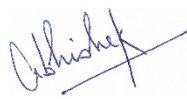




Verification and certification report form for CDM programme of activities
(version 01.0)

Complete this form in accordance with the "Attachment. Instructions for filling out the verification and certification report form for CDM programme of activities" at the end of this form.

VERIFICATION AND CERTIFICATION REPORT

Title of the programme of activities (PoA)	Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America	
GS reference number of the PoA	GS 1988	
Earthhood reference number	GS.16.18	
Version number(s) of the PoA-DD(s) applicable to this report	Version 6.0 dated 25 th March 2016	
Version number of the verification and certification report	Version 1.0	
Completion date of the verification and certification report	30/01/2017	
Monitoring period number	07	
Duration of this monitoring period	01/12/2015 – 30/11/2016 (inclusive of both days)	
Number and version number of the monitoring report to which this report applies	Monitoring Report No.1 Version 3.0, dated 16/01/2017	
Coordinating/managing entity (CME)	Proyecto Mirador Foundation	
Host Party(ies)	Host Party(ies) of the PoA	Is this a host Party to a VPA covered in this report? (yes/no)
	Honduras	Yes
Sectoral scope(s)	Sectoral scope 3	
Selected methodology(ies)	Technologies and Practices to Displace Decentralized Thermal Energy Consumption, Version 2.0	
Selected standardized baseline(s)	Not Applicable	
Total estimated GHG emission reductions or net GHG removals for this monitoring period in the included VPA(s) covered in this report	332,568 tCO ₂ e	
Total certified GHG emission reductions or net GHG removals for this monitoring period for the included VPA(s) covered in this report	284,771 tCO ₂ e	
Name of DOE	Earthood Services Private Limited	
Name, position and signature of the approver of the verification and certification report	 Abhishek Mahawar Quality Manager	

SECTION A. Executive summary

Description of PoA and specific case VPA

The programme of activities titled “Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America” by Project Participant utilizes carbon finance to support the dissemination of improved cookstoves that address the problems of deforestation, indoor air quality, global warming and slow economic development.

VPA titled “Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America – Renewed VPA for Distribution of Dos por Tres Cookstoves in Honduras” includes dissemination of highly efficient Cookstoves.

The project reduces carbon emissions by providing efficient cookstoves, which help in burning the fuel efficiently and completely. Also, it reduces soot and black carbon found in products of incomplete combustion thereby improving the environmental and health condition of the user as well. The project will lead to reduction in respiratory illness caused by inhalation of toxic smoke and will help in reducing indoor air pollution as well.

Proyecto Mirador Foundation has contracted Earthood Services Private Limited (Earthood) to conduct the verification and certification of emission reductions reported for the GS VPA- “Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America – Renewed VPA for Distribution of Dos por Tres Cookstoves in Honduras” under the GS registered PoA 1988 “Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America” in Honduras for the period 01/12/2015 - 30/11/2016. This report contains the findings of the verification process and a certification statement for the certified emission reductions. The verification is the independent review and ex post determination by Earthood of the monitored reductions in GHG emissions that have occurred as a result of the registered GS project activity during a defined monitoring period. Certification is the written assurance by Earthood that, during a specific period in time, a project activity achieved the verifiable emission reductions.

The objective of this verification was to verify and certify emission reductions reported for the “Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America – Renewed VPA for Distribution of Dos por Tres Cookstoves in Honduras” for the period 01/12/2015 - 30/11/2016.

Scope of Verification

The scope of the verification is to establish and verify that:

- a) The project activity has been implemented and operated as per the registered PoA DD, VPA DD and passport or any approved revised versions, and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place;
- b) The monitoring report and other supporting documents provided are complete in accordance with the latest applicable version of the completeness checklist for requests for issuance of CERs, verifiable, and in accordance with applicable GS requirements;
- c) The actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan, any revised approved monitoring plan, the approved methodology including applicable tool(s) and/or, where applicable, the approved standardized baseline;
- d) The data recorded and stored as per the monitoring methodology including applicable tool(s) and, where applicable, the standardized baseline.

The verification report will report on the following;

- a) Emission reduction
- b) Leakages
- c) Changes to the key sustainable development indicators
- d) Achievement and implementation of mitigation/compensation measures, according to the success indicators established in the monitoring plan of registered PDD and passport
- e) Response by project participants to the grievances raised by local stakeholders

Verification Process:

The verification process involves an agreement with project participant for verification scope and defined monitoring period in accordance with latest valid CDM AS and GS standard. The verification was performed as per latest valid CDM Standards i.e., CDM PS, VVS and latest valid CDM PCP and latest GS toolkit i.e. Version 2.2. The desk review, onsite assessment, interview, reporting of findings, preparation of draft verification report followed by independent technical review (internal quality check) were performed as stated in further sections of this report.

Based on the outcome of the verification process of the registered VPA1 “Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America – Renewed VPA for Distribution of Dos por Tres Cookstoves in Honduras” under registered PoA “Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America” and for the monitoring period 01/12/2015 – 30/11/2016 we confirm that the implementation of referenced registered VPA is complying with applicable GS and CDM rules and regulations as stated in the Monitoring Report Version 3.0 dated 16/01/2017. Earthood Services Private Limited is able to certify that the emission reductions from the VPA1 “Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America – Renewed VPA for Distribution of Dos por Tres Cookstoves in Honduras ” under registered GS PoA 1988 “Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America ” during the period 01/12/2015 – 30/11/2016 (including both days) amount to 284,771 tCO₂e. Therefore, this is being submitted for request for issuance, as per GS and UNFCCC procedures as applicable.

SECTION B. Verification team, technical reviewer and approver**B.1. Verification team members**

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk review	On-site inspection	Interview(s)	Verification findings
1.	Team Leader	ER	Yadav	Siddharth	Central Office	Y	Y	Y	Y
2.	Verifier & Local expert	ER	Yadav	Siddharth	Central Office	Y	Y	Y	Y
3.	Technical Expert (1.1, 3.1)	IR	Gautam	Ashok	Central Office	Y	N	N	Y

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Singh	Kaviraj	Central Office
2.	Technical expert (1.1, 3.1)	IR	Singh	Kaviraj	Central Office
3.	Approver	IR	Mahawar	Abhishek	Central Office

SECTION C. Means of verification**C.1. Desk review**

Earthood conducted a desk review as under;

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- A review of the data and information presented to verify their completeness;
- A review of the monitoring plan, the monitoring methodology including applicable tool(s) and, where applicable, the applied standardized baseline, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures;
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions;

In addition to the monitoring documentation, Earthood has reviewed;

- The PoA-DD Version 6.0 dated 25/03/2016 and the monitoring plan, including any approved revised monitoring plan and/or changes from the registered PoA-DD, and the corresponding validation opinion;
- Registered VPA-DDs for already included VPAs and SD Appraisal Reports;
- The applied monitoring methodology (The Gold Standard Simplified Methodology for Efficient Cookstoves);
- The VPA-DDs for respective VPAs;
- Any other information and references relevant to the project activity's emission reductions (e.g. IPCC reports, third party test report, other literature reviewed, etc.);
- Sustainability appraisal reports for each VPA.
- Monitoring report (Final)

The complete list of documents reviewed is included under Appendix 3.

