to stove manufacturers' employees when handling metal sheets for IICS construction.? (from Ugastove representative)

Reply: Yes

Any Incidents of sexual harassment involving Simoshi or stove manufacturers' employees.? (from Simoshi and Ugastove representative)

Reply: No

D.4. Sampling approach

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

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

There are a total of 5 monitoring parameters (as given below) for which sampling has been done by the VVB.

1. $t_{fraction\ i}$
2. Date of commissioning of project device i
3. $N_{y,inst}$
4. μ_y
5. $U_{y,inst}$

VVB had planned to apply the acceptance sampling in accordance with the paragraph 54 of the "Guideline: Sampling and surveys for CDM project activities and programmes of activities, version 04.0" /31/. 4KES verification team carried out the random sampling from the PP's records and check (using its professional judgment) the acceptability of the data for each record in the PP's sample records against VVB records i.e. Data collected by the VVB. The VVB has determined acceptance sample size based on the "Table. Sample size and acceptance number based on AQL, UQL, and producer and consumer risks" of standard "Sampling and surveys for CDM project activities and programmes of activities" version 09.0 /30/.

During the on-site verification a sampling approach has been used by the verification team to verify the reported values for the monitored parameters (5 monitoring parameters as given above) as listed in section D.2 of the MR.

For the determination of VVB's acceptance sample size, verification team has selected the following using its professional judgment:

1. Acceptable quality level (AQL) – 0.5%
2. Unacceptable Quality Level (UQL) – 20%
3. Producer risk -10%
4. Consumer risk -5%

Verification team has determined acceptance sample size for all the monitoring parameters based on the "Table. Sample size and acceptance number based on AQL, UQL, and producer and consumer risks" of

standard “Sampling and surveys for CDM project activities and programmes of activities” version 09.0. From the above factors, the verification team determined the minimum sample size (n) as 14 and acceptance number (c) as 0. The sample size used to verify the reported values for the monitored parameters which are determined through monitoring by PP. The VVB interviewed the school’s representative during the site visit and filled the VVB survey form to check the acceptability of the data for each PP’s records.

The actual number of sample size where the acceptance survey was done is given below:

Parameters	Total Population	Acceptance sample size	Acceptance Number	Sampling method used
5 Monitoring parameters as per section D.2 of the MR 1. t fraction i 2. Date of commissioning of project device i 3. $N_{y,inst}$ 4. μ_y 5. $U_{y,inst}$	Total Institutions: 115	14	0	Acceptance Sampling based on random selection of schools.

Using acceptance sampling approach, verification team checked the PP’s Institution/IICS results (reported in the Monitoring forms) with the VVB interview records. During site visit, Verification team visited sample schools applying the random selection technique to cross check the data reported by PP.

The result of the survey is given below:

Parameters	VVB Sample size	No of PP’s record beyond unacceptable level	Accepted
Monitoring parameters as per E.2 of the MR	14	0	14

All the visited samples were showing similar result as reported by PP in its monitoring records. Onsite audit results/observation is found to be in line with PP surveys and results. Further, all the primary monitoring records on-site were reviewed to assess the consistency of information in MR and ER calculation spreadsheet and found the monitoring data to be correctly transcribed. Based on that, verification team concludes that results and values presented by PP in the MR and ER sheet are consistent with the onsite observation and interview with the end users.

D.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

During the course of verification, the findings may be raised as under;

CAR is raised if one of the following occurs:

- Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;
- Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;
- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
- Issues identified in a FAR during validation to be verified during verification(s) have not been resolved by the project participants.

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

FAR is raised during verification if the monitoring and reporting require attention and/or adjustment for the next verification period.

The verification report contains (Appendix 4) all CARs, CLs and FARs raised during this verification in transparent manner and provides clear information of the issues raised, response received and its resolutions, including the changes in the documents. Total 03 CAR, 00 CL and 00 FAR are raised in this verification report.

SECTION E. Verification findings

E.1. Compliance of the monitoring report with the monitoring report form

Means of verification	Verification team checked the GS monitoring report /02/ with “GS template” and found OK.
Findings	No CAR/CL raised.
Conclusion	Verification team confirms that final GS monitoring report /02/ is completed using the latest valid version of the applicable monitoring report form.

E.2. Remaining forward action requests from validation and/or previous verifications

The current verification is for the 6th monitoring period of the project activity. All raised CARs and CLs were successfully closed during previous Verification. There is no pending FAR from previous Verification.

E.3. Compliance of the project implementation and operation with the registered project design document

Means of verification	The purpose of this project activity is the dissemination of institutional improved cook stoves (IICS) in schools and institutions in Uganda. All the IICS disseminated under the project activity are manufactured by Uganda Stove Manufacturers Limited (Ugastove). The model is the portable rocket firewood IICS of different sizes that meet the minimum thermal efficiency requirement of 20%. The Ugastove rocket-stove design is portable IICS, it includes a chimney provision and has a single saucepan provision with capacities that range from 30 litres up to 600 litres capacity. All the IICS have a unique number. The same is verified during the interviews, technical specification of the distributed IICS /07/, provided efficiency test reports of project IICS /09/ and ER sheet /04/. Verification team confirms that the IICS distributed to schools under the project activity (till the end of this monitoring period) are in compliance with the PDD /25/. Verification team has also interviewed representative of UGASTOVE to understand the IICS manufacturing process, QMS of UGASTOVE, Stove design and similarity between different size of Saucepans (starting from 30 L to 600 L), Health & Safety aspects taken during the IICS manufacturing. PP has opted to carry out WBTs on 30 litres IICS capacity (3 test for each IICS and considered lowest) and apply conservatively the resulted thermal efficiency across all IICS sizes.² The SSC WG considered that applying the lowest efficiency found in IICS with saucepan capacities of 30 litres for IICS with saucepan capacities larger than 30 litres would be a conservative approach when the IICS designs and maintenance practices are comparable. All the stoves distributed under the project activity are from the same manufacturer i.e. Ugastove. Verification team based on review of IICS Quality Assurance Control Manual /16/ and interview with Ugastove representative confirms that the design
------------------------------	--

² This is in line with the response given from the SSG WG to Request for Clarification SSC_725.

(e.g. with respect to insulation, placement of grate, cooking vessel and if applicable chimney) of all Ugastove IICS remain the same irrespective of the size and thus using the value of efficiency test of 30 L saucepan to higher size is justified inline with the requirements of SSWG 725.

Based on the interview, IICS Maintenance Manual /20/ and maintenance sheet /18/, verification team confirms that all Ugastove IICS have comparable repair and maintenance practices on all project stoves, irrespective of the size.

PP has taken the census approach and 11 disseminated IICS of 30 litres capacity from the first batch were tested (by PP) following the WBT version 4.2.3 /22/, with three tests conducted on every IICS which is in compliance with the SSC_725 clarification /34/ and sentence *“PP will carry out WBTs on 30 litres IICS capacity and apply conservatively the resulted thermal efficiency across all IICS sizes. The SSC WG considered that applying the lowest efficiency found in IICS with saucepan capacities of 30 litres for IICS with saucepan capacities larger than 30 litres would be a conservative approach when the IICS designs and maintenance practices are comparable. The thermal efficiency of IICS with 30 litres saucepan capacity in the first batch would be used for annual efficiency monitoring as specified in option (c) of paragraph 25 and the result would be applied across all IICS sizes.”* under section B.7 of the registered PDD /25/. PP has taken 11 disseminated IICS of 30 litres capacity from the first batch and conducted three WBT tests on every IICS. The most conservative value among the results of efficiency tests conducted (i.e. the least efficiency determined) were applied conservatively to all the stoves which is accepted to the verification team.

11 WBT tests³ have been done by Ms. Virginia Echavarria (Managing Director, Simoshi Limited). Verification team based on review of IICS Quality Assurance_Control Manual /16/, IICS material testing results /19/ and interview with representative of Ugastove confirms that the stove manufacturer i.e. Ugastove has a quality management system in place (e.g. proven stove design is employed and materials of high quality and consistency are used for the production of stoves and quality of the input material and critical dimensions of the produced stoves are tested). This is inline with the requirements of SSWG CL 726 and thus WBT carried out by PP is acceptable to the verification team.

As per para 37 of the standard “Sampling and surveys for CDM project activities and programmes of activities” Version 09.0 /30/, VVB has checked:

1. Whether the WBT tests were conducted by qualified institutions/testers.
2. Whether the WBT tests were conducted in accordance with approved established international/national standards, procedures.

From the WBT test data /09/ and the interview with Ms. Virginia Echavarria, Verification team has found that WBT test were conducted in accordance with “The Water Boiling Test” version 4.2.3 /22/ which is accepted to the verification team. Also, from the review of Ms. Virginia Echavarria’s CV /39/ and other supportive document /40/, Verification team has found that she is having multiple years of WBT testing experience in past employer organization (Uganda Carbon Bureau) and also contributed in international workshops /40/. Hence, she is found to be capable for WBT testing. VVB has also checked all the WBT monitoring data for 11 IICS /09/ and the ER sheet /04/ and found correct.

Average efficiency of the 11 IICS (26.94%) has been considered for the ER calculation /04/ which is accepted to the verification team.

Verification team has also checked the calibration records /06/ for all the three monitoring instruments (Weighing scale, Digital thermometer and Moisture meter) used during the WBT. Verification team has checked the monitoring equipments from the Photos /14/. WBT test for IICS efficiency was done during August/September 2024 as checked from the WBT test records /09/. As verified

³ 3 test for each IICS and considered lowest.

from the calibration records /06/, the calibration of the monitoring equipments (Weighing scale calibrated on 26/07/2024, Digital thermometer calibrated on 25/07/2024 and Moisture meter calibrated on 30/07/2024) was done before the WBT test which is accepted to the verification team. As verified from calibration reports /06/, The Calibration of all the three monitoring instruments (Weighing scale, Digital thermometer and Moisture meter) was done by Uganda National Bureau of Standards which is a government agency and hence accepted to the verification team.

As verified by the verification team during the sampling, Sales agreement /10/ and from the ER sheet /04/, all the IICS have been distributed only in schools (till the end date of this monitoring period).

Till the end of this monitoring period, total 115 schools were enrolled in the project and the calculation of the actual number of pupils enrolled and staff (teachers and non-teachers) in the school is based on the actual data of these 115 Schools as recorded in the document Term Information Update /11/.

Simoshi Limited (Simoshi) is the project participant of this project activity. The ongoing support Simoshi provides to all schools includes continuous monitoring and training of kitchen staff, annual free maintenance for all IICS. Verification team has verified the same from the review of various documents /13/, /15/, /18/. The monitoring staff of the Simoshi is competent as verified during interview and also from the training documents /13/.

When purchasing the IICS, the school/institution filled a sales agreement with Simoshi that contains, among others, information about the IICS model, price and payment, the name, location/address and phone number of the school/institution. This information allows the identification and the monitoring of the IICS and its usage. By filling the sales agreement, the school/institution has agreed to discontinue the use of the traditional stove, and to use the IICS instead. By signing the sales agreement, the school/institution was aware of and willing to give up its rights on emission reductions and transfer all carbon rights to Simoshi. Verification team has verified the same during the sampling, Sales agreements /10/.

The size of each IICS distributed under the project till the end of this monitoring period was checked and found within 5% of the small-scale threshold 180 GWh_{th}/year. As per the calculation provided under the tab "Debundling and Additionality" of ER sheet /04/, verification team confirms that size of each unit (IICS) is within 5% of the small-scale threshold 180 GWh_{th}/year which is in compliance of the registered PDD /25/ and the additionality of the project activity is secured.

According to the tab "SSC threshold" of the ER sheet /04/, the actual number of school added under the project activity are lower than the allowed maximum no of schools (Calculated as per small-scale threshold 180 GWh_{th}/year). Hence the project activity is within the small-scale threshold i.e. aggregated thermal energy savings has not exceeded 180 GWh_{th}/year during this monitoring period.

Verification team has checked the life time of the project IICS from the technical document from the manufacturer /08/ which is 10 years. Project IICS are operating well as verified during the sample audit and also from the document /18/.

The verification team determined the conformity of the actual project activity and its operation with the registered project design documents /25/. Verification team has, by means of a desk review and interviews, assessed that all physical features of the project activity proposed in the registered PDD /25/ are in place, and that the project participants have operated the project activity as per the registered PDD /25/.

The second crediting period starts 01/03/2022 and finishes on 28/02/2027. The current 6th monitoring period i.e. from 01/01/2024 until 31/12/2024 (both days included) comes under 2nd crediting period.

	The verification team has checked the information in the monitoring report and compared against the registered PDD /25/ and found consistent. Project activity is registered under CDM (UNFCCC ref. no. 10345) & GS (ref. no. 4364) however only GS VERs are claimed for this monitoring period i.e. 01/01/2024 to 31/12/2024 (both dates included) which is also confirmed from the declaration /42/. The project developer declared that no double issuance has been requested for the same monitoring period. The same is confirmed from the CDM webpage (https://cdm.unfccc.int/Projects/DB/CarbonCheck_Cert1486462226.32/view). Project is not included in any national or international emissions trading program or binding emission limit as confirmed from the weblinks /43/, /44/, /45/, /46/.
Findings	No CAR/CL raised.
Conclusion	The verification team, based on the interviews and document review, was able to conclude that the project activity has been commissioned and implemented as per the registered PDD /25/ and that all physical features of the project are in place. As per para 354 and 355 of CDM VVS for project activity version 03.0 /27/, the verification team confirms that: a) The project activity is implemented as per the registered PDD /25/. b) The actual operation of the project activity is in line to the registered PDD /25/. c) It has reviewed the registered PDD /25/ including the monitoring plan, the applied monitoring methodology, relevant decisions from the CMP and the CDM EB and found that the Final MR for this monitoring period is in line with all the above-mentioned documents.

E.4. Post-registration changes

E.4.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents⁴

There is no temporary deviation to be submitted with this request for issuance. Therefore, this section is not applicable.

⁴ Other standards, methodologies, methodological tools and guidelines (to be) applied in accordance with the applied (selected) methodologies are collectively referred to as the other (applied) methodological regulatory documents).

E.4.2. Corrections

There is no correction to be submitted with this request for issuance. Therefore, this section is not applicable.

E.4.3. Changes to the start date of the crediting period

There is no change to the start date of the crediting period in this monitoring period.

E.4.4. Permanent changes from registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents

There is no permanent change to be submitted with this request for issuance. Therefore, this section is not applicable.

E.4.5. Changes to the project design

There is no change to the project design to be submitted with this request for issuance. Therefore, this section is not applicable.

