VERIFICATION REPORT FOR "DISTRIBUTION OF ONIL STOVES – MEXICO, SAN FELIPE USILA 1"

Document Prepared by Earthood Services Limited

Project Title	Distribution of ONIL Stoves – Mexico, San Felipe Usila 1
Version	4.0
Report ID	VCS.VER.21.77

Report Title	Verification Report for "Distribution of ONIL Stoves – Mexico, San Felipe Usila 1
Client	C-Quest Capital LLC
Pages	47
Date of Issue	12/03/2025
Prepared By	Earthood Services Limited

Contact	12003 to 12005, 12th floor, tower b, Emaar digital greens, sector-61, Golf course extension road, Gurgaon, Haryana, India, 122011 Website: www.earthood.in email: info@earthood.in
Approved By	Dr, Kaviraj Singh Chief Executive Officer
Work Carried Out By	Team Leader (old): N Premjit Singh Verifier(old): Vaishali Vatsa Team Leader and Verifier (new): Sukanya Phukan Technical Expert: Deepika Mahala Technical Reviewer (old): Shreya Garg Technical Reviewer (new): Shifali Guleria Meth Expert: Deepika Mahala Local Expert: Ricardo Lopes

Summary:

Earthood Services Limited (Earthood) has been contracted by C-Quest Capital LLC to conduct the verification of the project "Distribution of ONIL Stoves – Mexico, San Felipe Usila 1", VCS ID 1216, against VCS Standard Version 4.1.

The verification includes confirming the implementation of the monitoring plan of the registered VCS PD and MR (Project ID 1216) and the application of the monitoring methodology as per AMS.II.G, Version 03 "Energy efficiency measures in thermal applications of non-renewable biomass". A remote site visit was conducted to verify and cross checked the data submitted in the monitoring report.

Monitoring period for the current verification is considered from 01-06-2020 to 31-12-2020. The review of the project design documentation, monitoring report and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and stakeholders have provided Earthood with sufficient evidence to validate the fulfillment of the stated criteria.

The coordinating managing entity of the project activity is C-Quest Capital LLC and the distribution and installation of ONIL stoves is implemented by HELPS International A.C. in Mexico. The installed capacity of the project activity is 29,495[1] stoves out of 31,178 installed stoves for this monitoring period. PP has excluded the non-operational stoves found during regular spot checks by their ground personnel. As per the test results, The ONIL stoves reduces the firewood consumption up to 58% compared to traditional baseline stoves and single ONIL stove can save up to 2.893 tons of CO_2 every year.
Since the project activity involves distribution of fuel-efficient stoves to reduce the firewood consumption by households. Therefore, the project reduces greenhouse gas emissions and thereby contributes to sustainable development.

A risk-based approach has been followed to perform this verification. In the course of verification, 02 Corrective Action request (CARs), 00 Forward Action request (FARs), and 05 Clarification request (CLs) were raised and successfully closed.

Summary of the verification conclusion:

Earthood confirms that the project is implemented in accordance with the registered VCS PD & MR. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the project's GHG emissions, and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information seen and evaluation we confirm that the emission reductions from the project activity "Distribution of ONIL Stoves – Mexico, San Felipe Usila 1" in Mexico during the period 01-06-2020 to 31-12-2020 (including both days) amount to 11,550 tons of CO_2e.

[1] **The registered stoves of 2011, 2013 2014, 2015 and 2016 which were deployed in the north of Mexico are deemed unsafe to visit due to local safety reason. Hence, these stoves are excluded from the final database for the calculation of emission reduction.**

CONTENTS

1 INTRODUCTION 6
1.1 Objective 6
1.2 Scope and Criteria 6
1.3 Level of Assurance 6
1.4 Summary Description of the Project 6
2 VERIFICATION PROCESS 7
2.1 Method and Criteria 7
2.2 Document Review 7
2.3 Interviews 7
2.4 Site Inspections 10
2.5 Resolution of Findings 11
2.5.1. Forward Action Requests 11
2.6 Eligibility for Validation Activities 12
3 VALIDATION FINDINGS 12
3.1 Participation under Other GHG Programs 12
3.2 Methodology Deviations 12
3.3 Project Description Deviations 12
3.4 Grouped Project 14
4 VERIFICATION FINDINGS 14
4.1 Project Implementation Status 14
4.2 Safeguards 16
4.2.1 No Net Harm 16
4.2.2 Local Stakeholder Consultation 16
4.3 AFOLU-Specific Safeguards 17
4.4 Accuracy of GHG Emission Reduction and Removal Calculations 17
4.5 Project Emissions 32
4.6 Leakage 32
4.7 Quality of Evidence to Determine GHG Emission Reductions and Removals 32
4.8 Non-Permanence Risk Analysis 32

5. VERIFICATION CONCLUSION 32

APPENDIX 1: REFERENCES 34

APPENDIX 2: COMPETENCY STATEMENT 36

APPENDIX 3: ABBREVIATIONS 41

APPENDIX 4: FINDINGS OVERVIEW 42

1 INTRODUCTION

1.1 Objective

C-Quest Capital LLC has contracted Earthood Services Limited (Earthood) to perform VCS Verification of the 'ONIL Stoves – Mexico, San Felipe Usila 1' in Mexico (hereafter called project). This project has already been registered as a VCS project (VCS ID 1216). The objective of this verification is a thorough and independent assessment of registered project activities against the applicable VCS requirement by the VVB. The verification process shall determine whether the proposed project activity complies with the requirements of latest VCS guidelines, applicability conditions of the selected methodology, relevant host country regulations and guidance issued by the VCS Board.

1.2 Scope and Criteria

The scope of verification is to assess the claims and assumptions made in the VCS monitoring report (MR) against the VCS criteria, including but not limited to, VCS standard, applied methodology and other relevant rules and requirements established for VCS project activities.

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

1.3 Level of Assurance

The verification team verified the complete monitoring data for all the parameters of the monitoring plan and confirms that the reported emission reductions are free from any type of material errors. Therefore, Earthood confirms that the verification is conducted with reasonable level of assurance.

1.4 Summary Description of the Project

The project activity involves distribution and installation of energy efficient ONIL stoves in Mexico to reduce the amount of firewood required by households. There is only one stove model "ONIL Plancha stove" has been distributed for this project activity.

The coordinating managing entity of the project activity is C-Quest Capital LLC and Fuego Limpio S.A. (FLSA) is the implementer of the CPA for the current monitoring period. At the time of registration of this PoA under CDM, HELPS International A. C. was the PP as well as the implementer but from March'2017 they have withdrawn from the project and Fuego Limpo S.A. became the implementer[1]. This project was registered as the CPA "ONIL Stoves – Mexico, San Felipe Usila" of the PoA "Distribution of ONIL Stoves – Mexico" under the CDM program.

2 VERIFICATION PROCESS

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

2.1 Method and Criteria

Earthood assessed and determined whether the proposed implementation and operation of the project activity, and the steps taken to report emission reductions comply with the criteria and relevant guidance provided by the VCS Board. The validation/verification process consist of the following three phases;

- A desk review of the VCS Project Design and VCS Monitoring Report
- Remote site visit and follow up interviews with project stakeholders including end users of devices
- The resolution of outstanding issues and issuance of final report and opinion.

2.2 Document Review

The verification is performed primarily as a document review of the registered VCS PD/1/, previous MR/23/ and Verification report/2/ and associated documents as stated in detail in appendix 1 of this document. The assessment is performed by a verification team using a protocol. The cross-checks between information provided in the Monitoring report, VCS PD and information from sources other than those used, if available, the team's sectoral or local expertise and, if necessary, independent background investigations.