C.2. On-site inspection

Duration of on-site inspection: 05/12/2016 to 08/12/2016				
No.	Activity performed on-site	Site location	Date	Team member
1.	Opening Meeting: Introduction, scope and objective of work, roles and responsibilities of audit team, resources required, and timetable of the onsite audit including venue for closing meeting and any concerns from PP & Site visit involving on site sampling of the technology distribution and VPA implementation. Local Stakeholder especially end users interview and feedbacks	Copan, Various locations	05/12/2016	Siddharth Yadav
2.	Physical sampling of the technology distribution and VPA implementation. Local Stakeholder especially end users interview and feedbacks	Various locations	06/12/2016	Siddharth Yadav
3.	Summary of day 1&2	Santa Barbara Office	06/12/2016	Siddharth Yadav
4.	Physical sampling of the technology distribution and VPA implementation & Local Stakeholder especially end users interview and, feedbacks	Various locations	07/12/2016	Siddharth Yadav
6.	Management and monitoring procedures followed at project site.	Various locations, Santa Barbara Office	07/12/2016	Siddharth Yadav
7.	Management and operational system: Documentation, allocation of responsibilities, qualification and training, data recording & archiving, internal audit and management review and emergency procedures.	Santa Barbara Office	08/12/2016	Siddharth Yadav
8.	Verification checklist: compliance of monitoring procedures followed at project site with registered PoA-DD and monitoring methodology.	Santa Barbara Office	08/12/2016	Siddharth Yadav

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9.	Review of monitored data and relevant document in accordance with registered monitoring plan and applied monitoring methodology.	Santa Barbara Office	08/12/2016	Siddharth Yadav
10.	Interviews with other stakeholders like suppliers and employees involved in PoA.	Santa Barbara Office	08/12/2016	Siddharth Yadav
11.	Compilation of the findings by Auditor/s (CARs/CLs)	Santa Barbara Office	08/12/2016	Siddharth Yadav
12.	Closing Meeting: Submission of the audit findings to the client and agreement on the issues raised and timelines.	Santa Barbara Office	08/12/2016	Siddharth Yadav

C.3. Interviews

C.3.1. Interview with PP/CME/VPA Implementers

Interviews were conducted during site visits included the households that have been using the Dos por Tres stoves and the personnel engaged by Proyecto Mirador foundation. Interviews revealed that the all the people involved with the project are well versed with monitoring plan and implementation of the project including the QA/QC procedures.

Project staff interviewed:

Name	Affiliation	Date	Subject
Esther Adams	Proyecto Mirador Program Manager	05/12/2016-08/12/2016	Project monitoring and reporting, leakage, ER Calculations, Salesforce data management system
Elder Mendoza	Proyecto Mirador Director of Operations	05/12/2016-08/12/2016	Surveys, general execution, quality assurance and quality control issues
Emilia Mendoza	Proyecto Mirador Director (Honduras)	05/12/2016-08/12/2016	General execution, quality assurance and quality control issues
Roy Lara	Proyecto Mirador Asst. to Dir. of Ops.	07/12/2016-08/12/2016	Transportation records
Jessica Vasquez	Proyecto Mirador Marketing Manager	06/12/2016-08/12/2016	Surveys, Salesforce data management system
Renieri Rodriguez	Proyecto Mirador Manager of I.T.	07/12/2016-08/12/2016	IT infrastructure, Salesforce data management system, surveys
Juan Carlos Guzman	Proyecto Mirador Dir. of Supervision	05/12/2016-08/12/2016	Surveys, general execution
Martin Avilez	Proyecto Mirador Human Resources	07/12/2016-08/12/2016	Personnel; quantitative and qualitative employment issues
Louise Moody, MD	Independent consultant	05/12/2016-08/12/2016	Surveys, health benefits

C.3.2. Type of questions asked by Team member

The households were asked the following questions;

- Usage and functionality of Dos por Tres stove
- Whether any other type of stove is installed and if yes, its hours of operation
- Physical condition of chimney, mouth piece, or if any changes were made by the households after its installation that could effect the stove efficiency
- Hours of usage
- If there were electric or gas stoves being used along with the usage of the Dos por Tres
- Users were also asked about how has the family benefitted from the installation of the Dos por Tres stove, for example: reduction in smoke or indoor air pollution, efficient cooking, reduction in time spent for collection of firewood and the quantity of the firewood collected

There was no reported decline in efficiency of the stove due to its age, however some stoves were considered as dropped off if the chimney or the mouthpiece was broken. Four households from the survey reported presence of another kind of wood burning stove. Of these, only one user reported using this stove (not Dos por Tres) on a regular basis for cooking daily meals.

Households that were found to have a gas/electric stove reported that it is used as an auxiliary stove for making quick coffee or boiling water.

C.4. Sampling approach

The assessment team has followed a simple random sampling approach for verification purposes. Sampling was done across the PoA in a random manner, but considering the principles of proportional representation. The travel time to the site and the security issue was also considered when deciding the sample. The list of households selected for random surveys including the names and government IDs of the owners is available with DOE on request /38/.

204 households (end users) were surveyed during the site visit. The households in the following regions (states) of Honduras were visited:

Age Group	Date	Village	Department	# surveys
0_1	5/12/16	La Arada, La Union Otuta, Santa Rita	Copán	11
0_1	5/12/16	La Arada, La Union Otuta, Santa Rita	Copán	10
0_1	6/12/16	Alpes Arriba, Coclan, Jesus de Otoro	Intibucá	11
0_1	6/12/16	Alpes Abajo, Coclan, Jesus de Otoro	Intibucá	12
0_1	7/12/16	El Zapote, Plan de Trompo, Guacamaya	Santa Barbara	31
1_2	5/12/16	Cabañas	Copán	25
2_3	6/12/16	La Cañada, Queruco, San Rafael	Lempira	10
2_3	6/12/16	San Antonio, San Rafael	Lempira	19
2_3	6/12/16	Teocinte, San Rafael	Lempira	6
2_3	6/12/16	Teocinte, San Rafael	Lempira	4
3_4	5/12/16	Florida	Copán	14
4_5	5/12/16	Nueva Arcadia	Copán	10
4_5	5/12/16	Macuelizo	Santa Barbara	5
4_5	7/12/16	Gualjoco	Santa Barbara	16
5_6	7/12/16	Santa Barbara	Santa Barbara	20

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The status of the stove installed in each house was checked vis a vis the data available from salesforce.com. The location of the households, and the government IDs were also checked against the data reported. Information outlined in section C.3.2 above was checked for these households.

C.5. Clarification requests, corrective action requests and forward action requests raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
General	-	-	-
Compliance of the monitoring report with the monitoring report form	-	-	-
Remaining forward action requests from validation and/or previous verification	-	-	-
Specific-case VPA(s) considered for verification and covered in this report	-	-	-
Programme of activities	-	-	-
Compliance of the programme implementation with the registered PoA-DD	-	-	-
Implementation and operation of the management system	-	-	-
Post-registration changes	-	-	-
Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline	-	-	-
Corrections	-	-	-
Inclusion of a monitoring plan in a registered PoA-DD (including its generic VPA-DD(s))	-	-	-
Permanent changes to the monitoring plan as described in the registered PoA-DD, applied methodology, or applied standardized baseline	-	-	-
Changes to the programme design of the registered PoA-DD (including corresponding changes to project design of the generic VPA-DD(s)) and updates to the eligibility criteria for inclusion of specific-case VPAs in the PoA	-	-	-
Types of changes specific to afforestation and reforestation activities	-	-	-
Component project activity(ies)	-	-	-
Compliance of the VPA implementation with the included VPA design document	-	-	-
Post-registration changes	-	-	-
Temporary deviations from registered monitoring plan, applied methodology or applied standardized baseline	-	-	-
Corrections	-	-	-
Changes to the start date of the crediting period	-	-	-
Inclusion of a monitoring plan to an included VPA-DD	-	-	-
Permanent changes to the monitoring plan as described in the included VPA-DD, applied methodology, or applied standardized baseline	-	-	-
Changes to the programme design of the included VPA-DD	-	-	-
Types of changes specific to afforestation and reforestation component project activities	-	-	-
Compliance of the monitoring plan with the monitoring methodology including applicable tool and standardized baseline	-	-	-
Compliance of monitoring activities with the registered monitoring plan	-	-	-

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• Data and parameters fixed ex ante or at renewal of crediting period	-	-	-
• Data and parameters monitored	CL2	CAR1	-
• Implementation of sampling plan	-	-	-
Compliance with the calibration frequency requirements for measuring instruments	-	-	-
Assessment of data and calculation of emission reductions or net removals	-	-	-
• Calculation of baseline GHG emissions or baseline net GHG removals by sinks	-	-	-
• Calculation of project GHG emissions or actual net GHG removals by sinks	-	CAR3	-
• Calculation of leakage GHG emissions	-	-	-
• Summary of calculation of GHG emission reductions or net GHG removals by sinks	-	-	-
• Comparison of actual GHG emission reductions or net GHG removals by sinks with estimates in included specific-case VPA	-	-	-
• Remarks on difference from estimated value in registered PDD	-	-	-
Others (please specify)	-	-	-
Total	1	2	0

SECTION D. Internal quality control

A draft verification report prepared by assessment team is reviewed by an independent Technical Review team (one or more members) to confirm if the internal procedures established and implemented by Earthood were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the applicable Gold Standard and CDM requirements. The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team are independent of the validation team. Managing Director, who is overall responsible to ensure quality, before final release, endorses the report approved by Quality Manager. The further details of applicable procedures and responsibilities about Earthood Quality Management System (QMS) are available on its website (www.earthood.in).