E.5. Compliance of the registered monitoring plan with applied methodologies, applied standardized baselines, and other applied methodological regulatory documents

Means of verification	The verification team checked compliance of project monitoring plan (PDD) /25/ with the applied methodology (AMS-II.G., version 12.0) /23/ and including applicable tools.						
	The actual procedures followed for monitoring of parameters are checked against the parameters and procedures provided in the applied methodology /23/.						
	All parameters used for emission reductions calculation have been verified. The discussion regarding each parameter has been elaborated in the further sections of this report.						
	<table><tr><th>Applicability criteria as per applied methodology i.e. AMS-II.G., version 12.0</th><th>Means of Verification</th></tr><tr><td>Requirement as per para 2 of the applied methodology AMS-II.G., version 12.0: This methodology comprises efficiency improvements in thermal applications of non-renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency biomass fired project devices (cook stoves or ovens or dryers) to replace the existing devices and/or energy efficiency improvements in existing biomass fired cook stoves or ovens or dryers.</td><td>Verification team confirms that project activity has disseminated high efficiency firewood institutional improved cook stoves (IICS) in schools in Uganda, hence this applicability criterion is met. The same is verified during the physical site visit, technical specification of the distributed IICS /07/, provided efficiency test reports of project IICS /09/.</td></tr><tr><td>Requirement as per para 3 of the applied methodology AMS-II.G., version 12.0: In the case of cook stoves, the methodology is applicable to introduction of single pot or multi pot portable or in-situ cook stoves with</td><td>The IICS distributed under the project activity are single pot and portable as verified during the physical site visit, technical specification of the distributed IICS /07/. The average efficiency of project IICS as per the provided efficiency test reports /09/ is 26.94%, thus complies with the</td></tr></table>	Applicability criteria as per applied methodology i.e. AMS-II.G., version 12.0	Means of Verification	Requirement as per para 2 of the applied methodology AMS-II.G., version 12.0: This methodology comprises efficiency improvements in thermal applications of non-renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency biomass fired project devices (cook stoves or ovens or dryers) to replace the existing devices and/or energy efficiency improvements in existing biomass fired cook stoves or ovens or dryers.	Verification team confirms that project activity has disseminated high efficiency firewood institutional improved cook stoves (IICS) in schools in Uganda, hence this applicability criterion is met. The same is verified during the physical site visit, technical specification of the distributed IICS /07/, provided efficiency test reports of project IICS /09/.	Requirement as per para 3 of the applied methodology AMS-II.G., version 12.0: In the case of cook stoves, the methodology is applicable to introduction of single pot or multi pot portable or in-situ cook stoves with	The IICS distributed under the project activity are single pot and portable as verified during the physical site visit, technical specification of the distributed IICS /07/. The average efficiency of project IICS as per the provided efficiency test reports /09/ is 26.94%, thus complies with the
Applicability criteria as per applied methodology i.e. AMS-II.G., version 12.0	Means of Verification						
Requirement as per para 2 of the applied methodology AMS-II.G., version 12.0: This methodology comprises efficiency improvements in thermal applications of non-renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency biomass fired project devices (cook stoves or ovens or dryers) to replace the existing devices and/or energy efficiency improvements in existing biomass fired cook stoves or ovens or dryers.	Verification team confirms that project activity has disseminated high efficiency firewood institutional improved cook stoves (IICS) in schools in Uganda, hence this applicability criterion is met. The same is verified during the physical site visit, technical specification of the distributed IICS /07/, provided efficiency test reports of project IICS /09/.						
Requirement as per para 3 of the applied methodology AMS-II.G., version 12.0: In the case of cook stoves, the methodology is applicable to introduction of single pot or multi pot portable or in-situ cook stoves with	The IICS distributed under the project activity are single pot and portable as verified during the physical site visit, technical specification of the distributed IICS /07/. The average efficiency of project IICS as per the provided efficiency test reports /09/ is 26.94%, thus complies with the						

	rated efficiency of at least 20 per cent.	requirement of the applied methodology.
	Requirement as per para 4 of the applied methodology AMS-II.G., version 12.0: The aggregate energy savings of a single project activity shall not exceed the equivalent of 60 GWh per year or 180 GWh thermal per year in fuel input.	According to the tab "SSC threshold" of the ER sheet /04/, the actual number of school added under the project activity are lower than the allowed maximum no of schools (Calculated as per small-scale threshold 180 GWh _{th} /year). Hence the project activity is within the small-scale threshold i.e. aggregated thermal energy savings has not exceeded 180 GWh _{th} /year during this monitoring period.
	Requirement as per para 7 of the applied methodology AMS-II.G., version 12.0: The CDM-PDD or CDM-PoA-DD/CPA-DD shall explain the proposed method for distribution of project devices including the method to avoid double counting of emission reductions such as unique identifications of product and end-user locations (e.g. programme logo).	According to tab "IICS Serial Numbers" of the ER sheet /04/, each ICS has a serial number, GPS co-ordinates of the school/institution, address etc. Further all the ICS are distributed by Simoshi Limited as confirmed during the interviews.
	Requirement as per para 8 of the applied methodology AMS-II.G., version 12.0: The CDM-PDD or CDM-PoA-DD/CPA-DD shall also explain how the proposed procedures prevent double counting of emission reductions, for example to avoid that project stove manufacturers, wholesale providers or others claim credit for emission reductions from the project devices.	By signing the sales agreement, the school/institution was aware of and willing to give up its rights on emission reductions and transfer all carbon rights to Simoshi. Verification team has verified the same during the interviews of school/institution, Sales agreements /10/. Further all the ICS are distributed by Simoshi Limited as confirmed during the interviews.
Findings	No CAR/CL raised.	
Conclusion	The verification team was able to confirm that the monitoring plan contained in registered PDD /25/ and MR /02/ is in accordance with the approved small scale methodology applied for the project activity i.e. (AMS-II.G., version 12.0) /23/. As per para 357 and 358 of CDM VVS for project activity version 03.0 /27/, In the opinion of the verification team the monitoring plan of the registered PDD /25/ complies with the monitoring requirement of the applied approved small scale methodology (AMS-II.G., version 12.0) /23/.	

E.6. Compliance of monitoring activities with the registered monitoring plan

E.6.1. Data and parameters fixed ex ante or at renewal of crediting period

Means of verification	The verification team has checked the ex-ante parameters and data stated in Section D.1 of MR /02/ and compared registered PDD /25/ whether all parameters fixed ex-ante for the crediting period have been applied correctly.		
	Ex-ante Parameter, Unit, Description	Value applied and source	Verification of the source
	Bold,p	Boarding schools:	The values were fixed at the

	Unit: Tonnes/person /year Description: Annual quantity of woody biomass that would have been used per person in the school/institution in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices	0.402 Day schools: 0.201 Source: AMS-II.G. Version 12.0, paragraph 44 /23/	time of validation of PDD /25/. The values have been correctly taken as per the registered PDD /25/ and hence accepted by the verification team. This is used for Baseline emission calculation.
	f_{NRB,y} Unit: Fraction Description: Fraction of woody biomass saved by the project activity in the year y that can be established as non-renewable biomass	0.81 Fraction Source: Default values as per https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-30-v3	The values were fixed at the time of validation of PDD /25/. The values have been correctly taken as per the registered PDD /25/ and hence accepted by the verification team. This is used for Baseline emission calculation.
	NCV biomass Unit: TJ/tonne Description: Net calorific value of the non-renewable woody biomass that is substituted	0.0156 TJ/tonne Source : IPCC default 2006 (volume 2, chapter 1, Table 1.2)	The values were fixed at the time of validation of PDD /25/. The values have been correctly taken as per the registered PDD /25/ and hence accepted by the verification team. This is used for Baseline emission calculation.
	EF_{projected fossil-fuel} Unit: tCO₂/TJ Description: Emission factor for the substitution of non-renewable woody biomass by similar consumers	73.2 tCO₂/TJ Source : Default values paragraph 25 of AMS.II.G. version 12.0 /23/	The values were fixed at the time of validation of PDD /25/. The values have been correctly taken as per the registered PDD /25/ and hence accepted by the verification team. This is used for Baseline emission calculation.
	LE_y Unit: Fraction Description: Net to gross adjustment factor to account for leakage	0.95 Source : AMS-II.G. (version 12.0), paragraph 41 /23/	The values were fixed at the time of validation of PDD /25/. The values have been correctly taken as per the registered PDD /25/ and hence accepted by the verification team. This is used for Baseline emission calculation.
	η_{old} Unit: Fraction Description: Efficiency of the baseline appliance being	0.10 Source: AMS-II.G. (version 12.0), table 9 /23/	The values were fixed at the time of validation of PDD /25/. The values have been correctly taken as per the registered PDD /25/ and hence accepted by the verification team. This is

	replaced		used for Baseline emission calculation.
Findings	No CARs/CL raised.		
Conclusion	As per para 360 to 361 of CDM VVS for project activity version 03.0 /27/, the verification team confirm that the value of the Ex-ante parameters (Fixed ex-ante for the 2 nd crediting period) used for calculation of emission reduction are consistent with registered PDD /25/ and correctly applied in MR /02/ and emission reduction spread sheet /04/ and justified.		

E.6.2. Data and parameters monitored

Means of verification	Verification team confirms through interviews and from the document review, the actual monitoring system complies with the monitoring plan mentioned in the registered PDD /25/.		
	During the verification, the SDGs of the registered monitoring plan /25/ have been verified with regard to the appropriateness of the verification method; the correctness of the values applied for ER calculation, the accuracy and applied QA/QC measures. The monitoring parameters have been measured / determined without material misstatements and is in line with all applicable standards and relevant requirements.		
	The assessment for the SDG parameters is given below:		
	Relevant SDG Indicator/Safeguarding Principle	Goal 1 – End poverty in all its forms everywhere	Means of Verification
	Data / Parameter	Training of school staff and kitchen monitoring, following the “Kitchen Management Techniques” and “Firewood Best Practice Manual”, to improve the overall conditions and safety of the kitchen environment.	PP collects the amount of firewood spent in Ugandan Shillings (UGX) at the end of each school term (three times per year) and monitors that savings are still achieved compared to the baseline expenditure through the “School Term Update” form. The SDG has been reported under the tab “Ny Term Information Update” of the Emission reduction sheet /04/. Verification team has verified the school term update for all the schools /11/ and found the average firewood reduction is around 43% which is little lower than the target i.e. 50% even though this is still an improvement. Further it was also confirmed during the interviews with the school kitchen staff and found in compliance with the reported values.
	Unit	Ugandan Shillings (UGX)	
	Description	Amount in UGX saved by school/institution per school term	
	Source of data	“School Term Update” survey	
	Value(s) applied	130,787,333	
	Measurement methods and procedures	School bursars are usually responsible for all firewood purchases during the school term. PP monitors these firewood expenditures right at the beginning during the baseline survey it conducts in each school, and after the IICS have been deployed. baseline UGX expenditure – school term UGX expenditure: UGX firewood saved per school term.	

	Monitoring frequency	PP collects the amount of firewood spent in Ugandan Shillings (UGX) at the end of each school term (three times per year) and monitors that savings are still achieved compared to the baseline expenditure through the "School Term Update" form. It is expected that a 50% reduction in firewood expenditure is achieved as the school/institutions use the IICS for all of the cooking activities.	
	QA/QC procedures	N/A	
	Purpose of data	To monitor SDG1 to ensure financial savings are achieved through the firewood savings	
	Additional comment	The amount of firewood spent in UGX is completed on the "School Term Update" form, stamped by the school and signed by the school administrator responsible for providing such information. All participating schools under the Project Activity had successfully reduced approximately 43% their firewood expenditures throughout the monitoring period. Calculations found on Excel spreadsheet "Ny Term Information Update" tab, column S. The values captured as baseline consumption have not been adjusted for inflation therefore savings are actually higher than those here reported.	
	Relevant SDG Indicator/Safeguarding Principle	Goal 3 – Ensure healthy lives and promote well-being for all at all ages	Means of Verification
	Data / Parameter	Air quality	PP has quarterly conducted the "Kitchen Information Update" /12/ survey during the school visits which is as per the frequency defined in PDD /25/. Every three months, kitchen staff were interviewed and asked how the air quality was perceived in the kitchen – with options to choose between worse, same or better, while asked to further expand if discomfort was felt as a result of smoke from firewood burning (such as coughing, eye infections, respiratory illnesses, etc).
	Unit	-	
	Description	Amount of CO and RPM emission reductions achieved, indirectly measured through perception of improvement of air quality. Research indicates reduced CO and RPM as follows: A quantitative estimation for the reduction of CO, RPM etc. arising from the emission reductions of the programme due to the reduced consumption of firewood or charcoal. It can be derived as follows (Reference: Modelling indoor air pollution from cookstove emissions in	

		developing countries using a Monte Carlo single-box model, Johnson et.al; made available to the DOE): Wood-fuel stoves reduce CO emissions by three-fourths and PM emissions by nearly half. More precisely for the model compared in the study (table 2, page 4) it indicates a mean reduction of PM in the range of 35% and 83% (1975 μg per cubic metre to 1266 measured in the field and 328 measured in the lab respectively). Similarly, the measured CO emissions are reduced by 50% or more (25, compared to 12 or 7 mg per cubic metre respectively). For charcoal rocket stoves, CO emissions are reduced by at least half. However, measurements of CO and RPM emissions complex and costly, hence the indicator 'Air quality' is monitored indirectly through perception of improvement of air quality.	Verification team has verified the same from the interview of the schools kitchen staff and found that the air quality has improved because of the project activity distributed IICS. Further it was also verified that the fuel consumption has been reduced due to the project activity distributed IICS which has contributed the air quality improvement.
	Source of data	Interview of kitchen staff from "Kitchen Information Update" survey.	Simoshi Limited (Simoshi) is the project participant of this project activity. The on-going support Simoshi provides to all schools includes continuous monitoring and training of kitchen staff, annual free maintenance for all IICS. Verification team has verified the same from the review of various documents /13/, /15/, /18/. The monitoring staff of the Simoshi is competent as verified during interview and also from the training documents /13/. 100% of those staff interviewed responded that air quality was perceived as better since the installation of IICS. Hence VVB confirms the air quality improvement in current monitoring period.
	Value(s) applied	218 kitchen staff interviewed perceived air quality as better after the installation of IICS.	
	Measurement methods and procedures	The perception of members of the school/institution (staff responsible for cooking) concerning air quality after the introduction of IICS were evaluated on the basis of the results of the "Kitchen Information Update" survey. The question is "How do you perceive air quality when using an IICS?". The enumerators are instructed to elaborate this question further by asking detailed questions (perceived smoke level, incidents of coughing, respiratory illness, eye infections, etc.). Changes in fuel consumption and the monitored air quality perception of schools/institutions was taken into consideration to confirm the improvement of air quality in institutions achieved through the introduction of IICS.	