2.3 Interviews

[1] Weblink of MoC withdrawn by HELPS International https://cdm.unfccc.int/ModalitiesOfCommunication/forms/QHAFSAWXMNLYA21SEOK4RK1W7STSYK5H/pdf/

No physical site visit was conducted for this verification due to outbreak of global pandemic (caused by COVID19) and increased risk of exposure and contraction due to travel as elaborated under section 2.4 of this report. Thus, the VVB team could not conduct on-site visit to verify the project implementation. However, alternate means were selected to verify the project implementation. Along with the alternate approach, remote interviews via Skype calling with the end users and PP representatives were conducted to discuss aspects of project implementation such as monitoring plan implemented, the operations of the ICS, survey data, and other details like calibration of the monitoring equipment used during the current monitoring period etc/14/. The required documents and details for the verification of project activity implementation were collected from the team of C-Quest Capital LLC,

The remote site visit/14/ for the project location, by the assessment team, was conducted on 08-11-2021 and 10-11-2021 and the following stakeholders were interviewed.

S N	Interviewee	Affiliation	Date	Subject	Team Member
1	Vineet Kumar Garg	CQC	08-11 -2021 and 10-11- 2021	Monitoring Plan ($n_{y,l}$, SS_y, WBT) Project Implementation Monitoring Survey	N Premjit Singh
2	Isabel Alegre	CQC	08-11 -2021 and 10-11- 2021	Project Implementation	N Premjit Singh
4.	Andrea Santos	Fuego Limpio	08-11 -2021 and 10-11- 2021	Monitoring Plan ($n_{y,l}$, SS_y, WBT), Monitoring Frequency	N Premjit Singh
5.	Oscar Troncoso Torrez	Fuego Limpio	08-11 -2021 and 10-11- 2021	Monitoring Plan ($n_{y,l}$, SS_y, WBT), Project Implementation, Location, Technology	N Premjit Singh
6.	Petra Martinez Ruiz	End user	08-11 -2021 and 10-11- 2021	VVB Remote Survey	N Premjit Singh
7.	Jose Luiz Olivera Diaz	End user	08-11 -2021 and 10-11- 2021	VVB Remote Survey	N Premjit Singh
8.	Maria Casilda Del Rosario	End user	08-11 -2021 and 10-11- 2021	VVB Remote Survey	N Premjit Singh
9.	Consuelo Perez Hernandez	End user	08-11 -2021 and 10-11- 2021	VVB Remote Survey	N Premjit Singh

10.	Ana Ruiz	End user	08-11 -2021 and 10-11- 2021	VVB Remote Survey	N Premjit Singh
11.	Paulina Rosy Poot Dzib	End user	08-11 -2021 and 10-11- 2021	VVB Remote Survey	N Premjit Singh
12.	Victoria Olivera Diaz	End user	08-11 -2021 and 10-11- 2021	VVB Remote Survey	N Premjit Singh
13.	Carolina Lopez Ramirez	End user	08-11 -2021 and 10-11- 2021	VVB Remote Survey	N Premjit Singh
14.	Herminia Caamal Pat	End user	08-11 -2021 and 10-11- 2021	VVB Remote Survey	N Premjit Singh
15.	Eleuteria Velasquez Hernandez	End user	08-11 -2021 and 10-11- 2021	VVB Remote Survey	N Premjit Singh
16.	Jazmin Merino Benitez	End user	08-11 -2021 and 10-11- 2021	VVB Remote Survey	N Premjit Singh
17.	Maria Guadalupe Cahum Chuc	End user	08-11 -2021 and 10-11- 2021	VVB Remote Survey	N Premjit Singh

The topics covered during interview ranges from general features and implementation of project to technical details of the project like calibration details, monitoring and measuring system and data collection, recording and archiving procedures. The end user of cookstoves was also interviewed to reconfirm the baseline and sample results conducted by PP, as part of acceptance sampling by VVB. The assessment was drawn based on the feedback received during interview coupled with the documentation and remote site observations.

2.4 Site Inspections

During the current verification, on-site visit was not possible due to the outbreak of COVID-19 global pandemic. Verification team avoided the risk of getting infected during the physical onsite assessment. It is important to note that the VCS Program does not explicitly mandate site visits as part of the verification process, however, VVBs must achieve a reasonable level of assurance in verifications (per Section 4.1.2 of the VCS Standard, v4.1). If a VVB can achieve a reasonable level of assurance (as mentioned in the section 1.3 of this report) without conducting a site visit, or through a remote site visit, this is in conformance with the VCS rules/14/. Therefore, in this verification, Earthood has achieved the reasonable level of assurance by applying the various alternative means as explained below under section 4.1 of this report.

A remote site visit was undertaken by Earthood team on 08-11 -2021 and 10-11- 2021 via Skype to carry out the following;

a) An assessment of the implementation and operation of the registered project activity as per the registered VCS PD and VCS MR;

b) A review of information flows for generating, aggregating and reporting the monitoring parameters;

c) Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PD;

d) A cross check between information provided in the monitoring report and data from other sources such as survey forms, survey result spreadsheets, technical specifications or similar data sources;

e) A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PD, the applied methodology including applicable tool(s), and, where applicable, the applied standardized baseline;

f) A review of calculations and assumptions made in determining the GHG data and emission reductions;

g) An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

h) Verification team has remotely checked 11 sampled households via live video calls in line with Standard for Sampling and surveys for CDM project activities and programmes of activities, Version 9 and verified the details of sampled stoves and found that all the stoves were in working condition. Also, interviewed the surveyors to check competencies of monitoring personnel and found to be competent.

i) All sampled WBT records have been verified and WBT personnel interviewed to confirm their competency and they have followed the latest WBT protocol version 4.3.2 correctly while conducting the WBT survey.

2.5 Resolution of Findings

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

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

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

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

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

• Issues identified in a FAR during validation to be verified during verification or previous verification(s) ha ve not been resolved by the project participants.

Clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met. All CARs and CLs raised by the ESPL during verification shall be resolved prior to submitting a request for issuance.

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

A total of 05 CLs and 02 CARs were raised in the current verification. All the findings that are raised and communicated to project participant during the verification are included under appendix 4. The section also includes the response, if provided, by the project participants and an assessment by the verification team if it was closed out or otherwise.

2.5.1. Forward Action Requests

The project activity is undergoing seventh verification; there were no FARs raised during the validation or previous verification.

2.6 Eligibility for Validation Activities

Not applicable.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

The project has been registered under Clean Development Mechanism (CDM) on 07/12/2012 with reference number PoA 8521 /3/. As verified through the UNFCCC project webpage, crediting period of the Program of Activity (PoA) under CDM is from 07-12-2012 to 06-12-2019. Earthood has verified through the project UNFCCC web page/24/ that CERs for the period 01-01-2013 to 31- 12-2013 have been already issued under CDM. CPA -01 was the only CPA included in this verification which has been verified from the CDM monitoring report version 1.0 dated 16-01- 2014/25/. Since the current monitoring period under VCS is considered from 01-06-2020 to 31- 12-2020, hence chances of double counting of credits are already ruled out.

This project is also registered under VCS (Project ID-1216) with 10 years crediting period from 01-01-2011 to 31-12-2020/01/. As verified through the records available at VCS registry, VERs for the six monitoring periods are already issued.

Even though the project has been registered under the CDM and crediting periods under both program (CDM & VCS) overlaps, but credits for the same GHG emission reductions under the VCS and the CDM shall not be claimed. This was confirmed through a declaration/11/ submitted by the PP and hence accepted by the assessment team. It was also confirmed through a declaration submitted/11/ by PP that the project activity has not been submitted under any other GHG or environmental related program for validation or verification.