SECTION E. Verification opinion

Earthood Services Private Limited (Earthood), contracted by Proyecto Mirador Foundation (CME), has performed the independent verification of the emission reductions for the following GS Project: 'Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America – Renewed VPA for Distribution of Dos por Tres Cookstoves in Honduras (Version 06, dated 25 March, 2016) for the period 01/12/2015 - 30/11/2016'.

Proyecto Mirador Foundation (CME) is responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the project activity. Earthood commenced the verification against the baseline and monitoring methodology 'Technologies and Practices to Displace Decentralized Thermal Energy Consumption, Version 2.0', the monitoring plan contained in the PoA DD Version 06 dated 25/03/2016, GS Sustainability Appraisal Report for the VPA-DD, for and Monitoring Report version 3.0 dated 16/01/2017.

Earthood confirms that the monitoring system is in place and the emission reductions are calculated without material misstatements. This verification report has been prepared using the latest available template specified by UNFCCC and complies with the instructions as per para 406 and 407 of CDM VVS Version 9. The verification activities were conducted in accordance with Earthood's CDM Quality Manual System as per the steps indicated under Section A of this report.

As a result, it is confirmed that the emission reductions from the GS VPAs mentioned above are correctly reported in the Monitoring Report version 3.0 dated 16/01/2017 and corresponding ER sheet for the monitoring period 01/12/2015–30/11/2016 (including both days) amounted as 284,771 tCO₂e. Therefore, this will be submitted as part of request for issuance as per CDM PCP Version 9 and GS tool kit 2.1.

SECTION F. Certification statement

ESPL's 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. ESPL planned and performed the verification by obtaining evidence and other information and explanations that ESPL 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 are fairly stated in the Monitoring Report version 3.0, dated 16/01/2017. ESPL, based on outcome of verification activities, certifies that during the monitoring period 01/12/2015–30/11/2016 (including both days), the registered GS PoA GS 1988 - Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America – Renewed VPA for Distribution of Dos por Tres Cookstoves in Honduras (Version 06, dated 25 March, 2016) achieved the verified amount of 284,771 tCO₂e reductions in anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the VPA.

These verified emission reductions span two crediting periods: CP1 (1 May 2009 – 30 April 2016) and CP2 (1 May 2016 – 30 April 2023). The breakdown of emission reductions by vintage is as follows:

- CP1, Vintage 2015: 22,363 (December 2015)
- CP1, Vintage 2016: 88,229 (January – April 2016)
- CP2, Vintage 2016: 163,826 (May – November 2016)

SECTION G. Verification findings - General

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

Means of verification	The template used for MR is CDM-PoA-MR-FORM Version 01, which has been released by UNFCCC for the reporting of monitored data of VPAs under same PoA for CDM.
Findings	None
Conclusion	The monitoring report template was found to be the latest and appropriate for program of activities. The sections were filled in according to the guidelines.

G.2. Remaining forward action requests from validation and/or previous verification

As verified through the review of the Validation report/21/ issued on 30/03/2016, previously issued verification reports/22/, and the protocol dated 14/04/2015/3/ provided by Gold Standard, there were no FARs in validation or previous verification.

G.3. Specific-case VPA(s) considered for verification and covered in this report

Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America – Renewed VPA for Distribution of Dos por Tres Cookstoves in Honduras (Version 06, dated 25 March, 2016)

SECTION H. Verification findings – Programme of activities

H.1. Compliance of the programme implementation with the registered programme design document

Means of verification	The programme implementation was checked by assessment team through onsite visit. A total of 204 households were visited across the VPAs to examine if the implementation of programme is as per the description provided in registered PoA-DD/1/. The end users were surveyed based on the installation, functioning, maintenance and utility of the cook stove to them. The salesforce software usage and the unique information of each sample as per the records maintained by CME
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	was also cross-checked onsite. There were some repairs done on a few stoves during this monitoring period. As observed onsite and validated by interviews, these repairs have resulted in better maintenance and durability of the stoves. There were some cases where the chimney was bent or damaged while household owner repaired the roof of house – these stoves have been considered to be destroyed/dropped off. The people were in habit of using open mouth traditional stoves, however in dos por tres, comparatively smaller wood pieces are required to be fed. Thus, people forced larger pieces into the inlet leading to damage of the mouthpiece of the stove. Some households were also found to have installed another wood burning stove, but the numbers are minimal (4 out of 2014 sampled households), and only one household confirmed that the other stove is used everyday for meeting the daily cooking requirements. No major issues in terms of stove design or project implementation were found. Grievance Mechanism: During the site visits it was checked that the households which have installed the efficient stoves are visited by the supervisors and the household feedback is recorded. In general, the grievances are related to the problems faced by the stove users for example- broken mouthpiece, replacement of chimney etc. or about the functionality of stove, its benefits and criticism i.e the stove takes time to heat up as compared to an electric or gas stove. None of the concerns were of extreme nature and resolvable. The log is maintained electronically at the project offices was reviewed and an export of the stakeholder feedback log was obtained/25/.
Findings	None
Conclusion	The implementation of the programme was found to be in compliance with the description provided in the registered PoA-DD. The unique information of each cook stove sample was found to be consistent on sales force and onsite concluding that the data management system is working efficiently and in compliance with the system mentioned in registered PoA-DD.

H.2. Implementation and operation of the management system

Means of verification	The implementation and operation of management system was verified through onsite visit which included interaction with end-users and key staff members from Proyecto Mirador Foundation. As observed in each household, cookstoves bear a unique serial number which had been recorded in the PE's records on salesforce software. Along with the stove model, serial number, name, address, installation date, contact number etc. had also been noted which were found to be consistent on ground. Trainings were provided to the staff and users of cook stove which could be verified through training records and photographs checked during site visit.
Findings	None
Conclusion	The assessment team, with the help of onsite verification and document review that implementation and operation of the management system is as per the registered PoA-DD.

H.3. Post-registration changes

H.3.1. Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline

Not applicable

H.3.2. Corrections

Not applicable

H.3.3. Inclusion of a monitoring plan in a registered PoA-DD (including its generic VPA-DD(s))

Not applicable

H.3.4. Permanent changes to the monitoring plan as described in the registered PoA-DD, applied methodology, or applied standardized baseline

Not applicable

H.3.5. Changes to the programme design of the registered PoA-DD (including corresponding changes to project design of the generic VPA-DD(s)) and updates to the eligibility criteria for inclusion of specific-case VPAs in the PoA

Not applicable

H.3.6. Types of changes specific to afforestation and reforestation activities

N/A.