	Monitoring frequency	Quarterly	
	QA/QC procedures	-	
	Purpose of data	Reduction of smoke levels, incidents of coughing, respiratory illness, eye infections. There are very high levels of CO2 emissions associated with the low numbers of IICS in use, and therefore high fuel consumption per stove. This results in correspondingly high levels of CO and RPM levels in cooking environments as cited above. Three stone fires used in the baseline scenario cause high smoke levels, incidents of coughing, respiratory illness, eye infections.	
	Additional comment	PP has systematically conducted the “Kitchen Information Update” survey during the school visits. Every three months, kitchen staff were interviewed and asked how the air quality was perceived in the kitchen – with options to choose between worse, same or better, while asked to further expand if discomfort was felt as a result of smoke from firewood burning (such as coughing, eye infections, respiratory illnesses, etc). The question posed the kitchen staff is “How do you perceive air quality with regards to smoke level, coughing, respiratory illness and eye infections?” The respondent is given the option to choose between worse, same or better. On the other hand, PP also reinforces the training of the “Firewood best Practice Manual” that teaches staff how to best keep firewood dry to minimise the smoke in the kitchen. 100% of those staff interviewed responded that air quality was perceived as better since the installation of IICS.	
	Relevant SDG Indicator/Safeguarding Principle	Goal 4 – Quality education	Means of Verification

	Data / Parameter	Training of school staff and kitchen monitoring, following the “Kitchen Management Techniques” and “Firewood Best Practice Manual”, to improve the overall conditions and safety of the kitchen environment.	a) kitchen staff is trained, and such training exercise is captured when each participant includes their name, signature and date when the training took place and b) the kitchen is assessed as per the training provided to ensure goals are achieved 814 training sessions conducted, 400 kitchen staff trained, 825 kitchen training assessments made. Verification team has verified the “Kitchen Management IICS Training Log Sheet” /13/ and “Kitchen Training Assessment” /13/ for this monitoring period. Verification team has also verified the same from the interview of the schools kitchen staff and found that regular trainings have been performed.
	Unit	-	
	Description	Number of schools and institutions with IICS in year y	
	Source of data	Training records and kitchen data obtained by Simoshi’s Project Officers from the “Kitchen Management IICS Training Log Sheet” and “Kitchen Training Assessment”	
	Value(s) applied	814 training sessions conducted, 400 kitchen staff trained, 825 kitchen training assessments made	
	Measurement methods and procedures	a) kitchen staff is trained, and such training exercise is captured when each participant includes their name, signature and date when the training took place and b) the kitchen is assessed as per the training provided to ensure goals are achieved	
	Monitoring frequency	6 times per year	
	QA/QC procedures	On-site inspection of the IICS to ensure it is performing in optimal manner	
	Purpose of data	To monitor SDG4 through the training records and kitchen assessments provided to the schools/institutions	
	Additional comment	115 schools were visited and the kitchen staff trained at least 6 times in each school, with PP conducting the training sessions following the “Kitchen Management Manual” and the Firewood Best Practice Manual”. All participants signed attendance during such sessions.	
	Relevant SDG Indicator/Safeguarding Principle	Goal 5 – Achieve gender equality and empower all women and girls	Means of Verification
	Data / Parameter	Number of women	Verification team has verified the “Kitchen Management IICS Training Log Sheet” /13/ and found the reported values
	Unit	-	
	Description	Number of women benefitting from the use of IICS	

	Source of data	Training records obtained by Simoshi's Project Officers from the "Kitchen Management IICS Training Log Sheet"	correct. There are 115 schools under the project activity till the end of this monitoring period. There are 139 female kitchen staff who have been trained regularly. Verification team has also verified the same from the interview of the schools kitchen staff and found that regular trainings have been performed.
	Value(s) applied	139 female kitchen staff	
	Measurement methods and procedures	When the school/institution kitchen staff is trained, PP captures participant's name, gender, signature and date when the training took place	
	Monitoring frequency	6 times per year	
	QA/QC procedures	On-site inspection of the IICS to ensure it is performing in optimal manner while kitchen staff are following the correct guidelines from the 'Kitchen Management Manual' and the "Firewood Best Practice Manual"	
	Purpose of data	To monitor SDG5 through the training records ensuring women benefit from the IICS	
	Additional comment	-	
	Relevant SDG Indicator/Safeguarding Principle	Goal 7 – Ensure access to affordable, reliable, sustainable and modern energy	Means of Verification
	Data / Parameter	Sale of IICS and increase number of schools/institutions using the cooking technology	A total of 115 schools/institutions have been included since the commencement of the project activity, with 451 IICS sold of different saucepan capacities that range from 30 litres to 600 litres. Sales Agreements are stored by PP, with an original copy kept by each participating school/institution. A back-up of the project database is also stored on an electronic medium by PP. The commissioning date is provided by the kitchen staff and the school/institution officials as of when they agree to put the IICS in use. PP confirms this date is true through an on-site visit. PP collects information in the form "Kitchen Information Update (Usage Survey)" from each school/institution on a quarterly basis to ensure that (i)
	Unit	-	
	Description	Number of schools and institutions with IICS in year y	
	Source of data	Sales database and usage survey	
	Value(s) applied	115 schools using 451 IICS of different saucepan capacities	
	Measurement methods and procedures	Sales database and usage survey to confirm the amount of IICS in use and number of participating schools/institutions	
	Monitoring frequency	Continuously through sales database and quarterly through the on-site inspection of the IICS to ensure it is performing in optimal manner.	
	QA/QC procedures	On-site inspection of the IICS to ensure it is performing in optimal manner	
	Purpose of data	To monitor SDG7 through the number of schools/institutions that access clean energy services	

	Additional comment	-	all IICS are in use, (ii) the condition of the IICS and whether they need maintenance/repair, and (iii) no traditional stoves are seen in use. PP has included all schools under the monitoring period that are using exclusively the IICS for all of their cooking activities. Quarterly site visits have confirmed that no baseline stoves have been found in use. Verification team has checked the distributed IICS during the visit. Sales data base /04/ and Usage survey record /12/ were also checked by the verification team. Verification team confirm that total 115 schools have been included under the project activity (till the end of this monitoring period) since the commencement of the project activity, with 451 IICS sold of different saucepan capacities that range from 30 litres to 600 litres. Usage survey /12/ have been done as per the defined frequency i.e. quarterly. Verification team has checked the sales agreement /10/, Usage survey /12/ results and also interviewed the school staff to confirm the distributed IICS data base and found OK. Project IICS are in working condition.
	Relevant SDG Indicator/Safeguarding Principle	Goal 8 – Promote inclusive and sustainable economic growth, employment and decent work for all	Means of Verification
	Data / Parameter	Employment generation	The project proponent has directly employed 6 Ugandan
	Unit	-	

	Description	Uganda last set a minimum wage of Ugandan shillings 6,000 per month in 1984, which has remained in force to this day. The Minimum Wage Advisory Council in 1995 recommended a Ugandan shillings 75,000 minimum monthly wage for unskilled workers, which has never been implemented. Uganda has 34.6% of its population living on USD 1.99 per person per day (World Bank). Simoshi will continue to provide improved salaries when compared to the proposed UGX 250,000 monthly by Trade Unions (USD 70).	nationals to support the marketing, sale, training and maintenance etc. of the IICS is schools and institutions. Verification team has checked the employee list /41/ and also the salary receipts /41/. Verification team confirm that the salary received by the employees is higher than the recommended national monthly average. Verification team has also interviewed the Simoshi employees to confirm their salaries. Employing 6 people puts a positive impact compared to baseline scenario.
	Source of data	Employment records	
	Value(s) applied	6	
	Measurement methods and procedures	Employment records with evidence for improved income generation for both men and women in an equal manner, than average wages in Uganda for workers involved in the project activity. These include project officers, field workers, data clerks, maintenance workers, where applicable. Documents include employment contracts; payment slips and employment lists	
	Monitoring frequency	Annually	
	QA/QC procedures	-	
	Purpose of data	To monitor SDG8 through quantitative employment and income generation for both men and women and equal pay for equal work.	
	Additional comment	The project has directly employed 1 training/maintenance officer, 2 administrators, 1 welder, 1 commercial induction researcher and 1 project manager during the monitoring period.	
	Relevant SDG Indicator/Safeguarding Principle	Goal 8 – Promote inclusive and sustainable economic growth, employment and decent work for all	Means of Verification
	Data / Parameter	Labour standards - Compliance with health and safety guidelines	PP has conducted regular visits (26/02/2024, 14/05/2024, 11/07/2024, 10/10/2024) /41/ to the IICS manufacturer Uganda
	Unit	-	

	Description	Provision of all necessary personal protective equipment for stove manufacturers' employees when handling metal sheets for IICS construction.	Stove Manufacturer's Limited (Ugastove) responsible for the production of all IICS distributed under the project activity, at both production sites in Nkere zone and the industrial park in Nakawa, Uganda. A signed training log sheet by all those attending the Quality Assurance and Quality Control training sessions /13/ and log sheet /13/ were verified by the verification team which confirm that workers involved in IICS production were provided with (1) all necessary protective equipment when handling metal sheets, (2) protective gloves, (3) goggles for vision protection during welding, (4) a headset for noise protection, and (5) closed shoes. PP found no health and safety inconsistencies during its unannounced visits with Ugastove complying with all required guidelines. Ugastove has a "Health and Safety Manual_IICS" for IICS production /26/ which is checked by the verification team. Verification team has also interviewed the CEO of Ugastove, Rehema Nakyazze to confirm the same and found that they were using proper PPEs. Hence verification team confirms that all the health and safety requirements have been followed by the Ugastove during the IICS manufacturing. Verification team also confirm that the monitoring frequency i.e. annually is also followed during this monitoring period.
	Source of data	Surveys as reported	
	Value(s) applied	No corrective actions needed	
	Measurement methods and procedures	Regular monitoring process and unannounced visits to Ugastove's manufacturing sites (both documented)	
	Monitoring frequency	Annually	
	QA/QC procedures	-	
	Purpose of data	To monitor SDG 8 to promote employment and decent work for all	
	Additional comment	Ugastove complied with all Ugandan health and safety guidelines and the provision of all necessary personal protective equipment for stove manufacturers' employees when handling metal sheets for IICS construction, therefore no corrective actions were needed	
	Relevant SDG Indicator/Safeguarding Principle	Goal 8 – Promote inclusive and sustainable economic growth, employment and decent work for all	Means of Verification
	Data / Parameter	Labour standards-sexual harassment	PP's Managing Director conducted on site interviews to the Ugastove's and Simoshi's employees on a frequently basis (26/02/2024, 14/05/2024, 11/07/2024, 10/10/2024) /41/ to find out if any incident involving
	Unit	-	
	Description	All incidents of sexual harassment involving Simoshi or stove manufacturers' employees	

	Source of data	Monitoring surveys	sexual harassment had been experienced within. No sexual harassment complaints have been filed by neither Ugastove's nor Simoshi's employees since the commencement of the project activity. Verification team has also interviewed the Simoshi employees and the Ugastove representative to confirm the same and could not found any complain.
	Value(s) applied	0	
	Measurement methods and procedures	All reports of sexual harassment immediately reported to PP for appropriate action in compliance with Ugandan legislation and best practice.	
	Monitoring frequency	As incidents arise, and as summarized at the end of each year	
	QA/QC procedures	-	
	Purpose of data	To monitor SDG 8 to ensure employees do not suffer from sexual harassment	
	Additional comment	No sexual harassment incidents were reported during the monitoring period	
	Relevant SDG Indicator/Safeguarding Principle	Goal 15 – Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss	Means of Verification
	Data / Parameter	IICS Quality and Efficiency	PP has conducted annual tests at Uganda Industrial Research Institute (UIRI) on the clay and maica used by the manufacturer Ugastove. All submitted testing certificates prove that the alumina content found in clay is above 10% and in mica is above 20%. The testing by the UIRI /19/ was done annually i.e. on 05/08/2024. The results were in the limits. Simoshi's quality assurance and quality control procedures /16/ are followed for the manufacturing of every IICS and recorded accordingly on the 'QA & QC IICS production assessment sheet' /17/ by Simoshi before despatching the IICS to the school. The 'QA & QC IICS production assessment sheet' /17/ results show that the metal sheets used are of the appropriate thickness as per the manufacturing manual /16/.
	Unit	-	
	Description	Lab tests on the clay and mica used for the insulation of fire chamber of all IICS Thickness/gauge of the metal sheets used for the body of all IICS Feedback about the results to the manufacturer. Progressive disciplinary actions on suppliers that sell deficient IICS At least 10% alumina content in clay At least 20% alumina content in mica 1,5 mm. thickness metal sheets	
	Source of data	Uganda Industrial Research Institute or any other certified laboratory for clay and mica testing PP for metal sheet	
	Value(s) applied	20.10 % of alumina content in clay 35.48 % of alumina content in mica 1,5 mm. thickness of all metal sheets used	

	Measurement methods and procedures	Laboratory tests on random samples taken from the raw material purchased by the IICS manufacturer to determine the amount of clay and mica content found in the material. Measurement of metal sheets randomly taken at the IICS manufacturer factory site.	Verification team has also interviewed Ugastove representative to confirm the above. Verification team confirm that appropriate standards are used for the material used by Ugastove (for the manufacturing of IICS). Also the laboratory tests results /19/ provided by UIRI on the clay and maica used for insulation are within in the limits according to PDD /25/. Verification team has also verified the “IICS QA & QC Training Log Sheet” /13/ for the trainings provided to the Ugastove employees which confirm that the Ugastove employees are well trained for the production of the IICS. Hence verification team confirms that the IICS have been manufactured as per the appropriate quality recommended in the PD /25/.
	Monitoring frequency	Annually	
	QA/QC procedures	-	
	Purpose of data	To monitor SDG 15 to ensure an optimum IICS quality hence achieving maximum firewood savings from unsustainable forests	
	Additional comment	-	
	Relevant SDG Indicator/Safeguarding Principle	Goal 17 – Revitalize the global partnership for sustainable development	Means of Verification
	Data / Parameter	Number of Kampala Capital City Authority schools included	Four schools – Katwe Martyrs Primary School, Kawempe Muslim Primary School, Namirembe Infants Primary School and Namungoona Orthodox Primary School were added during this monitoring period, bringing the total number of KCCA schools under the Project Activity to 44. Verification team has checked all the supportive document for the school /04/, /10/, /11/, /12/ etc and found the claim OK.
	Unit	-	
	Description	Number of KCCA schools included under the Project Activity using IICS for all their cooking activities	
	Source of data	School survey	
	Value(s) applied	4	
	Measurement methods and procedures	-	
	Monitoring frequency	Continuous	
	QA/QC procedures	-	
	Purpose of data	To monitor SDG 17 to ensure the number of KCCA schools increase under the Project Activity	
	Additional comment	Four schools – Katwe Martyrs Primary School, Kawempe Muslim Primary School, Namirembe Infants Primary School and Namungoona Orthodox Primary School - were added during this monitoring period, bringing the total number of KCCA schools under the Project Activity to 44	
S.	Ex-post parameters, Verification opinion of the verification team		

No.	
1	Data/Parameter: $\eta_{new,i,j}$ Unit: Fraction Description: Efficiency of the IICS of each type i and batch j being deployed as part of the project activity Value(s) of monitored parameter: PP has opted to carry out WBTs on 30 litres IICS capacity and apply conservatively the resulted thermal efficiency across all IICS sizes.⁵ The SSC WG considered that applying the lowest efficiency found in IICS with saucepan capacities of 30 litres for IICS with saucepan capacities larger than 30 litres would be a conservative approach when the IICS designs, and maintenance practices are comparable. All the stoves distributed under the project activity are from the same manufacturer i.e. Ugastove. Verification team based on review of IICS Quality Assurance Control Manual /16/ and interview with Ugastove confirms that the design (e.g. with respect to insulation, placement of grate, cooking vessel and if applicable chimney) of all Ugastove IICS remain the same irrespective of the size and thus using the value of efficiency test of 30 L saucepan to higher size is justified in line with the requirements of SSWG 725. Based on the interview, IICS Maintenance Manual /20/ and maintenance sheet /18/, verification team confirms that all Ugastove IICS have comparable repair and maintenance practices on all project stoves, irrespective of the size. PP has taken the census approach and 11 disseminated IICS of 30 litres capacity from the first batch were tested (by PP) following the WBT version 4.2.3 /22/, with three tests conducted on every IICS which is in compliance with the SSC_725 clarification /34/ and sentence “PP will carry out WBTs on 30 litres IICS capacity and apply conservatively the resulted thermal efficiency across all IICS sizes. The SSC WG considered that applying the lowest efficiency found in IICS with saucepan capacities of 30 litres for IICS with saucepan capacities larger than 30 litres would be a conservative approach when the IICS designs and maintenance practices are comparable. The thermal efficiency of IICS with 30 litres saucepan capacity in the first batch would be used for annual efficiency monitoring as specified in option (c) of paragraph 25 and the result would be applied across all IICS sizes.” under section B.7 of the registered PDD /25/. PP has taken 11 disseminated IICS of 30 litres capacity from the first batch and conducted three WBT tests on every IICS. The most conservative value among the results of efficiency tests conducted (i.e. the least efficiency determined) were applied conservatively to all the stoves which is accepted to the verification team. Verification team has checked the WBT monitoring data for 11 IICS /09/ with respect to achieved precision. This is a mean value parameter. From the Sample size calculator /38/, verification team has found that 90/10 has been met which is in compliance with the monitoring plan /25/. All the 11 WBT tests have been done by Ms. Virginia Echavarria (Managing Director, Simoshi Limited). Verification team based on review of IICS Quality Assurance Control Manual /16/, IICS material testing results /19/ and interview with representative of Ugastove confirms that the stove manufacturer i.e. Ugastove has a quality management system in place (e.g. proven stove design is employed and materials of high quality and consistency are used for the production of stoves and quality of the input material and critical dimensions of the produced stoves are tested). This is in line with the requirements of SSWG CL 726 and thus WBT carried out by PP is acceptable to the verification team.