3.2 Methodology Deviations

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

3.3 Project Description Deviations

There were 3 project deviations mentioned in the MR. The detailed description of the deviations are as follows-

1- Change in sampling frame from Multi-Stage Sampling to Simple Random Sampling

PP required to do the multistage sampling as per the CDM registered PoA DD, however it has been observed that the sampling frame has been changed from multi-stage sampling to simple random sampling. The proposed change is prescribed under Standard “Sampling and Survey for CDM project Activities and Programme of Activities”/20/. The project is implemented in Mexico and demographically it can be categorized as homogeneous region with reference to cooking habits and climatic conditions and the simple random sampling is suited for the homogeneous population as per the Guidelines for “Sampling and survey for CDM project activities and programmes of activities”/21/. The verification team confirms that the population of Mexico using cookstoves have been categorized as homogeneous and thus the simple random sampling is appropriate for the project. Also, since the simple random sampling is applied, the removal of secondary sampling unit is unlikely to lead to a reduction in the calculation accuracy of emission reduction.The verification team has reviewed the sample size calculation from the corresponding Sample calculation spread sheet and found the calculation consistent as per the Guidelines for “Sampling and survey for CDM project activities and programmes of activities”/21/. The deviation doesn’t affect the accuracy or conservativeness of the emission reduction calculation and therefore has been accepted by the verification team. This deviation was carried out for the monitoring period from 29-10-2015 to 31-07-2017, from 01-08-2017 to 31-07-2018, from 01- 08-2018 to 31-07-2019, from 01-08-2019 to 31-05-2020/2/. This deviation is applicable for the current monitoring period also from 01-06-2020 to 31-12-2020. This changed in sampling approach for the above different monitoring periods for the monitored parameters does not affect the applicability of the methodology, additionality or the appropriateness of the baseline scenario.

2 Change in crediting period.

PP has carried out a change in the crediting period. The original crediting period for the project activity as per the registered PD /1/ from 01-01-2010 to 31-12-2020. Project participants requested a deviation to extend this crediting period to 31-12-2020 (ten years, renewable twice, but not extending beyond the CDM total crediting period for this CPA during the monitoring period from 01-01-2014 to 28-10-2015. This deviation was also applicable for the monitoring period 29-10-2015 to 31-07-2017, from 01-08-2017 to 31-07-2018, from 01-08-
2018 to 31-07-2019, from 01-08-2019 to 31-05-2020 and for the current monitoring period i.e., from 01-06-2020 to 31-12-2020. As assessed and evident from the previous verification reports /2/changing is duration of crediting period does not affect the applicability of the methodology, additionality or the appropriateness of the baseline scenario.

3 Number of stoves included in the project activity

At the time of registration of the project the number of cook stoves in the project activity was capped to 13,859 No's. However, a deviation in change of number of cook stoves has been requested to increase the number to 31,178.

It is noteworthy that the capped limit was estimated based on an adaption rate of 100% and an average efficiency of cookstove as 24%. But during the actual distribution of the cookstoves the lower than expected efficiency and also the adoption rate was not able to make the project economically sustainable and survive over the years. Therefore, an increase in number of stoves has been requested by CME. As per the applied methodology type II category projects, the threshold limit for small scale project is 180 GWh thermal and this project activity comes under type II category projects. For the current monitoring period energy saving is found to be beyond the threshold limit of 180 GWh_{th}. As per CDM project standard for programmes of activities, version 02.0 para 272. PP has a provision to cap the GHG emission reductions that are claimed for this monitoring period at the amount calculated with the limit of 180 GWh_{th} energy savings. For the current monitoring period, total 29,495[2] stoves were considered for emission reduction. Increase in the numbers of cook stoves will result in the energy saving achieved for the current monitoring period beyond the threshold limit of small-scale category i.e., 180 GWh_{th}

So, PP has capped the achieved GHG emission reductions to limit the energy savings. Therefore, the project activity is still adhering the applicability conditions of the methodology AMS II.G.

The assessment team confirms that the project activity is in compliance with the applied methodology as well as CDM project standard for programmes of activities, version 03.0. After this deviation the additionality of the project activity is not affected, and it has been demonstrated as per "Methodological tool: Demonstration of additionality of small-scale project activities version 10.0"/26/.

3.4 Grouped Project

Not applicable. The project activity is not a grouped project.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

[2] **The registered stoves of 2011, 2013 2014, 2015 and 2016 which were deployed in the north of Mexico are deemed unsafe to visit due to local safety reason. Hence, these stoves are excluded from the final database for the calculation of emission reduction.**

The project installed 3 number of stoves in 2009[3], 4,361 stoves in 2010, 8524 stoves in 2011, 3,833 stoves in 2013, 5,900 stoves in 2014, 4067 stoves in 2015 and 4440 stoves in 2016 and a total of 31,178 stoves installed for this project. The current monitoring period covers 29,495 stoves. As during regular spot checks PP has found out that some stoves were not in working condition and hence excluded them from the ER calculation for this monitoring period. The stoves are made of concrete materials with little metal parts in it. As the broken and lost part of the stove is maintained or replaced and thus the stoves are still working even though the few of them were installed in the 2010. The working condition of the old stove has been verified during the remote site visit and found in the operational condition. The assessment team has confirmed that stoves are working fine.
The assessment team has checked during the remote site visit interviewing the end-users and confirmed that project has been implemented as planned and as mentioned in the registered VCS-PD, CDM PoA-DD, CDM CPA-DD from the records available and the survey samples.
The assessment team has checked the sample calculation as per the Guideline: "Sampling and Survey for CDM project activities and programme of activities"/21/ and found out that the calculation of confidence/precision is consistent as per the monitoring plan. The assessment team has done the desk review and the remote site visit of the project activity and confirmed that the project has not received any other form of environmental credit for the project. The project activity was implemented as described in the revised VCS PD/1/ and CDM CPA-DD/4/ and no material discrepancy was identified between the project implementation and the project description. The data and variables provided in the monitoring report are the same as stated in the registered PD/01/.

Non-working stoves i.e those cannot be used by the user will be excluded for further verification. As a result of spot check PP has excluded stoves from the ER calculation. Therefore, 29,495 stoves considered for ER calculation.

Total emission reductions achieved under this monitoring period 01-06-2020 to 31-12-2020 (including both days) is 11,550 tCO_2e.

a) Assessment team concludes the following: There is no material discrepancies between project implementation and the project description provided in the registered PD/01/.

b) The monitoring plan is implemented completely and monitoring system (i.e., process and schedule for obtaining, recording, compiling and analysing the monitored data and parameters) is appropriate.

c) There is no material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology/09/.

d) The GHG emission reductions or removals generated by the project have not included in an emissions trading program or any other mechanism that includes GHG allowance trading/2//10/.

[3] These 3 stoves installed in 2009 could not be monitored because the area where these were installed presents security problems and are therefore inaccessible for monitoring and removed from ER calculation

e) The project has not received or sought any other form of environmental credit or has become eligible to do so since validation or previous verification/2/.

VVB confirms that the project activity is registered as CPA under UNFCCC no, 8521. PP has claimed credits for this project activity from VCS from 01-01-2014 till 31-05-2020 which is confirmed from the previous verification reports of VCS registry. So, the project activity has not participated in any other GHG program for the current monitoring period from 01-06-2020 to 31-12-2020 (including both days). Hence, VVB confirms and checked with other registries also and it is evident that the project activity has not participated or been rejected under other GHG program for the current monitoring period.

f) The project is registered under VCS program as well as CDM.

g) The project activity is complying for sustainable development as discussed under section 1.11 of MR.

In view of the information's as verified above the assessment team is able to conclude that the project has been implemented as described in the project description.