SECTION I. Verification findings – Component project activity(ies)**I.1. Compliance of the VPA implementation with the included VPA design document**

Means of verification	The programme implementation was checked by assessment team through onsite visit. A total of 204 samples were visited across VPA to examine if the implementation of programme is as per the description provided in registered PoA-DD/1/. The end users were surveyed based on the installation, functioning, maintenance and utility of the cook stove to them. The unique information of each user as per the records maintained by CME was also cross-checked onsite through random sampling procedure.
Findings	None
Conclusion	The implementation of the programme was found to be in compliance with the description provided in the registered PoA DD/1/ and VPA DD/2/. The unique information of each cookstove sample was found to be consistent onsite concluding that the data management system is working efficiently and in compliance with the system mentioned in registered design documents (PoA DD and VPA DD).

I.2. Post-registration changes**I.2.1. Temporary deviations from registered monitoring plan, applied methodology or applied standardized baseline**

Not applicable

I.2.2. Corrections

Not applicable

I.2.3. Changes to the start date of the crediting period

Not applicable

I.2.4. Inclusion of a monitoring plan to an included VPA-DD

Not applicable

I.2.5. Permanent changes to the monitoring plan as described in the included VPA-DD, applied methodology, or applied standardized baseline

Not applicable

I.2.6. Changes to the programme design of the included VPA-DD

Not applicable

I.2.7. Types of changes specific to afforestation and reforestation component project activities

Not applicable

I.3. Compliance of monitoring plan with the monitoring methodology including applicable tool and standardized baseline

Means of verification	The monitoring plan has been registered in PoA-DD/1/ and VPA-DD/2/ at the time of validation. However, the monitoring plan was cross-checked with the applied methodology/10/ and found to be in compliance. No standardized baseline was applied as per the registered PoA-DD/1/.
Findings	None
Conclusion	The monitoring plan was found to be in compliance with the monitoring methodology/10/

I.4. Compliance of monitoring activities with the registered monitoring plan

I.4.1. Data and parameters fixed ex ante or at renewal of crediting period

ID 1/ EF_{fuel,CO_2} : CO₂ emission factor of the fuel that is reduced

Means of verification	The value of the parameter has been verified from 2006 IPCC Guidelines for National Greenhouse Gas Inventories 2.1, Volume 2: Energy/23/. The value is reported in the MR/5/ and ER sheet/7/ is consistent with the PoA DD/1/ and the VPA DD/2/.
Findings	None
Conclusion	The value of parameter is 112 tCO ₂ /TJ, which has been correctly applied.

ID 2/ $EF_{fuel,nonCO_2,CH_4}$: CH₄ emission factor for the fuel that is reduced

Means of verification	The value of the parameter has been verified from 2006 IPCC Guidelines for National Greenhouse Gas Inventories 2.1, Volume 2: Energy/23/. The value is reported in the MR/5/ and ER sheet/7/ is consistent with the PoA DD/1/ and the VPA DD/2/.
Findings	None
Conclusion	The value of parameter is 0.30 tCO ₂ /TJ, which has been correctly applied.

ID 3/ $EF_{fuel,nonCO_2,N_2O}$: N₂O emission factor for wood that is reduced

Means of verification	The value of the parameter has been verified from 2006 IPCC Guidelines for National Greenhouse Gas Inventories 2.1, Volume 2: Energy/23/. The value is reported in the MR/5/ and ER sheet/7/ is consistent with the PoA DD/1/ and the VPA DD/2/.
Findings	None
Conclusion	The value of parameter is 0.004 tCO ₂ /TJ, which has been correctly applied.

ID 4/ NCV_{fuel} : The Net Calorific Value (NCV) of the fuel that is substituted or reduced

Means of verification	The registered PoA DD and VPA DD give a value of 0.00186 TJ/Ton for the parameter. The value has been sourced from the report- NCV for Red Oak, per Global Alliance for Clean Cookstoves, "WBT 4.2.4 Spreadsheet" with reference to Cheremisinoff, N. Properties of Wood. Wood for Energy Production. Ann Arbor, MI, Ann Arbor Science: 31-43. 1980/24/
Findings	None
Conclusion	The value of 0.0186 TJ/ton has been correctly applied.

I.4.2. Data and parameters monitored (Carbon)

ID 5/ $f_{NRB,y}$: %, The non-renewable fraction of the woody biomass harvested in the project collection area in year y in the baseline scenario

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	The parameter is a measured value that has been fixed at the time of revalidation.

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	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The frequency of recording is in line with the registered PoA-DD/1/ and the VPA DD/2/.
	Monitoring equipment	Not applicable.
	Calibration frequency /interval:	Not applicable
	How were the values in the monitoring report verified?	The value of 69% was taken from a third-party NRB Analysis by Berkeley Air Monitoring Group (2011). The result adjusted downward from the previously used NRB value of 77% to ensure conservativeness and align with recently validated project NRB figures. The above figure of 69% has been validated in the ERM CVS validation report dated 30th March 2016/21/.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, QA/QC procedures are in place.
	In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?	Not applicable
Findings	None.	
Conclusion	The parameter does not require further monitoring as the value of the parameter has been already fixed at the time of re-validation. The PoA DD/1/ and VPA DD/2/ also prescribes the same method to determine the value if the parameter	

ID 6 / N_{py} : Number of project technology days

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	Ongoing.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The frequency of recording is in line with the registered PoA-DD/1/ and VPA DD/2/.
	Monitoring equipment	Not applicable.
	Calibration frequency /interval:	Not applicable
	How were the values in the monitoring report verified?	The parameter is measured manually and recorded on Salesforce.com installation database through Garmin GPS devices which was checked during the site visit. The total stoves installed during the 7 th Verification Period (1 December, 2015 – 30 November, 2016) is 20,319. The

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		sales record/8/ and stove installed by month/9/ submitted by the CME have been checked to confirm the no. of stoves installed in the current monitoring period.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes QA/QC procedures listed in the MR were followed by the CME staff.
	In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?	Not applicable
Findings	None	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

ID 7 / P_{p,b,y} : Average daily dry wood fuel reduction per person-meal (tonnes/household/day)

Means of verification	Criteria/Requirements	Assessment/Observation															
	Measuring /Reading /Recording frequency	Calculated and recorded annually															
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	The frequency of recording set in registered PoA-DD/1/ and VPA DD/2/ is Bi-annual (i.e. once in two year). TheCME has followed an annual frequency which is better than the sset frequency, therefore the verification team has accepted the change.															
	Monitoring equipment	Compact digital scale Zipper polyethylene bag Moisture(Humidity) meter with digital readout The details of meter are as follows: <table><tr><th>Equipment</th><th>Manufacturer</th><th>Type</th><th>Accuracy</th></tr><tr><td>Humidity Meter</td><td>Delmhorst</td><td>BD-2100</td><td>± 0.2% (in moisture range 6% to 40%)</td></tr><tr><td>Digital Scale</td><td>MadBite</td><td>Digital hanging fish scale</td><td>± 1 ounce (to 110 lbs / 50 kg)</td></tr></table>				Equipment	Manufacturer	Type	Accuracy	Humidity Meter	Delmhorst	BD-2100	± 0.2% (in moisture range 6% to 40%)	Digital Scale	MadBite	Digital hanging fish scale	± 1 ounce (to 110 lbs / 50 kg)
	Equipment	Manufacturer	Type	Accuracy													
Humidity Meter	Delmhorst	BD-2100	± 0.2% (in moisture range 6% to 40%)														
Digital Scale	MadBite	Digital hanging fish scale	± 1 ounce (to 110 lbs / 50 kg)														
Calibration frequency /interval:	The user manuals for Humidity Meter and Digital Scale were provided by the CME. The User manual states that the equipment can be calibrated manually. It was verified from the interviews conducted during site visit that trained staff of CME has performed the calibration manually by following the																

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		guidelines listed in the manuals of all the equipment/26,27/.
	How were the values in the monitoring report verified?	Specific fuel savings from an individual technology of project p against an individual technology of baseline b in year y are measured through a Kitchen Performance Test. Survey data is tabulated in the attached "VP7-02 KPT Data 2016.xlsx"/12/ and parameter flows to "VP7-01 ER Calculations.xlsx,"/7/ "Assumption" worksheet, Cell G20. The data has been analysed by third party expert – Prof. Rob Bailis, currently at Stockholm Environment Institute (previously worked at Yale School of Forestry), Prof. Bailis is one of the key contributors to the methodology. A value of 0.005485 t/household/day has been applied correctly
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	The calibration has been conducted by the trained staff of CME. QA/QC procedures were in place.
	In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?	Not applicable
Findings	None	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

