



TEMPLAT

MONITORING REPORT

PUBLICATION DATE **14.10.2020**

VERSION **v. 1.1**

RELATED SUPPORT - **TEMPLATE GUIDE Monitoring Report v. 1.1**

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Key Project Information

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KEY PROJECT INFORMATION

This template has been revised to aid a consistent interpretation and to better support project developers submitting documentation for certification. Please read the accompanying guide to understand how to complete this template accurately.

TEMPLATE GUIDE Monitoring Report v. 1.1

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Programme of Activity Information

GS ID of Programme	GS1988
Title of Programme	Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America
Version of POA-DD applicable to this monitoring report	Version 06 (date: 25/03/2016)
Name and GS ID of fully Validated CPA/VPAAs (i.e. non compliance check)	Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America: First VPA for Distribution of Dos por Tres Cookstoves in Honduras, GS2758

Key Project Information

GS ID (s) of Project (s)	GS2758
Title of the project (s) covered by monitoring report	Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America: First VPA for Distribution of Dos por Tres Cookstoves in Honduras
Version number of the PDD/VPA-DD (s) applicable to this monitoring report	Version 06 (date: 25/03/2016)
Version number of the monitoring report	1.1
Completion date of the monitoring report	23/04/2021
Date of project design certification	29/06/2010
Date of Last Annual Report	NA
Monitoring period number	11th Monitoring Period
Duration of this monitoring period	01/12/2019 to 30/11/2020
Project Representative	Esther Adams, Program Manager eadams@proyectomirador.org +1 (415) 925-1887
Host Country	Honduras

Activity Requirements applied	<input checked="" type="checkbox"/> Community Services Activities <input type="checkbox"/> Renewable Energy Activities <input type="checkbox"/> Land Use and Forestry Activities/Risks & Capacities <input type="checkbox"/> N/A
Methodology (ies) applied and version number	Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC), Version 2.0
Product Requirements applied	<input checked="" type="checkbox"/> GHG Emissions Reduction & Sequestration <input type="checkbox"/> Renewable Energy Label <input type="checkbox"/> N/A

Table 1 - Sustainable Development Contributions Achieved

Sustainable Development Goals Targeted	SDG Impact	Amount Achieved	Units/Products
SDG 13 Climate Action (mandatory)	Emission Reductions	271,291	VERs
SDG1 No Poverty	USD saved per week per household	1.43	USD
SDG1 No Poverty	Reduction in time spent collecting fuelwood	56%	%
SDG 2 Zero Hunger	Wood purchasers report they used the money saved to buy food	52%	%
SDG 3 Good Health and Well-Being	Reduction in personal exposure to PM2.5	47%	%
SDG 4 Quality Education	Annual training hours provided	346	Hours
SDG 5 Gender Equality	Satisfaction among stove beneficiaries	97%	%
SDG 5 Gender Equality	Stove users report improved cooking times	98%	%
SDG 5 Gender Equality	Mirador's direct employees are women	28%	%
SDG 7 Affordable and Clean Energy	Reduction of PM2.5 emissions resulting from cookstove intervention	79%	%
SDG 8 Decent Work and Economic Growth	Jobs created	174	Number of jobs
SDG 8 Decent Work and Economic Growth	Job satisfaction rate	96%	%

Table 2 – Product Vintages

Amount Achieved				
Start Dates	End Dates	VERs
01/12/2019	31/12/2019	22,904		
01/01/2020	30/11/2020	248,387		

SECTION A. DESCRIPTION OF PROJECT

A.1. General description of project

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Established in 2004, Proyecto Mirador is a non-profit organization that sells Gold Standard voluntary carbon offsets to finance the construction of improved cookstoves in Central America.

Mirador's project activity was originally certified by the Gold Standard in 2009 under a small-scale Project Design Document (PDD). In 2014 that project became the First Voluntary Project Activity (VPA) under the Gold Standard Programme of Activities (PoA), Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America.

The Coordinating/Managing Entity (CME), Proyecto Mirador Foundation, assumes responsibility for all communications with the VVB auditor and the Gold Standard, manages carbon finance certification and sustainability monitoring, receives and allocates all carbon revenues, and ensures VPA operations are properly funded and that proper resources are in place to meet construction targets.

Project implementation, stove construction and supply sourcing are managed locally under VPA supervision through the creation of local microenterprises. Such microenterprises include stove construction organizations, suppliers to provide specific stove construction components, and other vendors. Partnerships are formed with local community leaders to facilitate stove construction in each community.

This Monitoring Report covers the First VPA under Mirador's PoA, under which Proyecto Mirador replaces the traditional, inefficient fogón biomass cookstove with the improved Dos por Tres plancha-style chimney cookstove in Honduras. Since 2004 Proyecto Mirador has built more than 200,000 improved Dos por Tres cookstoves directly onsite in Honduran homes, providing economic and health benefits to over half a million people and creating sustainable local employment for 187 Hondurans. By reducing fuelwood consumption by about half, the Dos por Tres addresses the problem of forest degradation while also improving health and providing a significant savings in time and/or money to the client.

Per FAR #1, as established at CP2 renewal, PP shall carry out baseline surveys as and when institutional stoves are implemented. However, at this time, institutional stoves have not been implemented as a part of the project.

Following is a general description of the project's implementation and management structure.

(a) Purpose of the specific-case VPA and measures taken for GHG emission reductions:

Under the First VPA, Proyecto Mirador replaces the traditional, inefficient *fogón* biomass cookstove with the improved Dos por Tres plancha-style cookstove in Honduras, where degraded forest conditions, indoor air pollution and rural poverty exceed acceptable levels.

Honduras is one of the poorest countries in the Western Hemisphere, with nearly 48% of the population living in poverty, and 60.1% of people living in poverty in rural areas.¹ In rural areas, 6 out of 10 households live in extreme poverty, on less than

¹ World Bank, Honduras country overview. <http://www.worldbank.org/en/country/honduras/overview>

US\$ 1.90 per day.² Honduras also faces the highest level of economic inequality in Latin America, with rampant crime and violence being major contributing factors. Crime and violence are rampant, and the homicide rate is one of the highest in the world at 38 homicides per 100,000 inhabitants.³ Owing to crime, corruption and other factors, Honduras ranks 125th out of 185 countries globally In terms of ease of doing business, and 133rd out of 190 on the successful enforcement of contracts.⁴ Despite these obstacles, including the COVID-19 pandemic and two devastating hurricanes that hit Central America⁵, Mirador has successfully installed more than 85,768 cookstoves under the second crediting period, created 17 thriving microenterprises and provided 93 local jobs to Hondurans in areas where reliable employment is difficult to find. All of the components used to build the Dos por Tres, including the plancha (steel cooktop), chimney and ceramic firebox, are manufactured and sourced in Honduras providing a boost to local economies.

81% of rural households in Honduras use fuelwood for cooking⁶ and 65 percent of the country's total energy comes from fuelwood. Lower-income households are more dependent on wood because it is less costly than electricity or gas. The traditional *fogón* cookstove is in widespread use across Honduras, especially in rural areas. Chronic exposure to smoke from inefficient biomass cookstoves causes respiratory illness such as asthma, emphysema, acute respiratory lung infections (ARLI) and lung cancer. Such illnesses disproportionately affect women and children, who spend much of their time indoors while cooking and attending to other household responsibilities. In addition, woodcutting for private use contributes significantly to forest degradation, so reducing fuelwood consumption has a positive effect on forest conditions.

Wherever wood use is high, carbon savings from reduced wood use by the Dos por Tres is also high. Thus, carbon finance both helps Mirador to lower the cost of improved cookstove intervention and incentivizes us to serve rural areas where poverty is rampant. The Dos por Tres is the lowest cost plancha-style improved cookstove technology available in Honduras, and our unique "no cash" business model enables even the poorest households to access our program. We pride ourselves in serving the "last mile" and helping families that cannot afford to purchase improved cookstoves, and yet are able to coinvest in a stove with materials they can easily acquire.

Mirador donates to each client the plancha, the chimney and chimney top, the six custom ceramic pieces for the stove mouth or firebox, and the installation and training. These components are sourced and manufactured locally in Santa Barbara Department, Honduras, creating local jobs through 17 material provider businesses. Beneficiaries contribute the remaining components, including cement, rebar, bricks, adobe blocks and wood ash, all of which are commonly available throughout Honduras. This cost-sharing arrangement is part of Mirador's philosophy of "*No Cuesta, No Cuida*," which asserts that beneficiaries will better care for their donated stove if they invest some of their own resources in its acquisition.

Beneficiaries are clearly informed that the ownership of emission reductions shall reside with the CME. Each client must agree to relinquish any claims to ownership of emission reductions as a precondition to receiving the Dos por Tres. The concept is related at multiple stages during the process, including training materials presented at pre-construction Community Meetings as well as the training brochure presented to each

² Working for a World Free of Poverty <https://povertydata.worldbank.org/poverty/country/HND>

³ Ibid.

