



VERIFICATION REPORT “IMPROVED COOK STOVE MARKET DEVELOPMENT IN RURAL NEPAL”

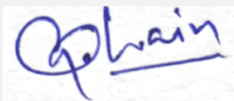


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Summary:

EcoLance Private Limited (hereafter referred to as EPL) appointed by Value Network Venture Advisory Services Pte. Ltd., has verified the greenhouse gas emission reductions for the project activity “Improved Cook Stove Market Development in Rural Nepal” in Nepal (VCS 2357), covering monitoring period from 01 Nov 2021 to 31 Oct 2022 (both dates included) with regard to the relevant requirement for VCS activities.

The objective of the verification is to have an independent review of ex-post determination of the monitored reductions in GHG emission. Verification was conducted using EPL’s procedures in line with the requirements specified in the VCS program guide version 4.3, VCS standard Version 4.4, VCS validation and verification manual version 3.2, ISO14064-3: 2019, CDM M&P, the latest version of the CDM Validation and Verification Standard, and relevant decisions of the COP/MOP and the CDM EB and applying standard auditing techniques. The verification consisted of desk review, on-site assessment and the resolution of outstanding issues and the issuance of the final verification report and certification. The verification shall ensure that reported emission reductions are complete and accurate in accordance with applicable VCS/CDM requirements in order to be certified.

The GHG emission reductions were calculated on the basis of the approved methodology “AMS-II.G- ‘Energy efficiency measures in thermal applications of non-renewable biomass” version 11.1 and the monitoring plan included in the joint project description & MR, version 4.1 of 23 Sep 2021.

During this verification, 8 Corrective Action Request (CARs) and 4 Clarification Requests (CLs) were raised related to operation, monitoring and GHG emission reduction calculation of the VCS project activity in relation to all relevant VCS requirements for the project activity and the applied baseline and monitoring methodology, and these CARs and CLs are successfully closed after necessary corrections/clarifications by the client. The same has been discussed in Appendix B of this verification report.

VVB found no uncertainties during this verification of the project activity.

In conclusion, it is EPL’s opinion that the project activity “Improved Cook Stove Market Development in Rural Nepal” (VCS 2357) meets all relevant requirements for VCS standard and guidelines and correctly applies the baseline and monitoring methodology AMS-II.G ‘Energy efficiency measures in thermal applications of non-renewable biomass’ version 11.1. The monitoring system is in place and the emission reductions are calculated without material misstatement. Hence, EPL is able to certify that the emission reductions from the project during the monitoring period from 01 Nov 2021 to 31 Oct 2022 (both dates included) amount to 26,404 tCO₂e.

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1 INTRODUCTION

1.1 Objective

Value Network Venture Advisory Services Pte. Ltd. (VNV) has appointed EcoLance Private Limited (EPL) to carry out verification of the project “Improved Cook Stove Market Development in Rural Nepal” (VCS 2357) for the period from 01 Nov 2021 to 31 Oct 2022 (both dates included). This report summarizes the findings of the verification of the project, performed on the basis of VCS requirements & UNFCCC criteria of CDM, as well as criteria to provide for consistent project operations, monitoring and reporting.

The objective of the verification is to have an independent evaluation of a project activity by an accredited validation and verification body against the requirements of the VCS Version 4.3, VCS standard version 4.4 and GHG program applied, on the basis of the registered project design document. The verification is for the period from 01 Nov 2021 to 1 Oct 2022. The objectives of this verification exercise are, by review of objective evidence, to establish that:

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

1.2 Scope and Criteria

The verification scope is:

- to verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan.
- to evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement.
- to verify that reported GHG emission data is sufficiently supported by evidence.

The project is assessed against the of VCS program guide v4.3 VCS standard v4.4 EPL has, based on the recommendations in the latest version of VCS Validation and Verification Manual v 3.2, and employed a rule-based approach (as criteria) in the verification, focusing on the identification of significant reporting rules and the reliability of project monitoring.

Verification is not meant to provide any consultancy towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the monitoring.

1.3 Level of Assurance

The verification assessment was conducted to provide a reasonable level of assurance of compliance against the defined audit criteria and materiality threshold (defined as 5% as per VCS standard) within the audit scope. Based on the audit findings, the validation statement reasonably assures that the GHG assertion is materially correct and is a fair representation of the GHG data and information. The final verification report before being submitted to the client was subjected to an independent internal technical review to confirm that all verification activities had been completed according to the pertinent EPL's instructions, with a **reasonable level of assurance**.

The technical review was performed by a technical reviewer qualified in accordance with EPL's qualification procedure. The verification team and the technical reviewer consist of the following personnel.

Role/Qualification	Last Name	First Name
VCS Team Leader, verifier, technical expert	Menon	Rekha

Trainee Auditor & Host Country Expert	Pokhrel	Prem Kumar
Trainee Auditor	Lahon	Biswajit
Technical Reviewer	K	Sudheendra

1.4 Summary Description of the Project

The project activity involves is to install 15,292 improved cooking stoves (ICS) in Baglung, Argakhanchi, Bara, Chitwan, Gulmi, Kaski, Makwanpur, Myagdi, Parbat, Tanahu and Syangja of Nepal replacing conventional cooking stoves. The baseline stoves are conventional system with no improved combustion air supply or flue gas ventilation system as verified from on-site visit and interview. The project stoves are having better efficiency compared to baseline cooking system and therefore results in saving firewood compared to baseline scenario. The project activity is an initiative by Practical Action; an international NGO in disseminating the project ICS with the help of local NOGs. Each project ICS included in the project activity has an end user agreement executed between the user and project developer (Practical Action) /9/. The project developer (Practical Action) and VNV has agreement for managing the project under VCS and VNV is acting as entity responsible for communication with VERRA /11/. Thereby, the ownership rights of carbon credit is shared between end user and project developer and VNV /9/11/.

The project ICSs are HPNJE-01ND & Greenway Jumbo with efficiency of 30.29% & 29.79% as per respectively as certified from Renewable Energy Test Station (RETS), Nepal/10/. The ICS are single pot metallic rocket stoves with natural draft. The “Greenway Jumbo Stoves” manufactured by Greenway Grameen Infra Pvt. Ltd. of India with supply, distribution and aftersales services is being provided by Smart Power Pvt. Ltd., Nepal. The project technology was witnessed by the audit team during on-site audit and confirm to be correct. Each ICS has a technical life of at least 7 years as confirmed from project developer Practical Action / manufacturer’s ICS lifetime certificate / in consistent with the registered PD. Further, the verification team checked publicly available report which states that for such type of ICS the life is around 7 years /13/. The commissioning date of the project cookstoves are taken as Batch 1 from 01/11/2018 to 28/02/2019 & Batch 2 from 01/03/2019 to 21/06/2019.