4.2 Safeguards

4.2.1 No Net Harm

There is no negative impact to any socio-economic conditions of the region due to the project activity. As per the CDM PoA DD/3/ and CPA-DD/4/, it is confirmed that ONIL stoves presents positive environmental impacts wherever they are applied.

This project activity will not involve any negative environmental or socio-economic impacts, as the project activity involves distribution and installation of the fuel-efficient stoves. Hence no mitigation measures are required.

4.2.2 Local Stakeholder Consultation

Verification team confirms through remote site visit that whether PP had conducted regular spot checks to check the status of project ICS as mentioned in section 2.2 of MR. Further, it was checked and confirmed about the procedure if any stove part is damaged or missing whether PP representatives addressed the concern raised and changing the parts immediately. Non-working stoves are not considered for emission reduction if it is not found in working condition at the time of spot checks. It is confirmed that PP has a robust grievance mechanism and a proper on-going communication with stakeholders and no negative feedbacks are provided during the current monitoring period.

4.3 AFOLU-Specific Safeguards

Not applicable for the project activity. For non-AFOLU projects, this section is not required.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The assessment team has reviewed the monitoring plan and found out that the monitoring of GHG emission reduction from the project activity was implemented in accordance with the registered project document/1/, CDM PoA-DD/3/ and CDM CPA-DD/4/. The monitoring plan has been implemented as per the applied methodology and all parameters in the monitoring plan had been sufficiently monitored as per the applied methodology and relevant EB decisions.

Data measurement, recording and Sampling Approach; There are several approaches for collecting the data depending on the applied methodology for each step. The PP has followed the following steps:

1. CPA-IMP: User registered stove. Fuego Limpio S.A. field personnel collected the information in the Registration Card from the users. Information was collected via a Registration Card filled by ground staff and partner organizations. Ground staff double-checked the accuracy of the information and requested clarifications if needed. PP has presented details of the registration card to the VVB which has been verified during the remote site visit and found correct are per the requirement.

2. CPA-IMP: Data logged into database. Fuego Limpio S.A. trained staff inputted the information from the Registration Card into the database. Fuego Limpio S.A. and CQC checked the database records and removed duplicates (this included completing the serial number, checking for name duplicates, etc...). The registration card data have been checked from the ER sheet and verified from the database during the remote site visit and found correct.

3. CPA-IMP: Spot-checks (ongoing). Fuego Limpio S.A. visited locations in the field and reported updates to office either via telephone or forms. Fuego Limpio S.A. personnel corrected the database and clearly marked stoves that were not installed, were given away, the end user died or left town, or had any other issues that made the stove no longer eligible to participate in the CPA. These stoves were excluded from the emission reduction calculations. PPs presented the VVB with evidences that spot checks were performed independently from monitoring during monitoring period.

4. Third Parties: Monitoring. Third Parties followed the simple random sampling plan.

5. PP Preparation of monitoring report. CQC prepared the final monitoring report and retained copies of the document.

Step 1,2 and 3 collects the end user information and fill the database and step 4 involves survey to capture data on continuous use of stoves ($n_{y,j}$) and use of baseline or secondary fires (SS_y) and stove efficiency ($\eta_{new,i}$) as described in the below table:

Parameter	Description of Parameter	Sampling approach (outcome in brackets)
$n_{y,j}$	Proportion of ONIL Stoves still in operation	Visual inspection of the premises to see if ONIL stove is operational and in use. Interview with end user if required to verify that ONIL stove is still in use [Yes/No]
SS_y	Percentage of continued baseline stove use among ONIL stove households in the database	Interview with end user and visual inspection to determine if a baseline (replaced) stove is still being used in addition to ONIL stove [Yes/No]
$\eta_{new,i}$	Thermal Efficiency of operational ONIL Stoves	ONIL Stoves were tested using WBTs [ONIL stove thermal efficiency]

PP has taken two different type of sampling surveys. One survey to collect the information of ($n_{y,j}$) and (SS_y), another second survey to collect the information of ($\eta_{new,i}$).

The sampling has been done as per the monitoring plan which requires confidence/precision of 90/10 for annual monitoring. A simple random sampling has been proposed in place of multi-stage sampling as per the options provided in the Standard: “Sampling and Survey for CDM Project Activities and Programme of Activities version 09.0”. The deviation doesn’t affect the project design and detailed described in the section 3 of this report.

The sample size calculation has been conducted in the corresponding sample calculation spreadsheet. The assessment team has reviewed the revised information and found them consistent as per the Guidelines:” Sampling and survey for CDM project activities and programme of activities/21/. The assessment team has considered the procedure for sampling following the applied methodology AMS-II.G version 3.0/9/ and the EB guidelines for sampling. During the remote site visit the assessment team has verified that the project has been implemented as per the registered project document by interviewing a sample of 12 households selected at random from the survey samples.

Data and monitoring parameters

The PP has used ex-ante fixed data and monitored data by the applied methodology. The value used for calculation of GHG emission reductions have been thoroughly checked by the verification team and found appropriate and correct. The input values have been verified from the reliable and authentic sources including monitoring records and applied methodology. The emission reduction calculation verified from the emission reduction spread sheet and found to be correct. The details of the parameters are provided below-

1- Number of ONIL Stoves in operation during the monitoring period, $n_{y,i}$

Criteria/Requirements	Assessment/ Observation

Measuring /Reading /Recording frequency	Annually

Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes, measuring and reporting frequency is in accordance with monitoring plan/1/ and methodology/9/.
Monitoring equipment	NA
Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	NA
Calibration frequency /interval:	There are no calibration requirements since the value is obtained from physical surveys (to calculate the drop-off rate).
How were the values in the monitoring report verified?	The value of 30,548 which was previously verified was obtained by multiplying 0.9896 by 30,869 stoves eligible in the database. 98.96 was the percentage of the ONIL stoves in the operations. PP had submitted the survey sheets which were assessed. They had considered 96 samples for the survey and found that 95 ICS were in good working condition. Hence, ny,i of 95/96 = 98.96% was considered for ER calculation for this MP. Further, Verification team had checked 11 samples inline with Standard for Sampling and surveys for CDM project activities and programmes of activities, Version 9 out of 96 stoves surveyed during remote-site visit and found all ICS in working condition, means 100% ICS operating as against 98.96% considered in the MR.

However, internal investigations by PP management revealed new information regarding the monitoring surveys which indicated issues with the monitoring practices which could potentially result in the monitoring survey showing higher operationality rate than actual in target sampled population.

Due to the unreliability of the monitoring survey data, the resulting 98.96% operationality rate has now been discarded. As an alternative, the operational stove percentage was determined by assuming 0% usage rate in year 2023, which is the last year after any verification was conducted for the project by a VVB (and continued usage of project devices by at least some proportion of the population was confirmed through VVB assessment). This was followed by application of annual deration to previous years, thus basing the calculation on linear loss rate- indicating an annual drop of 7.14% in usage by population each year, starting from the first year of distribution or the base year when operationality is assumed 100%.