⁴ The World Bank, Economy Profile: Honduras, in Doing Business 2020: Comparing Business Regulation in 190 Economies. <https://openknowledge.worldbank.org/bitstream/handle/10986/32436/9781464814402.pdf>

⁵ <https://www.amnesty.org/es/latest/news/2020/12/devastating-impact-hurricanes-eta-iota-honduras/>

⁶ Government of Honduras, "Encuesta Nacional de Demografia y Salud (National Demographic and Health Survey), 2011-2012." http://pdf.usaid.gov/pdf_docs/pnaec215.pdf (p.19)

client at the time of installation. The brochure is provided for verification (see "VP11-08 Training Brochure.pdf.")

Beneficiaries are also required to remove the traditional stove that is being replaced. They are made aware of this requirement at the time they sign up to receive the stove. Also, during Mirador's training exercises, Stove Technicians are instructed to require the client to remove the traditional stove. Supervisors return later to ensure the stove has actually been destroyed, making a note on the account to follow up if that has not yet happened.

In order to ensure that only the baseline *fogón* is being replaced, the Executor (construction team leader) sends an Inspector to visit each household prior to installation. At that time the Inspector makes sure that a *fogón* is present and that it is the primary stove used for cooking.

(b) Description of the technology employed and installed equipment and/or infrastructure, including information requested by the eligibility criteria:

Under this VPA Proyecto Mirador exclusively installs its own proprietary "Dos por Tres" model improved cookstoves, in replacement of the less efficient traditional *fogón* baseline stove. A new Dos por Tres improves combustion efficiency and reduces fuelwood consumption by half, as compared to the baseline *fogón*, thus reducing the overall emission of greenhouse gases into the atmosphere due to cooking. Our stove's efficiency has been confirmed with 125, 4-day project scenario Kitchen Performance Tests (KPTs), with the data analysis performed by leading third-party industry experts. Additionally, third-party laboratory tests show that the Dos por Tres reduces Carbon Monoxide emissions and particulate matter by 79%, CO₂ by 43%, and CH₄ by 94% compared to traditional stoves (Aprovecho Research Center, 2009).

The Dos por Tres design is based on the original La Justa model stove, with structural modifications to improve efficiency, maximize safety and facilitate successful adoption. It is built *in situ* (directly installed at each home) and consists of a ceramic firebox for the stove mouth, a steel plancha (cooktop), a chimney, and a sophisticated system of insulated interior walls constructed from adobe blocks or ceramic bricks that channels the heat under the plancha and smoke and particulates out the chimney.

The structural modifications reflected in the Dos por Tres include the following: First, the grate in the stove mouth has been elevated slightly in order to raise the fuel off the stove floor, thus making the wood burn more thoroughly and efficiently. Second, the dimensions of the plancha have been changed, allowing the plancha to heat up faster and distribute the heat more evenly than before. Third, the plancha has been lowered closer to the level of the wood ash insulation in order to use the firepower of the stove more efficiently. Fourth, the chimney attachment has been modified to eliminate excess air circulation. From the user's point of view the Dos por Tres is functionally similar to the traditional *fogón*, making successful adoption seamless.

(c) Relevant dates for the specific-case CPA:

Start Date of the VPA: 01/05/2009

First Crediting Period: 01/05/2009 – 30/04/2016

Second Crediting Period: 01/05/2016 – 30/04/2023

11th Verification Period: 01/12/2019 – 30/11/2020

Stoves have been installed continuously, *in situ*, throughout the first crediting and second crediting period to date. The project has operated under Gold Standard certification since 01/05/2009, and the expected operational lifetime of the VPA is expected to be 21 years (7

years x 3 crediting periods) according to PoA provisions.

A.2. Location of project

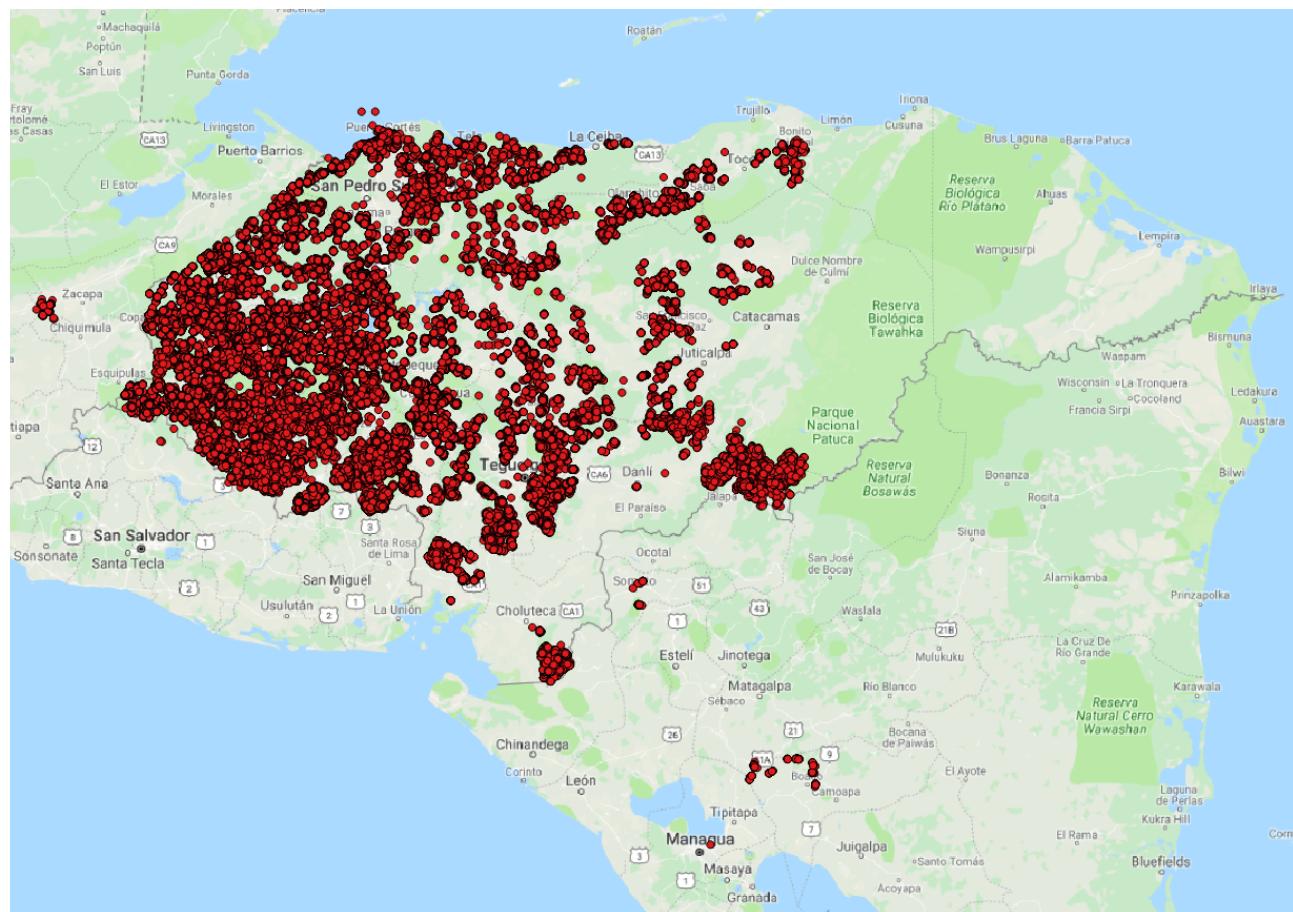
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i. Physical address

VPA project boundary is Honduras, which is located within the geographical boundary of the registered PoA. Host party is Honduras, a non-Annex 1 party to the 1992 UN Framework Convention on Climate Change. This VPA covers the construction of the Dos por Tres cookstove exclusively, and only as appropriate, wherever baseline conditions are similar and cluster definition is met. Project operations are headquartered Colonia Suyapa, Barrio Gualjoco in the municipality of Santa Bárbara, in Santa Bárbara Department, Honduras ($14^{\circ}56'49.1''N$ $88^{\circ}14'23''W$), with administrative offices in Greenbrae, California, USA.

ii. Map

GPS markings are kept for each stove installed and are available to the VVB for verification to ensure all stoves are within VPA project boundary. There is a unique identification for each stove included in the project activity.



Map with stove locations

A.3. Reference of applied methodology

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- Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC), Version 2.0
- Tool for the Demonstration and Assessment of Additionality, V 7.0.0

A.4. Crediting period of project

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01/05/2016 – 30/04/2023

7 years

SECTION B. IMPLEMENTATION OF PROJECT

B.1. Description of implemented project

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VPA1 is fully implemented and its status is “issued.” Since project inception almost 200,000 stoves⁷ have been installed across 16 Departments (provinces) in Honduras. Based on a reported average of 4.8 people per household, this translates to 960,000 people served — roughly 10% of the population of Honduras.