As per registered project document and baseline study and justification, it is noted a project ICS can save 3.80 ton/year of firewood consumed in a baseline and a project ICS “HPNJE-

01ND can save 2.55 ton/year of firewood whereas “Greenway Jumbo” can save 2.52 tonne/year of firewood as calculated using approved methodology AMS-II.G, version 11.1 /17/ /19/. Therefore, 15,292 ICSs results in reduction of 31,983 tCO₂e emission reductions per year /17/ /19/.

The project's initial crediting period is from 01/11/2018 to 31/10/2028 (inclusive of both the dates). Emission reductions from 01/11/2018 to 31/10/2021 have already been verified and VCU's are issued. This verification pertains to the 3rd consecutive monitoring period for the project.

2 VERIFICATION PROCESS

2.1 Method and Criteria

Verification was conducted using EPL's procedures in line with the requirements specified in the VCS Requirements, i.e. VCS Program Guide, VCS Version 4.3, VCS standard document version 4.4. The GHG emission reductions are on the basis of the approved Baseline and monitoring methodology AMS-II.G version 11.1.

The verification consisted of the following three phases

- Document review;
- On-site assessment on including Interviews and actual project scenario done on 15th March 2023 & 16th March 2023
- Resolution of any Material Discrepancy and the issuance of the final verification report and certification.

The following sections outline each step in more detail.

2.2 Document Review

The monitoring report (MR) version 1 of 25/01/2023, version 1.1 of 30/03/2023, version 1.2 of 10/05/2023 and version 1.3 of 07/07/2023 /01/, version 1.2 of 10/05/2023 and the emission reduction calculations spreadsheets with version 1 dated 25/01/2023, version 1.1 dated 30/03/2023 /02/ received from the Project Developer were assessed as part of the verification. In addition, the registered Project Design Documents (VCS-PDs) /19/ in particular the baseline estimations and the monitoring plan for the project was reviewed. The following table lists the documentation that was reviewed during the verification.

/1/	VNV: VCS monitoring report for “Improved Cook Stove Market Development in Rural Nepal”, version 1 of 25/01/2023, version 1.1 of 30/03/2023, version 1.2 of 10/05/2023, version 1.3 of 07/07/2023
/2/	VNV: Emission Reduction Calculation Spreadsheet for “Nepal ICS_ER monitored MP 03_VCS” version 01 dated 25/01/2023, version 1.1 dated 30/03/2023
/3/	VCS: VCS Program Guide, version 4.3 of 17/01/2023
/4/	VCS: VCS Standard, version 4.4 of 17/01/2023
/5/	VCS: Monitoring report Template VCS Version 4.2
/6/	CDM Executive Board: Baseline and Monitoring Methodology “AMS-II.G”, “Energy efficiency measures in thermal applications of non-renewable biomass”, version 11.1
/7/	UNFCCC: Project search: https://cdm.unfccc.int/Projects/projsearch.html
/8/	Gold Standard Foundation: https://registry.goldstandard.org/projects?q=&page=1
/9/	PA: Sample copies of end user agreement between project developer and end user
/10/	Renewable Energy Test Station (RETS), Nepal: Result of performance test of ICS (HPNJE-01ND and ,Greenway ICS) as per WBT, Test report dated 18/08/2015 and 18/01/2017
/11/	VNV &PA: Declaration of Agency and Communications Agreement dated 11/11/2020
/12/	PA: Declaration of ICS life, Official declaration dated 07/06/2018
/13/	Muna Thapa, Lokendra Subba: Analysis of available models of improved cook stoves and their suitability in different ecological zones in Nepal
/14/	PA: Declaration to avoid double counting, non-inclusion of projects in other standards
/15/	UNFCCC: guidelines for Sampling and Surveys for CDM Project activities and Programme of Activities, Ver. 4.0 (EB86, Annex 4)

/16/	UNFCCC: Standard for Sampling and surveys for CDM project activities and programmes of activities, Version 09.0
/17/	Carbon Check: Joint Validation & Verification report “Improved Cook Stove Market Development in Rural Nepal” version 2.2 of 27/09/2021
/18/	VERRA: Project review report VCS 2357 dated 23/09/2021
/19/	VNV: Registered joint PD & MR for the project ‘Improved Cook Stove Market Development in Rural Nepal’ version 4.1 of 23/09/2021
/20/	Practical Action: User survey - Sample User Survey Form - Sample User survey photo taken during survey - Attendance sheet and presentation for data collection training during survey
/21/	VERRA: https://registry.verra.org/app/projectDetail/VCS/2357
/22/	VNV: Project installation database
/23/	Practical Action: Grievance/Repair/Maintenance - Technician’s monthly reports - Maintenance forms
/24/	Practical Action: Declaration to avoid double counting, non-inclusion of the project in the other standards.

2.3 Interviews

The main topic of the interviews are summarized in the table below:

SN	Date	Name and Role	Organization	Topic
/a/	15 th March 2023 to 16 th March 2023	Deboshmita Dey, Lead Technical	VNV	Description of the project activity, ownership, avoidance of double counting,
/b/	15 th March 2023 to 16 th March 2023	Banupriya. J, Technical Associate	VNV	Emission reductions calculations
/c/	15 th March 2023 to 16 th March 2023	Ajay Mehra, Sr. Associate	VNV	Monitoring plan and monitoring arrangements Monitoring, recording, QA/QC procedures.
/d/	15 th March 2023 to 16 th March 2023	Chandra Bahadur Karki, Sr. Project Officer	Practical Action	ICS operational status, commissioning details, Carbon right transfer, project investment etc.
/e/	15 th March 2023 to 16 th March 2023	Basudev Upadhyay, Project Manager, Energy	Practical Action	

/f/	15 th March 2023 to 16 th March 2023	Naba Raj Dahal, Engineer	Representativ e of DCRDC	
/g/	15 th March 2023 to 16 th March 2023	Sirjana Thapa, Chairperson	Representativ e of DCRDC	
/h/	15 th March 2023 to 16 th March 2023	Gyanend Prasad Gautam, District Coordinator	Representativ e of DCRDC	
/i/	15 th March 2023	1.Sangita Lamichhane (PA/NP/WR/ICS/VCS/ 04778) 2.Gopi Parsad Lamichane (PA/NP/WR/ICS/VCS/ 04782) 3.Kopila Sarki (PA/NP/WR/ICS/VCS/ 04693) 4.Lekh Nath Subedi (PA/NP/WR/ICS/VCS/ 04777) 5.Chabilal Tiharai (PA/NP/WR/ICS/VCS/ 04779) 6.Indira Devi Dhakal (PA/NP/WR/ICS/VCS/ 04684) 7.Yosoda Lamichane (PA/NP/WR/ICS/VCS/ 04686) 8.Tulsinath Paudel (PA/NP/WR/ICS/VCS/ 04687)	End-User	
/j/	16 th March 2023	1.Sangita Kumari Sharma Poudel (PA/NP/WR/ICS/VCS/ 05839) 2.Tara Kumari (PA/NP/WR/ICS/VCS/ 01089) 3.Chandu Davi Lamichane (PA/NP/WR/ICS/VCS/ 06899)		