⁵ This is in line with the response given from the SSG WG to Request for Clarification SSC_725.

As per para 37 of the standard “Sampling and surveys for CDM project activities and programmes of activities” Version 09.0 /30/, VVB has checked:

1. Whether the WBT tests were conducted by qualified institutions/testers.
2. Whether the WBT tests were conducted in accordance with approved established international/national standards, procedures.

From the WBT test data /09/ and the interview with Ms. Virginia Echavarria, Verification team has found that WBT test were conducted in accordance with “The Water Boiling Test” version 4.2.3 /22/ which is accepted to the verification team. Also, from the review of Ms. Virginia Echavarria’s CV /39/ and other supportive document /40/, Verification team has found that she is having multiple years of WBT testing experience in past employer organization (Uganda Carbon Bureau) and also contributed in international workshops /40/. Hence, she is found to be capable for WBT testing. VVB has also checked all the WBT monitoring data for 11 IICS /09/ and the ER sheet /04/ and found correct.

Average efficiency of the 11 IICS (26.94%) has been considered for the ER calculation /04/ which is accepted to the verification team.

Test	Result
Test 1 SL0000036	24.33
Test 2 SL0000044	26.00
Test 3 SL0000054	27.33
Test 4 SL0000060	27.33
Test 5 SL0000066	27.67
Test 6 SL0000104	27.33
Test 7 SL0000088	27.67
Test 8 SL0000103	29.33
Test 9 SL0000120	27.33
Test 10 SL0000089	25.33
Test 11 SL0000069	26.67
Average	26.94%

Measuring/reporting frequency: Annually as per registered monitoring plan /25/. Last WBT was done August/September 2023 and current WBT was done August/September 2024, hence there is no delay.

Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No): Yes

Type of monitoring equipment: The monitoring equipments used during the WBT test are given below. Verification team has checked the monitoring equipments during from the photos /14/.

	Weighing scale
Type	TCS
Accuracy class	150 kg capacity by 0.01 kg
Calibration date	26/07/2024
Calibration entity	UNBS
Certificate number	01230824
Serial number	66286
Calibration frequency	Before annual monitoring

	Digital thermometer
Type	SL-TH01 Model TME 2000
Accuracy class	-200° C to 1372° C by 0.1° C
Calibration date	25/07/2024
Calibration entity	UNBS

Certificate number	02230712
Serial number	SL-TH01
Calibration frequency	Before annual monitoring

	Moisture meter
Type	MT18 R&D Instruments
Accuracy class	4 – 75%
Calibration date	30/07/2024
Calibration entity	UNBS
Certificate number	06230144
Serial number	MM-01
Calibration frequency	Before annual monitoring

Is accuracy of the monitoring equipment as stated in the PDD? No accuracy has been defined in the registered PDD /25/. The accuracy of the instruments is as per the industry standard and hence accepted.

Calibration frequency /interval: WBT test for IICS efficiency was done during August/September 2024 as checked from the WBT test records /09/. As verified from the calibration records /06/, the calibration of the monitoring equipments (Weighing scale calibrated on 26/07/2024, Digital thermometer calibrated on 25/07/2024 and Moisture meter calibrated on 30/07/2024) was done before the WBT test which is accepted to the verification team.

Is the calibration interval in line with the monitoring plan of the PDD? Calibration frequency of the monitoring instruments has not been defined in the monitoring plan /25/. During this monitoring period, the calibration of the monitoring equipments (Weighing scale calibrated on 26/07/2024, Digital thermometer calibrated on 25/07/2024 and Moisture meter calibrated on 30/07/2024) was done before the WBT test which is accepted to the verification team.

Company performing the calibration: As verified from calibration reports /06/, The Calibration of all the three monitoring instruments (Weighing scale, Digital thermometer and Moisture meter) was done by Uganda National Bureau of Standards which is a government agency and hence accepted to the verification team.

Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Verification team has checked the calibration records /06/ for all the three monitoring instruments (Weighing scale, Digital thermometer and Moisture meter) and found the instruments functioning properly.

Is (are) calibration(s) valid for the whole reporting period? Not applicable as the monitoring instruments are only used during the WBT test. During this monitoring period, the calibration of the monitoring equipments (Weighing scale calibrated on 26/07/2024, Digital thermometer calibrated on 25/07/2024 and Moisture meter calibrated on 30/07/2024) was done before the WBT test which is accepted to the verification team.

If applicable, has the reported data been cross-checked with other available data? Not applicable

How were the values in the monitoring report verified? VVB has checked all the WBT monitoring data for 11 IICS /09/ and the ER sheet /04/. The data was found consistent.

Average efficiency of the 11 IICS has been considered for the ER calculations /04/ which is accepted to the verification team.

Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?: Yes

		In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved? Not Applicable
	2	Data/Parameter: tfraction i Unit: Fraction of 365 for Institutions Fraction of 288 for Schools Description: Fraction of the days in use in year y of the IICS installed Value(s) of monitored parameter: ER calculation spreadsheet (column T of tab ER calculations /04/). The value of the monitoring parameter is reported in the ER sheet /04/. As verified from the sales agreement /10/ and ER sheet /04/. The number of operational days of an IICS is calculated from the commissioning date (date of use) of the IICS which is the date on which the first IICS is put into use for the first time. For each IICS, "tfraction,i" is calculated by the number of days the IICS is in use in the respective year divided by 365. The commissioning date is provided by the kitchen staff and the school/institution officials as of when they agree to put the IICS in use. Simoshi confirms this date is true through an on-site visit. Verification team has verified this process from the interview of PP and the schools official/kitchen staff. This monitoring parameter is related to the ex-ante parameter Bold,p (given under section B.6.2 of the registered PDD /25/). Hence for each IICS, "tfraction,i" is calculated by the number of days the IICS is in use in the respective year divided by 365 which is accepted to the verification team. To verify this monitoring parameter, verification team has done the IICS sampling from the distributed IICS under the project activity (till the end of this monitoring period) as discussed under section D.4 of this report. Verification team has verified the monitoring parameter through sales agreement (mention the date of use of IICS) /10/, interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by VVB are explained in the section D.4 of this report. Hence the verification team was able to conclude that this parameter is being monitored & recorded as per the monitoring plan. Measuring/reporting frequency: The commissioning date of the IICS is mentioned in the sales agreement as and when the IICS is distributed as verified from the sales agreement /10/ and from sample IICS interview. For each IICS, "tfraction,i" is calculated by the number of days the IICS is in use in the respective year divided by 365 and hence reported yearly which is in compliance with the monitoring plan /25/. The same is verified from the ER sheet /04/. Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No): Yes Type of monitoring equipment: Not applicable Is accuracy of the monitoring equipment as stated in the PDD? Not applicable Calibration frequency /interval: Not applicable Is the calibration interval in line with the monitoring plan of the PDD? Not applicable Company performing the calibration: Not applicable Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Not applicable Is (are) calibration(s) valid for the whole reporting period? Not applicable If applicable, has the reported data been cross-checked with other available

	data?: Not Applicable How were the values in the monitoring report verified? For each IICS, "tfraction,i" is calculated by the number of days the IICS is in use in the respective year divided by 365 and hence reported yearly which is in compliance with the monitoring plan /25/. The same is verified from the ER sheet /04/. Verification team has verified the monitoring parameter through check of the sales agreement (mention the date of use of IICS) /10/, sample interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by VVB are explained in the section D.4 of this report. Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place? Yes In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved? Not Applicable
	3 Data/Parameter: Date of commissioning of project device i Unit: Date Description: Actual date of commissioning of the project device Value(s) of monitored parameter: ER calculation spreadsheet (column D of tab ER calculations /04/ and column E of tab IICS serial numbers /04/). The value of the monitoring parameter is reported in the ER sheet /04/. As verified from the sales agreement /10/ and ER sheet /04/, The number of operational days of an IICS is calculated from the commissioning date (date of use) of the IICS which is the date on which the IICS is put into use for the first time. The commissioning date is provided by the kitchen staff and the school/institution officials as of when they agree to put the IICS in use. Simoshi confirms this date is true through an on-site visit. Verification team has verified this process from the interview of PP and the schools official/kitchen staff. To verify this monitoring parameter, verification team has done the IICS sampling from the distributed IICS under the project activity (till the end of this monitoring period) as discussed under section D.4 of this report. Verification team has verified the monitoring parameter through check of the sales agreement (mention the date of use of IICS) /10/, sample interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by VVB are explained in the section D.4 of this report. Hence the verification team was able to conclude that this parameter is being monitored & recorded as per the monitoring plan. Measuring/reporting frequency: The commissioning date of the IICS is mentioned in the sales agreement as and when the IICS is distributed as verified from the sales agreement /10/ and from sample IICS interview. This parameter is being monitored & recorded as per the monitoring plan. Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No): Yes Type of monitoring equipment: Not applicable Is accuracy of the monitoring equipment as stated in the PDD?: Not applicable Calibration frequency /interval: Not applicable Is the calibration interval in line with the monitoring plan of the PDD?: Not applicable Company performing the calibration: Not applicable Did calibration confirm proper functioning of monitoring equipment? (Yes / No):

	Not applicable Is (are) calibration(s) valid for the whole reporting period?: Not applicable If applicable, has the reported data been cross-checked with other available data?: Not Applicable How were the values in the monitoring report verified?: The commissioning date of the IICS is mentioned in the sales agreement as and when the IICS is distributed as verified from the sales agreement /10/ and from sample IICS interview. Verification team has verified the monitoring parameter through check of the sales agreement (mention the date of use of IICS) /10/, sample interview and also from the details given under the ER sheet /04/ and found consistent. Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?: Yes In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?: Not Applicable
4	Data/Parameter: $N_{y,inst}$ Unit: Number of people in the school/institution in year y Description: Number of people in the school/institution that consume food cooked by IICS Value(s) of monitored parameter: 921 (column M row 332, from tab Ny Term Information Update of ER calculation spreadsheet /04/). The form "Term Information Update" is completed for each school/institution three times per year and contains the detailed information of number of people attending, type (day or boarding) and it is signed and officially stamped by the school/institution. The average of the information in the three 'Term Information Update' sheets of the respective year has been taken for the number of people in the school/institution in year y. To verify this monitoring parameter, verification team has done the schools sampling from the total number of schools under the project activity (till the end of this monitoring period) as discussed under section D.4 of this report. Verification team has verified the monitoring parameter through check of the Term Information Update /11/, sample interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by VVB are explained in the section D.4 of this report. Hence the verification team was able to conclude that this parameter is being monitored & recorded as per the monitoring plan. Measuring/reporting frequency: This monitoring parameter is measured three times a year by PP through "Term Information Update" /11/. The average of the information in the three 'Term Information Update' sheets of the respective year has been taken for the number of people in the school/institution in year y. The measuring/reporting frequency is as per the monitoring plan /25/. Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No): Yes Type of monitoring equipment: Not applicable Is accuracy of the monitoring equipment as stated in the PDD?: Not applicable Calibration frequency /interval: Not applicable Is the calibration interval in line with the monitoring plan of the PDD?: Not applicable

	Company performing the calibration: Not applicable Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Not applicable Is (are) calibration(s) valid for the whole reporting period?: Not applicable If applicable, has the reported data been cross-checked with other available data?: Not applicable How were the values in the monitoring report verified?: Verification team has verified the monitoring parameter through check of the Term Information Update /11/, sample interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by VVB are explained in the section D.4 of this report. Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?: Yes In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?: Not applicable
5	Data/Parameter: μ_y Unit: Fraction Description: Adjustment to account for any continued use of pre-project devices during the year y Value(s) of monitored parameter: 1, column O of tab ER calculations /04/. The value of the monitoring parameter is reported in the ER sheet /04/. The average of the information in the quarterly 'Kitchen Information Update' sheets of the respective year has been taken for ER calculation for that year. Simoshi collects information in the form "Kitchen Information Update" /12/ from each school/institution on a quarterly basis to ensure that no traditional stoves are seen in use. Throughout the monitoring period, no pre-project devices were found in use in any of the participating school/institution's kitchens. To verify this monitoring parameter, verification team has done the schools sampling from the total number of schools under the project activity (till the end of this monitoring period) as discussed under section D.4 of this report. Verification team has verified the monitoring parameter through check of the Kitchen Information Update /12/, sample interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by VVB are explained in the section D.4 of this report. Hence the verification team was able to conclude that this parameter is being monitored & recorded as per the monitoring plan. Measuring/reporting frequency: This monitoring parameter is measured quarterly by PP through "Kitchen Information Update" /12/. The average of the information in the quarterly 'Kitchen Information Update' sheets of the respective year has been taken for ER calculation for that year. Verification team has checked all the survey (i.e. "Kitchen Information Update") dates for this monitoring period under the Tab "Kitchen Information Update" of ER calculation sheet /04/ and found consistent with the supportive document /12/. Quarterly frequency has been maintained most of the times except few delays for some schools. Since the baseline devices were never found in use, hence these minor delays do not have any impact on the emission reduction calculation. Is measuring and reporting frequency in accordance with the monitoring plan