Proyecto Mirador Foundation, a U.S. based 501(c)3 non-profit corporation, receives carbon funds and donated equity capital and in turn distributes it to Proyecto Mirador LLC, a U.S. based 501(c)3 non-profit that is also registered as a non-profit in Honduras. Proyecto Mirador LLC’s U.S. office manages all activities related to carbon finance, certification and Gold Standard compliance, and funds all project operations. Stove building operations are managed from Proyecto Mirador LLC’s office in Santa Bárbara, Honduras.

Mirador’s co-founder and director, Doña Emilia Mendoza, has primary responsibility for the management team. She is assisted by a Director of Finance, a Director of International Expansion, and a Director of Operations who, in turn, manages a team of mid-level managers. These managers include a Manager of Technology, Manager of Human Resources, Manager of Communication and Manager of Supervision and Verification. In addition, the Director of Operations supervises stove construction entrepreneurs through Mirador’s outsourced Programa de Ejecutores. In this microenterprise program, entrepreneurs (whom we call Ejecutores) are trained and paid by Mirador to lead stove teams that build and install Dos por Tres stoves under Mirador’s leadership and verification.

Under the Programa de Ejecutores, scaling the project simply involves the addition of more Ejecutores, or encouraging existing Ejecutores to “pyramid up” and hire more stove building teams under their direction. Expansion thus creates additional jobs for Ejecutores and Stove Technicians; middle managers; supervisors and inspectors; material suppliers; IT providers and other support organizations. As of 30 November 2020, 25 Direct Employees in Honduras, 4 direct employees in USA, 90 Ejecutores and technicians (stove builders), 65 suppliers 3 indirect employees (USA) and an additional 17 material provider businesses are operating under Proyecto Mirador’s regimes in Honduras.

The management system covered in the PoA had already been implemented at the time of crediting period renewal (01/05/2016) and all components are still in place as described in the renewal PoA, including:

- Roles and responsibilities: Management hierarchy remains unchanged since PoA renewal except for the addition of a Director of International Expansion whose work is to direct Mirador’s expansion into Guatemala and Nicaragua.
- Training and capacity development: Structured training is ongoing and training structure remain unchanged since PoA renewal. Employee training data is provided in the attached file, “VP11-17 Training Data.xlsx.”
- Technical review for inclusion of VPAs: The request for inclusion of the second and third VPAs in Guatemala and Nicaragua, respectively, took place on 10/10/2020.
- 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

⁷ Including both first and second crediting periods.

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. While Mirador never builds cookstoves in homes where another ICS is in current use, we do see cases in which another carbon certified stove project has installed an ICS in homes where the Dos por Tres was already present. Mirador conducts extensive surveys to determine the prevalence of such cases and the results are tabulated in Parameter ID 9 - Leakage. Substantiating data collected on Salesforce.com is provided in the attached file, "VP11-16 Double Counting Data.xlsx."

- Records and documentation control processes: Documentation is maintained as described in the PoA, with data collection performed from Mirador's Honduras office and Gold Standard documentation and reporting conducted from its U.S. office.
- Continuous improvements of the PoA management system: Mirador's senior management meets regularly with office staff, Supervisors and Ejecutores to make sure operations are running efficiently and to facilitate communication between the departments. Mirador's Manager of Human Resources continues to review and improve training, management and communication systems on an ongoing basis. Periodically, Mirador's Honduran management meets with U.S. management in California to review systems and discuss further improvements to Mirador's operations. IT structures are reviewed frequently and revised as needed, including enhancements to SMS workflows and IT infrastructure.

B.1.1 Forward Action Requests

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FAR # 1: In case the PP is applying the Multi-stage sampling method, the PP is requested to follow the Guideline Sampling and surveys for CDM project activities and programmes of activities, Version 04.0 (i.e. section 2.1.5. Example 4 – Multi-stage sampling) for calculating the number of required clusters and sample size.

CME response: The CME is not applying the multi-stage sampling approach because the sample size and the geographic spread under said approach are not representative enough. Instead, the project has a sampling plan with larger sample size and better geographic representation. Another reason for not applying the multi-stage approach is that if the sample is grouped by stove age, the proportion is based on the proportion of cookstoves in operation (π_i) for each group, regardless of the share of age groups in each village. This results in underrepresentation of some age groups in some villages, making it difficult to reach the minimum sample size of 30 per age group.

Please see the file 'Multi-sampling approach comparison.xlsx' where the sample size under the multi-stage approach is compared with the sampling plan defined by the project. The document shows clearly that the project sampling plan is larger than the multi-stage sampling approach. In this regard, it is important to highlight that the final sampling size applied by the project is even larger than the plan described in the file, but the sampling plan is the starting point for the project to ensure there is a clear procedure defined.

FAR # 2: The PP shall submit the calibration records for their used scales for the KPT survey from following monitoring survey.

CME response: The calibration records of the scales used for the KPTs and supporting documents are submitted to the VVB. The documents submitted include the following:

- Calibration Records (Calibracion Balanzas 02 Nov 2020.xlsx)⁸
- Description of the iron cast standard mass for calibration (048-COT-RA-2020 Masa 20kg con certificado - Usada - Proyecto Mirador.pdf)
- Description of the iron cast standard mass for calibration (FADSA-CP-0058-20 Mirador.FIRMADO.pdf, FADSA-CP-0059-20 Mirador.FIRMADO.pdf, FADSA-CP-0060-20 Mirador.FIRMADO.pdf)⁹
- Equipment Inventory (Inventario Equipos de medicion KPT PM LLC.xlsx)
- Calibration Procedure (VP11-19 Scales calibration procedure.pdf)
- Tutorial video of calibration procedure
(https://drive.google.com/file/d/19o3Y2DXgRXVJ1_jDmGSFI8yF4k5qYwGB/view)

FAR # 3: The PP shall selected the Age groups for usage survey to be compliance with the applied methodology TPDDTEC: "to ensure conservativeness, participants in a usage survey with technologies in the first year of use (age 0-must have technologies that have been in use on average longer than 0.5 years. For technologies in the second year of use (age 1-2), the usage survey must be conducted with technologies that have been in use on average at least 1.5 years, and so on".

CMS response: The drop-off rate for all age groups has been defined in compliance with the applied methodology. The average age lies within the second semester of the respective age group (e.g. 0.5 years, 1.5 years etc.). Below is a summary of the average age for each group (see file VPA11-13 Dropoff Data.xlsx):

Age group (years)	Average age of stoves included in the drop-off calculation (years)	Tab and cell
0-1	0.51	Dropoff Y0_1 VP11, F7
1-2	1.51	Dropoff Y1_2 VP11, F7
2-3	2.52	Dropoff Y2_3 VP11, F7
3-4	3.59	Dropoff Y3_4 VP11, F7
4-5	4.50	Dropoff Y4_5 VP11, F7
5-6	5.70	Dropoff Y5_5 VP11, F7

For transparency, the referenced file, which contains the drop-off data, shows all the records included in the survey; however, only those that meet the above explained requirement are used for the drop-off calculation.

⁸ The relevant records for the VPA1 Honduras correspond to Scales #07b, #08b and #09b.
The calibration records include three readings for each scale; the average is calculated to define calibration.
The tolerance defined to consider the scales calibrated is $\pm 0.03\%$ as per the capacity of the equipment (50kg).
The date included in the calibration records corresponds to the first day of the KPT measurements. The same approach is taken to record the KPT results.

⁹ For quality control, the provider of the standard weight mass provided the electronic certificates with passwords. Please use the following passwords for opening the files:

FADSA-CP-0058-20 for 'FADSA-CP-0058-20 Mirador.FIRMADO.pdf'
FADSA-CP-0059-20 for 'FADSA-CP-0059-20 Mirador.FIRMADO.pdf'
FADSA-CP-0060-20 for 'FADSA-CP-0060-20 Mirador.FIRMADO.pdf'

FAR # 4: For the next monitoring, PP shall demonstrate compliance from Rule Update: Requirements and Guidelines for carrying out usage surveys for projects implementing improved cooking devices (Publication Date: 23/08/2017) in the MR.

CME Response: The document 'Compliance checklist for Usage Rate Guidelines VPA1 Honduras VP11 v1 16 April 2021.docx' provides detailed information about how the project is in compliance with 'Requirements and Guidelines for carrying out usage surveys for projects implementing improved cooking devices'.