ID 8 / U_{p,y} : Abandonment (drop-off) rate (the number of stoves that have fallen out of use in a given age group) expressed as %of households

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	Calculated and recorded annually
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The frequency of recording is in line with the registered PoA-DD/1/ and VPA DD/2/.
	Monitoring equipment	Not applicable.
	Calibration frequency	Not applicable

	/interval:																																									
	How were the values in the monitoring report verified?	Cumulative abandonment rates are applied, i.e., they reflect the total rate of abandonment for a given age group. The Annual rates are extrapolated and applied to ER Calculations/7/. Survey data is exported from Salesforce and tabulated in the attached "VP7-13 Dropoff Data.xls."/19/. The DOE has reasonable assurance on the following drop off rates which have been applied for the current verification period: <table> <tr><td>Year 0_1</td><td>14%</td></tr> <tr><td>Year 1_2</td><td>10%</td></tr> <tr><td>Year 2_3</td><td>16%</td></tr> <tr><td>Year 3_4</td><td>27%</td></tr> <tr><td>Year 4_5</td><td>47%</td></tr> <tr><td>Year 5_6</td><td>48%</td></tr> </table>	Year 0_1	14%	Year 1_2	10%	Year 2_3	16%	Year 3_4	27%	Year 4_5	47%	Year 5_6	48%																												
	Year 0_1	14%																																								
	Year 1_2	10%																																								
Year 2_3	16%																																									
Year 3_4	27%																																									
Year 4_5	47%																																									
Year 5_6	48%																																									
Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, QA/QC procedures were in place.																																									
In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?	Not applicable																																									
Findings	CAR 3 was raised. The following drop off rates were observed during the verification site visit: <table border="1"> <thead> <tr> <th></th><th></th><th></th><th>Verification</th><th>Reported</th></tr> <tr> <th>Age Group</th><th># surveys</th><th># abandoned</th><th>Dropoff %</th><th>Dropoff %</th></tr> </thead> <tbody> <tr><td>0_1</td><td>75</td><td>4</td><td>5%</td><td>4%</td></tr> <tr><td>1_2</td><td>25</td><td>2</td><td>8%</td><td>10%</td></tr> <tr><td>2_3</td><td>39</td><td>3</td><td>8%</td><td>16%</td></tr> <tr><td>3_4</td><td>14</td><td>2</td><td>14%</td><td>27%</td></tr> <tr><td>4_5</td><td>31</td><td>14</td><td>45%</td><td>47%</td></tr> <tr><td>5_6</td><td>20</td><td>14</td><td>70%</td><td>48%</td></tr> </tbody> </table> While the drop off rates as observed during the verification site visit are acceptable for the age groups 1-2, 2-3, 3-4, 4-5, there is a significant discrepancy for the age group 5-6.					Verification	Reported	Age Group	# surveys	# abandoned	Dropoff %	Dropoff %	0_1	75	4	5%	4%	1_2	25	2	8%	10%	2_3	39	3	8%	16%	3_4	14	2	14%	27%	4_5	31	14	45%	47%	5_6	20	14	70%	48%
			Verification	Reported																																						
Age Group	# surveys	# abandoned	Dropoff %	Dropoff %																																						
0_1	75	4	5%	4%																																						
1_2	25	2	8%	10%																																						
2_3	39	3	8%	16%																																						
3_4	14	2	14%	27%																																						
4_5	31	14	45%	47%																																						
5_6	20	14	70%	48%																																						
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.																																									

ID 9 / LE_{p,y} : Number of households

Assess leakage sources including (1) replacement of efficient household heating sources with less efficient fuel; (2) continued use of baseline stove after installation

Means of	
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verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	Ongoing.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The frequency of recording is in line with the registered PoA-DD/1/ and VPA DD/2/.
	Monitoring equipment	Not applicable.
	Calibration frequency /interval:	Not applicable
	How were the values in the monitoring report verified?	The parameter has been verified from surveys are taken onsite, and also checking the information contained on Salesforce.com database during site visit.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, QA/QC procedures were in place.
	In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?	Not applicable
Findings	CAR1 was raised because the verification team found 4 households also had installed has another kind of fuel burning stove, hence there exists a possibility that the emissions are claimed twice by the same household under two parallel projects which are both registered during registered and operating under internationally recognized GHG schemes. CL2 was raised because 710 households were assessed for the presence of an auxiliary <i>fogón</i> (baseline stove). A traditional <i>fogón</i> was still present in 116 of households surveyed (16%). Refer Annexure 1 - Findings for details	
Conclusion	CAR1 was closed and FAR1 was issued because the project proponent agreed to conduct a survey which is statistically significant geographically through representative sampling of households for all age groups of Dos por Tres stoves, to determine whether or not a cookstove from another carbon project is also present and, if so, whether or not the other project's cookstove is actively in use. PP will discount its ER claims such that households that include such project technologies in active use are not included. CAR2 was closed as the project proponents agreed to PP deduct a value of 2,960 VERs from the overall ERs claimed.	

ID 10 / LEp,y – Leakage due to Transportation, in Kilometers

Means of verification		
	Criteria/Requirements	Assessment/Observation

	Measuring /Reading /Recording frequency	Measured on ongoing basis and tabulated annually.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The frequency of recording is in line with the registered PoA-DD/1/ and VPA DD/2/.
	Monitoring equipment	Vehicle odometers.
	Calibration frequency /interval:	Not applicable
	How were the values in the monitoring report verified?	As verified from the transportataion records/20/, Mirador vehicles drove 258,312 km (or 160,508 miles) during the Seventh Verification Period. An Assuming of an estimated average fuel efficiency of 14 mpg has been taken by the CME applying which results in the project emission of 116.94 tonnes of CO ₂ due to transportation. That figure is less than 0.05% of the total emissions claimed, so it is disregarded as <i>de minimis</i> .
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, QA/QC procedures were in place.
	In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?	Not applicable
Findings	None	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

1.4.3. Data and parameters monitored (Sustainable Development)

Air Quality, Qualitative

Air Quality , ID 11 / Number and percentage of individuals, Individuals

Means of verification		
	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	The parameter is measured is measured on ongoing basis and tabulated and reported on annual basis.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology?	Yes, the frequency is inline to the registered monitoring plan/4/. 794 Leakage and Sustainability Surveys collected during the seventh Verification

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		Period
	How were the values in the monitoring report verified?	Questionnaires, salesforce.com. 794 Leakage and Sustainability Surveys collected during the seventh Verification Period returned the following results. Cell references below pertain to the "Summary-Vertical" worksheet within the file "VP7-09 Leakage Sustainability Results.xlsx."/15/ As verified from the sheet referred above, 100% of respondents reported the air is cleaner in their homes with the new Dos por Tres cook stove.
	If applicable, has the reported data been cross-checked with other available data?	Yes, through on site interviews and visual observation.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes
Findings	None	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

ID 12 /Livelihood of the Poor

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	Ongoing Randomness of the sample is maintained by surveying every nth beneficiary.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology?	Yes, the frequency is inline to the registered monitoring plan/4/. 794 Leakage and Sustainability Surveys collected during the seventh Verification Period
	How were the values in the monitoring report verified?	Survey data exported from Salesforce and tabulated in the attached "VP7-09 Leakage Sustainability Results.xlsx."/15/ were checked.
	If applicable, has the reported data been cross-checked with other available data?	Yes, through on site interviews and visual observation
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, Questionnaires are administered by Supervisors and checked by the project manager on a regular basis
Findings	None	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and	

	applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.
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ID 13 / Human & Institutional Capacity