	and monitoring methodology? (Yes / No): No, Verification team has checked all the survey (i.e. "Kitchen Information Update") dates for this monitoring period under the Tab "Kitchen Information Update" of ER calculation sheet /04/ and found consistent with the supportive document /12/. Quarterly frequency has been maintained most of the times except few delays for some schools. Since the baseline devices were never found in use, hence these minor delays do not have any impact on the emission reduction calculation. Type of monitoring equipment: Not applicable Is accuracy of the monitoring equipment as stated in the PDD?: Not applicable Calibration frequency /interval: Not applicable Is the calibration interval in line with the monitoring plan of the PDD?: Not applicable Company performing the calibration: Not applicable Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Not applicable Is (are) calibration(s) valid for the whole reporting period?: Not applicable If applicable, has the reported data been cross-checked with other available data?: Not applicable How were the values in the monitoring report verified?: Verification team has verified the monitoring parameter through check of the Kitchen Information Update /12/, sample interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by VVB are explained in the section D.4 of this report. Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?: Yes In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?: Not applicable
6	Data/Parameter: $U_{y,inst}$ Unit: Fraction Description: Usage rate of stoves in institution in year y Value(s) of monitored parameter: 1, column P of tab ER calculations /04/. The value of the monitoring parameter is reported in the ER sheet /04/. The average of the information in the quarterly 'Kitchen Information Update' sheets of the respective year has been taken for ER calculation for that year. Simoshi collects information in the form "Kitchen Information Update" /12/ from each school/institution on a quarterly basis to ensure that all IICS are in use, the condition of the IICS and whether they need maintenance/repair. If a school/institution does not use all of its IICS, Simoshi has asked for the reasons and take immediate corrective actions (if needed) to repair or replace those IICS not in use. Throughout the monitoring period, the project devices have always been found in use in all of the quarterly 'Kitchen Information Updates'. To verify this monitoring parameter, verification team has done the schools sampling from the total number of schools under the project activity (till the end of this monitoring period) as discussed under section D.4 of this report. Verification team has verified the monitoring parameter through check of the Kitchen Information Update /12/, sample interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by VVB are explained in the section D.4 of this report. Hence the verification team was able to

	conclude that this parameter is being monitored & recorded as per the monitoring plan. Measuring/reporting frequency: This monitoring parameter is measured quarterly by PP through “Kitchen Information Update” /12/. The average of the information in the quarterly ‘Kitchen Information Update’ sheets of the respective year has been taken for ER calculation for that year. Verification team has checked all the survey (i.e. “Kitchen Information Update”) dates for this monitoring period under the Tab “Kitchen Information Update” of ER calculation sheet /04/ and found consistent with the supportive document /12/. Quarterly frequency has been maintained most of the times except few delays for some schools. Since project devices have always been found in use in all of the quarterly ‘Kitchen Information Updates’, hence these minor delays do not have any impact on the emission reduction calculation. Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No): No, Verification team has checked all the survey (i.e. “Kitchen Information Update”) dates for this monitoring period under the Tab “Kitchen Information Update” of ER calculation sheet /04/ and found consistent with the supportive document /12/. Quarterly frequency has been maintained most of the times except few delays for some schools. Since project devices have always been found in use in all of the quarterly ‘Kitchen Information Updates’, hence these minor delays do not have any impact on the emission reduction calculation. Type of monitoring equipment: Not applicable Is accuracy of the monitoring equipment as stated in the PDD?: Not applicable Calibration frequency /interval: Not applicable Is the calibration interval in line with the monitoring plan of the PDD?: Not applicable Company performing the calibration: Not applicable Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Not applicable Is (are) calibration(s) valid for the whole reporting period?: Not applicable If applicable, has the reported data been cross-checked with other available data?: Not applicable How were the values in the monitoring report verified?: Verification team has verified the monitoring parameter through check of the Kitchen Information Update /12/, sample interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by VVB are explained in the section D.4 of this report. Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?: Yes In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?: Not applicable
Findings	No CAR/CL raised.
Conclusion	As per para 360 to 361 of CDM VVS for project activities version 03.0 /27/, the assessment team concludes that the monitoring of the project activity is being carried out in accordance with the registered PDD monitoring plan /25/ and meets the requirements of the applied monitoring methodology /23/. The adequacy and compliance of the registered monitoring plan in the MR can be concluded to be conforming. The flow of the information from the point of generation up to reporting has been reviewed and found to be correct and appropriate meeting the requirements of the applied methodology.

E.6.3. Implementation of sampling plan

Means of verification	There is no sampling plan applied for this project activity by PP as verified from the
------------------------------	--

	registered PDD /25/.
Findings	No CAR/CL raised.
Conclusion	There is no sampling plan applied for this project activity which is in compliance with the registered PDD /25/.

E.7. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	Verification team has checked whether the calibration of the measuring equipment that has an impact on the claimed GHG emission reductions is conducted by the PP at a frequency specified in the monitoring plan /25/.																
	For the monitoring parameter $\eta_{new,i,j}$, the monitoring equipments (Weighing scale, Digital thermometer and Moisture meter) were used during the WBT test. Verification team has checked the monitoring equipments from the site visit.																
	<table><tr><td></td><td>Weighing scale</td></tr><tr><td>Type</td><td>TCS</td></tr><tr><td>Accuracy class</td><td>150 kg capacity by 0.01 kg</td></tr><tr><td>Calibration date</td><td>26/07/2024</td></tr><tr><td>Calibration entity</td><td>UNBS</td></tr><tr><td>Certificate number</td><td>01230824</td></tr><tr><td>Serial number</td><td>66286</td></tr><tr><td>Calibration frequency</td><td>Before annual monitoring</td></tr></table>		Weighing scale	Type	TCS	Accuracy class	150 kg capacity by 0.01 kg	Calibration date	26/07/2024	Calibration entity	UNBS	Certificate number	01230824	Serial number	66286	Calibration frequency	Before annual monitoring
		Weighing scale															
	Type	TCS															
	Accuracy class	150 kg capacity by 0.01 kg															
	Calibration date	26/07/2024															
	Calibration entity	UNBS															
	Certificate number	01230824															
	Serial number	66286															
Calibration frequency	Before annual monitoring																
<table><tr><td></td><td>Digital thermometer</td></tr><tr><td>Type</td><td>SL-TH01 Model TME 2000</td></tr><tr><td>Accuracy class</td><td>-200° C to 1372° C by 0.1° C</td></tr><tr><td>Calibration date</td><td>25/07/2024</td></tr><tr><td>Calibration entity</td><td>UNBS</td></tr><tr><td>Certificate number</td><td>02230712</td></tr><tr><td>Serial number</td><td>SL-TH01</td></tr><tr><td>Calibration frequency</td><td>Before annual monitoring</td></tr></table>		Digital thermometer	Type	SL-TH01 Model TME 2000	Accuracy class	-200° C to 1372° C by 0.1° C	Calibration date	25/07/2024	Calibration entity	UNBS	Certificate number	02230712	Serial number	SL-TH01	Calibration frequency	Before annual monitoring	
	Digital thermometer																
Type	SL-TH01 Model TME 2000																
Accuracy class	-200° C to 1372° C by 0.1° C																
Calibration date	25/07/2024																
Calibration entity	UNBS																
Certificate number	02230712																
Serial number	SL-TH01																
Calibration frequency	Before annual monitoring																
<table><tr><td></td><td>Moisture meter</td></tr><tr><td>Type</td><td>MT18 R&D Instruments</td></tr><tr><td>Accuracy class</td><td>4 – 75%</td></tr><tr><td>Calibration date</td><td>30/07/2024</td></tr><tr><td>Calibration entity</td><td>UNBS</td></tr><tr><td>Certificate number</td><td>06230144</td></tr><tr><td>Serial number</td><td>MM-01</td></tr><tr><td>Calibration frequency</td><td>Before annual monitoring</td></tr></table>		Moisture meter	Type	MT18 R&D Instruments	Accuracy class	4 – 75%	Calibration date	30/07/2024	Calibration entity	UNBS	Certificate number	06230144	Serial number	MM-01	Calibration frequency	Before annual monitoring	
	Moisture meter																
Type	MT18 R&D Instruments																
Accuracy class	4 – 75%																
Calibration date	30/07/2024																
Calibration entity	UNBS																
Certificate number	06230144																
Serial number	MM-01																
Calibration frequency	Before annual monitoring																
Calibration frequency /interval: WBT test for IICS efficiency was done during August/September 2024 as checked from the WBT test records /09/. As verified from the calibration records /06/, the calibration of the monitoring equipments (Weighing scale calibrated on 26/07/2024, Digital thermometer calibrated on 25/07/2024 and Moisture meter calibrated on 30/07/2024) was done before the WBT test which is accepted to the verification team.																	
Is the calibration interval in line with the monitoring plan of the PDD?: Calibration frequency of the monitoring instruments has not been defined in the monitoring plan /25/. During this monitoring period, the calibration of the monitoring equipments (Weighing scale calibrated on 26/07/2024, Digital thermometer calibrated on 25/07/2024 and Moisture meter calibrated on 30/07/2024) was done before the WBT test which is accepted to the verification team.																	
Company performing the calibration: As verified from calibration reports /06/, The Calibration of all the three monitoring instruments (Weighing scale, Digital thermometer and Moisture meter) was done by Uganda National Bureau of																	

	Standards which is a government agency and hence accepted to the verification team. Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Verification team has checked the calibration records /06/ for all the three monitoring instruments (Weighing scale, Digital thermometer and Moisture meter) and found the instruments functioning properly. Is (are) calibration(s) valid for the whole reporting period?: Not applicable as the monitoring instruments are only used during the WBT test. During this monitoring period, the calibration of the monitoring equipments was done before the WBT test which is accepted to the verification team.
Findings	No CAR/CL raised.
Conclusion	As per para 365 to 370 of CDM VVS for project activity version 03.0 /27/, the Verification team confirms that the calibration frequency is in line with the monitoring plan mentioned in the registered PDD /25/.

E.8. Assessment of SDG impacts

E.8.1. Calculation of baseline value or estimation of baseline situation of each SDG Impact

Means of verification	<u>SDG 13: Climate Action:</u> Verification team confirm that the calculation, applied formulae and the method for calculation of baseline emissions are in accordance with the registered PDD /25/ and are in line with the requirements of the applied methodology /23/. The formulae and the methods referred in the MR /02/ and the emission reduction calculation spread sheet /04/ for estimation of emission reduction complies with the corresponding formulae and methods in the registered PDD /25/. As per the registered PDD /25/, the calculation of emission reductions is based on the number of individuals served instead of number of project devices. As per the registered PDD /25/, the emission reduction is calculated using the formula: $ER_{y,i} = B_{y,savings,i} \times N_{y,i} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossilfuel} \times t_{fraction,i} - LE_y$ Where: $B_{y,savings,i}$ = Quantity of woody biomass that is saved in tonnes per person in year y $N_{y,i}$ = Number of individuals served in year y μ_y = Adjustment to account for any continued use of pre-project device during the year y. Use 1.0 in other cases $f_{NRB,y}$ = Fraction of woody biomass saved by the project activity in year y. $NCV_{biomass}$ = Net calorific value of the non-renewable woody biomass that is substituted. $EF_{projected_fossilfuel}$ = Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers. $t_{fraction,i}$ = Fraction of the days in use in year y of the IICS installed LE_y = Leakage emissions in the year y For $B_{y,savings,i}$, PP has used following equation of the applied methodology /23/ which is in compliance with the registered PDD /25/. $B_{y,savings,i,j} = B_{old,i,j} \times \left(1 - \frac{\eta_{old,i,j}}{\eta_{new,i,j}}\right)$ Where: $B_{old,i,j}$ = Annual quantity of woody biomass that would have been used per person in the school/institution in the absence of the project activity to generate
------------------------------	---

useful thermal energy equivalent to that provided by the project devices
 $\eta_{old,i,j}$ = Efficiency of the baseline system/s being replaced by project devices of type i.

$\eta_{new,i,j}$ = Efficiency of the system being deployed as part do the project activity (fraction), as determined using the Water Boiling Test (WBT) protocol.

All the ex-ante parameters (1. $\eta_{old,i,j}$, 2. $\eta_{old,i,j}$, 3. $f_{NRB,y}$, 4. $NCV_{biomass}$, 5. $EF_{projected_fossilfuel}$, 6. LE_y) have been justified in the section E.6.1 of this report. Verification team confirms that all the ex-ante parameters used in the ER sheet /04/ are in accordance with the registered PDD /25/ and also the applied methodology /23/.

Also the ex-post parameters (1. $\eta_{new,i,j}$, 2. $t_{fraction,i}$, 3. $N_{y,i}$, 4. μ_y) have been justified in the section E.6.2 of this report. Verification team confirms that all ex-post parameters have been monitored in accordance with the registered PDD /25/ and also the applied methodology /23/.

The calculation of the emission reductions /04/ is based on an individual institution based on the number of individuals served which is in compliance with the registered PDD /25/.

In the case of schools, Emission reduction is based on the average number of children attending on a day and boarding basis, and including the number of staff also working in the school. Till the end of this monitoring period, total 115 schools were enrolled in the project and the calculation of the actual number of pupils enrolled and staff (teachers and non-teachers) in the school is based on the actual data of these 115 Schools as recorded in the document Term Information Update /11/.

The steps taken and the equations and parameters applied in the ER sheet /04/ to calculate emission reductions comply with the requirements of the registered PDD /25/ and the selected methodology /23/. The emission reduction calculation is completely traceable and verified by reviewing the ER spread sheet /04/ submitted by the PP.

Hence baseline emission for this monitoring period is 13,253 tCO_{2e} (Rounded down).

PP has submitted the calculation in the excel sheet /04/. The baseline calculation in the excel sheet is checked whether the calculation is in accordance with the formula given in the registered PDD /25/ and the selected methodology /23/ and found OK.

SDG 1 No poverty

Financial savings from avoided firewood purchases. School bursars are usually responsible for all firewood purchases during the school term. PP monitors these firewood expenditures right at the beginning during the baseline survey it conducts in each school, and after the IICS have been deployed. PP collects the amount of firewood spent in Ugandan Shillings (UGX) at the end of each school term and monitors that savings are still achieved compared to the baseline expenditure through the "School Term Update" form. It is expected that a 50% reduction in firewood expenditure is achieved as the school/institutions use the IICS for all of the cooking activities.

Measurement calculation: baseline UGX expenditure – school term UGX expenditure: UGX firewood saved per school term.

SDG 3 Good health and well-being

The parameter captures the perception of members of the school/institution (staff responsible for cooking) concerning air quality after the introduction of IICS evaluated quarterly on the basis of the results of the "Kitchen Information Update" survey. The question is "How do you perceive air quality when using an IICS?".

The enumerators are instructed to elaborate this question further by asking detailed questions (perceived smoke level, incidents of coughing, respiratory illness, eye infections, etc.). The monitoring of this indicator confirms the parameter during on site interviews to cross-check that information captured four times a year on the “Kitchen Information Update” sheet proves that air quality perception is better.

Measurement calculation: this parameter is based on a qualitative assessment obtained from the IICS users. It is expected that with the introduction of the IICS, the air quality is perceived as better when compared to the bad baseline situation prior the installation of the IICS.

SDG 4 Quality education

PP’s service-oriented approach provides better perceptions and outcomes from users, promoting a positive behavioural change in the kitchen. On-going training and free IICS annual maintenance are the added on values necessary for the behavioural transition to happen. PP empowers the kitchen staff (usually neglected by school managers, badly remunerated and working in unhealthy and poor environments) through the continuous training and monitoring model, following the “Kitchen Management Techniques” and “Firewood Best Practice Manual”, and the “Kitchen Training Assessment” to improve the overall conditions and safety of the kitchen environment.

Measurement calculation: at least 6 times per year the school/institution kitchen staff is trained, and such training exercise is captured when each participant includes their name, signature and date when the training took place in the “Kitchen Management IICS Training Log Sheet”.

a) kitchen staff is trained, and such training exercise is captured when each participant includes their name, signature and date when the training took place and b) the kitchen is assessed as per the training provided to ensure goals are achieved.