B.2. Post-Design Certification changes

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N/A

B.2.1. Temporary deviations from the approved Monitoring & Reporting Plan, methodology or standardized baseline

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N/A

B.2.2. Corrections

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N/A

B.2.3. Changes to start date of crediting period

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N/A

B.2.4. Permanent changes from the Design Certified monitoring plan, applied methodology or applied standardized baseline

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N/A

B.2.5. Changes to project design of approved project

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N/A

SECTION C. DESCRIPTION OF MONITORING SYSTEM APPLIED BY THE PROJECT

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Proyecto Mirador's Monitoring System includes extensive training of stove beneficiaries at various stages in the stove construction process, including Community Meetings staged by the Ejecutor before construction; a home visit by an inspector to determine the correct stove location and assess appropriateness of the household prior to construction; direct training at the time of construction; and multiple follow-up visits after construction. Mirador has invested in a sophisticated, highly customized electronic monitoring system built on the Salesforce.com platform to monitor all aspects of our operations and to bring us closer to our clients. We are constantly refining our design, construction and supervision practices to optimize efficiency and guarantee successful stove adoption.

The quality of stove construction by each Technician is monitored through direct supervision by the Ejecutor as well as ongoing monitoring by Mirador's Director of Operations. Mirador's supervisory and electronic monitoring systems enable Mirador management to capture any maintenance issues or problems with stove use at the level of the household, so that the Ejecutor and Technician can take appropriate steps to correct user behavior. Ejecutores and Technicians are incentivized through higher construction allocations based on good construction performance.

All aspects of business are subject to audit by Director of Operations and Director of Proyecto Mirador LLC. The objective of the reviews is to ensure that the stove construction, training of the beneficiaries, and collection of monitoring information are being completed in an accurate and timely manner, as well as to support any ongoing third-party verification as part of the Gold Standard certification.

Since ongoing research and stakeholder consultation are vital components of a successful Gold Standard project, having solid "on-the-ground" resources provides a critical advantage for Mirador. Recommendations from the beneficiaries as to functional improvements or problems are explored and researched, then implemented if appropriate. Furthermore, as Mirador expands into new areas, local government leaders and NGOs are informed and consulted on an ongoing basis. Stakeholder feedback is channelled through the Ejecutores or Supervisors to Mirador management and reviewed regularly. When issues are relevant to construction or maintenance, beneficiaries are contacted or revisited by a Mirador Supervisor as appropriate.

Stakeholder feedback is either submitted directly by beneficiaries or gathered by Mirador's Supervisors and Ejecutores. In either case it is tracked electronically in Mirador's Electronic Feedback Log using Salesforce.com. All comments logged in the physical process book (kept in Mirador's office) are added to the electronic system as well. When relevant, stakeholder feedback is reviewed at weekly staff meetings and Mirador's responses are documented. In many cases stakeholder feedback results in follow-up visits to beneficiaries' homes by a specialized Mirador supervisor to address outstanding issues and repair any defects in construction. Responses and follow up are tracked appropriately. An export of the Electronic Feedback Log is provided to the VVB for review (see VP11-15 Stakeholder Comment 2020.xlsx).

The central aspect of our Monitoring Plan is an electronic monitoring database where all household information, as well as usage, maintenance, leakage and sustainability monitoring data, is kept. Data integrity is checked and maintained by the Director of Technology in Honduras on an ongoing basis. Throughout the process by which data is gathered and verified in the field, the office team, under the supervision of the Director of Technology, cross checks and reviews the data with various data de-duplication tools, checking it for quality, eliminating duplicates if found, and making sure that the required data is being captured on all records. The electronic database is automatically backed up. If any data is modified or changed, a record history is tracked.

Sales Record/Installation Record/Stove Database

CME keep its sales record electronically using the Salesforce.com platform. At the time of stove construction, a stove account record is created in the system to track the installation. Basic data for each account includes the following:

- Date of installation
- Location of installation
- Model/type of stove installed
- Model of use prior to installation of improved cookstove
- Name of client
- Government ID number of each client
- Unique serial number applied to each stove

The stove account record also provides the basis for all further interaction with the client. When any type of survey is conducted in a given household, the survey is created electronically from within the household record in the stove database and is thus automatically associated with that household. The database accepts survey data through a handheld interface and the desktop interface allows flexible reporting and data management on the administrative side.

Every time a Supervisor performs a follow-up visit to a household post-installation, the Supervisor enters basic data related to stove condition and maintenance and verifies user information. That data is entered using a handheld device and is used by Mirador Supervisors and Ejecutores to schedule additional training or repairs, if needed, and to streamline operations.

Equipment Specifications & Calibration

The specifications for all equipment used by Mirador for purposes of measurements related to emission reduction calculations are as follows:

Item	Equipment	Manufacturer	Model	Capacity	Number Inventory
1	Portable Digital Hook Scale	Dr meter	ES-PS01	110 lb/50 Kg	#01b
2	Portable Digital Hook Scale	Dr meter	ES-PS01	110 lb/50 Kg	#02b
3	Portable Digital Hook Scale	Dr meter	ES-PS01	110 lb/50 Kg	#03b
4	Portable Digital Hook Scale	Dr meter	ES-PS01	110 lb/50 Kg	#04b
5	Portable Digital Hook Scale	Dr meter	ES-PS01	110 lb/50 Kg	#05b
6	Portable Digital Hook Scale	Dr meter	ES-PS01	110 lb/50 Kg	#06b
7	Portable Digital Hook Scale	Dr meter	ES-PS01	110 lb/50 Kg	#07b
8	Portable Digital Hook Scale	Dr meter	ES-PS01	110 lb/50 Kg	#08b
9	Portable Digital Hook Scale	Dr meter	ES-PS01	110 lb/50 Kg	#09b
10	Humidity Meter	DELMHORST	BD-2100	6%-40%	49278
11	Humidity Meter	DELMHORST	BD-2100	6%-40%	49279
12	Humidity Meter	DELMHORST	BD-2100	6%-40%	49280
13	Humidity Meter	DELMHORST	BD-2100	6%-40%	49281

14	Humidity Meter	DELMHORST	BD-2100	6%-40%	51107
15	Humidity Meter	DELMHORST	BD-2100	6%-40%	51131
16	Cast Iron Grip (Standard Mass weight)	METTER TOLEDO	M1-20 KG	20 Kg	U-0254
17	Cast Iron Grip (Standard Mass weight)	METTER TOLEDO	M1-20 KG	20 Kg	U-1109
18	Cast Iron Grip (Standard Mass weight)	METTER TOLEDO	M1-20 KG	20 Kg	U-0406

Humidity Meter (used for KPT)

Prior to each test the user checks the calibration of the humidity meter using the Calibration Check Key. This key checks the meter calibration according to manufacturer specifications. Meter is in calibration if it displays 12% (± 0.2). Any other reading generally indicates low battery, in which case batteries are replaced and the meter is reset according to manufacturer specifications.

Digital Scale (used for KPT)

The digital scales are calibrated by checking the accuracy of the readings using a certified Cast Iron Grip (Standard Mass weight)¹⁰ of 20 kg. A calibration procedure ('VP11-18 Scales calibration procedure') has been defined and the Mirador staff have received a training on said procedure.¹¹

GPS Marking Device (used to mark stove locations)

Stove technicians use handheld devices to mark each stove location. GPS is reset at each location prior to measurement. GPS locations are digitally uploaded and matched to correct stove accounts in the Salesforce.com database using an automated data transfer process involving TaroWorks and Mogli SMS software.

¹⁰ The certificates are available for the verifier and the Gold Standard upon request.

¹¹ Educational videos are available for the verifier and the Gold Standard upon request.

SECTION D. DATA AND PARAMETERS

D.1. Data and parameters fixed ex ante or at renewal of crediting period

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Please refer to Mirador's GS4GG Transition Annex, Sections A.1 and A.2, for explanatory notes on how each Parameter below is specifically tied to the Relevant SDG Indicators noted.