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	Ongoing, randomness of the sample is maintained by surveying every nth beneficiary.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology?	Yes, Questionnaires are collected regularly. 794 Leakage and Sustainability Surveys were collected during the seventh Verification Period returned the following results. Cell references below pertain to the "Summary-Vertical" worksheet within the file "VP7-09 Leakage Sustainability Results.xlsx."/15/
	How were the values in the monitoring report verified?	The review of surveys revealed that majority of the respondents have given a positive response for the questions asked during the survey and there is a continuous increase in % of beneficiaries. Reduction in time for cooking and reduction in amount of fuelwood leading to money and time saving has been reported by the end users of the product. Based on the answers it can be concluded that the livelihood of the poor has improved through the installation of ICS. The surveys were verified and the values reported on salesforce.com were verified.
	If applicable, has the reported data been cross-checked with other available data?	Yes, through on site interviews and visual observation
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Survey data is exported from Salesforce and tabulated in the attached "VP7-09 Leakage Sustainability Results.xlsx."/15/
Findings	None	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

ID 14 / Quality of Employment

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	The frequency to monitoring quantity of employment is Annual. Training and capacity building are ongoing functions of HR.
	Is measuring and reporting frequency in accordance with the monitoring plan and	Yes Qualitative employment data is substantiated in the attached "VP7-10 Employee Survey

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	monitoring methodology?	Export.xlsx"/16/ and "VP7-11 Employee Questionnaires.pdf."/17/.
	How were the values in the monitoring report verified?	The surveys were verified and the values reported on the excel sheet were verified
	If applicable, has the reported data been cross-checked with other available data?	Yes, through document review, on site interviews and visual observation
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, Questionnaires are checked by the project manager on a regular basis
Findings	None	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

ID 15 / Quantitative Employment and Income Generation

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	Ongoing, Annual reporting
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology?	Yes
	How were the values in the monitoring report verified?	Surveys of employees, management report on number of employees were checked/16,17,18/. The total number employees (both direct and indirect) is 146 as checked from the Quantitative Employment sheet/18/. The direct employees of Mirador at end of 7th Verification Period: 22
	If applicable, has the reported data been cross-checked with other available data?	Annual written report of number of employees is a crosscheck for the record of employee surveys/16.17/.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, employee surveys conducted by Human Resources Manager in Honduras are reported and reviewed by U.S. office.
Findings	None	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

ID 16 / Technology Transfer

Means of verification		
	Criteria/Requirements	Assessment/Observation

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	Measuring /Reading /Recording frequency	Ongoing
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology?	Yes, through on site checks (visual observation) and statements in Passport/4/ Sustainability Monitoring Plan sections regarding wider social and economic impact of the project including #12, Technology Transfer
	How were the values in the monitoring report verified?	Reviewed maintenance surveys are recorded in Salesforce.com. Qualitative employment data substantiated in the attached "VP7-10 Employee Survey Export.xlsx"/16/ and "VP7-11 Employee Questionnaires.pdf"/17/ and Quantitative employment data provided in the attached "VP7-12 Quantitative Employment 2016.xlsx."/18/ was checked.
	If applicable, has the reported data been cross-checked with other available data?	Interviews were conducted on site during site visits and offices based in Santa Barbara
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, maintenance survey data collected on handheld devices, stored in Salesforce.com monitoring system and reviewed by office staff in Honduras and U.S. offices.
Findings	None	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

E.6.3. Implementation of sampling plan

Means of verification	It was verified through on site visit that a sampling method of Simple Random was followed through VPA which is in compliance with the registered PoA-DD./1/
Findings	No Finding
Conclusion	The Sampling Plan implemented is in line to the method mentioned in PoA DD/1/.

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

The details of the meter during the current monitoring period are as follows:

Equipment	Manufacturer	Type	Accuracy
Humidity Meter	Delmhorst	BD-2100	± 0.2% (in moisture range 6% to 40%)
Digital Scale	MadBite	Digital hanging fish scale	± 1 ounce (to 110 lbs / 50 kg)
GPS marking device	Garmin	eTrex 20	± 12 feet

The user manuals for Humidity Meter, Digital Scale and GPS marking device were provided by the CME. The User manual states that the equipment can be calibrated manually. It was verified from the interviews conducted during site visit that trained staff of CME has performed the calibration manually by following the guidelines listed in the manuals of all the equipment/26,27,28/.

I.5. Assessment of data and calculation of emission reductions or net removals

I.5.1. Calculation of baseline GHG emissions or baseline net GHG removals by sin

Means of verification	Baseline emission was calculated using the approach given in the applied methodology/17/. The formula used for baseline estimation is follows: $ER_y = \sum_{b,p} (N_{p,y} * U_{p,y} * P_{p,b,y} * NCV_{b,fuel} * (f_{NRB,b,y} * EF_{fuel,CO_2} + EF_{fuel,nonCO_2})) - \sum LE_{p,y}$ Accordingly, key data are monitored as follows: <table border="1"> <tr> <td>$N_{p,y}$</td><td>Cumulative number of project technology-days included in the project database for project scenario p against baseline scenario b in year y</td></tr> <tr> <td>$U_{p,y}$</td><td>Cumulative usage rate for technologies in project scenario p in year y, based on cumulative adoption rate and drop off rate revealed by usage surveys (fraction)</td></tr> <tr> <td>$NCV_{b,fuel}$</td><td>Specific fuel savings for an individual technology of project p against an individual technology of baseline b in year y, in tons/day, as derived from the statistical analysis of the data collected from the field tests</td></tr> <tr> <td>$f_{NRB,b,y}$</td><td>Fraction of biomass used in year y for baseline scenario b that can be established as non-renewable biomass</td></tr> <tr> <td>$NCV_{b,fuel}$</td><td>Net calorific value of the fuel that is substituted or reduced</td></tr> <tr> <td>EF_{fuel,CO_2}</td><td>CO₂ emission factor of the fuel that is reduced</td></tr> <tr> <td>$EF_{fuel,nonCO_2}$</td><td>Non-CO₂ emission factor of the fuel that is reduced</td></tr> <tr> <td>$LE_{p,y}$</td><td>Leakage for project scenario p in year y (tCO₂e/yr)</td></tr> </table> The formula was checked with methodology and registered PoA-DD and VPA-DD. As per the formula used above, emission reduction for VPA is quantified in "VP7-01 ER Calculation.xlsx."/7/ The calculation method was checked with methodology, registered PoA-DD/1/ and VPA-DD/2/.	$N_{p,y}$	Cumulative number of project technology-days included in the project database for project scenario p against baseline scenario b in year y	$U_{p,y}$	Cumulative usage rate for technologies in project scenario p in year y, based on cumulative adoption rate and drop off rate revealed by usage surveys (fraction)	$NCV_{b,fuel}$	Specific fuel savings for an individual technology of project p against an individual technology of baseline b in year y, in tons/day, as derived from the statistical analysis of the data collected from the field tests	$f_{NRB,b,y}$	Fraction of biomass used in year y for baseline scenario b that can be established as non-renewable biomass	$NCV_{b,fuel}$	Net calorific value of the fuel that is substituted or reduced	EF_{fuel,CO_2}	CO ₂ emission factor of the fuel that is reduced	$EF_{fuel,nonCO_2}$	Non-CO ₂ emission factor of the fuel that is reduced	$LE_{p,y}$	Leakage for project scenario p in year y (tCO ₂ e/yr)
$N_{p,y}$	Cumulative number of project technology-days included in the project database for project scenario p against baseline scenario b in year y																
$U_{p,y}$	Cumulative usage rate for technologies in project scenario p in year y, based on cumulative adoption rate and drop off rate revealed by usage surveys (fraction)																
$NCV_{b,fuel}$	Specific fuel savings for an individual technology of project p against an individual technology of baseline b in year y, in tons/day, as derived from the statistical analysis of the data collected from the field tests																
$f_{NRB,b,y}$	Fraction of biomass used in year y for baseline scenario b that can be established as non-renewable biomass																
$NCV_{b,fuel}$	Net calorific value of the fuel that is substituted or reduced																
EF_{fuel,CO_2}	CO ₂ emission factor of the fuel that is reduced																
$EF_{fuel,nonCO_2}$	Non-CO ₂ emission factor of the fuel that is reduced																
$LE_{p,y}$	Leakage for project scenario p in year y (tCO ₂ e/yr)																
Findings	None																
Conclusion	The formula and approach used to calculate baseline emission was found to be in compliance with the applied methodology and registered PoA-DD and VPA-DDs. Emission reduction calculations are applied according to the above equation and provided in the attached file, "VP7-01 ER Calculation.xlsx."/7/ were found to be consistent.																