SDG 5 Gender equality

Cooks are usually women who play an instrumental role in raising awareness between their peers and community members about the dangers of utilizing traditional cooking methods. Addressing gender issues in clean energy recognizes that women are key players in health, environmental, economic and climate change issues. Clean cooking results in tangible impacts for women and girls. They play a crucial leadership role in the adoption and use of clean cooking solutions.

Measurement calculation: at least 6 times per year the school/institution kitchen staff is trained, and such training exercise is captured when each participant includes their name, signature and date when the training took place in the “Kitchen Management IICS Training Log Sheet” and “Kitchen Information Update” surveys. Such records indicate the gender of the participants, allowing PP to quantify the number of women benefitting from such exercise.

SDG 7 Access to affordable and clean energy services

Number of schools and institutions with IICS in year y are monitored. Sales database and usage survey to confirm the amount of IICS in use and number of participating schools/institutions.

Measurement calculation: addition of number of schools included under the Project Activity, and number of IICS disseminated and in use are reported.

SDG 8 Decent work and economic growth

Employment records including evidence for income generation is collected by PP for workers involved in the IICS chain. These include stove manufacturers, vendors, data clerks and project officers, extension workers, where applicable. Documents include employment contracts, payment slips, employment lists and others. Labour standards on sexual harassment and compliance with health and safety guidelines are also monitored.

	Measurement calculation: amount in UGX of income earned by workers involved in the IICS chain is higher than the Ugandan average gross salary survey reported by the Ministry of Public Survey or Trade Unions in Uganda. SDG 15 Life on land To ensure an optimum IICS quality hence achieving maximum firewood savings from unsustainable forests, PP annually monitors the IICS quality and efficiency. Measurement method used includes laboratory tests on the clay and mica used for the insulation of fire chamber of all IICS are conducted every year at the Uganda Industrial Research Institute, to ensure At least 10% alumina content in clay and at least 20% alumina content in mica is achieved. Thickness/gauge of the metal sheets used for the body of all IICS are also monitored to confirm 1,5 mm. thickness metal sheets is used. PP ensures that IICS models from the selected IICS manufacturers are of similar design, following Simoshi's Quality Assurance and Quality Control Manual (which includes consistency in manufacturing practices and materials used) and Simoshi's Maintenance Manual that demonstrates comparable maintenance and repair practices on all IICS included under the project activity to ensure the maximum firewood savings are achieved. PP has conducted annual tests at Uganda Industrial Research Institute (UIRI) on the clay and maica used by the manufacturer Ugastove. All submitted testing certificates prove that the alumina content found in clay is above 10% and in mica is above 20%. SDG 17 Partnership for the goals The number of Kampala Capital City Authority schools included under the Project Activity is monitored, as part of the mutual efforts to move government schools away from traditional cooking practices. PP gathers information of all schools included under its Project Activity, with information related to whether the participating school is private or government, and whether it belongs to the Kampala Capital City Authority division. This ensures PP discloses any addition of government supported schools that can be properly accounted for in its effort to revitalize the global partnership for sustainable development.
Findings	No CAR/CL raised.
Conclusion	As per para 372 and 373 of CDM VVS for project activity version 03.0 /27/, Verification team concludes that the calculation provided in the monitoring report /02/ and emission reduction spread sheet /04/ are complete and reflect all the requirements of the registered monitoring plan /25/ and: a) All the monitored data pertaining to baseline calculation as required by the registered monitoring plan was available to PP, the same has been verified by the verification team. b) The calculations of GHG emissions have been carried out in accordance with the equations and methods described in the registered monitoring plan /25/ and applied methodology /23/. c) The ex-ante emission factors correctly sourced from the registered PDD /25/ and was found to be appropriate and justified. d) The ER calculation sheet /04/ provided is clear, transparent and the calculations provided in the sheet are reproducible.

E.8.2. Calculation of project value or estimation of project situation of each SDG Impact

Means of verification	SDG 1 No poverty Financial savings from avoided firewood purchases. School bursars are usually responsible for all firewood purchases during the school term. PP monitors these firewood expenditures right at the beginning during the baseline survey it conducts in each school, and after the IICS have been deployed. PP collects the amount of
------------------------------	--

firewood spent in Ugandan Shillings (UGX) at the end of each school term and monitors that savings are still achieved compared to the baseline expenditure through the “School Term Update” form. It is expected that a 50% reduction in firewood expenditure is achieved as the school/institutions use the IICS for all of the cooking activities.

Measurement calculation: baseline UGX expenditure – school term UGX expenditure: UGX firewood saved per school term.

The SDG has been reported under the tab “Ny Term Information Update” of the Emission reduction sheet /04/. Verification team has verified the School term update for all the schools /11/ and found the average firewood reduction is around 43% which is lower than the target i.e. 50% however it is still an improvement. Further it was also confirmed during the interview with the schools kitchen staff and found in compliance with the reported values.

SDG 3 Good health and well-being

The parameter captures the perception of members of the school/institution (staff responsible for cooking) concerning air quality after the introduction of IICS evaluated quarterly on the basis of the results of the “Kitchen Information Update” survey. The question is “How do you perceive air quality when using an IICS?”. The enumerators are instructed to elaborate this question further by asking detailed questions (perceived smoke level, incidents of coughing, respiratory illness, eye infections, etc.). The monitoring of this indicator confirms the parameter during on site interviews to cross-check that information captured four times a year on the “Kitchen Information Update” sheet proves that air quality perception is better.

Measurement calculation: this parameter is based on a qualitative assessment obtained from the IICS users. It is expected that with the introduction of the IICS, the air quality is perceived as better when compared to the bad baseline situation prior the installation of the IICS.

PP has quarterly conducted the “Kitchen Information Update” /12/ survey during the school visits which is as per the frequency defined in the design documents /25/. Every three months, kitchen staff were interviewed and asked how the air quality was perceived in the kitchen – with options to choose between worse, same or better, while asked to further expand if discomfort was felt as a result of smoke from firewood burning (such as coughing, eye infections, respiratory illnesses, etc).

Verification team has verified the same from the interview of the schools kitchen staff and found that the air quality has improved because of the project activity distributed IICS. Further it was also verified that the fuel consumption has been reduced due to the project activity distributed IICS which has contributed the air quality improvement.

Simoshi Limited (Simoshi) is the project participant of this project activity. The on-going support Simoshi provides to all schools includes continuous monitoring and training of kitchen staff, annual free maintenance for all IICS. Verification team has verified the same from the review of various documents /13/, /15/, /18/. The monitoring staff of the Simoshi is competent as verified during interview and also from the training documents /13/.

100% of those staff interviewed responded that air quality was perceived as better since the installation of IICS. Hence VVB confirms the air quality improvement in current monitoring period.

SDG 4 Quality education

PP’s service-oriented approach provides better perceptions and outcomes from users, promoting a positive behavioural change in the kitchen. On-going training and free IICS annual maintenance are the added on values necessary for the behavioural transition to happen. PP empowers the kitchen staff (usually neglected

by school managers, badly remunerated and working in unhealthy and poor environments) through the continuous training and monitoring model, following the “Kitchen Management Techniques” and “Firewood Best Practice Manual”, and the “Kitchen Training Assessment” to improve the overall conditions and safety of the kitchen environment.

Measurement calculation: at least 6 times per year the school/institution kitchen staff is trained, and such training exercise is captured when each participant includes their name, signature and date when the training took place in the “Kitchen Management IICS Training Log Sheet”.

a) kitchen staff is trained, and such training exercise is captured when each participant includes their name, signature and date when the training took place and b) the kitchen is assessed as per the training provided to ensure goals are achieved

814 training sessions conducted, 400 kitchen staff trained, 825 kitchen training assessments made.

Verification team has verified the “Kitchen Management IICS Training Log Sheet” /13/ and “Kitchen Training Assessment” /13/ for this monitoring period.

Verification team has also verified the same from the interview of the schools kitchen staff and found that regular trainings have been performed.

SDG 5 Gender equality

Cooks are usually women who play an instrumental role in raising awareness between their peers and community members about the dangers of utilizing traditional cooking methods. Addressing gender issues in clean energy recognizes that women are key players in health, environmental, economic and climate change issues. Clean cooking results in tangible impacts for women and girls. They play a crucial leadership role in the adoption and use of clean cooking solutions.

Measurement calculation: at least 6 times per year the school/institution kitchen staff is trained, and such training exercise is captured when each participant includes their name, signature and date when the training took place in the “Kitchen Management IICS Training Log Sheet” and “Kitchen Information Update” surveys. Such records indicate the gender of the participants, allowing PP to quantify the number of women benefitting from such exercise.

Verification team has verified the “Kitchen Management IICS Training Log Sheet” /13/ and found the reported values correct.

There are 115 schools under the project activity till the end of this monitoring period. There are 139 female kitchen staff who have been trained regularly.

Verification team has also verified the same from the interview of the schools kitchen staff and found that regular trainings have been performed.

SDG 7 Access to affordable and clean energy services

Number of schools and institutions with IICS in year y are monitored. Sales database and usage survey to confirm the amount of IICS in use and number of participating schools/institutions.

Measurement calculation: addition of number of schools included under the Project Activity, and number of IICS disseminated and in use are reported.

A total of 115 schools/institutions have been included since the commencement of the project activity, with 451 IICS sold of different saucepan capacities that range from 30 litres to 600 litres.

Sales Agreements are stored by PP, with an original copy kept by each participating school/institution. A back-up of the project database is also stored on an electronic medium by PP.

The commissioning date is provided by the kitchen staff and the school/institution officials as of when they agree to put the IICS in use. PP confirms this date is true through an on-site visit.

PP collects information in the form "Kitchen Information Update (Usage Survey)" from each school/institution on a quarterly basis to ensure that (i) all IICS are in use, (ii) the condition of the IICS and whether they need maintenance/repair, and (iii) no traditional stoves are seen in use.

PP has included all schools under the monitoring period that are using exclusively the IICS for all of their cooking activities. Quarterly site visits have confirmed that no baseline stoves have been found in use.

Verification team has checked the distributed IICS during the visit. Sales data base /04/ and Usage survey record /12/ were also checked by the verification team. Verification team confirm that total 115 schools have been included under the project activity (till the end of this monitoring period) since the commencement of the project activity, with 451 IICS sold of different saucepan capacities that range from 30 litres to 600 litres. Usage survey /12/ have been done as per the defined frequency i.e. quarterly.

Verification team has checked the sales agreement /10/, Usage survey /12/ results and also interviewed the school staff to confirm the distributed IICS data base and found OK. Project IICS are in working condition.

SDG 8 Decent work and economic growth

Employment records including evidence for income generation is collected by PP for workers involved in the IICS chain. These include stove manufacturers, vendors, data clerks and project officers, extension workers, where applicable. Documents include employment contracts, payment slips, employment lists and others. Labour standards on sexual harassment and compliance with health and safety guidelines are also monitored.

Measurement calculation: amount in UGX of income earned by workers involved in the IICS chain is higher than the Ugandan average gross salary survey reported by the Ministry of Public Survey or Trade Unions in Uganda.

The project proponent has directly employed 6 Ugandan nationals to support the marketing, sale, training and maintenance of the IICS in schools and institutions.

Verification team has checked the employee list /41/ and also the salary receipts /41/. Verification team confirm that the salary received by the employees is higher than the recommended national monthly average. Verification team has also interviewed the Simoshi employees to confirm their salaries.

Employing 6 people puts a positive impact compared to baseline scenario.

SDG 15 Life on land

To ensure an optimum IICS quality hence achieving maximum firewood savings from unsustainable forests, PP annually monitors the IICS quality and efficiency.

Measurement method used includes laboratory tests on the clay and mica used for the insulation of fire chamber of all IICS are conducted every year at the Uganda Industrial Research Institute, to ensure At least 10% alumina content in clay and at least 20% alumina content in mica is achieved. Thickness/gauge of the metal sheets used for the body of all IICS are also monitored to confirm 1.5 mm. thickness metal sheets is used.

PP ensures that IICS models from the selected IICS manufacturers are of similar design, following Simoshi's Quality Assurance and Quality Control Manual (which includes consistency in manufacturing practices and materials used) and Simoshi's Maintenance Manual that demonstrates comparable maintenance and repair practices on all IICS included under the project activity to ensure the maximum firewood savings are achieved.

	PP has conducted annual tests at Uganda Industrial Research Institute (UIRI) on the clay and maica used by the manufacturer Ugastove. All submitted testing certificates prove that the alumina content found in clay is above 10% and in mica is above 20%. The testing by the UIRI /19/ was done annually i.e. on 05/08/2024. The results were in the limits. Simoshi's quality assurance and quality control procedures /16/ are followed for the manufacturing of every IICS and recorded accordingly on the 'QA & QC IICS production assessment sheet' /17/ by Simoshi before despatching the IICS to the school. The 'QA & QC IICS production assessment sheet' /17/ results show that the metal sheets used are of the appropriate thickness as per the manufacturing manual /16/. Verification team has also interviewed Ugastove representative to confirm the above. Verification team confirm that appropriate standards are used for the material used by Ugastove (for the manufacturing of IICS). Also, the laboratory tests results /19/ provided by UIRI on the clay and maica used for insulation are within in the limits according to PDD /25/. Verification team has also verified the "IICS QA & QC Training Log Sheet" /13/ for the trainings provided to the Ugastove employees which confirm that the Ugastove employees are well trained for the production of the IICS. Hence verification team confirms that the IICS have been manufactured as per the appropriate quality recommended in the PDD /25/. SDG 17 Partnership for the goals The number of Kampala Capital City Authority schools included under the Project Activity is monitored, as part of the mutual efforts to move government schools away from traditional cooking practices. PP gathers information of all schools included under its Project Activity, with information related to whether the participating school is private or government, and whether it belongs to the Kampala Capital City Authority division. This ensures PP discloses any addition of government supported schools that can be properly accounted for in its effort to revitalize the global partnership for sustainable development. Four schools – Katwe Martyrs Primary School, Kawempe Muslim Primary School, Namirembe Infants Primary School and Namungoona Orthodox Primary School were added during this monitoring period, bringing the total number of KCCA schools under the Project Activity to 44. Verification team has checked all the supportive document for the school /04/, /10/, /11/, /12/ etc and found the claim OK.
Findings	CAR-01 is raised in this respect and successfully closed. Refer Appendix 4 of this report for more details.
Conclusion	There is no project emissions and hence SDG 13 not applicable.

E.8.3. Calculation of leakage GHG emissions

Means of verification	Document Review and interviews.
Findings	No CAR/CL raised.
Conclusion	Potential leakage is accounted for by multiplying with net gross adjustment factor which is in compliance with the registered PDD /25/ and hence accepted to the Verification team.