Relevant SDG Indicator	13 – Climate Action • 13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
Data/parameter	ID 1 / EF_{fuel,CO₂}
Unit	tCO ₂ /TJ
Description	CO ₂ emission factor of the fuel that is reduced
Source of data	2006 IPCC Guidelines for National Greenhouse Gas Inventories 2.1, Volume 2: Energy (https://www.ipcc-nngip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_2_Ch2_Stationary_Combustion.pdf)
Value(s) applied)	112 tCO ₂ /TJ
Choice of data or measurement methods and procedures	IPCC default value
Purpose of data	Calculation of baseline and project emissions
Additional comments	

Relevant SDG Indicator	13 – Climate Action • 13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
Data/parameter	ID 2 / EF_{fuel,nonCO₂,CH₄}
Unit	tCO _{2e} /TJ
Description	CH ₄ emission factor for the fuel that is reduced
Source of data	2006 IPCC Guidelines for National Greenhouse Gas Inventories 2.1, Volume 2: Energy (https://www.ipcc-nngip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_2_Ch2_Stationary_Combustion.pdf)
Value(s) applied)	0.30
Choice of data or measurement methods and procedures	IPCC default value
Purpose of data	Calculation of baseline and project emissions
Additional comments	

Relevant SDG Indicator	13 – Climate Action • 13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
Data/parameter	ID 3 / EF_{fuel,nonCO₂,N₂O}
Unit	tCO ₂ e/TJ
Description	N ₂ O emission factor for wood that is reduced
Source of data	IPCC Default value
Value(s) applied)	0.004
Choice of data or measurement methods and procedures	2006 IPCC Guidelines for National Greenhouse Gas Inventories 2.1, Volume 2: Energy (https://www.ipcc-nrgip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_2_Ch2_Stationary_Combustion.pdf)
Purpose of data	Calculation of baseline and project emissions
Additional comments	

Relevant SDG Indicator	13 – Climate Action • 13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
Data/parameter	ID 4 / NCV_{fuel}
Unit	TJ/ton
Description	The Net Calorific Value (NCV) of the fuel that is substituted or reduced
Source of data	NCV for Red Oak, per Global Alliance for Clean Cookstoves, "WBT 4.2.4 Spreadsheet" (http://cleancookstoves.org/technology-and-fuels/testing/protocols.html) with reference to Cheremisinoff, N. Properties of Wood. Wood for Energy Production. Ann Arbor, MI, Ann Arbor Science: 31-43. 1980
Value(s) applied)	0.0186 TJ/ton
Choice of data or measurement methods and procedures	NCV for Red Oak
Purpose of data	Calculation of baseline and project emissions
Additional comments	

Relevant SDG Indicator	SDG 13
Data/parameter	EF _{p,non co2}

Unit	tCO ₂ /TJ
Description	Non-CO ₂ emission factor arising from use of fuels in project scenario
Source of data	GWP: IPCC AR4, https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-chapter2-1.pdf GWP: IPCC AR5, https://www.ipcc.ch/assessment-report/ar5/ CH ₄ and N ₂ O (GWP for CH ₄ = 28; GWP for N ₂ O = 265) Emission Factors: Emission Factor value provided in Table 2.5 of Chapter 2:Stationary Emissions (2006 IPCC Guidelines for National Greenhouse Gas Inventories). https://www.ipcc-nccc.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_2_Ch2_Stationary_Combustion.pdf
Value(s) applied	8.69 (value applied for ERs achieved from 01/12/2019 to 31/12/2019) 9.46 (value applied fro ERs achieved from 01/01/2020 onwards)
Choice of data or Measurement methods and procedures	(7.5*1.192 ((CH ₄ =0.3*GWP 25) + (N ₂ O=0.004*GWP 310)) (8.4*1.06 ((CH ₄ =0.3*GWP 28) + (N ₂ O=0.004*GWP 265)) Deemed valid by GS VER Methodology Determined as per IPCC default figures
Purpose of data	Determination of non-CO ₂ emission factor in baseline
Additional comment	This value has been updated based on the GS rule update 'APPLICABILITY OF GLOBAL WARMING POTENTIAL FOR GOLD STANDARD FOR THE GLOBAL GOALS PROJECTS PUBLICATION', dated 27/10/2020.

Relevant SDG Indicator	SDG 13
Data/parameter	EF _{b,non co2}
Unit	tCO ₂ /TJ
Description	Non-CO ₂ emission factor arising from use of fuels in baseline scenario
Source of data	GWP: IPCC AR4, https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-chapter2-1.pdf GWP: IPCC AR5, https://www.ipcc.ch/assessment-report/ar5/ CH ₄ and N ₂ O (GWP for CH ₄ = 28; GWP for N ₂ O = 265) Emission Factors: Emission Factor value provided in Table 2.5 of Chapter 2:Stationary Emissions (2006 IPCC Guidelines for National Greenhouse Gas Inventories). https://www.ipcc-nccc.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_2_Ch2_Stationary_Combustion.pdf

Value(s) applied	8.69 (value applied for ERs achieved from 01/12/2019 to 31/12/2019) 9.46 (value applied fro ERs achieved from 01/10/2020 onwards)
Choice of data or Measurement methods and procedures	(7.5*1.192 ((CH4=0.3*GWP 25) + (N2O=0.004*GWP 310)) (8.4*1.06 ((CH4=0.3*GWP 28) + (N2O=0.004*GWP 265)) Deemed valid by GS VER Methodology Determined as per IPCC default figures
Purpose of data	Determination of non-CO ₂ emission factor in baseline
Additional comment	This value has been updated based on the GS rule update 'APPLICABILITY OF GLOBAL WARMING POTENTIAL FOR GOLD STANDARD FOR THE GLOBAL GOALS PROJECTS PUBLICATION', dated 27/10/2020.

D.2 Data and parameters monitored

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Please refer to Mirador's GS4GG Transition Annex, Sections A.1 and A.2, for explanatory notes on how each Parameter below is specifically tied to the Relevant SDG Indicators noted.

Relevant SDG Indicator	15 – Life on Land 15.2.1 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation
Data/parameter:	ID 5 / fNRB,b,y
Unit	%
Description	The non-renewable fraction of the woody biomass harvested in the project collection area in year y in the baseline scenario
Measured/calculated/default	Measured
Source of data	Third-party NRB Analysis by Berkeley Air Monitoring Group (2011). Result adjusted downward to ensure conservativeness and align with recently validated project NRB figures.
Value(s) of monitored parameter	69%
Monitoring equipment	N/A
Measuring/reading/recording frequency	Fixed at the time of revalidation; can be updated at PP's option as allowed in Section III.1, item f, of the TPDDTEC.
Calculation method (if applicable)	Assessed in accordance with the CDM AMS II.G., <i>Energy efficiency measures in thermal applications of non-renewable biomass</i>
QA/QC procedures	Assessment shall be conducted by a reputable third-party forestry expert

Purpose of data	Calculation of project emissions
Additional comments	

Relevant SDG Indicator	13 – Climate Action • 13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
Data/parameter	ID 6 / Np,y
Unit	Number of project technology days
Description	Cumulative number of project technology-days included in the project database for project scenario p against baseline scenario b in year y
Measured/calculated/default	Measured
Source of data	Salesforce.com installation database
Value(s) of monitored parameter	38,566,912 days (Based on 98,998 total stoves in operation at the end of the 11 th Verification Period)
Monitoring equipment	Smartphones; Salesforce.com installation database
Measuring/reading/recording frequency	Ongoing
Calculation method (if applicable)	The value of Np,y is a function of the total stoves in use times days in operation and is updated on a monthly basis in the ER Calculations spreadsheet. The figure reported above represents an average of the monthly values for Np,y reported in the ER Calculations during VP11 (DZ57:EK57)
QA/QC procedures	Stoves are built <i>in situ</i> and a unique household account is created in the electronic database at the time of construction. Data integrity is checked and maintained by the Director of Technology in Honduras on an ongoing basis. Throughout the process by which data is gathered and verified in the field, the office team, under the supervision of the Director of Technology, cross checks and reviews the data with various data de-duplication tools, checking the data for quality, eliminating duplicates if found, and making sure that the required data is being captured on all records. The electronic database is automatically backed up. If any data is modified or changed, a record history is tracked. The Salesforce.com database holds the following information to identify each household using project technology: - Date of installation - Location of installation - Model/type of stove installed - Model of use prior to installation of ICS - Name of client - Government ID number of client - Unique serial number applied to each stove
Purpose of data	Calculate emission reductions and assess sustainability
Additional comments	A sales record including all stoves built during the 11th Verification Period is exported from Salesforce and provided in the attached "VP11-06 Sales Record.xlsx." A

	<p>monthly summary is provided in the attached "VP11-07 Stoves Installed by Month."</p> <p>3% of our clients report that there are days in the year when the stove is not in use. Of those 3%, the average number of days per year when the stove is not in use is 5.13 days. When averaged over the entire survey population, there is 0.95 day per year per household when the stove is not in use; thus, adjustments have not been made to the ER Calculations to account for seasonal variation. (Substantiation is provided in the attached "VP-09 Leakage Sustainability Results.")</p>
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Relevant SDG Indicator	15 – Life on Land • 15.2.1 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation
Data/parameter	ID 7 / Pp,b,y
Unit	Average daily dry wood fuel reduction per person-meal (tonnes/household/day)
Description	Specific fuel savings from an individual technology of project p against an individual technology of baseline b in year y.
Measured/calculated/default	Measured
Source of data	1,165 Kitchen Performance Tests (252 baseline and 930 project scenario) performed between 2010 and 2020 in multiple villages across 50 municipalities in 15 Departments (provinces) in Honduras. 162 of these were taken across 8 Departments for the 11 th Verification Period. (See "VP11-02 KPT Data.xlsx," "Location" worksheet.) For weighted average calculation see ER Calculations spreadsheet, "Assumption" worksheet, Cell H32.
Value(s) of monitored parameter	0.004618 t/household/day
Monitoring equipment	Compact digital hanging scale Zipper polyethylene bag Moisture meter with digital readout
Measuring/reading/recording frequency	Annual
Calculation method (if applicable)	Average fuel savings per person-meal, weighted on the basis of number of stoves in operation for each age group
QA/QC procedures	Equipment is calibrated at the start of each study. All KPT studies are managed by a supervisor who is specifically trained to oversee data collection and to spot potential errors in the reported figures. Any concerns are addressed and resolved onsite before data sheets are submitted for data entry. Data is compiled and reviewed by a third-party expert, with all outlier values individually checked and reviewed for accuracy.
Purpose of data	Calculation of emission reductions