I.5.2. Calculation of project GHG emissions or actual net GHG removals by sinks

Means of verification	Not applicable as per the methodology and also no source of project emission could be identified.
Findings	Not applicable
Conclusion	Not applicable

I.5.3. Calculation of leakage GHG emissions

Means of verification	Details as per CL2 (refer Annex 1)
Findings	Not applicable
Conclusion	Not applicable

I.5.4. Summary of calculation of GHG emission reductions or net GHG removals by sinks

Specific-case VPA reference number	Baseline emissions or baseline net GHG removals by sinks (tCO ₂ e)	Project emissions or actual net GHG removals by sinks (tCO ₂ e)	Leakage (tCO ₂ e)	GHG emission reductions or net GHG removals by sinks (tCO ₂ e) achieved in the monitoring period		
				Up to 31/12/2012	From 01/01/2013	Total amount
VPA1	*	*	0%	N/A	284,771	284,771
Total	*	*	0%	N/A	284,771	284,771

**Since emission reductions are conducted with respect to fuel savings per unit, rather than by comparing overall emissions in the baseline and project scenarios, the 2nd and 3rd columns in the table below are left blank.*

I.5.5. Comparison of actual GHG emission reductions or net GHG removals by sinks with estimates in included specific-case VPA

Means of verification	Review of VPA-DD and ER calculation spreadsheets was done by the verification team. As per the VPA-DD, 574,103 tonnes CO ₂ were estimated to be reduced between 1 May 2016 – 30 Nov. 2017. The current monitoring period covers 1 Dec. 2015 – 30 Nov. 2016, for which, the ERs are calculated based on real data.
Findings	None
Conclusion	Achieved ERs are lower than the value estimated in VPA-DD

I.5.6. Remarks on difference from estimated value in registered PDD

Means of verification	The achieved ERs are lower than the estimates in registered VPA-DD for the VPA. It is explained by PP in monitoring report explicitly and DOE have accepted the justification.
Findings	None
Conclusion	The difference is attributed primarily to a reduction in 2016 stove build quotas in response to devaluation in the carbon market, as well as the application of actual rather than estimated fuelwood consumption figures from project KPT results for all stove age groups.

Appendix 1. Abbreviations

Abbreviations	Full Texts
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CME	Coordinating and Managing Entity
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
CP	Crediting Period
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EB	Executive Board
ER	Emission Reduction
ER	Emission Reduction
ESPL	Earthood Services Private Limited (Earthood)
FAR	Forward Action Request
GHG	Green House Gas
GS	Gold Standard
IPCC	Intergovernmental Panel on Climate Change
IR	Internal Resource
ODA	Official Development Assistance
PCP	Project Cycle Procedure
PDD	Project Design Document
PFA	Pre-Feasibility Assessment
PMU	Project Management Unit
PoA	Programme of Activities
PP	Project participant
PS	Project Standard
SFR	Stakeholders Feedback Round
UNFCCC	United Nations Framework Convention on Climate Change
VER	Verified Emission Reductions
PO	Partner Organisation

Appendix 2. Competence of team members and technical reviewers

Competence Statement			
Name	Kaviraj Singh		
Country	India		
Education	Ph.D. (Environmental Engineering), IIT Delhi Masters (Energy & Environmental), DAVV Indore		
Experience	8 Years +		
Field	Climate Change & Environment		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS-I.D., AMS-II.D., ACM0006, AMS-I.A., AMS-I.C., AMS-II.B., AMS-III.H, ACM0002, ACM0001		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert (1.1)	YES		
TA Expert (1.2)	YES		
TA Expert (13.1)	YES		
TA Expert (13.2)	YES		
TA Expert (15.2)	YES		
Reviewed by	Abhishek Mahawar	Date	08/09/2016
Approved by	Ashok Gautam	Date	08/09/2016

Competence Statement			
Name	Siddharth Yadav		
Country	England (UK)		
Education	Masters (Oxford University) B. Tech. - Civil Engineering		
Experience	14 Years, More than 10 GS projects		
Field	Energy, Climate Change & Environment Complete more than 30 CDM projects and various GS projects		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert (1.2)	YES		
TA Expert (13.1)	YES		
Reviewed by	Abhishek Mahawar	Date	10/11/2014
Approved by	Kaviraj Singh	Date	11/11/2014

Competence Statement			
Name	Ashok Gautam CDM-PoA-VCR-FORM		
Country	India		
Education	M. Sc. (Environmental Sciences) M. Tech. (Energy & Environmental Management)		
Experience	14 Years +		
Field	Energy, Climate Change & Environment		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS-I.D., AMS-I.A., AMS-I.C. AMS-II.D., AMS-II.G., AMS-III.E., AMS-III.H., AMS-III.AV., ACM0002, ACM0004, ACM0006, ACM0012		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert (1.1)	YES		
TA Expert (1.2)	YES		
TA Expert (3.1)	YES		
TA Expert (13.1)	YES		
Reviewed by	Abhishek Mahawar	Date	08/09/2016
Approved by	Kaviraj Singh	Date	08/09/2016

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1.	Proyecto Mirador Foundation	PoA-DD, Version 4.0	Dated 25/03/2016	CME
2.	Proyecto Mirador Foundation	VPA-DD, Version 6	Dated 25/03/2016	CME
3.	Gold Standard Foundation	4-week review renewal crediting period GSv2.2 VER	Dated 20/04/2016	CME
4.	Proyecto Mirador Foundation	VPA Passport 2016	Dated 25/03/2016	CME
5.	Proyecto Mirador Foundation	Monitoring Report, Version 01	Dated 31/10/2016 (V01)	CME
6.	Proyecto Mirador Foundation	Monitoring Report, Version 03 (Final)	Dated 16/01/2017 (V03)	
7.	Proyecto Mirador Foundation	a) ER calculations b) ER calculations	Dated 02/11/2016 Dated 14/12/2016	CME
8.	Proyecto Mirador Foundation	VP07-06 Sales Records	Dated 07/12/2016	CME
9.	Proyecto Mirador Foundation	VP07-07 Stoves installed by month	Dated 07/12/2016	CME
10.	The Gold Standard Foundation	The Gold Standard Simplified Methodology Technologies and Practices to Displace Decentralized Thermal Energy Consumption	Version 2.0, Dated 24/04/2015	Others
11.	The Gold Standard Foundation	GS webpage for the project: https://mer.markit.com/br-	Last accessed on 24/12/2016	Others