Based on this, calculations in the excel file "20250125 VERRA 6.1 LATAM VCS 1216 Mexico Loss rate (Deration) & Usage rate"/27/were reviewed and ERs for following vintages were found to be consistently reported:

year	Determination of the operational cookstoves based on the distributed year			$n_{y,l}$ of 2020
2020	Stoves of year (vintage)	Registered stoves in database	Operating stoves with annual drop percentage	6,321
	2010	4137	887	
	2011	8508	1823	
	2013	3850	825	
	2014	5429	1163	

	<table><tr><td></td><td>2015</td><td>3411</td><td>731</td><td></td></tr><tr><td></td><td>2016</td><td>4160</td><td>891</td><td></td></tr></table> The number of stoves distributed at the time of that monitoring period based on percentage operationality calculated based on linear deration rate is reflected in the above table. This is accepted as a conservative approach to calculate usage rate in absence of actual data records. The value obtained from these surveys was further cross-checked against the similar projects in the LATAM region across different registries and the average stove operationality rate in these projects is found to be significantly higher than the value applied based on annual deration rate/28/. Based on the principle of conservativeness, the lowest value of the parameter obtained from sources discussed above has been accepted.
If applicable, has the reported data been cross-checked with other available data?	The data has been cross checked with sampling survey questionnaires.
Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes

2- The fraction of ongoing baseline stove use within the population of in-use ONIL Stoves during a monitoring period, SS_y

Criteria/Requirements	Assessment/ Observation
Measuring /Reading /Recording frequency	Annually

Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes, measuring and reporting frequency is in accordance with monitoring plan/1/ and methodology/9/.
Monitoring equipment	NA
Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	NA
Calibration frequency /interval:	There are no calibration requirements since the value is obtained from physical surveys (to calculate the drop-off rate).
How were the values in the monitoring report verified?	96 households were surveyed and 1 baseline was found non-operational (i.e. 1.04%) which has been collected during the same survey for the fraction of $n_{y,j}$ (appliances in operation). The survey results has been cross checked with the actual data available at the time of remote site visit and also cross checked from the filled survey questionnaires.
If applicable, has the reported data been cross-checked with other available data?	-
Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes

3- If baseline stoves continue to be used, monitoring shall ensure that fuel-wood consumption of those stoves is excluded from $B_{old_Adjusted}$

Criteria/Requirements	Assessment/ Observation
Measuring /Reading /Recording frequency	Continuous
Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes, measuring and reporting frequency is in accordance with monitoring plan/1/ and methodology/9/.
Monitoring equipment	NA
Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	NA
Calibration frequency /interval:	There are no calibration requirements since the value has calculated from the B_{old} value.
How were the values in the monitoring report verified?	The value of this parameter is 5.331 tonnes /year. It is calculated based on the baseline survey captured the number of households using a baseline stove in addition to the ONIL stove. The difference between the amount of wood used by households with a second baseline stove (2 stoves) and all households with an ONIL stove gives the amount of wood attributed to the use of the baseline stove. This amount is multiplied by the proportion of households using the 2 stoves and then subtracted from B_{old}. From the applied methodology II.G/Version 3. The monitoring ensures that (a) Either the

	replaced low efficiency appliances are disposed of and not used within the boundary or within the region; or (b) If baseline stoves continue to be used, monitoring shall ensure that the fuel-wood consumption of those stoves is prorated in Bold. Since the CME cannot require end users to dispose of stoves, option (b) is used and the wood used for any baselines stoves that continue to be in use was discounted from B_{old}.
If applicable, has the reported data been cross-checked with other available data?	The reported data was cross-checked during the remote site visit from complete sales database and also for samples which were randomly selected the data was found to be consistent to the surveys and monitored results.
Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes

4- Efficiency of the ICS, $n_{new,i}$

Criteria/Requirements	Assessment/ Observation

Measuring /Reading /Recording frequency	Annually
Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes, measuring and reporting frequency is in accordance with monitoring plan/1/ and methodology/9/.
Monitoring equipment	Digital scales Firewood moisture meters Digital thermometers Thermocouple The water Boiling test (WBT) protocol used was the WBT version 4.2.2 published by the Global Alliance for clean Cook stoves.
Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	Yes
Calibration frequency /interval:	WBT is done by third party. The calibration details of the equipment have been submitted by PP and all the equipment are calibrated for this monitoring period. The calibration details of the equipment are listed in the reference/19/.
How were the values in the monitoring report verified?	The value of the paramater has been taken from the water boiling test implemented over stoves samples of 2010, 2011, 2013, 2014, 2015 and 2016 vintage. The value of the paramater-

Vintage	Efficiency

	<table><tr><td>$n_{new,2010}$</td><td>23.59%</td></tr><tr><td>$n_{new,2011}$</td><td>23.65%</td></tr><tr><td>$n_{new,2013}$</td><td>23.38%</td></tr><tr><td>$n_{new,2014}$</td><td>23.82%</td></tr><tr><td>$n_{new,2015}$</td><td>23.80%</td></tr><tr><td>$n_{new,2016}$</td><td>23.89%</td></tr></table> was checked from the WBT test reports/18/ and WBT version 4.2.2 calculation methods by the Grupo Interdisciplinario de Tecnologia Rural Apropiada, A.C. (GIRA).
If applicable, has the reported data been cross-checked with other available data?	The reported data was cross-checked during the remote site visit from complete sales database and also for samples which were randomly selected the data was found to be consistent to the surveys and monitored results.
Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes

5- Fraction of project's monitoring period the stove is in operation (weeks in operation/total weeks in monitoring period), $t_{y,j}$

Criteria/Requirements	Assessment/ Observation
Measuring /Reading /Recording frequency	Continuous
Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes, measuring and reporting frequency is in accordance with monitoring plan/1/ and methodology/9/.
Monitoring equipment	NA

Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	NA
Calibration frequency /interval:	There are no calibration requirements since the value is a derived value.
How were the values in the monitoring report verified?	The value of the paramater is 1.00 (average). The data has been calculated from the days in operation during monitoring period devided by total number of days in monitoring period. The data has been verified from the database to ensure installation dates.
If applicable, has the reported data been cross-checked with other available data?	The reported data was cross-checked from complete sales database.
Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes

Ex-ante Parameters-

Ex-Ante Parameter	Assessment
Quantity of Biomass used in the absence of the project activity (per appliance); B_{old}; Tonnes per annum	The value was calculated to be 5.34 tonnes/annum. This parameter has been determined during the baseline study done at the time of validation by conducting a kitchen performance test. The value is consistent with the PDD/1/, MR/6/ and the ER sheet /7/
Net to gross adjustment factor to account for leakage; L; Fraction	The value of this parameter is 0.95 which was fixed at the time of validation. This value has been given as a default in the methodology/9/. The validated value is consistent with the MR/6/ and ER spreadsheet/7/
Efficiency of the system being replaced; ηold; Fraction	The value of the parameter is 0.10 which is given in the para 6 of the applied methodology/9/. The value is consistent with the MR/6/ and ER sheet/7/
Fraction of non-renewable biomass saved by the project activity; $f_{NRB,y}$; fraction	The value of this ex-ante parameter is 0.87. This value has been applied from the methodology/9/ and For biomass savings to be calculated, the portion of biomass used that is renewable must be accounted for based on the methodology. The FAO 2010 report[4] gives a reforested area value of 247,600 ha/yr. The B_{old} number (5.34 tonnes of fuel wood per household per year) obtained from the baseline survey is multiplied by the estimated number of homes in Mexico (5.44 million) that still use open fires to obtain an estimate of the total amount of fuel wood

[4] [2] FAO, *Evaluacion de los Recursos Forestales Mundiales, Informe Nacional, 2010, Mexico*, World Forest Resources Assessment, National Report, 2010, Mexico. www.fao.org/forestry/fra/67090/en/mex/; Data on reforested hectares on Page 38, data on average tree density and percentage of each on Page 43

	used in Mexico ($B_{old,mexico}$). NRB is $B_{old,Mexico}$ (excluding fuel wood used in baseline stoves) minus the DRB component (excluding trees that did not survive). Then, fNRB = NRB/(NRB +DRB) The value is consistent with the MR/6/ and ER sheet/7/
Net calorific value of non-renewable biomass that is substituted; $NCV_{biomass}$; TJ/t	The value of this ex-ante parameter is 0.015 TJ/tonne. This value has been fixed at the time of validation and applied from IPCC default value of the methodology/9/. The value is consistent with the MR/6/ and ER sheet /7/.
Emission factor for the substitution of non-renewable biomass by similar consumers, $EF_{projected_fossilfuel}$, tCO_2/TJ	The value of this parameter is 81.6 t CO2/TJ. This value has been fixed at the time of validation and applied from default value of the methodology/9/. The value is consistent with the MR/6/ and ER sheet /7/.