		4.Buddha Kumari Sharma (PA/NP/WR/ICS/VCS/01437) 5.Sumitra Sharma (PA/NP/WR/ICS/VCS/01446) 6.Guma Kumari Sharma (PA/NP/WR/ICS/VCS/01447) 7.Kalpana Rijal Bastola (PA/NP/WR/ICS/VCS/01444) 8.Durga Pd Sharma (PA/NP/WR/ICS/VCS/01448)		
/k/	15 th March 2023 to 16 th March 2023	Local Stakeholder		Project implementation, socio-economic impact, other benefits etc.

During the verification, VVB followed physical inspection, documents check and interview with PP, users and the stakeholders to check if the reported information for the monitoring period are correct and followed due process inline with the registered PD. For checking operational status, VVB visited the sample user's place and checked if the project ICS are operational. Other parameters such as the baseline practices, use of other devices during project activities and any repair/maintenance activities and date of project purchased were checked through interviews with the users and related documents such as installation certificates for the stoves and reports from the technicians related to grievance if any. The detail information on how VVB verified is presented in section 2.4 below.

2.4 Site Visits

EPL audit team conducted on-site inspection from 15 March 2023 to 16 March 2023 following sampling approach as explained below:

PP's sampling approach:

PP has proposed simple random sampling plan using 90/10 as confidence/precision. This is in line with the applied methodology /6/ and consistent with the registered PDD /19/. The project involves two types of ICS namely Greenway Jumbo and HPNJE-01N and accordingly PP has applied sample random sampling of each type of ICS. The sample size for each parameter is determined following guidelines for Sampling and Surveys for CDM Project activities and Programme of Activities Ver. 4.0 (EB86, Annex 4) /15/. The monitoring parameters monitored through the sampling plan are:

- a) Number of operating unit (ICS) under the project activity
- b) Continued use of pre-project devices

Besides these parameters, PP has also monitored the other parameters that can help demonstrating the contribution of socio-economic impacts and user's satisfactions.

VVB's verification of sampling approach:

The sampling approach is consistent with registered PDD, applied methodology and sampling standard. As per §25 of the Standard: Sampling and surveys for CDM project activities and programmes of activities (version 09.0) /16/, the verification team has to verify whether the project participant have implemented the sampling and surveys according to the sampling plan in the registered monitoring plan. The verification includes determining:

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

In line with §26 of the Sampling Standard (version 09.0) /16/, the verification team has applied a sampling approach for on-site survey as part of verification. Since PP had applied a sampling approach for each type of ICS, the verification team has chosen acceptance sampling for monitoring parameters of each type of ICS in accordance with §28 of the sampling standard (version 09.0) /16/. Two types of ICS are distributed under the project which are considered as two different strata and accordingly separate sample size calculated for each type. All the districts where project is implemented are homogeneous in terms of geography, climate, user's need and baseline scenario, the districts are not considered as strata and not considered separately for sample size calculation.

For selection of samples, PP assigned random number using excel function for each ICS under both ICS type. Accordingly, required sample numbers are selected arranging the random numbers in ascending order. Snaps of selection of random number and arranging in ascending order prior to survey was provided to the audit team. Hence, VVB accepted two districts which randomly got selected as part of the process.

The following table illustrates the agenda covered during the acceptance sampling by the VVB in accordance with Table 1, § 37 of "Standard: Sampling and surveys for CDM project activities and programmes of activities (version 09.0)

Parameter	How the PP conducted sampling surveys	How the VVB could obtain records for verification	Criteria for deciding what ultimately constitutes a discrepancy
Number of operating unit (ICS) under the	Sampling based survey (questionnaire	Cross-check of a sample of PP's samples (Questionnaire, operation surveys/interviews)	VVB results, accounting for duly justified differences.

project activity-proportionate parameter	survey/interviews)	including but not limited to following: - Consistency between the information as contained in Survey sheet and revealed from on-site inspection interviews - Baseline scenario - Enquire/observe whether ICS systems are in use or not?	
Continued use of pre-project devices	Sampling based survey (questionnaire survey/interviews)	Cross-check of a sample of PP's samples (Questionnaire, operation surveys/interviews) including but not limited to following: Consistency between the information as contained in Survey sheet and revealed from on-site inspection interviews	VVB results, accounting for duly justified differences.

VVB has considered para 39 (a) of “Standard for Sampling and surveys for CDM project activities and programmes of activities, Version 09.0” for determining the sampling size to be visited by VVB /16/. In case of this project activity, the estimated emission reduction is 31,983 tCO₂e per year. So, the verification team determined the sample size for acceptance sampling by using its own professional judgment and guidance in the Standard ‘Sampling and surveys for CDM project activities and programme of activities’ version 09.0 /16/. Considering Acceptable Quality Level (AQL) as 0.5%, Unacceptable Quality Level (UQL) as 20%, producer risk of 5% and consumer risk of 20%; a sample size of 8 was required as per Table 2 in the referred Standard /16/. Acceptance number (c) thus determined for the sample size is 0. To comply with this, EPL verified 16 (each model 8 samples) samples to verify the project activity. The verification team selected random samples from PP’s sample list and has assessed 16 samples on-site to ascertain the monitoring results. The stoves details (unique serial number, date of installation, type of ICS, name of user and address) were checked and found to be consistent with that reported in the installation database. No inconsistency was observed for any of the 16 samples with respect to on-site inspection & document review. This assessment of the selected samples was done to ascertain the implementation status of the project activity w.r.t. the stove types, serial number, location etc. of ICS. The onsite assessment and the document review has complied with the required acceptance number (c).

2.5 Resolution of Findings

The objective of this phase of the verification is to resolve any outstanding issues which need to be clarified for EPL’s positive conclusion on the project description. To guarantee transparency a verification protocol has been customized for the project. The protocol shows in a transparent manner the requirements, means of verification and the results from verifying the identified criteria. The verification protocol consists of three tables; the different columns in these tables are described below.

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

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

A clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met. In summary, 4 CL and

8 CARs were raised during this verification which were closed successfully and details are given under Appendix B of this report.