E.8.4. Calculation of net benefits or direct calculation of each SDG Impact

Means of verification	The verification team has checked whether calculations of SDGs have been carried out in accordance with the formulae and methods described in the registered monitoring plan /25/. Section E.4 of MR demonstrate the summary of SDGs for the monitoring period and calculated according to the applied methodology as follows:
------------------------------	--

	ER _y = BE _y – L _y				
	SD G	SDG Impact	Baseline estimate	Project estimate	Net benefit
	13	CO2 emission reduction	13,253	0	13,253
	1	Equal rights to economic resources	300,100,000	169,312,667	130,787,333
	3	Reduce the number of illnesses from air pollution	Worse	218 kitchen staff confirmed better perception	218 kitchen staff confirmed better perception
	4	Provide a safe learning environment	n/a	814 training, 400 staff trained, 825 training assessments	814 training, 400 staff trained, 825 training assessments
	5	Promote women empowerment	n/a	139	139
	7	Double the global rate in energy efficiency	n/a	115 schools 451 IICS	115 schools 451 IICS
	8	Achieve full and productive employment and equal pay for all	n/a	6 jobs	6 jobs
	15	Halt deforestation	n/a	16,258 tons of firewood Clay: above 10% alumina content Maica: above 20% alumina content Metal sheets: 1,5mm. thickness	16,258 Tons of firewood Clay: 20.10% alumina content Maica: 35.48% alumina content Metal sheets: 1,5mm. thickness
	17	Enhance the global partnership for sustainable development	n/a	4	4
The ER calculation sheet and monitoring report is verified to check the calculation.					
Findings	CAR-02 is raised in this respect and successfully closed. Refer Appendix 4 of this report for more details.				
Conclusion	As per para 372 and 373 of CDM VVS for project activity version 03.0 /27/, Verification team concludes that the calculation provided in the monitoring report /02/ and emission reduction spread sheet /04/ are complete and reflect all the requirements of the monitoring plan /25/ and: a) The emission reduction value reported (i.e. 13,253 tCO₂e) is verified to be correct. b) The summary table in the MR has been filled correctly and the values are in line with the related emissions reduction spreadsheet. c) All the monitored data as required by the registered monitoring plan /25/ was available to PP, the same has been verified by the verification team. d) Formula used for the baseline was in line to the registered monitored plan				

	/25/ e) The ex-ante emission factors correctly sourced from the registered PDD /25/ and was found to be appropriate and justified.
--	---

E.8.5. Comparison of actual SDGs Impacts with estimates in registered PDD

Means of verification	Section E.5 of the MR includes a comparison of the calculated actual SDGs with the ex-ante calculated values in the registered PDD /25/.		
	SDG	Values estimated in ex ante calculation of approved PDD for this monitoring period	Actual values ⁶ achieved during this monitoring period
	13	24,972 tCO ₂ e CDM/VER for annual average.	13,253
	1	50% firewood savings achieved equivalent to UGX 44,439,500 per year.	130,787,333 ⁷
	3	The cleaner and more efficient combustion of IICS and the reduction of at least 50% in fuel consumption are directly related to better air quality in the kitchen environment,	218 kitchen staff confirmed better perception
	4	235 training sessions conducted. 371 staff trained. 243 kitchen training assessments conducted.	814 training, 400 staff trained, 825 training assessments
	5	With improved health, less time spent collecting fuel and faster cooking time, 86 women can pursue income-generating, educational opportunities, or just have more free time, contributing to poverty alleviation.	139 women
	7	100 schools included, 350 IICS sold.	115 schools, 451 IICS
	8	12 jobs generated in compliance with labour standards.	6 jobs
	15	11,025 tons of firewood saved per year	16,258 tons of firewood saved
	17	Partnership with Kampala Capital City Authority to support the Kampala Climate Change Action Strategy	4
In summary, verification team confirms that the actual emission reduction is lower than the estimate of the registered PDD /25/ for the current monitoring period.			
Findings	CAR-03 is raised in this respect and successfully closed. Refer Appendix 4 of this report for more details.		
Conclusion	In summary, verification team confirms that the actual emission reduction is lower than the estimate of the registered PDD /25/ for the current monitoring period. Verification team confirms that the comparison for the estimated and actual SDGs for this monitoring period is correctly calculated and reported.		

E.8.6. Remarks on difference from estimated value in registered PDD

Means of verification	The actual emission reductions are lower than the estimated emission reductions based on the registered PDD /25/.
------------------------------	---

⁶ Whenever emission reductions are capped, both the original and capped values used for calculations must be transparently reported. Use brackets to denote original values.

⁷Per school term ugx 37,481,944 is saved. There are three school terms per year.

Findings	No CAR/CL raised.
Conclusion	The actual emission reductions are lower compared to the ex-ante calculations.

E.9. SAFEGUARDS REPORTING

As per the Safeguarding Principles Assessment in the PDD /25/, there are few safeguarding principles that need to be monitored. Hence, the VVB Assessment for each principle to be monitored is provided below.

As per the sustainability monitoring plan, verification team evaluate all sustainable development Goals as followed table:

Principles	PP justification	VVB Assessment
Quantitative employment and income generation	The project proponent has directly employed 6 Ugandan nationals to support the marketing, sale, training and maintenance of the IICS in schools and institutions. Simoshi's Project Officers have been trained on aspects from clean cooking and carbon finance to good hygiene practices in the kitchen environment. Especially dedicated IICS Maintenance Officers have been responsible for providing free annual maintenance to all IICS in operation to further support the schools in achieving the maximum amount of firewood savings. On-going training to all kitchen staff and the free IICS annual maintenance have been the key pillars in the project activity to achieve a long-term sustainable kitchen environment. PP has not only generated better employment conditions within its own employees, but indirectly has also had a positive impact in the quality of employment of those involved in the school kitchens. PP's service-oriented approach provides better perceptions and outcomes from users, promoting a positive behavioural change in the long term. On-going training and free IICS annual maintenance are the added on values necessary for the behavioural transition to happen. The inclusion and empowerment of kitchen staff (usually neglected by school managers, badly remunerated and working in unhealthy and poor environments) in the continuous training and monitoring model, gives them not only a decent working environment but also a voice in future decisions to be made as the model continuously adapts to changes and innovates to improve.	The project proponent has directly employed 06 Ugandan nationals to support the marketing, sale, training and maintenance of the IICS in schools and institutions. Verification team has checked the employee list /41/ and also the salary receipts /41/. Verification team confirm that the salary received by the employees is higher than the recommended national monthly average. Verification team has also interviewed the Simoshi employees to confirm their salaries. Employing 06 people puts a positive impact compared to baseline scenario.
Project Specific Risk – IICS Quality	PP has conducted its annual tests at Uganda Industrial Research Institute (UIRI) on the clay and maica used by the manufacturer Ugastove. All submitted testing certificates prove that the alumina content found in clay is above 10% and in mica is above 20%. Simoshi's quality assurance and quality control procedures are followed for the manufacturing of every IICS and recorded	PP has conducted annual tests at Uganda Industrial Research Institute (UIRI) on the clay and maica used by the manufacturer Ugastove. All submitted testing certificates prove that the alumina content found in clay is above 10% and in mica is above 20%. The testing by the UIRI /19/ was done annually i.e. on 05/08/2024. The results were in the limits. Simoshi's quality

	accordingly on the 'QA & QC IICS production assessment sheet" and show that the metal sheets used are of the appropriate thickness as per the manufacturing manual. PP found no sub standards in the material used by Ugastove for the manufacturing of IICS and the laboratory tests results provided by UIRI on the clay and maica used for insulation.	assurance and quality control procedures /16/ are followed for the manufacturing of every IICS and recorded accordingly on the 'QA & QC IICS production assessment sheet" /17/ by Simoshi before despatching the IICS to the school. The 'QA & QC IICS production assessment sheet" /17/ results show that the metal sheets used are of the appropriate thickness as per the manufacturing manual /16/.
Labour standards- Compliance with health and safety guidelines	PP has conducted regular visits to the IICS manufacturer Ugastove responsible for the production of all IICS distributed under the project activity, at both production sites in Nkere zone and the industrial park in Nakawa. Documentation includes a signed training log sheet by all those attending the Quality Assurance and Quality Control training sessions, and log sheet to confirm that workers involved in IICS production were provided with (1) all necessary protective equipment when handling metal sheets, (2) protective gloves, (3) goggles for vision protection during welding, (4) a headset for noise protection, and (5) closed shoes. PP found no health and safety inconsistencies during its unannounced visits with Ugastove complying with all required guidelines. Details of the individual monitoring visits are provided on table 1 in Annex I of Monitoring report.	PP has conducted regular visits (26/02/2024, 14/05/2024, 11/07/2024, 10/10/2024) /41/ to the IICS manufacturer Uganda Stove Manufacturer's Limited (Ugastove) responsible for the production of all IICS distributed under the project activity, at both production sites in Nkere zone and the industrial park in Nakawa, Uganda. A signed training log sheet by all those attending the Quality Assurance and Quality Control training sessions /13/ and log sheet /13/ were verified by the verification team which confirm that workers involved in IICS production were provided with (1) all necessary protective equipment when handling metal sheets, (2) protective gloves, (3) goggles for vision protection during welding, (4) a headset for noise protection, and (5) closed shoes. PP found no health and safety inconsistencies during its unannounced visits with Ugastove complying with all required guidelines. Ugastove has a "Health and Safety Manual_IICS" for IICS production /26/ which is checked by the verification team. Verification team has also interviewed the CEO of Ugastove, Rehema Nakyazze to confirm the same and found that they were using proper PPEs. Hence verification team confirms that all the health and safety requirements have been followed by the Ugastove during the IICS manufacturing. Verification team also confirm that the monitoring frequency i.e. annually is also followed during this monitoring period.
Labour standards- sexual harassment	PP's Managing Director conducted on site interviews to the Ugastove's and Simoshi's employees on a quarterly basis to find out if any incident involving sexual harassment had been experienced within. No sexual harassment complaints have been filed by neither Ugastove's nor Simoshi's employees since the commencement of the project activity. A project book was made	PP's Managing Director conducted on site interviews to the Ugastove's and Simoshi's employees on a frequently basis (26/02/2024, 14/05/2024, 11/07/2024, 10/10/2024) /41/ to find out if any incident involving sexual harassment had been experienced within. No sexual harassment complaints have

	available at Simoshi's office enabling stakeholders to provide feedback of whatever nature they wish during the monitoring period. PP regularly informed the school administrators of the PP's monitoring process and book existence, and confirmed no comments or suggestions were received throughout that period.	been filed by neither Ugastove's nor Simoshi's employees since the commencement of the project activity. Verification team has also interviewed the Simoshi employees and the Uga stove representative to confirm the same and could not found any complain.
--	--	---

In summary, verification team confirms that all monitored sustainable development indicators are in accordance with the monitoring plan. It is also confirmed that all SDGs are rated as positive hence the project fulfils the eligibility requirement

Finding: No findings raised.

Conclusion:

The adequacy and compliance of the monitoring plan in the Monitoring report was found as per the requirements laid by the monitoring methodology and the PDD. The information flow (from data generation, aggregation, to recording, calculation and reporting) is already included under respective parameter above. The verification team has verified all the data and collected evidence as per the required monitoring frequency and found to be correct and appropriate meeting the requirements of the applied methodology and the PDD.

E.10. Stakeholder Inputs & Grievance Mechanism

Means of verification	Verification team verified the continuous input and grievance mechanism in place. There is a continuous input/grievance mechanism in place for beneficiaries to be able to give feedback on the project. A project book was made available at Simoshi's office enabling stakeholders to provide feedback of whatever nature they wish during the monitoring period; beneficiaries are also given a contact number for the field staff so that they can contact them directly. Field staffs are based close-by the project area and visit regularly so face-to-face feedback is also possible. The verification team checked the grievances register. It was confirmed that no feedback was received during the monitoring period. The Verification team also interviewed the stakeholders/end users and confirms that they are aware about the grievance mechanism in place for this project activity.
Findings	No CAR/CL raised.
Conclusion	No grievances received during the current or previous monitoring period.

SECTION F. Internal quality control

The draft verification report prepared by team leader is reviewed by an independent technical reviewer before requesting for issuance for this verification period for the project activity to confirm the internal procedures established by 4KES are duly followed and the verification report/opinion is reached in an objective manner and complies with the applicable CDM/GS requirements. The technical review is conducted by the technical reviewer qualified as per the 4KES procedures established for the qualification of CDM/GS personnel as per EB guidelines and GS guidelines.

The independent technical reviewer may approve or reject the draft verification report. The findings may be identified even at this stage, which needs to be satisfactorily resolved, before the request for issuance is submitted to GS. The final decision is taken by the Head of the VVB. The technical reviewer approves the final version of the report.

The final approval is authorized by the Director, 4KES once the report is approved by the Head/VVB Manager.

SECTION G. Verification opinion

The verification team confirms that the evidence is of sufficient quantity, appropriate quality and reliable. The reported values, notation, units and sources in the monitoring report for all the monitoring parameters have been cross checked with the emission reduction sheet and monitoring report. During the course of verification and audit, the data submitted by PP was cross verified with the values mentioned in the ER Sheet /04/ and GS monitoring report /02/. The procedure for data monitoring, recording, transfer and compilation was also verified and found in compliance with the SDG monitoring plan as mentioned in the registered PDD /25/.

Evidences (Documents/interview) referred for verification of individual monitoring parameter defined in section E.6 above. It is confirmed by the assessment team that the reported emission reductions have been conservatively calculated. A list of referred documents for verification is also included in Appendix 3 of this report.

Based on the information seen and evaluated we confirm that the implementation of the project has resulted in SDGs during period 01/01/2024 to 31/12/2024 (Including both the days) as follows.

SD G	SDG Impact	Baseline estimate	Project estimate	Net benefit
13	CO2 emission reduction	13,253	0	13,253
1	Equal rights to economic resources	300,100,000	169,312,667	130,787,333
3	Reduce the number of illnesses from air pollution	Worse	218 kitchen staff confirmed better perception	218 kitchen staff confirmed better perception
4	Provide a safe learning environment	n/a	814 training, 400 staff trained, 825 training assessments	814 training, 400 staff trained, 825 training assessments
5	Promote women empowerment	n/a	139	139
7	Double the global rate in energy efficiency	n/a	115 schools 451 IICS	115 schools 451 IICS
8	Achieve full and productive employment and equal pay for all	n/a	6 jobs	6 jobs
15	Halt deforestation	n/a	16,258 tons of firewood Clay: above 10% alumina content Maica: above 20% alumina content Metal sheets: 1,5mm. thickness	16,258 Tons of firewood Clay: 20.10% alumina content Maica: 35.48% alumina content Metal sheets: 1,5mm. thickness
17	Enhance the global partnership for sustainable development	n/a	4	4

SECTION H. Certification statement

4K Earth Science Pvt. Ltd. has been contracted by 'Simoshi Limited' to undertake independent verification and certification for the SDGs reported from the "Institutional Improved Cook Stoves for Schools and Institutions in Uganda" GS Ref# GS 4364 for the monitoring period 01/01/2024 to 31/12/2024 (including both dates) in the GS Monitoring Report Version 01 (first version) dated 10/01/2025.

The verification is based on the registered PDD /25/ and the SDG monitoring report for this project. Our verification approach was based on the requirements as defined under the Kyoto Protocol, Marrakech accord, GS Validation and Verification Standard /47/, as well as those defined by the Gold Standard Board.

The management of the 'Simoshi Limited' is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions and monitoring of SDG parameters on the basis set out within this final GS Monitoring Report (version 04, dated 27/02/2025). The calculation and determination of GHG emission reductions from the project is the responsibility of the management of the Simoshi Limited. The development and maintenance of records and reporting procedures are in accordance with the GS Monitoring Report.