Additional comments	Survey data is tabulated in the attached "VP11-02 KPT Data.xlsx" and parameter flows to "VP11-01 ER Calculations.xlsx," "Assumption" worksheet, Cell G20.
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Relevant SDG Indicator	13 – Climate Action • 13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population																								
Data/parameter	ID 8 / Up,y																								
Unit	% of households																								
Description	Abandonment (drop-off) rate (the number of stoves that have fallen out of use in a given age group)																								
Measured/calculated/default	Measured																								
Source of data	9,548 usage surveys collected in 375 villages during the 11 th Verification by Mirador supervisors on handheld devices and input directly into the Salesforce.com monitoring database, then exported and tabulated in the attachment "VP11-13 Dropoff Data.xlsx."																								
Value(s) of monitored parameter	The following monitored <i>cumulative</i> abandonment rates are applied for the 11th Verification Period: <table style="margin-left: 20px;"> <tr><td>Year 0_1</td><td>10%¹²</td></tr> <tr><td>Year 1_2</td><td>12%</td></tr> <tr><td>Year 2_3</td><td>10%¹³</td></tr> <tr><td>Year 3_4</td><td>10%</td></tr> <tr><td>Year 4_5</td><td>10%</td></tr> <tr><td>Year 5_6</td><td>12%</td></tr> </table> The average age of stove at the time of the survey for each age group is as follows: <table style="margin-left: 20px;"> <tr><td>Year 0_1</td><td>0.51 years</td></tr> <tr><td>Year 1_2</td><td>1.51 years</td></tr> <tr><td>Year 2_3</td><td>2.52 years</td></tr> <tr><td>Year 3_4</td><td>3.59 years</td></tr> <tr><td>Year 4_5</td><td>4.50 years</td></tr> <tr><td>Year 5_6</td><td>5.70 years</td></tr> </table>	Year 0_1	10% ¹²	Year 1_2	12%	Year 2_3	10% ¹³	Year 3_4	10%	Year 4_5	10%	Year 5_6	12%	Year 0_1	0.51 years	Year 1_2	1.51 years	Year 2_3	2.52 years	Year 3_4	3.59 years	Year 4_5	4.50 years	Year 5_6	5.70 years
Year 0_1	10% ¹²																								
Year 1_2	12%																								
Year 2_3	10% ¹³																								
Year 3_4	10%																								
Year 4_5	10%																								
Year 5_6	12%																								
Year 0_1	0.51 years																								
Year 1_2	1.51 years																								
Year 2_3	2.52 years																								
Year 3_4	3.59 years																								
Year 4_5	4.50 years																								
Year 5_6	5.70 years																								
Monitoring equipment	Surveys compiled by handheld device and uploaded to Salesforce.com database.																								
Measuring/reading/recording frequency	Annual																								
Calculation method (if applicable)	Total stoves abandoned out of total households surveyed																								
QA/QC procedures	Surveys are taken onsite, results are corroborated by visual inspection and tracked using Salesforce.com database.																								
Purpose of data	Calculation of emission reductions																								

¹² The value actual value monitored is 6% (see file 'VP11-13 Dropoff Data Rev.xlsx', tab 'SUMMARY Avg.', cell 'C8'), however, a value of 10% is adopted in order to align with 'GS Requirements and Guidelines for carrying out usage surveys for projects implementing improved cooking devices' that allows the project with Level B. Good Practice Monitoring Requirements to claim up to maximum 90%.

¹³ The value actual value monitored is 8% (see file 'VP11-13 Dropoff Data Rev.xlsx', tab 'SUMMARY Avg.', cell 'C8'), however, a value of 10% is adopted in order to align with 'GS Requirements and Guidelines for carrying out usage surveys for projects implementing improved cooking devices' that allows the project with Level B. Good Practice Monitoring Requirements to claim up to maximum 90%.

Additional comments	Monitored abandonment rates are cumulative, i.e., they reflect the total rate of abandonment for a given age group. Annual rates are extrapolated and applied to ER Calculations. Survey data is exported from Salesforce and tabulated in the attached "VP11-13 Dropoff Data.xlsx."
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Relevant SDG Indicator	13 – Climate Action <ul style="list-style-type: none"> 13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
Data/parameter	ID 9 / LEP,y
Unit	%
Description	Assess leakage sources including (1) replacement of efficient household heating sources with less efficient fuel; (2) continued use of baseline stove after installation; (3) double counting
Measured/calculated/default	Measured
Source of data	213 Leakage and Sustainability Surveys collected by Mirador supervisors in the 11 th verification period across 187 villages in 14 Departments (provinces) of Honduras.
Value(s) of monitored parameter	1,616 tonnes (0.7%)
Monitoring equipment	Surveys are taken onsite via handheld device and tracked using Salesforce.com database.
Measuring/reading/recording frequency	Ongoing
Calculation method (if applicable)	<p>(1) Leakage due to the replacement of efficient household heating sources was determined to be zero. Out of 213 respondents, zero answered that they use their 2x3 to heat the home outside of regular cooking activity.</p> <p>(2) Leakage due to the continued presence of a baseline stove was determined as follows:</p> <ul style="list-style-type: none"> Multiply the % of homes that have a <i>fogón</i> (12%) by the net stoves in operation, being the total stoves in the population for which ERs are being claimed, net of abandonment (98,998: see ER Sheet, cell EK53), which returns a value of 11,880 households affected. Reduce 11,880 according to the percent of total cooktime during which the <i>fogón</i> is in use in those households (5%: see Leakage Sustainability Results, "Summary" sheet, Cell G19), resulting in a value of 594. This is the number of cookstove equivalents for which emissions are not reduced. Multiply 594 (cookstove equivalents) by the annualized average of 2.72 ERs/stove (see ER Sheet, Row 69) = 1,616, the number of tonnes lost due to the presence of the auxiliary stove. ER claims are directly discounted by the absolute figure of 1,616 (see ER Sheet, cell EK72). <p>(3) Double counting was determined as follows:</p>

	<ul style="list-style-type: none"> • Count the total number of households surveyed for the presence of another ICS between November 2019-November 2020: 20,876 • Count the total number of households surveyed in which another ICS was present in the household: 22 • Divide these two figures to determine the ratio of households in which another ICS is present: 0.11% • Multiply 0.11% by the net stoves in operation, being the total stoves in the population for which ERs are being claimed, net of abandonment (98,998: see ER Sheet, cell EK53), which returns a value of 109 households affected. • Multiply 109 households by the annualized average of 2.72 ERs/stove (see ER Sheet, Row 69) = 296, the number of tonnes lost due to the presence of the auxiliary stove. ER claims are directly discounted by the absolute figure of 296 (see ER Sheet, cell EK73). <p>Considering the sources of leakage identified above, including discounts to prevent double counting, total leakage for the 11th Verification Period is 1,912 VERs, which equates to 0.7% of gross ERs (see ER Sheet, cell EK78).</p>
QA/QC procedures	Survey, on an ongoing basis, 1 of every 100 new Dos por Tres stove owners. Questionnaires to be administered by Mirador Supervisors.
Purpose of data	Calculation of leakage
Additional comments	Survey data is exported from Salesforce and tabulated in the attached "VP11-09 Leakage Sustainability Results.xlsx"

Relevant SDG Indicator	13 – Climate Action <ul style="list-style-type: none"> • 13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
Data/parameter	ID 10 / LEp,y – Leakage due to Transportation
Unit	%
Description	Assess leakage due to transportation
Measured/calculated/default	Measured
Source of data	Mileage records; transportation and maintenance records maintained and tabulated by the Assistant to the Director of Operations during the course of the 11 th Verification, including all vehicle types in use by the project at all levels (large trucks, light trucks and motorcycles).
Value(s) of monitored parameter	0%
Monitoring equipment	Vehicle odometers
Measuring/reading/recording frequency	Mileage records track miles driven on an ongoing basis for each vehicle, and the results are tabulated annually.