2.5.1 Forward Action Requests

Based on the review of the joint validation & verification report /17/, VERRA review report /18/, one FAR found raised during last verification which needs to be closed during this verification. The FAR is assessed and closed as discussed in Appendix B of this report.

2.6 Eligibility for Validation Activities

The project is a registered VCS project and already validated. This is a verification activity and EPL is accredited for validation and verification of GHG emission reduction project activities falling under sectoral scope 3.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

The MR confirms regarding no participation in any other GHG mechanism. The same was confirmed during the site visit by interacting with the PP. The VVB confirms that PP is not participating in any other GHG mechanism during current monitoring period from 01 Nov 2021 to 31 Oct 2022. Furthermore, VVB has checked the websites of other program such as UNFCCC, VERRA, Gold Standard and confirms that the project has not availed ERs for the current monitoring period (01 Nov 2021 to 31 Oct 2022) under any of these programs.

3.2 Methodology Deviations

No methodology deviation has not been applied.

3.3 Project Description Deviations

No project deviation has been applied.

3.4 Grouped Project

This project is not a grouped project. Therefore, this section is not applicable.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

As verified from the on-site assessment and third party survey report, the audit team confirms the project implementation and operation complies with the project design document. The purpose of the project is to disseminate efficient, improved cooking stoves (ICS) in rural Nepal. The ICS are natural draft single pot hole metallic stoves. The improvement in thermal efficiency is achieved by properly designing the dimension of the combustion chamber and ensuring effective air flow during cooking. The baseline cooking practice in Nepal is the use of “Three-stone” cooking stove, popularly known as traditional stoves using firewood. The project thus reduce Greenhouse Gas (GHG) emission by replacing traditional wood-fuel three stone stoves with wood fuel ICS. The replacement of traditional stoves by ICS improves heat transfer to the cooking utensil thereby reducing the amount of fuel (non-renewable cooking) required for cooking. A reduction in consumption of non-renewable biomass contributes towards reduction of GHG emission into the atmosphere. Thus, ICS reduce GHG emissions through their improved thermal efficiency as compared to traditional/baseline stoves.

This project is implemented by Practical Action (PA). Users transfer the ownership of carbon credit via end user agreement to PA. VNV is working as partner to Practical Action (PA) for sale of carbon credit generated from the project activity. The operation and management structured is verified from document review and on-site interview. The project involves 15,292 ICS (12,415 number of HPNJE-01 type and 2,877 Greenway Jumbo ICS) implemented in Baglung, Argakhanchi, Bara, Chitwan, Gulmi, Kaski, Makwanpur, Myagdi, Parbat, Tanahu and Syangja districts of Nepal. The implementation took place between 01-11-2018 to 21-06-2019 which is verified from project database /22/. The ICS are of 7 years technical life /12/. The initial tested efficiency of HPNJE-01 and Greenway jumbo were 30.29% and 29.79%. During this 3rd monitoring period operational status of the ICS were taken into consideration and monitoring survey confirmed a 100% operational rate /02/, /20/.

EPL verification team verified 16 ICS as explained in section 2.4 above to ascertain accuracy of information. EPL confirms the project cook-stoves are operating in all samples visited, each cook-stove has unique identification number which has been provided in the end user agreement and are correct as per project database. Along with the serial number, end user name, address, installation date etc. had also been noted which were found to be consistent on ground.

It is noted that no changes have been observed or identified which may impact the additionality, no addition of component nor extension of technology, no addition nor removal of project sites. No change of value of the actual operational parameter relevant to determination of emission reduction which are within the control of the PP; no change has been observed or identified that may impact the scale of the project activity or applicability of baseline and monitoring methodology AMS-II.G version 11.1.

EPL verification team confirms that all the emission sources within the project boundary have been considered appropriately. Monitoring of all parameters during the monitoring period is followed as per registered monitoring plan. Below table describes the data parameters relevant to the monitoring plan. Data parameters fixed ex-ante and available at validation and the data/parameters that are monitored are given below.

Data Parameter fixed ex-ante and available at validation:

SN	Data/parameter	Unit	Value applied	Assessment
1	Annual quantity of woody biomass that would have been used in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project device type <i>l</i> and batch <i>j</i> ($B_{old,i,j}$)	tonnes/ household/ year	3.80	The value is fixed as per registered PD for the entire crediting period/ 19 /.
2	Efficiency of pre-project device ($\eta_{old,i,j}$)	%	10%	This value is default as per applied methodology (AMS-II.G, version 11.1) / 6 /. This value is fixed ex-ante during validation / 19 /
3	Fraction of woody biomass that can be established as non-renewable biomass (f_{NRB})	%	86.10%	Calculated following procedures outlined in tool to calculate f_{NRB} referred in the methodology AMS-II.G, version 11.1 which is duly approved by Ministry of Forest and Environment, Nepal on 25 Nov 2018. The value is fixed as per registered PD for the entire crediting period / 19 /.
4	Emission factor for the fossil fuels projected to be	CO ₂ /TJ	64.40	Default value as per applied methodology / 6 /

	used for substitution of non-renewable woody biomass by similar consumers ($EF_{projected_fossilfuel}$).			and ex-ante fixed in registered PD /19/.
5	Leakage adjustment factor	Fraction	0.95	Default value as per paragraph 39 of the applied methodology /06/. Also ex-ante fixed in registered PD /19/

Data and parameters monitored:

Parameter	Value	Description
Number of project devices of type i and age a that are operating in year y, $N_{y,a,i}$ (Number)	15,292	From the total commissioned ICS, PP has conducted the sample survey in line with monitoring plan and sampling and survey guidelines covering 35 samples for HPNJE-01ND and 35 sample of Greenway Jumbo and found 100% operational /01/,/02/. During the site visit, EPL verified taking 16 samples (Each model 8 samples) through acceptance sampling and all samples were found operational. Hence reported results are accepted.
Adjustment to account for any continued use of pre-project devices during the year y (μ_y)	For HPNJE-01ND: 0.903 For Greenway Jumbo: 0.90	As per sample survey, it was noted users use pre-project devices in some cases. During the survey, users were asked if people uses baseline stoves and other stoves as well. In case if they also use baseline stoves and/or other stoves, the use of project devices are considered 0.5 and 0.3 which is more conservative since in some cases the HH's were using both ICS and pre project device as per the applied methodology (refer page 18,19 of the methodology) although all ICS are found operating during the monitoring period. Considering this, the survey found that yearly factor for compensating pre-project device use for the project is calculated as 0.903 for HPNJE-01ND and 0.90 for Greenway Jumbo/2/. VVB noted during interview with end users the use of pre-project device in some case and survey's result found to be correct as per user's confirmation. Hence, the result is accepted.