Emission reduction:

The methodology does not calculate baseline and project emission separately.

Instead, the methodology calculates emission reduction using the following

equations:

$$ER_y = B_{y,savings} * f_{NRB,y} * NCV_{biomass} * EF_{projected_fossilfuel} * L$$

Where:

ER_y	Emissions reductions during the year in tCO2e
$B_{y,savings}$	Quantity of woody biomass that is saved in tonnes
$f_{NRB,y}$	Fraction of woody biomass saved by the project activity in year y that can be established as non-renewable biomass (0.87)
$NCV_{biomass}$	Net calorific value of non-renewable woody biomass that is substituted (IPCC default value for fuel wood 0.015 TJ/tonne)
$EF_{projected_fossilfuel}$	Emission factor for the substitution of non-renewable woody biomass by similar consumers. Use a value of 81.6 tCO_2/TJ

L	A net to gross adjustment factor (0.95 default) is applied above (equation (1) of AMS II.G, version 3) in order to adjust B_{old} to account for leakages as per paragraph 13 (a) of the methodology.

To calculate $B_{y,savings}$, PP has adopted Option 2 of paragraph 6 of AMS II.G

$$B_{y,savings} = B_{old} * (1 - \frac{h_{old}}{h_{new}})$$

Where:

B_{old}	Quantity of wood fuel used in the absence of the project activity in tonnes
η_{old}	A default value of 0.10 may be optionally used if the replaced system is a three stone fire, or a conventional system with no improved combustion air supply or flue gas ventilation system, i.e. without a grate or a chimney
η_{new}	Efficiency of the system being deployed as part of the project activity (fraction), as determined using the Water Boiling Test (WBT) protocol.

And

$$B_{y,savings} = B_{old,adjusted} \cdot \left[\sum_{i=1}^{n} N_{y,i} \left(1 - \frac{\eta_{old}}{\eta_{new,i}} \right) \right]$$

Where:

$N_{y,i}$	Total number of stoves in operation for a full monitoring period equivalent in the project
η_{old}	Efficiency of the baseline system/s being replaced. The 0.10 default value is used as the replaced systems are three-stone fires or conventional systems lacking improved combustion air supply mechanism and flue gas ventilation system i.e., traditional stoves.
$\eta_{new,i}$	Efficiency of the system being deployed as part of the project activity (fraction), as determined using the Water Boiling Test (WBT) protocol.

Where,

$B_{old,adjusted} = B_{old} – 0.45*SS_y/0.5713$ where：

SS_y	fraction of households with an ICS that are also using baseline stoves.

0.45 is difference between the average fuel consumption of households only having an ICS and households having an ICS and baseline stoves (11.87-9.76) Kg/household/day*365 days/year/1000Kg/ton according to baseline studies (.77); in tons per year, multiplied by 0.58

0.571 fraction of households in baseline study that use baseline stoves along with ICS which is in conform to the para 20 (b) of the applied methodology "*If baseline stoves continue to be used, monitoring shall ensure that the fuel-wood consumption of those stoves is excluded from B_{old}*".

The assessment team checked the formula and calculation used for baseline calculation in the MR and ER sheet and found that it is in compliance with the registered CDM PoA_DD, CDM CPA-DD and VCS project document. And the appropriate methods and formulae for calculating emission reduction have been followed and assumptions and emissions factors correctly applied. In this noted that adjusted factor of 0.46 on Activities version 3.0 as per CDM Project Standard for Programmes of para 272 (b), "*If, during any year of its crediting period, the scale goes beyond the limit of that type, cap the GHG emission reductions that are claimed for that year at the amount calculated with the limit of its type*"

Accordingly, Energy saving for current monitoring period = 229.96 GWh and by extrapolating the Annual Energy saving for year 2020 = 392.22 GWh

Here, the % Increase from the threshold value (i.e. 180 GWhth/year) = 218%

Hence, ER has been calculated multiplying with 0.46 (or 55,833 ÷ 218%)

Therefore:

$B_{2020,savings}$ = 5.3318 x [887x(1- 0.1/0.2359) + 1,823x(1-0.1/0.2365) + 825x(1-0.1/0.2338) + 1,163x(1-0.1/0.2382) + 731x(1-0.1/0.2380) + 891x(1-0.1/0.2389)] x (214/365)

= 11,417.58 tonnes

ER_{2020} = 11,417.58 tonnes * 0.015 TJ/tonne * 81.6 tCO2/TJ * 0.95 * 0.87

= 11,550 tCO2 (round down).

[3] In accordance with the registered CPA DD.

4.5 Project Emissions

Not applicable.

4.6 Leakage

According to the applied methodology, a net-to-gross adjustment factor of leakage of 0.95 is applied to calculate the emission reductions for the monitoring period.

PP has provided the spreadsheet used for calculation and assessment is in confidence that the quantified value in the ER sheet is in accordance with the project description and applied methodology and consistent with the evidence provided.

4.7 Quality of Evidence to Determine GHG Emission Reductions and Removals

The assessment team can confirm that the calculation is based on the authentic data. The quality of supporting documents submitted for verification are adequate. The assessment team has checked the quality and maintenance of the supporting documents during the remote site visit to confirm the authenticity of the documents and to check the appropriate calculations. The assessment team confirms that the proper evidence is available for the whole monitoring period and the same is verifiable and the data collection system meets the requirement of the monitoring plan and the applied methodology according to the assessment carried out.

The assessment team confirms the quality of evidence to determine the GHG reductions is satisfactory and the detailed information regarding the roles and responsibilities have been provided in the monitoring report.

4.8 Non-Permanence Risk Analysis

Not applicable for the project activity.

5. VERIFICATION CONCLUSION

Earthood Services Limited (Earthood), contracted by C-Quest Capital LLC, has performed the independent verification of the emission reductions for the VCS project activity (VCS ID- 1216) “Distribution of ONIL Stoves – Mexico, San Felipe Usila 1” in Mexico for the monitoring period 01-06-2020 to 31-12-2020 as reported in the Monitoring Report Version 3.2 dated 22/01/2025. The C-Quest Capital LLC is responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the project activity.It is our responsibility to express an independent verification statement on the reported GHG emission reductions from the project activity.

Earthood commenced the verification based on the baseline and monitoring methodology AMS.II.G. version 03, the monitoring plan contained in the registered VCS PD Version 3.0 and VCS guidelines version 04, Monitoring Report Version 3.2 dated 27/01/2025 as per the process described under Section 2 of this report.

Earthood verification approach is based on the understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these. Earthood planned and performed the verification by obtaining evidence and other information and explanations that Earthood considered necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

In our opinion the GHG emissions reductions reported for the project activity for the period 01-06-2020 to 31-12-2020 are fairly stated in the Monitoring Report Version 3.2 dated 27/01/2025. The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology AMS.II.G., Version 03, and the VCS standard, version 4.1.

Verification period: From 01-06-2020 to 31-12-2020 (including both days).