Calculation method (if applicable)	A standard online carbon calculator is used to calculate the total CO ₂ produced from driving the total distance driven. That figure is compared against the total emissions being claimed during the verification period in order to determine leakage. Transportation records for all Mirador vehicles are tabulated in the attached "VP11-14 Transportation Summary.xlsx" showing Mirador vehicles collectively drove 128,285 km (or 79,713 miles) during the 11th Verification Period. Mileage was recorded for 3 vehicle types (motorcycles, light pickups and delivery trucks) and emissions were assessed accordingly. Altogether the project emitted 42.65 tonnes of CO ₂ due to transportation during the 11 th Verification Period (see Cell E3, Summary sheet). That figure equates to 0.02% of the total emissions claimed, so it is disregarded as <i>de minimis</i> . (Source: http://www.nativeenergy.com/travel.html).
QA/QC procedures	Vehicle odometer checks at each instance of reporting
Purpose of data	Calculation of project emissions
Additional comments	It should be noted that: (1) such emissions also occur in the baseline scenario, and the consolidation of transit routes in the project scenario increases transportation efficiency relative to the baseline scenario, in which parts are often procured individually; and (2) due to the reduction in fuelwood use, the project is also expected to result in reduced leakage emissions due to the reduced need for transportation of fuel.

Relevant SDG Indicator	7 – Affordable and Clean Energy <ul style="list-style-type: none">• 7.3.1 Energy intensity measured in terms of primary energy and GDP
Data/parameter	ID 11 / % reduction in release of PM2.5
Unit	%
Description	Measurement of the reduction of PM2.5 emissions resulting from cookstove intervention.
Source of data	McCarty, Nordica & Still, Dean, "Results of Testing the Overlook Foundation Justa Stoves Including the '2 By 3' Stove: Fuel Use and Carbon/CO _{2eq} Savings" (2009)
Value(s) applied	79%
Choice of data or Measurement methods and procedures	The Water Boiling Test (WBT) was used to determine relative PM2.5 emissions in the baseline vs. project stove, as measured by Aprovecho's Research Center's commercially available Portable Emissions Measurement System (PEMS), in which real-time emissions of carbon dioxide (CO ₂), carbon monoxide (CO) and particulate matter (PMTSP) are recorded.
Purpose of data	Assess sustainability
Additional comment	Due to the cost and complexity of such studies, PP will maintain original monitored figures unless it is determined that baseline or project conditions have materially changed or testing methodologies require reassessment.

Relevant SDG Indicator	3 – Good Health and Well Being <ul style="list-style-type: none">• 3.9.1 Mortality rate attributed to household and ambient air pollution
Data/parameter	ID 12 / % reduction in personal exposure to PM2.5
Unit	%
Description	Measurement of the reduction of personal exposure to PM2.5 (as opposed to the overall reduction to PM2.5) resulting from cookstove intervention.
Source of data	Lefebvre, Olivier, "Health Impact of Proyecto Mirador 2x3 Stove" (2018)
Value(s) applied	47%
Choice of data or Measurement methods and procedures	Exposure to PM2.5 was measured in real-life control and intervention households using a the HAPEx Nano light scattering nephelometer. This device provides real time readings on PM2.5 and takes a new measurement every minute. It was worn by study participants in control and intervention groups during a 48-hour period.
Purpose of data	Assess sustainability
Additional comment	Due to the cost and complexity of such studies, PP will maintain original monitored figures unless it is determined that baseline or project conditions have materially changed or testing methodologies and/or assessment equipment have improved, in which case PP may opt to further assess the parameter.

Relevant SDG Indicator	1 – No Poverty <ul style="list-style-type: none">• 1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
Data/parameter	ID 13 / Time saved collecting fuelwood
Unit	Hours/week
Description	For clients who collect their own wood, PP will monitor how much time they have saved, and how they invest the time saved.
Measured/calculated/default	Calculated
Source of data	213 Leakage and Sustainability Surveys collected by Mirador supervisors in the 11 th verification period in multiple villages across 187 villages in 14 Departments (provinces) of Honduras.
Value(s) of monitored parameter	2.04 (a reduction of 56%)
Monitoring equipment	Surveys are taken onsite via handheld device and tracked using Salesforce.com database.
Measuring/reading/recording frequency	Ongoing
Calculation method (if applicable)	Subtract average time spent collecting wood in the project scenario from average time spent collecting wood in baseline scenario.

QA/QC procedures	Surveys are taken onsite, results are corroborated by visual inspection and tracked using Salesforce.com database.
Purpose of data	Assess sustainability
Additional comments	<i>Cross-reference to GS v2.2 documentation: ID 12 – Livelihood of the poor; ID 13 – Human & Institutional Capacity</i>

Relevant SDG Indicator	1 – No Poverty • 1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
Data/parameter	ID 14 / Money saved purchasing fuelwood
Unit	US Dollars
Description	For clients who purchase fuelwood, PP will monitor how much money clients save due to the reduction in fuelwood consumption and track how the saved funds are spent.
Measured/calculated/default	Calculated
Source of data	213 Leakage and Sustainability Surveys collected by Mirador supervisors in the 11 th verification period in multiple villages across 187 villages in 14 Departments (provinces) of Honduras.
Value(s) of monitored parameter	US\$ 1.43 (36 Honduran Lempiras ¹⁴) per week per HH, a reduction of 45%
Monitoring equipment	Surveys are taken onsite via handheld device and tracked using Salesforce.com database.
Measuring/reading/recording frequency	Ongoing
Calculation method (if applicable)	Subtract average money spent purchasing wood in the project scenario from average money spent purchasing wood in baseline scenario.
QA/QC procedures	Surveys are taken onsite, results are corroborated by visual inspection and tracked using Salesforce.com database.
Purpose of data	Assess sustainability
Additional comments	<i>Cross-reference to GS v2.2 documentation: ID 12 – Livelihood of the poor; ID 13 – Human & Institutional Capacity</i>

Relevant SDG Indicator	2 – Zero Hunger • 2.1.1 Prevalence of undernourishment
Data/parameter	ID 15 / % of people reporting they used money saved purchasing fuelwood to buy food
Unit	%

¹⁴ Base on Exchange rate 25.14 Lempiras per USD.

Description	For clients who report saving money due to the reduction in fuelwood purchased, PP will monitor how the saved funds are spent.
Measured/calculated/default	Measured
Source of data	213 Leakage and Sustainability Surveys collected by Mirador supervisors in the 11 th verification period in multiple villages across 187 villages in 14 Departments (provinces) of Honduras.
Value(s) of monitored parameter	52%
Monitoring equipment	Surveys are taken onsite via handheld device and tracked using Salesforce.com database.
Measuring/reading/recording frequency	Ongoing
Calculation method (if applicable)	N/A
QA/QC procedures	Surveys are taken onsite, results are corroborated by visual inspection and tracked using Salesforce.com database.
Purpose of data	Assess sustainability
Additional comments	<p>See Parameters ID 13 and ID 14 for qualitative data showing savings of time and money. While direct monetary savings is the monitored parameter for SDG 2, it should be noted that time savings (for those who collect their fuelwood) can also translate to higher income, if saved time is dedicated to work that generates income.</p> <p><i>Cross-reference to GS v2.2 documentation:</i> <i>ID 12 – Livelihood of the poor; ID 13 – Human & Institutional Capacity</i> Cross-reference to GS v2.2 documentation: <i>ID 12 – Livelihood of the poor; ID 13 – Human & Institutional Capacity</i></p>

Relevant SDG Indicator	7 – Affordable and Clean Energy • 7.3.1 Energy intensity measured in terms of primary energy and GDP
Data/parameter	ID 16 / % of households that report the air inside the home is cleaner
Unit	%
Description	Households are surveyed to determine if they report the air is cleaner after installation of the Mirador stove.
Measured/calculated/default	Measured
Source of data	213 Leakage and Sustainability Surveys collected by Mirador supervisors in the 11 th verification period in multiple villages across 187 villages in 14 Departments (provinces) of Honduras.
Value(s) of monitored parameter	100%

Monitoring equipment	Surveys are taken onsite via handheld device and tracked using Salesforce.com database.
Measuring/reading/recording frequency	Ongoing
Calculation method (if applicable)	N/A
QA/QC procedures	Surveys are taken onsite, results are corroborated by visual inspection and tracked using Salesforce.com database.
Purpose of data	Assess sustainability
Additional comments	<i>Cross-reference to GS v2.2 documentation: ID 11 – Air Quality</i>

Relevant SDG Indicator	4 – Quality Education • 4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex
Data/parameter	ID 17 / Training hours provided per year
Unit	Hours/year
Description	Demonstrate the transfer of useful and marketable job skills to local direct and indirect employees through training records.
Measured/calculated/default	Measured
Source of data	Human resource training records, provided by Director of Human Resources (see "VP11-17 Training Data.xlsx").
Value(s) of monitored parameter	346 hours
Monitoring equipment	N/A
Measuring/reading/recording frequency	Ongoing
Calculation method (if applicable)	N/A
QA/QC procedures	Human resources specialist tracks all hours spent by Mirador employees and associates in various types of training and/or certification programs.
Purpose of data	Assess sustainability