Date of commissioning of batch j	Batch 1: 01-11-2018 to 28-02-2019 Batch 2: 01/03/2019 to 21-06-2019	The date of commissioning of batch is considered as per the applied methodology requirement. The date of commissioning of project devices are found correct as per the project database and accordingly the date of commissioning of batch is taken correctly for the project devices.
Date of commissioning of project device i	Installed between 01-11-2018 to 21-06-2019	The project includes 15,292 ICS of two types of stoves (HPN JE-01ND and Greenway Jumbo) installed in two batches of 12,157 and 3,135 ICS. The implementation took place between 01 November 2018 to 21 June 2019. The date of commissioning of each device is found consistent in the project database.
Number of project devices distributed per household ($N_{d,HH}$)	1	One ICS per household has been distributed in the project which is consistent with implementation database.
Efficiency of the device of each type l and batch j implemented as part of the project activity ($\eta_{new,l,j}$)	For HPNJE-01ND: 25.88% For Greenway Jumbo: 25.62%	PP has chosen linear decrease in efficiency as per paragraph 37(a) of the methodology and accordingly decreased the project system efficiency for each year of operation. The applied efficiency is correct as per the methodology requirement and registered PD /19/ and hence accepted.
Net calorific value of the non-renewable woody biomass that is substituted ($NCV_{biomass}$)	0.0156 TJ/tonne	IPPC default wood fuel/6/
Life of project ICS	7 Years	As per manufacturer specification. Consistent in the registered PD /12/. This has been validated during registration as well /17/.
Other GHG program		The project has not participate or not been rejected under any other GHG programs since validation or previous verification.
Other form of Environmental credit		The project has not received or sought any other form of environmental credit, or has not become eligible to do since validation and previous verification

4.2 Safeguards

4.2.1 No Net Harm

The project involves use of improved cooking stove in households replacing conventional cooking stoves. Therefore, the project results in avoidance of CO₂ emissions due to improvement in efficiency. Therefore, there is no negative environmental impact from the project activity. In addition, due to the project activity, jobs are created in local level as verified during on-site interview which has improved socio-economic impacts in the project area. Therefore, there is no net harm from the project activity.

4.2.2 Local Stakeholder Consultation

PP organized stakeholder consultation during validation of the project activity which was validated by the validation agency. The verification team has interacted local stakeholders during on-site assessment and details are summarized in section 2.3 of this report. A continuous complaint mechanism system is in place for the project with records of complaint/feedback and monthly reports provided by the technicians. The grievance are received at the field level by technicians and women self-help group for the operational and usage related issues and address them locally wherever possible. At the centre, Kathmandu office of the Practical Action, 3 persons are assigned as in-charge of addressing and receiving the grievances. VVB during the site verification confirmed that there was no negative comment or feedback from local stakeholders as recorded by the verification team and no outstanding grievances to be addressed for this monitoring period.

4.3 AFOLU-Specific Safeguards

The project is a non-AFOLU project, this section is not required.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The baseline emission reductions have been calculated using the following formulae:

$$ER_y = B_{y,savings} \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossilfuel} \times N_{y,l} \times \mu_y$$

Where:

- $B_{y,savings,i,j}$ = Quantity of woody biomass that is saved in tonnes per cookstove device of type i and batch j during year y . $B_{y,savings}$ is calculated as following:
- $$B_{y,savings} = B_{old} * (1 - \eta_{old} / \eta_{new})$$
- B_{old} is fixed ex-ante to be 3.80 ton/year as per PD. η_{old} is also fixed ex-ante to be 10% default as per the methodology. η_{new} is linearly decreased as per applied methodology.
- $f_{NRB,y}$ = Fraction of woody biomass that can be established as non-renewable biomass (fNRB) fixed ex-ante to be 86.1% calculated as per procedure outlined in tool to calculate fNRB.
- $NCV_{biomass}$ = Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.0156 TJ/tonne, based on the gross weight of the wood that is 'air-dried')
- $EF_{projected_fossilfuel}$ = Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers. Use a value of 64.40 t CO₂/TJ
- $N_{y,i,a}$ = Number of project devices of type i and age a operating during year y . During this monitoring period, 100% households are operational as explained in section 4.1 above.
- μ_y = Adjustment to account for any continued use of pre-project devices during the year y . The same is calculated as 0.903 for HPN JE-01 ND and 0.90 for Greenway Jumbo from sample survey.

As per paragraph 29 of the applied methodology and PD, $B_{y,savings,i,j}$ is multiplied by a net to gross adjustment factor of 0.95 to account for leakage. Therefore, ERY is realized during the monitoring period is 26,404 tCO₂.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

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

All records needed for monitoring are archived in line with the requirements of the registered monitoring plan. No significant, lack of evidence and missing data were detected during verification. Hence, the verification team confirms that the monitoring system ensures required quality of the monitoring system to ensure the quality of the monitored data. All internal data are subjected to QA/QC measures.

The operational status of project ICS is monitored through sample survey following UNFCCC sampling and survey guideline follows 90/10 confidence precision. As per the registered PDD /19/ project involve with two different types of ICS in rural Nepal and based on the simple random sampling two ICS are homogeneous. There is two set of samples derived from this method based on two types of stoves distributed. The same has been already mention in the section 4.3 of the MR. Further, most of the district are located in the hilly regions of Nepal. Hence, the population is homogenous as well. The survey forms, survey photographs etc. were checked to ascertain the monitoring results reported in survey/20/. For enhancing the survey reliability and QA/QC, training was provided to the data collector during survey /20/. It is also noted that the achieved precision is less than 10% i.e., it lies within the confidence interval of 10% and hence meets the desired confidence precision /02/. The monitored results are found consistent with on-site audits. The focal person is also nominated by the project participants for providing training to the field persons to minimize the errors and addressing any nonconformity.

Also, project developer has set up grievance/repair/maintenance mechanisms and rectifies any issues for the operation of the project device. The continued use of pre-project devices in parallel to project ICS are also conservatively taken into account while calculating the achieved emission reductions.

Therefore, EPL is of the opinion that this method of calculation of emission reductions is accurate and results in conservative estimation of emission reduction and is line with the applicable VCS requirements.

4.6 Non-Permanence Risk Analysis

The project is not a forestry project. Hence this section is not applicable.

5 VERIFICATION OPINION

EcoLance Pvt. Ltd. (EPL), appointed by Value Network Venture Advisory Services Pte. Ltd., has verified the greenhouse gas emission reductions reported for the project activity “Improved Cook Stove Market Development in Rural Nepal” VCS 2357 in Nepal for the period from 01/11/2021 to 31/10/2022 with regard to the relevant requirements for VCS Version 4 activities.