It is our responsibility to express an independent GHG verification on the GHG emissions and on the calculation of GHG emission reductions and SDGs parameter assessment opinion of the project for the monitoring period 01/01/2024 to 31/12/2024 (including both dates) based on the reported emission reductions in the Final Monitoring Report Version 04 dated 27/02/2025 for the same period. The verification and conclusion about the GHG emission reductions and the assessment of SDG parameters is provided in this report.

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

4KES confirms the following.

Reporting period: 01/01/2024 to 31/12/2024 (including both dates)

Verified and certified SDGs in the above reporting period:

SD G	SDG Impact	Baseline estimate	Project estimate	Net benefit
13	CO2 emission reduction	13,253	0	13,253
1	Equal rights to economic resources	300,100,000	169,312,667	130,787,333
3	Reduce the number of illnesses from air pollution	Worse	218 kitchen staff confirmed better perception	218 kitchen staff confirmed better perception
4	Provide a safe learning environment	n/a	814 training, 400 staff trained, 825 training assessments	814 training, 400 staff trained, 825 training assessments
5	Promote women empowerment	n/a	139	139
7	Double the global rate in energy efficiency	n/a	115 schools, 451 IICS	115 schools, 451 IICS
8	Achieve full and productive employment and equal pay for all	n/a	6 jobs	6 jobs
15	Halt deforestation	n/a	16,258 tons of firewood Clay: above 10% alumina content Maica: above 20% alumina content Metal sheets: 1,5mm. thickness	16,258 Tons of firewood Clay: 20.10% alumina content Maica: 35.48% alumina content Metal sheets: 1,5mm. thickness

17	Enhance the global partnership for sustainable development	n/a	4	4
----	--	-----	---	---

Period	GS VERs (tCO ₂ e)
01/01/2024 to 31/12/2024 (Including both the days)	13,253
Total	13,253

Verification team also confirms the SDG parameters are correctly monitored and all the monitored indicators rated as positive. Hence, the project results in sustainable development.

Appendix 1. Abbreviations

Abbreviations	Full texts
BE	Baseline Emission
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CDM PCP	Clean Development Mechanism Project Cycle Procedure for Project Activities
CDM PS	Clean Development Mechanism Project Standard for Project Activities
CDM VVS	CDM Validation and Verification Standard for Project Activities
VER	Verified Emission Reduction(s)
CL	Clarification request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
CP	Commitment Period
EB	Executive Board
EF	Emission factor
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
MP	Monitoring Plan
MR	Monitoring Report
PDD	Project Design Document
PP	Project Participant
UNFCCC	United Nations Framework Convention on Climate Change
VVB	Validation and Verification Body

Appendix 2. Competence of team members and technical reviewers

<u>Certificate of Competence</u>							
Name	☐ Mr. ☒ Ms.	Swati S Acharya					
Qualification Procedure	Fulfil the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GCC/GHG Projects.						
Appointed to work as:							
	Validator/ Verifier	Team Leader	Trainee	Technical Expert	Technical Reviewer	Financial Expert	Approver
Appointed	Yes	Yes	No	Yes	No	No	No
Appointed Date	05-12-2023						
Authorized to work as Technical Expert for:							
Authorized Technical Area	Sectoral Scope		TA Code		Technical Area within the scope		
	Energy industries (renewable - / non-renewable sources)		1.2		Renewables		
	Transportation		7.1		Transport		
Authorized to work as Local Expert for:							
Country/Countries	India						
Compliance check by:							
				Anand S R			

<u>Certificate of Competence</u>							
Name	☒ Mr. ☐ Ms.	Sanjay Kandari					
Qualification Procedure	Fulfil the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GCC/GHG Projects.						
Appointed to work as:							
	Validator/ Verifier	Team Leader	Trainee	Technical Expert	Technical Reviewer	Financial Expert	Approver
Appointed	Yes	Yes	No	Yes	Yes	No	No
Appointed Date	15-07-2023						
Authorized to work as Technical Expert for:							
Authorized Technical Area	Sectoral Scope		TA Code		Technical Area within the scope		
	Energy industries (renewable - / non-renewable sources)		1.1		Thermal energy generation		
	Energy industries (renewable - / non-renewable sources)		1.2		Renewables		
	Energy distribution		2.1		Energy distribution		
	Energy demand		3.1		Energy demand		
	Waste handling and disposal		13.1		Solid waste and wastewater		
	Waste handling and disposal		13.2		Manure		
Authorized to work as Local Expert for:							
Country/Countries	India						
Compliance check by:				Anand S. R.			

<u>Certificate of Competence</u>							
Name	☒ Mr. ☐ Ms.	Vikas Pandey					
Qualification Procedure	Fulfil the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GCC/GHG Projects.						
Appointed to work as:							
	Validator/ Verifier	Team Leader	Trainee	Technical Expert	Technical Reviewer	Financial Expert	Approver
Appointed	No	No	Yes	No	No	No	No
Appointed Date	15-11-2024						
Authorized to work as Technical Expert for:							
Authorized Technical Area	Sectoral Scope		TA Code		Technical Area within the scope		
	-		-		-		
Authorized to work as Local Expert for:							
Country/Countries	-						
Compliance check by:				Anand S R			

<u>Certificate of Competence</u>							
Name	☐ Mr. ☒ Ms.	Salome Alweny					
Qualification Procedure	Fulfil the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GCC/GHG Projects.						
Appointed to work as:							
	Validator/ Verifier	Team Leader	Trainee	Technical Expert	Technical Reviewer	Financial Expert	Approver
<i>Appointed</i>	No	No	No	Yes	No	No	No
<i>Appointed Date</i>	23-01-2025						
Authorized to work as Technical Expert for:							
<i>Authorized Technical Area</i>	Sectoral Scope		TA Code		Technical Area within the scope		
	Energy Demand		3.1		Energy Demand		
Authorized to work as Local Expert for:							
<i>Country/Countries</i>	Uganda						
<u>Compliance check by:</u>				Anand S R			

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1.	Simoshi Limited	Initial GS monitoring report	Version 1.0, dated 10/01/2025	Simoshi Limited
2.	Simoshi Limited	Final GS monitoring report	Version 4.0, dated 27/02/2025	Simoshi Limited
3.	Simoshi Limited	Draft ER calculation sheet	Corresponding to initial GS MR version 1.0	Simoshi Limited
4.	Simoshi Limited	Final ER calculation sheet	Corresponding to final GS MR version 4.0	Simoshi Limited
5.	Simoshi Limited and Uga stove	Commercial agreement between Simoshi Limited and Uga stove	04/01/2024	Simoshi Limited
6.	Uganda National Bureau of Standards	Calibrations certificates for the monitoring equipment's: 1. Balance 2. Thermometer 3. Moisture meter	-	Simoshi Limited
7.	Simoshi Limited and Uga stove	Technical specification of the IICS distributed (Manual)	-	Simoshi Limited
8.	Uganda Stove Manufacturers Ltd. (UGASTOVE)	Technical document for the lifetime of the IICS distributed	16/11/2016	Simoshi Limited
9.	Simoshi Limited	Records for the monitoring parameter $\eta_{new,i,j}$: Testing results for IICS Ugastove model of 30 litres capacity – WBT for efficiency, efficiency calculation sheet and photos corresponding to this monitoring period	WBT conducted in August/September 2024	Simoshi Limited
10.	Simoshi Limited	Records for the monitoring parameter “ $t_{fraction}$ i” and “Date of commissioning of project device i” i.e. Sales agreement of the IICS distributed under the project activity for this monitoring period	-	Simoshi Limited
11.	Simoshi Limited	Records for the monitoring parameter $N_{y,inst}$: School Term update sheet for this monitoring period	School Term update sheet	Simoshi Limited
12.	Simoshi Limited	Records for the monitoring parameters μ_y and $U_{y,inst}$: Usage survey results (Kitchen information update) for this monitoring period	Kitchen information update	Simoshi Limited
13.	Simoshi Limited	1. Training records for kitchen/monitoring team etc. 2. School kitchen training assessment	-	Simoshi Limited
14.	Simoshi Limited	Photographs of project IICS and Monitoring equipments	-	Simoshi Limited
15.	Simoshi Limited	IICS installation log sheets for the IICS distributed during the monitoring period	-	Simoshi Limited
16.	Simoshi Limited and Uga	IICS Quality Assurance - Control Manual v03	-	Simoshi Limited

	stove			
17.	Simoshi Limited	IICS Quality Assurance and quality control assessment	-	Simoshi Limited
18.	Simoshi Limited	IICS maintenance sheets corresponding to the monitoring period	-	Simoshi Limited
19.	Uganda Industrial research institute	IICS material testing results by Uganda Industrial research institute	Dated 05/08/2024	Simoshi Limited
20.	Simoshi Limited	Simoshi QA/QC Manual and maintenance manual (IICS Maintenance Manual v03)	-	Simoshi Limited
21.	Simoshi Limited	Simoshi Monitoring Manual v02	-	Simoshi Limited
22.	Clean Cooking Alliance	The Water Boiling Test, Version 4.2.3 https://www.cleancookingalliance.org/binary-data/DOCUMENT/file/000/000/399-1.pdf	Released on 19/03/2014	Simoshi Limited
23.	UNFCCC	Approved monitoring methodology: AMS-II.G. ver. 12.0 - Energy efficiency measures in thermal applications of non-renewable biomass	-	Publicly Available
24.	Simoshi Limited	Annual report	Dated 01/12/2024	Simoshi Limited
25.	Simoshi Limited and Carbon Check India Pvt. Ltd.	2 nd crediting period: PDD version 3.5, dated 16/08/2022 Validation report by Carbon Check India Pvt. Ltd.	-	Publicly Available
26.	Ugastove	Health and safety manual	-	Simoshi Limited
27.	UNFCCC	CDM Validation and Verification Standard for project activities	Version 03.0	Publicly available
28.	UNFCCC	CDM Project Standard for project activities	Version 03.0	Publicly available
29.	UNFCCC	CDM project cycle procedure for project activities	Version 03.0	Publicly available
30.	UNFCCC	Standard: Sampling and surveys for CDM project activities and programme of activities	Version 9.0	Publicly available
31.	UNFCCC	Guidelines for sampling and surveys for CDM project activities and programme of activities	Version 4.0	Publicly available
32.	Gold Standard	GS Performance review report of (5 th) verification	-	Simoshi Limited
33.	UNFCCC	Glossary "CDM terms"	Version 11.0	Publicly available
34.	UNFCCC	SSG WG to Request for Clarification SSC_725: Clarification on efficiency testing for institutional improved cookstoves of different sauce pan capacities under AMS-II.G.	-	Publicly available
35.	UNFCCC	SSG WG to Request for Clarification SSC_726: Clarification on the requirements to use simplified approach to test stove efficiency under AMS-II.G.	-	Publicly available
36.	UNFCCC	SSG WG to Request for Clarification SSC_727: Clarification on the test method to demonstrate above 20% stove efficiency under AMS-II.G.	-	Publicly available
37.	4KES and PP	Verification contract between 4K Earth Science Pvt. Ltd. and PP	26/11/2024	4KES

38.	UNFCCC	Sample size calculator	-	Publicly available
39.	Simoshi Limited	CV of the Ms. Virginia Echavarria performed WBT testing.	-	Simoshi Limited
40.	Simoshi Limited	International Workshop Agreement IWA 11 was approved at a workshop organized by the Partnership for Clean Indoor Air (PCIA) and the Global Alliance for Clean Cookstoves, in association with the American National Standards Institute (ANSI), and held in The Hague, Netherlands, in February 2012. Workshop contributors: Ms. Virginia Echavarria https://www.iso.org/obp/ui/fr/#iso:std:iso:iwa:11:ed-1:v1:en	-	Simoshi Limited
41.	Simoshi Limited	Documents corresponding to the sustainability monitoring: - Continuous input/grievance mechanism result/comment received. - Supportive document corresponding to each Sustainable Development Goals. - Employee list and Salary receipts - Regular visits by PP for the indicator "Labour standards-Compliance with health and safety guidelines" - Regular visits by PP for the indicator Labour standards---sexual harassment	-	Simoshi Limited
42.	Simoshi Limited	Declaration for claiming only GS VEs for this monitoring period	Dated 06/01/2025	Simoshi Limited
43.	UNFCCC	CDM webpage https://cdm.unfccc.int/Projects/projsearch.html	-	Publicly available
44.	VERRA	Verra Registry https://registry.verra.org/app/search/VCS/All%20Projects	-	Publicly Available
45.	I.REC Standard	International REC Standard (I-REC) https://www.irecstandard.org/registries/	-	Publicly Available
46.	Global Carbon Council	GCC Website https://www.globalcarboncouncil.com/	-	Publicly Available
47.	Gold Standard	Validation and Verification Standard	2.0	Publicly Available
48.	UNFCCC	Guideline: Application of materiality in verifications, Version 02.0	-	Publicly Available

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. Remaining FAR from validation and/or previous verifications

This is the 6th periodic verification of the project activity. No remaining FAR from last (5th) verification or Validation for renewable of crediting period.

FAR ID	XX	Section no.	Date: DD/MM/YYYY
Description of FAR			
Project participant response			Date: DD/MM/YYYY

Documentation provided by project participant	
DOE assessment	Date: DD/MM/YYYY

Table 2. CL from this verification

No CL raised during this verification.

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

Table 3. CAR from this verification

CAR ID	01	Section no.	E.8.2	Date: 30/01/2025
Description of FAR				
Under SDG 13 (In section E.2 of the MR), the total days of IICS operation is used as 365 days however under the ER calculation excel sheet, the same is mentioned as 366 days. PD need to use the consistent information.				
Project participant response				Date: 31/01/2025
PP has adjusted the Monitoring Report accordingly to reflect 366 days for 2024.				
Documentation provided by project participant				
Revised MR and ER sheet				
DOE assessment				Date: 04/02/2025
Changes have been made by PD in the revised MR /02/ and ER sheet /04/ and found OK. Hence CAR is closed.				

CAR ID	02	Section no.	E.8.4	Date: 30/01/2025
Description of CAR				
Under SDG 1 (In section E.4 of the MR), PD has mentioned Baseline estimate as US\$266,660,000 however under the tab "Ny Information Update" of the ER calculation excel sheet, the same is mentioned as US\$300,100,000. PD need to check the data and use consistently.				
Project participant response				Date: 31/01/2025
PP has adjusted the figure accordingly.				
Documentation provided by project participant				
Revised MR				
DOE assessment				Date: 04/02/2025
Changes have been made by PD in the revised MR /02/ and found OK. Hence CAR is closed				

CAR ID	03	Section no.	E.8.5	Date: 30/01/2025
Description of CAR				
Under SDG 15 (In section E.5 of the MR), actual values achieved i.e. "16,260 tons of firewood saved" is not clear. PD need to present calculation under ER sheet.				
Project participant response				Date: 31/01/2025
PP has included the calculation explanation on the Monitoring Report. The calculation is shown on the excel spreadsheet, tab "Ny information update" under columns F333 + G333. The number of boarding children is multiplied by 0.25 for By savings = 59390 x 0.25 The number of day scholars is multiplied by 0.13 for the firewood tonnes saved per year = 228982 x 0.13				
Documentation provided by project participant				
Revised MR and ER sheet				
DOE assessment				Date: 04/02/2025
Changes have been made by PD in the revised MR /02/ and ER sheet /04/ and found OK. Hence this CAR is closed.				

Table 4. FAR from this verification

No FAR raised during this verification.

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

- - - - -