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		reg/public/master-project.jsp?project_id=103000000001450		
12.	Proyecto Mirador Foundation	VP07-02 KPT Data	27/10/2016	CME
13.	Gold Standard Foundation	Toolkit Version 2.2	-	Other
14.	Proyecto Mirador Foundation	VP7-08 Training Brochure	March 2009	CME
15.	Proyecto Mirador Foundation	VP7-09 Leakage Sustainability Results	Dated 26/10/2016	CME
16.	Proyecto Mirador Foundation	VP07-10 Employee Survey Export	Dated 26/10/2016	CME
17.	Proyecto Mirador Foundation	VP07-11 Employee questionnaire contract	Dated 25/10/2016	CME
18.	Proyecto Mirador Foundation	VP7 -12 Quantitative Employment	Dated 28/10/2016	CME
19.	Proyecto Mirador Foundation	VP07-13 Dropoff data	Dated 14/12/2016	CME
20.	Proyecto Mirador Foundation	VP07 -14 Transportation summary	Dated 14/12/2016	CME
21.	ERM CVS	Validation Report	Dated 30/03/2016	Other
22.	Earthood	Verification Report for 01/12/2013 – 30/11/2014 Version 1.1	Dated 29/12/2014	Other
23.	IPCC	http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_2_Ch2_Stationary_Combustion.pdf	Last accessed on 03/01/2017	Other
24.	Global alliance for cleaned cookstoves	http://cleancookstoves.org/technology-and-fuels/testing/protocols.html	Last accessed on 03/01/2017	Other
25.	Proyecto Mirador Foundation	VP7-15 Stakeholder Comment Log.xlsx	-	CME
26.	GARMIN	GPS user manual (for eTrex 30)	-	CME
27.	MadBite	Digital scale manual	-	CME
28.	Delmhorst Instrument Co.	Humidity meter user manual (Delmhorst BD-2100)	-	CME

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

Table 1: CL from this verification

CL ID	01	Section no.	Date : 08/12/2016
Description of CL			
During the current verification period 710 households were assessed for the presence of an auxiliary <i>fogón</i>. A traditional <i>fogón</i> was still present in 116 of households surveyed (16%). Among those households, the <i>fogón</i> was in use an average of 2.54 hours/week, whereas the Dos por Tres was in use 7.34 hours per day, 7 days a week (total 51.38 hours per week). Thus, the <i>fogón</i> was responsible for 5% of total cooking times in 15% of households. Leakage was determined by multiplying the % of homes that have a <i>fogón</i> (16%) by the percent of total cooktime when the <i>fogón</i> is used (5%), returning a figure of 0.82% (less than 1%). Emissions accounted due to the use of the auxiliary fogon need to be calculated by applying the above sampled results to the entire population			
Project participant response			Date : 14/12/2016

PP will deduct a value of 2,960 VERs from the overall ERs claimed. The new calculation will be described in the "Calculation method" section of ID9 as follows:

Leakage due to the continued presence of a baseline stove was determined as follows:

- Multiply the % of homes that have a *fogón* (16%) by the total stove population for which ERs are being claimed (115,975) which returns a value of 18,500 households affected.
- Reduce 18,500 according to the percent of total cooktime during which the *fogón* is in use in those households (5%), resulting in a value of 925. This is the number of cookstove equivalents for which emissions are not reduced.
- Multiply 925 (cookstove equivalents) by the annualized average of 3.20 ERs/stove = 2,960, the number of tonnes lost due to the presence of the auxiliary stove. ER claims are directly discounted by the absolute figure of 2,960.

Dividing 2,960 tonnes by the total number of ERs being claimed (280,138) translates to a leakage factor of 1%.

It should be noted that the leakage factor calculated by the revised method does not differ from the originally proposed leakage factor (also 1%); the only difference is that the revised figure is expressed in absolute terms.

Documentation provided by project participant

DOE assessment

Date: 14/12/2016

CL1 Closed because the project proponents have discounted 2960 tCO₂e to account for possible leakage due to the presence of a baseline 'fogon' stove.

Table 2. CAR from this verification

CAR ID	02	Section no.		Date	08/12/2016
Description of CAR					
Page 4 of 28 of the monitoring report states: <i>'Procedure to avoid double counting: Stoves are built in situ and a unique household account is created in the electronic database at the time of construction. An inspector visits each home before construction can begin and at that time, verifies that improved cookstove technology is not already present and that a traditional fogón is the primary cooking unit. For those reasons, even if there is another, similar activity within the same target area, stoves from the other project cannot possibly be counted under Mirador's activity'.</i> The above procedure seems inadequate to capture the households which have installed another kind of a stove along with a dos por tres stove. For example – while conducting the verification site visit, five households were found to have other newly installed stoves. While interviewing the households, only one respondent said that they used the stove for meeting their cooking needs regularly, while the other stoves (another model - newly installed) were seldom used. However, there is a possibility that the emissions are claimed twice by the same household under two parallel projects which are both registered during registered and operating under internationally recognized GHG schemes. Please clarify how double counting is avoided?					
Project participant response					Date
					14/12/2016

As acknowledged by the DOE above, among the four non-Mirador project stoves encountered, only one was in regular use. If emissions are claimed under a parallel carbon certified project, it can be assumed that abandonment is adequately accounted for in the other project's calculations and that credits will only be claimed for stoves in use.

In every one of the four households, the beneficiaries reported that the Dos por Tres was still in regular, daily use.

Going forward PP will survey a statistically significant, geographically representative sampling of households for all age groups of Dos por Tres stoves, to determine whether or not a cookstove from another carbon project is also present and, if so, whether or not the other project's cookstove is actively in use. PP will discount its ER claims such that households that include such project technologies in active use are not included.

Since those surveys are not available for the 7th Verification Period, PP proposes the following approach to discounting emission reductions:

A total of 204 surveys were collected by the DOE during the site visit. Among those 204 surveys, only 1 household was found to have the different project technology in regular use. It should be noted that $1/204 = 0.0049$ (~0.5%). However, to be conservative, PP shall reduce ER claims to account for *all* stoves from the other project that were encountered, regardless of whether or not they are generally in use. Accordingly, $4/204 = 0.0196$ (2%). Applying 2% to the total emission reductions for the 7th Verification Period results in a discount of 5,661 tonnes, which shall be noted on the revised ER Calculations spreadsheet.

Documentation provided by project participant

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DOE assessment

Date: 14/12/2016

CAR1 Closed considering project proponent's response above wherein 5661 tCO₂e has been discounted to factor in any possible wood burning stoves installed in the households containing a Dos por Tres stove.

FAR1 issued for the reasons outlined below.

Table 3. CAR from this verification

Table 3: CAR from the verification

CAR ID	03	Section no.	Date : 08/12/2016	
Description of CAR				
Drop-off survey data is provided in the attached file "VP7-13 Dropoff Data.xlsx." Cumulative abandonment rates (as provided in Parameter ID6) which are applied in the document "VP7-01 ER Calculations.xlsx" do not match the surveys conducted during the onsite visit.				
The following drop off rates were observed during the verification site visit:				
			Verification	Reported
Age Group	# surveys	# abandoned	Dropoff %	Dropoff %
0_1	75	4	5%	4%
1_2	25	2	8%	10%
2_3	39	3	8%	16%
3_4	14	2	14%	27%
4_5	31	14	45%	47%
5_6	20	14	70%	48%
While the drop off rates as observed during the verification site visit are acceptable for the age groups 1-2, 2-3, 3-4, 4-5, there is a significant discrepancy for the age group 5-6. Please justify the difference.				
Project participant response				Date : 14/12/2016

The cumulative abandonment figure of 48% for stoves aged 5_6 years was determined from 103 abandonment surveys collected among 13 villages. However, in order to avoid further delay, PP shall accept DOE's monitored abandonment rate of 70% for this age group.

Documentation provided by project participant

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DOE assessment
Date: 14/12/2016

A conservative drop off rate of 70% found by the verification team during the site visit for the households visited has been used across stoves aged 5-6 years. CAR3 Closed.

Table 4. FAR from this verification

FAR 1	Section No.	Date: 14/12/2016
Description of FAR		
FAR1 is issued because the project proponents have agreed to conduct a statistically significant survey which is geographically representative of households for all age groups of Dos por Tres stoves, to determine whether or not a cookstove from another carbon project is also present and, if so, whether or not the other project's cookstove is actively in use. PP will discount its ER claims such that households that include such project technologies in active use are not included in future monitoring periods.		
CME response		Date: 16/12/2016
Accepted, implementation due for the next monitoring period starting 01/12/2016.		

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Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
01.0	5 June 2015	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Issuance Keywords: programme of activities, verifying and certifying		