The project participants of the project are responsible for:

- The preparation of greenhouses gas emissions data and the reported greenhouse gas emission reductions from the project on the basis set out in the monitoring plan contained in the joint project description and monitoring report.
- The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of greenhouse gas emission reductions of the project.

It is the responsibility of EPL to express an independent verification opinion about the project's conformity with the requirements of VCS standard, ISO 14064-3: 2019 and on the reported greenhouse gas emission reductions from the project.

Based on documented evidence and corroborated by an on-site assessment, EPL can confirm that:

- the project has been implemented and operated as per the design document;
- the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS requirements;
- the monitoring is in place as per the applied baseline and monitoring methodology;

It is EPL's opinion that the GHG emission reduction stated in the monitoring report version 1.3 of 07/07/2023 for the "Improved Cook Stove Market Development in Rural Nepal" VCS 2357 project in Nepal for the period 01/11/2021 to 31/10/2022 are fairly stated. The GHG emission reductions were calculated correctly on the basis of the approved monitoring methodology AMS-II.G version 11.1 and the monitoring plan contained in the registered Project Design Document, version 4.1 of 23/09/2021.

Hence, EPL is able to certify that the emission reductions from the project during the monitoring period from 01/11/2021 to 31/10/2022 amount to 26,404 tCO₂e with a reasonable level of assurance.

Verification period: From 01-November-2021 to 31-October-2022:

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
01/11/2021 to 31/12/2021	4,413	0	0	4,413
01/01/2022 to 31/10/2022	21,991	0	0	21,991
Total	26,404	0	0	26,404

APPENDIX A: ABBREVIATIONS

Abbreviations	Full texts
BE	Baseline Emissions
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM M&P	Modalities and Procedures CDM
CL	Clarification Request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DNA	Designated National Authority
EF	Emission Factor
ER	Emission Reductions
FAR	Forward Action Request

GHG(s)	Greenhouse gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
MoV	Means of Verification
MR	Monitoring Report
PDD	Project Design Document
PP(s)	Project Participant(s)
Ref.	Document Reference
SS(s)	Sectoral Scope(s)
TA(s)	Technical Area(s)
UNFCCC	United Nations Framework Convention on Climate Change
VCU	Verified Carbon Unit
VKU	VKU Certification Ltd.
VVS	Validation and Verification Standard
VVB	Validation and verification body

APPENDIX B: CLARIFICATION REQUEST, CORRECTIVE ACTION REQUEST & FORWARD ACTION REQUESTS

Table 1. Remaining FAR from Previous verification

FAR ID	01	Section no.		Date: 28/03/2023
Description of CL				

1. The registered PD indicates the 10% oversampling will be followed to anticipate any low response and answers bias. From next monitoring, PP is recommended to maintain the 10% oversampling while doing the user survey for monitoring the parameters indicated in registered PD appropriately and verifying body will check the conformity of the same. 2. In monitoring plan of the registered PD (section 5.3), PP has mentioned that “monitoring report” will be prepared based on “survey report”. Similarly, the sampling and survey guidelines also recommends to prepare a survey report compiling the information related to the qualification of the survey team, methodology of the survey conducted, sampling design, and result of the survey. This will help in improving the documentation and record keeping. Survey records are sufficient to substantiate the results however, PP is requested to prepare the User Survey Report (different than the monitoring report) compiling those information and aligning with sampling and survey guidelines from next monitoring for improving QA/QC in information and documentation management.	
Project participant response	Date: 30/03/2023
1. PP has taken due consideration of the raised FAR and has done 10 percent oversampling. Sample for this current MP survey is drawn as per the “Guidelines for sampling and surveys for CDM project activities and programme of activities, version 3 (EB 75, annex 8)”. As per sampling calculation in ‘Nepal ICS_ER monitored MP 03_VCS.xlsx’ tab “Sample size (MP03)” document, the sample size came out as 31 however PP has considered 35 samples for the monitoring survey. 2. PP has taken due consideration of the raised FAR and has prepared a survey report please refer document which was already shared “PA Nepal monitoring Survey report-MP-03”.	
Documentation provided by project participant	
VVB assessment	Date: 17/04/2023
1. PP has described that as per the MP survey PP has done the 10% oversampling as per the “Guidelines for sampling and survey for CDM project activities and programme of activities, version 3 (EB 75, annex 8)”. For sampling calculation PP has given the data mentioned in ‘Nepal ICS_ER monitored MP 03_VCS.xlsx’ tab “Sample size (MP03). Hence, FAR is closed. 2. PP has prepared the separate User Survey Report as FAR raised by the previous verification, for this verification VVB confirms that the documents related to the User Survey Report received from PP. FAR is closed.	

Table 2. CL from this verification

CL ID	01	Section no.	General	Date: 28/03/2023
Description of CL				

PP is requested to provide following documents/evidence to substantiate the information provided in MR:	
1. Sample commissioning reports of ICS. 2. Official declaration that whether the project activity is included in other emission trading programs or under any emission reduction binding limits and net GHG emission reductions or removals generated during this monitoring period have not been used for compliance under such programs or mechanisms.	
Project participant response	Date: 30/03/2023
1. PP has previously shared sample 'End user agreement and Installation form' please refer the same. 2. PP has provided 'Declaration VCS 2357'	
Documentation provided by project participant	
1. Declaration VCS 2357	
VVB assessment	Date: 17/04/2023
PP has provided the related documents and proofs accordingly. CL is closed.	

CL ID	02	Section no.	3.1	Date: 28/03/2023
Description of CL				
1. PP is requested to clarify how the non-operational ICS reported during previous monitoring were accounted and whether it has impact on ER calculation for this monitoring period. 2. PP is requested to clarify if any ICSs repair/maintenance took place during the monitoring period.				
Project participant response				Date: 30/03/2023
1. PP would like to clarify that the non-operational ICS in previous MP was due to some technical damage of ICS because of improper handling of the ICS while cooking. Further, they were repaired by the supplier and the ICS was operational once again. During the current MP, all the ICS surveyed were operational and hence it did not impact the GHG emission reductions, and the monitoring as can be cross-checked from the survey records. Section 3.1. of the MR can be referred for the same. 2. PP would like to clarify that there are some maintenances which has been taken place for some users, for which a monthly maintenance report and sample maintenance form has already been shared. All the issues were rectified. Please refer "maintenance form" folder and monthly technician report shared earlier.				
Documentation provided by project participant				
-				
DOE assessment				Date: 17/04/2023
1. As per the survey form and MR all the ICSs are operational in this monitoring period. Hence, CL is closed. 2. The evidence of maintenance report are provided. CL is closed.				