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

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
2020 (from 01-June-2020 to 01-December-2020	11,550	0	0	11,550
Total	11,550	0	0	11,550

Approved by



Dr. Kaviraj Singh
Chief Executive Officer
Earthood Services Limited

Date: 17/03/2025
Place: Gurgaon, Haryana

APPENDIX 1: REFERENCES

S.No	Title of Document	Version	Date
1.	Revised VCS PD	4.0	02-12-2015
2.	VCS Verification Reports and monitoring reports (For the previous monitoring periods https://registry.verra.org/app/projectDetail/VCS/1216		Last accessed on 11-04-2022
3.	CDM 8521 PoA-DD	Version 15	23-11-2012
4.	CDM CPA- 01 "Distribution of ONIL stoves- Mexico, San Felipe Usila 1" CPA-DD	Version 15	23-11-2012
5.	VCS Monitoring Report (Draft)	Version 01	01-09-2021
6.	VCS Monitoring Report (Final)	03.2	27-01-2025
7.	ER spread sheet (corresponding to the final monitoring report)	-	27/01/2025
8.	CDM Monitoring report PoA 8521	Version 1	Dated 16-01-2014
9.	AMS.II.G.- Energy efficiency measures in thermal applications of non-renewable biomass	Version 03	-
10.	VCS webpage for the project, VCS ID 1216; https://www.vcsprojectdatabase.org/#/project_details/1216	-	Last accessed on 29-10-2021
11.	Letter of declaration dated from PP regarding not having created or sought any other form of environmental credit for the same period	-	-
12.	VCS Standard	Version 4.1	22-04-2021
13.	VCS Program Guide	Version 4.0	19-09-2019
14.	Remote site assessment –interviews of staff personnel, video recording	-	08-11-2021 and 10-11-2021
15.	ONIL stove registration data	-	04-04-2010
16.	Training records	-	-
17.	Operational ONIL stoves data	-	-
18.	WBT test results	-	
19.	WBT measuring equipment Calibration certificates- **1-** Weighing scale **2-** Moisture meter	-	-
20.	Standard: Sampling and survey for CDM project activities and programmes of activities	Version 7.0	-
21.	Guidelines for Sampling and survey for CDM project activities and programme of activities	Version 4.0	-
22.	CQC- Fuego Service Agreement for WBT		Dated 30-08-2017
23.	Previous VCS monitoring report (For the previous monitoring period 01-08-2018 to 31-07-2019)		
24.	CDM UNFCCC webpage for the project, UNFCCC reference no. 8521; https://cdm.unfccc.int/ProgrammeOfActivities/poa_db/2BH1T0SFERD67JCZXAIWMKLO8PN5UQ/view	-	-
25.	Previous CDM monitoring report (For the monitoring period 01/01/2013 to 31/12/2013)	Version 1.0	Dated 16-01-2014
26.	"Methodological tool: Demonstration of additionality of small-scale project activities"	version 10.0	
27.	Deration rate calculations:	-	25/01/2025

	"*20250125 VERRA 6.1 LATAM VCS 1216 Mexico Loss rate (Deration) & Usage rate*"		
28.	Secondary data: other projects in the host country: *"44.03.05 Stoves in Operation - Verified Secondary Data (2024-08-05)"*		05/08/2024

APPENDIX 2: COMPETENCY STATEMENT

Competence Statement			
Name	N Premjit Singh		
Education	B.Tech in Mechanical Engineering M.Tech in Energy Technology		
Experience	9+ Years		
Field	Climate Change, Energy		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS I.D		
Local expert	YES		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert (X.X)	YES (TA 1.2)		
Reviewed by	Deepika Mahala (Quality Manager)	Date	19/08/2021
Approved by	Ashok Gautam (Technical Manager)	Date	25/08/2021

Competence Statement	
Name	Deepika Mahala
Country	India
Education	M. Sc. (Environmental Management), GGSIP University B.Sc. Hons. (Chemistry), Sri Venkateshwar College, DU
Experience	3 Years +

Field	Climate Change
Approved Roles	
Team Leader	YES
Validator	YES
Verifier	YES
Methodology Expert	ACM0002, AMS.I.D., AMS.I.A, AMS.III.AV, AMS.II.G
Local expert	YES (India)
Financial Expert	NO
Technical Reviewer	YES
TA Expert	YES (TA 1.2 & TA 3.1)

Reviewed by	Shreya Garg	Date	14/09/2018
Approved by	Anshika Gupta	Date	14/09/2018

Competence Statement	
Name	Ricardo Lopes
Country	Brazil
Education	Technical Diploma in Data Processing
Experience	12 years
Field	CDM, Energy, Environment
Approved Roles	
Team Leader	Yes
Validator	Yes
Verifier	Yes
Methodology Expert	Yes (ACM0001, ACM0002, AM0026, AMS ID, AMS III.H, AMS III.F)
Local expert	Brazil, Argentina, Chile, Colombia, Costa Rica, Dominican Republic, Equador, Honduras, Mexico, Nicaragua, Uruguay
Financial Expert	Yes
Technical Reviewer	No

TA Expert	Yes (1.2, 13.1)		
Reviewed by	Shreya Garg	**Date**	04/06/2019
Approved by	Anshika Gupta	**Date**	04/06/2019

Competence Statement			
Name	Shreya Garg		
Country	India		
Education	M.Sc. (Climate Science & Policy), TERI University		
Experience	6 Years +		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS.I.A., AMS.I.C., AMS.I.D., AMS.I.F., AMS.II.D., AMS.II.G., AMS.II.J., AMS.III.AV., ACM0002, ACM0012		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (TA 1.2, TA 3.1)		
Reviewed by	Abhishek Mahawar	**Date**	01/03/2018
Approved by	Ashok Gautam	**Date**	01/03/2018

Competence Statement	
Name	Shifali Guleria

Education	M.Sc. (Environmental Studies and Resource Management), TERI University		
Experience	3+ year		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	YES (AMS-I.A., AMS-II.G., AMS-II.E., AMS-III.A.V., AMS-I.D, ACM0002)		
Local expert	YES		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (1.2, 3.1)		
Reviewed by	Deepika Mahala	**Date**	18/02/2022
Approved by	Ashok Gautam	**Date**	18/02/2022

Competence Statement	
Name	Sukanya Phukan
Education	M.Sc (Environmental Science and Technology) B.Sc (Zoology)
Experience	1+ year
Field	Environment Science
Approved Roles	
Team Leader	YES (VM only)
Validator	YES (VM only)
Verifier	YES (VM only)

Local expert	NO		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert (X.X)	YES (VM TA 1.2, 3.1)		
Reviewed by	Shifali Guleria (Quality Manager)	**Date**	23/06/2023
Approved by	Deepika Mahala (Technical Manager)	**Date**	23/06/2023

Competence Statement			
Name	Vaishali Vatsa		
Education	M.Sc. (Environmental Studies and Resource Management), TERI University		
Experience	4 months		
Field	Climate Change		
Approved Roles			
Team Leader	NO		
Validator	Yes		
Verifier	Yes		
Methodology Expert	NO		
Local expert	NO		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert (X.X)	NO		
Trainee	NO		
Reviewed by	Shreya Garg	Date	30/12/2019
Approved by	Anshika Gupta	Date	02/01/2020

APPENDIX 3: ABBREVIATIONS

Abbreviations	Full texts
BEF	Baseline Emission Factor
CO2	Carbon dioxide
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CMS	Central Monitoring System
CL	Clarification Request
CMP	Conference of Parties Serving as Meeting of Parties
CAR	Corrective Action Request
EB	Executive Board
FAR	Forward Action Request
GHG	Green House Gas
MR	Monitoring Report
O&M	Operation and Maintenance
PD	Project Description
PP	Project Proponent
QA/QC	Quality Assurance and Quality Control
UNFCCC	United Nations Framework Convention on Climate Change
VCS PD	VCS Project Description
VCS	Verified Carbon Standard
VCSA	Verified Carbon Standard Association
VCUs	Verified Carbon Units