CL ID	03	Section no.	4.2	Date: 28/03/2023
Description of CL				
1. In section 4.2 of the MR under the first table, ICS user's survey through monitoring of the user 100% ICSs are operational. PP is requested to clarify how 100% operational are observed with the measurement methods and procedures applied, any standards or protocols followed, and the person/entity responsible for the measurement. 2. PP is requested to clarify and provide the details whether annual monitoring frequently has been maintained. 3. As per the monitoring μy, PP is request to clarify the basis of applying 0.5 and 0.3 for the user who reported used of other cooking system during the monitoring report. 4. Since survey shows that the used of LPG is alternative fuel, but the baseline is traditional biomass based stoves. PP is requested to clarify how this has been accounted.				
Project participant response				Date: 30/03/2023
1. During the annual users' survey, survey team inspected representative sample households to check if the devices are operating or not. Sample for this survey is drawn as per the "Guidelines for sampling and surveys for CDM project activities and programme of activities, version 3 (EB 75, annex 8)". During the survey, the respective field person checks the ICS whether it is operational or not as well. During the survey, in order to anticipate any low response rate and answers bias, 10% oversampling is applied. Refer section 4.3 for further details. 2. The survey dates for the previous monitoring period are MP 01-Year 1, Oct 2019, year 2, Sept 2020, Year 3, Sept-Oct 2021, for current MP i.e. MP03-year 04 survey was conducted in September 2022 which is falling under the annual frequency. 3. PP would like to clarify that the stated method is as per the applied methodology (Refer page 18 & 19 of the methodology). It has been stated that "if there was only one pre-project device per household and its use during the project period continues along with the project stove to meet 25% of the cooking needs of the household in which case the adjustment factor will be 0.75." Hence, we have assumed 0.5 and 0.3 which is more conservative since in some cases the HHs were using both ICS and the pre-project devices (50:50 for ICS and Traditional and a 20% additional deduction in case of LPG as well). 4. PP would like to clarify that the adjustment factor has been measured as per the number of meals cooked in project stove and other type of stove (which includes traditional stove or LPG stove). In cases where the HHs are using both the project stove and the other type of stove (LPG/Traditional stove), PP has considered no. of meals as 50-50 % each which is found to be conservative even though as per the responses provided by the HHs, the number of meals cooked is higher using the project ICS. Also, the LPG use is very minimal and only during special occasions like guest arrival in these households. The approach followed by PP is conservative as LPG is less GHG intensive fuel.				
Documentation provided by project participant'				
-				

DOE assessment	Date: 17/04/2023
1. PP has described how the respective field person conducted the survey and checks the ICS and filled the survey forms and the response on 100% operational by inspection and survey is justifiable. Also, Section 4.3 of the MR it is mentioned that 10% oversampling is done during the survey which is justified. CL is closed. 2. The information related to the annual monitoring is appropriately incorporated by PP. CL is closed. 3. As responded by PP, the use of pre-project device is accounted by using the adjustment factor in-line with the methodology and hence the response is accepted. CL is closed. 4. The approach followed by PP is conservative as LPG is less GHG intensive fuel. Also, as per the datasheet only few sampled households have used LPG as alternate fuel. So, CL is closed.	

CL ID	04	Section no.	4.3	Date: 28/03/2023
Description of CL				
PP is requested to clarify if any trainings, capacity development and repair maintenance of ICSs activities were undertaken during the monitoring period and provide the evidence for the same.				
Project participant response				Date: 30/03/2023
The supportive for the training related to survey has been now shared. Please refer "Training records" folder. Further, some sample maintenance forms and monthly technician reports have been provided to VVB already.				
Documentation provided by project participant				
<i>Training records folder</i>				
DOE assessment				Date: 17/04/2023
PP has provided the attendance sheet and the presentation slide for the training. CL is Closed.				

Table 3. CAR from this verification

CAR ID	01	Section no.	1.11	Date: 28/03/2023
Description of CAR				
1. In section 1.11 of the MR, PP is requested to clearly put the information on SDG 3 related indicators whether the smoke reduction and incidence of disease are reduced or increased based on the monitoring under "Current Project Contribution" in table 1. 2. The cumulative contributions have not provided for all indicators in the last column of the table 1.				
Project participant response				Date: 30/03/2023

1. PP would like to clarify that during survey the HHs were only asked about smoke reduction and the same has been now updated the table 1 in the revised MR. The same was approved during the previous verification as well. 2. PP would like to clarify that for SDG 7 there will be no further distribution after 15,292. For the SDG 13, the total estimated ERs have been provided and for SDG 3 the estimate has been provided. The same was approved during the previous verification as well.	
Documentation provided by project participant	
<i>Nepal ICS_MR monitored MP 03_VCS</i>	
DOE assessment	Date: 17/04/2023
1. The SDG 3 related indicators are updated in table 1.11 of the revised MR. CAR is closed. 2. PP has clarify the cumulative contributions. CAR is Closed.	

CAR ID	02	Section no.	2.2	Date: 28/03/2023
Description of CAR				
PP has not mentioned any ongoing communications with stakeholders' in-line with the MR template. Information on ongoing communications has to be incorporated accordingly in section 2.2.				
Project participant response				Date: 30/03/2023
The details have now been added in the updated MR section 2.2.				
Documentation provided by project participant				
<i>Nepal ICS_MR monitored MP 03_VCS</i>				
DOE assessment				Date: 17/04/2023
Information related to the ongoing communication is appropriately incorporated by PP is Section 2.2 of the MR. CAR is closed.				

CAR ID	03	Section no.	3.1	Date: 28/03/2023
Description of CAR				
Information on any events that may impact the GHG emission reductions or removals and monitoring in line with the MR template has to be provided in section 3.1 of MR.				
Project participant response				Date: 30/03/2023

PP would like to clarify that no such events have occurred that may have impacted the GHG emission reductions or removals and monitoring. All the ICS were operational during the current monitoring period. The non-operational ICS from previous MP were repaired and were in operational state. The same has already mentioned in section 3.1. of the MR	
Documentation provided by project participant	
-	
DOE assessment	Date: 17/04/2023
PP has described that no such events have occurred that may have impacted the GHG emission reductions or removals and monitoring. CAR is closed.	