APPENDIX 4: FINDINGS OVERVIEW

CAR: Corrective Action Request

CL: Clarification Request

FAR: Forward Action Request

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

~~FAR ID~~	~~00~~	~~Section no.~~	~~NA~~	~~Date : DD/MM/YYYY~~
~~Description of FAR~~				
~~NA~~				
~~Project participant response~~				~~Date : DD/MM/YYYY~~
~~*NA*~~				
~~Documentation provided by project participant~~				
~~*NA*~~				
~~VVB assessment~~				~~Date: DD/MM/YYYY~~
~~NA~~				

Table 2. CL from this verification

CL ID	01	Section no.	1.1	Date : 29-10-2021
Description of CL				
• As per section 1.1 of monitoring report, kindly provide evidence of first and last stove installed for this project. • And as per section 1.10 of monitoring report, PP shall provide declaration for no double counting claim to any GHG program for the same monitoring period.				
Documentation provided by project participant				Date : 10-11-2021
• Stove registration documents of the first and last stoves installed under the project activity have been submitted to VVB • Self-declaration letter has been submitted to VVB for further verification.				
VVB assessment				Date: 15-11-2021
The submitted documents are checked and verified and found to be OK. CL 01 stands closed.				

CL ID	02	Section no.	3.16.3	Date : 29-10-2021
Description of CL				

As per the VCS Standard V4.1, Section 3.16.3, the project proponent shall establish mechanisms for ongoing communication with local stakeholders to allow stakeholders to raise concerns about potential negative impacts during project implementation. PP is requested to clarify how the section 2.2 of monitoring report complies with VCS standard V4.1 requirements pertaining to the ongoing communication with local stakeholders.

Project participant response	Date : 10-11-2021
Ongoing communication with the local stakeholders is maintained throughout the project cycle. PP conducts the regular spot-checks as described under section 4.3 of the monitoring report. Evidence related to ongoing spot checks have been provided to VVB. As a result of continuous communication with the stakeholders, PP observed some of the ICS not in good working condition and repaired the same. Evidence related to the replacement of the stoves parts have been submitted to VVB.	
Documentation provided by project participant	
MR	
VVB assessment	Date: 15-11-2021
The justification provided by the PP is cross-checked with the end users at the time of remote site visit by the verification team. Also, the documents provided by the PP related to the replacement of stoves parts are also checked. Thus, CL 02 stands closed.	

CL ID	03	Section no.	NA	Date : 29-10-2021
Description of CL				
As per section 3.1 of monitoring report, PP is requested to provide evidence on the installation and any change in parts when not in working condition.				
Project participant response				Date : 10-11-2021
Evidence related to the replacement of the stove parts have been submitted to VVB.				
Documentation provided by project participant				
Documentation as evidence related to the replacement of the stove parts.				
VVB assessment				Date: 15-11-2021
The documents provided by the PP related to the replacement of stoves parts are checked and found OK. Thus, CL 03 is closed.				

CL ID	04	Section no.	NA	Date : 29-10-2021
Description of CL				

In section 4.2 of monitoring report, PP is requested to submit the following documents: • Survey forms and survey result spreadsheets for parameters $n_{y,i}$, SS_y , $n_{new,i}$ • Technical specifications and calibration/testing of equipments.
Project participant response — Date : 10-11-2021
Scanned copies of the survey forms, user manuals and calibration certificates of the equipment used have been submitted to VVB
Documentation provided by project participant
Scanned copies of the survey forms, user manuals and calibration certificates.
VVB assessment — Date: 15-11-2021
• The documents provided by the PP like the monitoring surveys, scanned copies of the survey forms and forms filled at the time of WBT are assessed and verified on the values of $n_{y,i}$, SS_y , $n_{new,i}$. It is evident that PP has adopted simple random approach and survey was conducted based on the same. The survey and WBT were conducted during 31-03-2021 to 22-05-2021 and they are found to be in line with the current monitoring period. Hence, it is appropriate and acceptable. • User manuals and calibration certificates are checked and found that monitoring equipment are calibrated in line with the calibration frequency and found OK. Thus, CL 04 stands closed.

CL ID	05	Section no.	NA	Date : 29-10-2021
Description of CL				
In section 4.3 of monitoring report, PP is requested to submit the following documents: • Sampling analysis sheet or related for the parameters mentioned. • Evidence on the precision achievements for the given monitored parameters.				
Project participant response — Date : 10-11-2021				
Sampling analysis sheet as well as sheet evidencing the precision achievement have been submitted to VVB				
Documentation provided by project participant				
Sampling analysis sheet and the documents related to the precision of the achievements of the monitored parameters.				
VVB assessment — Date: 15-11-2021				

The sampling analysis sheet provided by the PP has been checked.. PP has applied simple random sampling correctly and evident that the selected samples are identified randomly using appropriate and a valid statistical tool. Precision achieved by the samples are within the acceptable range as evident from the documents submitted. Also, verification team has cross-checked the sample results through filled questionnaires and data sheets and also virtually visited 11 number of sampled stoves during remote on-site visit in line with Standard for Sampling and surveys for CDM project activities and programmes of activities, Version 9 and found that all ICS were working. Thus, CL 05 stands closed.

Table 3. CAR from this verification

CAR ID	01	Section no.	1.8	Date : 29-10-2021
Description of CAR				
In Section 1.8 of monitoring report, information on the tool used for the determination of fNRB is not provided.				
Project participant response				Date : 10-11-2021
Reference of the tool 30, version 3 used for the determination of f_{NRB} has been mentioned under section 1.8 of the revised MR.				
Documentation provided by project participant				
MR				
VVB assessment				Date: 15-11-2021
The revised MR is checked and found that the information on the tool used for the determination of fNRB is now provided. Thus, the CAR 01 is closed.				

CAR ID	02	Section no.	NA	Date : 18-11-2021
Description of CAR				
Clarification is requested that the energy saving achieved during the monitoring period VVBs not cross the threshold limit of small-scale projects i.e., 180 GWh_{th}, as per the applied methodology AMS. II.G Version 3.				
Project participant response				Date : 01-12-2021
The energy saving achieved for the current monitoring period was found beyond the threshold limit of small-scale category i.e., 180 GWh_{th}. Hence, as per CDM Project Standard for Programmes of Activities version 3.0 para 272, CQC has capped the achieved GHG emission reductions to limit the energy savings. The actual energy saving achieved for current monitoring period to limit the ERs is calculated based on an extrapolated approach. As a result, the estimated ERs for the current monitoring period have reduced to 25,622 tCO_2e as compared to the actual values of 55,833 tCO_2e. Actual energy saving for the year 2020 was 382.75 GWh_{th} while on extrapolation, annual energy saving is calculated as 392.22 GWh_{th}. The ER for this current monitoring is now capped based on 392.22 GWh_{th} energy saving. Revised ERs calculation sheet and MR along with energy saving comparison sheet have been				

submitted to VVB for further review.	
Documentation provided by project participant	
Revised ERs calculation sheet and revised MR	
VVB assessment	Date: 01-12-2021
The justification provided by the PP is inline with para 272 of CDM Project Standard for Programmes of Activities, version 3.0. Further, the verification team has cross-verified with the actual energy savings achieved for the year 2020 (from previous verification and current verification) and found that the PP has adopted a conservative approach for the ER capping calculation. Therefore, it is evident that PP has apportioned the ERs appropriately with a conservative approach and the qualifying limit of 180GWh_{th} for a small scale is also met. . The revised MR and ER spread sheet along with ER capping calculation spreadsheet submitted by the PP are verified and found to be OK. Thus, the CAR 02 stands closed.	