CAR ID	04	Section no.	4.2	Date: 28/03/2023
Description of CAR				
1. In section 4.2 of the MR, the monitoring dates are not specified in monitoring table of parameters. 2. In section 4.2, in the table for "Adjustment to account for any continued use of pre-project devices during the year y", PP has to describe clearly how the measurement/calculation of the parameter is done.				
Project participant response				Date: 30/03/2023
1. PP has updated the tables in section 4.2. of the revised MR. 2. PP has updated the table for "Adjustment to account for any continued use of pre-project devices during the year y" in the revised MR.				
Documentation provided by project participant				
Nepal ICS_MR monitored MP 03_VCS				
DOE assessment				Date: 17/04/2023
1. The monitoring date now is incorporated in section 4.2 of the MR. CAR is closed. 2. PP has described on how the "Adjustment to account for any continued use of pre-project devices during the year y" in section 4.2 of the MR and is found appropriate. CAR is closed.				

CAR ID	05	Section no.	4.3	Date: 28/03/2023
Description of CAR				
1. PD is requested to report the actual achieved precision in section 4.3 of MR and the calculation sheet has to be provided. 2. PD is requested to clarify in section 4.3 on actual population taken while calculating the samples though some non-operational ICS are reported in previous monitoring.				

Project participant response	Date: 30/03/2023
1. PD would like to clarify that the actual precision can be reviewed in the excel itself, which is already provided and can be accessed via document 'Nepal ICS_ER monitored MP 03_VCS.XLsx, tab "Sample size(MP03)" 2. PP would like to clarify that the non-operational ICS in previous MP was due to some technical damage of ICS because of improper handling of the ICS while cooking. Further, they were repaired by the supplier and the ICS was operational once again. During the current MP, all the ICS surveyed were operational and hence it did not impact the GHG emission reductions and the population size.	
Documentation provided by project participant	
-	
DOE assessment	Date: 17/04/2023
1. The achieved precision for the monitoring period has been mentioned in section 4.3 of the MR and is also substantiated by the calculation sheet. So, CAR is closed. 2. The target population is the total number of operational ICS and all the ICS surveyed were operational during this monitoring period as per the MR. Hence, CAR is closed.	

CAR ID	06	Section no.	5.1	Date: 28/03/2023
Description of CAR				
The Efficiency of the system (fraction) has not provided in MR section 5.1 of the MR in detail applying the values in the given equation.				
Project participant response				Date: 30/03/2023
Please refer page no. 32 of the revised MR under section 5.1. the details are already available				
Documentation provided by project participant				
DOE assessment				Date: 17/04/2023
In the revised MR the details are available. CAR is closed.				

CAR ID	07	Section no.	5.4	Date: 28/03/2023
Description of CAR				

Amplify the given parameters used in section 5.4. PP is requested to correct the same.	
Project participant response	Date: 30/03/2023
Section 5.4 has been updated in the revised MR.	
Documentation provided by project participant	
<i>Nepal ICS_MR monitored MP 03_VCS</i>	
DOE assessment	Date: 17/04/2023
In Section 5.4, PP has updated the revised MR. CAR is closed.	

CAR ID	08	Section no.	General	Date: 28/03/2023
Description of CAR				
The page numbers are not reflected in the MR inconsistent with required MR template.				
Project participant response				Date: 30/03/2023
PP has rectified the issue				
Documentation provided by project participant				
<i>Nepal ICS_MR monitored MP 03_VCS</i>				
DOE assessment				Date: 17/04/2023
Page number are incorporated in the revised MR. CAR is closed.				

Table 3. FAR from this verification

FAR ID	00	Section no.		Date:
Description of FAR				
No FAR from this verification				
Project participant response				Date:
N/A				
Documentation provided by project participant				

N/A	
DOE assessment	Date:
N/A	

APPENDIX C: TEAM COMPETENCY



Rekha Menon

has been qualified for below schemes & Sectoral Scopes as per the requirements of ECOLANCE Private Limited to participate in validation/verification audits:

Standard	ISO 14064-1	ISO-14064-2	VCS
Qualified	☒	☒	☒

Role	Validator	Verifier	TL	Technical Reviewer	Technical Expert
	☒	☒	☒	☒	☒

Scopes Granted:

- Power Generation and Electric Power Transactions (Fossil fuel thermal/ Renewable energy non thermal)
- Energy Industries (Renewable/Non renewable sources)
- Energy Demand
- Waste handling and disposal
- Forestry and other land use

Version	DATE OF APPROVAL	VALIDITY
1	10 November 2021	09 November 2022
2	09 November 2022	08 November 2023

Authorized Signatory



Rekha Menon
Director- Technical

EPL/FR/5

ECOLANCE PRIVATE LIMITED

Version 1

Issued: 27-10-2021



Prem Kumar Pokhrel

has been qualified for below schemes & Sectoral Scopes as per the requirements of ECOLANCE Private Limited to participate in validation/verification audits:

Standard	ISO 14064-1	ISO-14064-2	VCS
Qualified	☐	☐	☒

Role	Validator	Verifier	TL	Technical Reviewer	Technical Expert	Trainee Auditor
	☐	☐	☐	☐	☒	☒

Scopes Granted:

- Energy Industries (Renewable/Non renewable sources)
- Energy Demand

Version	DATE OF APPROVAL	VALIDITY
1	09 November 2022	08 November 2023

Authorized Signatory



Rekha Menon
Director- Technical

EPL/FR/5

ECOLANCE PRIVATE LIMITED

Version 1

Issued: 27-10-2021



Biswajit Lahan

has been qualified for below schemes & Sectoral Scopes as per the requirements of ECOLANCE Private Limited to participate in validation/verification audits:

Standard	ISO 14064-1	ISO-14064-2	VCS
Qualified	☐	☐	☒

Role	Validator	Verifier	TL	Technical Reviewer	Technical Expert	Trainee Auditor
	☐	☐	☐	☐	☐	☒

Version	DATE OF APPROVAL	VALIDITY
1	02 December 2022	01 December 2023

Authorized Signatory



Rekha Menon
Director- Technical

EPL/FR/5

ECOLANCE PRIVATE LIMITED

Version 1

Issued: 27-10-2021



Sudheendra Krishna Char

has been qualified for below schemes & Sectoral Scopes as per the requirements of ECOLANCE Private Limited to participate in validation/verification audits:

Standard	ISO 14064-1	ISO-14064-2	VCS
Qualified	☒	☒	☒

Role	Validator	Verifier	TL	Technical Reviewer	Technical Expert
	☐	☐	☐	☒	☒

Scopes Granted:

- *Power Generation and Electric Power Transactions (Fossil fuel thermal/ Renewable energy non thermal)*
- *Energy Industries (Renewable/Non renewable sources)*
- *Energy Demand*
- *Waste handling and disposal*

Version	DATE OF APPROVAL	VALIDITY
1	02 February 2023	01 February 2024

Authorized Signatory



Rekha Menon
Director- Technical