Additional comments	<p><i>Cross-reference to GS v2.2 documentation: ID 16 – Technology Transfer</i></p> <p>Trainings conducted during the 11th Verification Period:</p> <p>Office training</p> <table border="1" data-bbox="639 377 1298 916"> <thead> <tr> <th>Type</th><th>Number of attendees</th><th>Number of trainings</th></tr> </thead> <tbody> <tr> <td colspan="3" style="text-align: center;">Technicians</td></tr> <tr> <td>Technician trainees</td><td>7</td><td>3</td></tr> <tr> <td>Technicians</td><td>67</td><td>1</td></tr> <tr> <td colspan="3" style="text-align: center;">Technology</td></tr> <tr> <td>SMS/Activation</td><td>24</td><td>1</td></tr> <tr> <td>New Supervisors</td><td>3</td><td>1</td></tr> <tr> <td>Inspectors</td><td>29</td><td>1</td></tr> <tr> <td colspan="3" style="text-align: center;">Ejecutores</td></tr> <tr> <td>New Ejecutores</td><td>1</td><td>1</td></tr> <tr> <td>Ejecutores</td><td>5</td><td>1</td></tr> <tr> <td>Others (team bosses)</td><td>0</td><td>0</td></tr> <tr> <td>Zoom Meetings with the U.S. team</td><td>10</td><td>9</td></tr> <tr> <td>Online Trainings</td><td>15</td><td>2</td></tr> </tbody> </table> <p>Training of technicians by ejecutores</p> <table border="1" data-bbox="639 1017 1218 1477"> <thead> <tr> <th>Name</th><th>Number of trainings</th><th>Attendees</th></tr> </thead> <tbody> <tr> <td>Josue Zaldivar</td><td>2</td><td>7</td></tr> <tr> <td>Fredy Pineda</td><td>2</td><td>7</td></tr> <tr> <td>Olvin Trochez</td><td>1</td><td>3</td></tr> <tr> <td>Jamil Rodriguez</td><td>3</td><td>10</td></tr> <tr> <td>Daniel Morazán</td><td>1</td><td>7</td></tr> <tr> <td>Felipe Garcia</td><td>1</td><td>14</td></tr> <tr> <td>Aristides Lara</td><td>1</td><td>12</td></tr> <tr> <td>Nelson Parrales</td><td>1</td><td>12</td></tr> <tr> <td>Oficina</td><td>2</td><td>14</td></tr> </tbody> </table>	Type	Number of attendees	Number of trainings	Technicians			Technician trainees	7	3	Technicians	67	1	Technology			SMS/Activation	24	1	New Supervisors	3	1	Inspectors	29	1	Ejecutores			New Ejecutores	1	1	Ejecutores	5	1	Others (team bosses)	0	0	Zoom Meetings with the U.S. team	10	9	Online Trainings	15	2	Name	Number of trainings	Attendees	Josue Zaldivar	2	7	Fredy Pineda	2	7	Olvin Trochez	1	3	Jamil Rodriguez	3	10	Daniel Morazán	1	7	Felipe Garcia	1	14	Aristides Lara	1	12	Nelson Parrales	1	12	Oficina	2	14
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Relevant SDG Indicator	5 – Gender Equality • 5.5.2 Proportion of women in managerial positions
Data/parameter	ID 18 / Proportion of employees who are women
Unit	%
Description	Employment records showing the proportion of women employed, by job type
Measured/calculated/default	Measured
Source of data	Employment records provided by Director of Human Resources (see "VP11-12 Quantitative Employment.xlsx" – "Mujeres" worksheet).
Value(s) of monitored parameter	28% (direct employees) 6% (overall, including all field personnel)

Monitoring equipment	N/A
Measuring/reading/recording frequency	Ongoing
Calculation method (if applicable)	N/A
QA/QC procedures	Human resource specialist maintains ongoing log of direct and indirect employees by employee type
Purpose of data	Assess sustainability
Additional comments	<p>While the gender balance of Mirador's managerial and office positions is rather even, despite sincere efforts it is extremely difficult to find women who are willing to fill stove construction jobs—partly because it is physically very taxing, but especially because it involves long periods of time away from home and family. We are continually striving to find ways to creatively address this issue. In VP11 the number of female employees in our direct workforce decreased to 6%.</p> <p><i>Cross-reference to GS v2.2 documentation: ID 15 – Quantitative Employment and Income Generation</i></p>

Relevant SDG Indicator	5 – Gender Equality <ul style="list-style-type: none"> • 5.c.1 Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment
Data/parameter	ID 19 / Improvement in Cooking Times
Unit	%
Description	Qualitative surveys to determine if the 2x3 cooks faster, slower or the same
Measured/calculated/default	Measured
Source of data	213 Leakage and Sustainability Surveys collected by Mirador supervisors in the 11 th verification period in multiple villages across 187 villages in 14 Departments (provinces) of Honduras.
Value(s) of monitored parameter	98%
Monitoring equipment	Surveys are taken onsite via handheld device and tracked using Salesforce.com database.
Measuring/reading/recording frequency	Ongoing
Calculation method (if applicable)	% of respondents that say the Dos por Tres cooks faster
QA/QC procedures	Surveys are taken onsite, results are corroborated by visual inspection and tracked using Salesforce.com database.
Purpose of data	Assess sustainability

Additional comments	Reduced time spent cooking allows women to have more discretionary time that they can spend as they wish, rather than doing the cooking task assigned to them. Usage monitoring with Sums devices in 2018 confirmed that the average cooking event performed on the 2x3 was 11% shorter (20 minutes) than the average cooking event performed on the traditional fogón. ¹⁵
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Relevant SDG Indicator	5 – Gender Equality • 5.c.1 Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment
Data/parameter	ID 20 / % of users who say there is something they don't like about the stove
Unit	%
Description	Qualitative surveys to demonstrate the % of users who say there is something they don't like about the stove
Measured/calculated/default	Measured
Source of data	213 Leakage and Sustainability Surveys collected by Mirador supervisors in the 11 th verification period in multiple villages across 187 villages in 14 Departments (provinces) of Honduras.
Value(s) of monitored parameter	3% (Users indicated the stove requires too much maintenance)
Monitoring equipment	Surveys are taken onsite via handheld device and tracked using Salesforce.com database.
Measuring/reading/recording frequency	Ongoing
Calculation method (if applicable)	N/A
QA/QC procedures	Surveys are taken onsite, results are corroborated by visual inspection and tracked using Salesforce.com database.
Purpose of data	Assess sustainability
Additional comments	Women in Central America spend a large part of their time cooking. Mirador eases their burden by providing a stove that functions to their satisfaction.

Relevant SDG Indicator	8 – Decent Work and Economic Growth • 8.8.2 Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status
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¹⁵ Lefebvre, Olivier (Climate Solutions), "Health Impact of Proyecto Mirador 2x3 Stove" (2018)

Data/parameter	ID 21 / % of Mirador employees and microenterprises who report they are satisfied with their jobs
Unit	%
Description	Results of qualitative annual survey to employees showing job satisfaction
Measured/calculated/default	Measured
Source of data	Online survey administered by Director of Human Resources. Raw data for the employee survey is provided in the file "VP11-10 Employee Survey Export.xlsx," and the survey template is provided as "VP11-11 Employee Questionnaire.pdf."
Value(s) of monitored parameter	96%
Monitoring equipment	Annual qualitative survey administered electronically or on paper and tabulated electronically.
Measuring/reading/recording frequency	Annual
Calculation method (if applicable)	N/A
QA/QC procedures	Surveys are taken onsite, results are corroborated by visual inspection and tracked using Salesforce.com database.
Purpose of data	Assess sustainability
Additional comments	<i>Cross-reference to GS v2.2 documentation: ID 14 – Quality of Employment</i>

Relevant SDG Indicator	8 – Decent Work and Economic Growth • 8.5.2 Unemployment rate, by sex, age and persons with disabilities
Data/parameter	ID 22 / Quantitative employment by job type
Unit	Number of Employees
Description	Employment records showing the number of people employed by the project (direct and indirect)
Measured/calculated/default	Measured
Source of data	Employment records provided by Director of Human Resources (see "VP11-12 Quantitative Employment.xlsx" – "Empleados" worksheet).
Value(s) of monitored parameter	181
Monitoring equipment	N/A
Measuring/reading/recording frequency	Ongoing
Calculation method (if applicable)	N/A
QA/QC procedures	Human resource specialist maintains ongoing log of direct and indirect employees by employee type
Purpose of data	Assess sustainability

Additional comments	<i>Cross-reference to GS v2.2 documentation: ID 15 – Quantitative Employment and Income Generation</i>
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Relevant SDG Indicator	13 – Climate Action • 13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
Data/parameter	ID 23 / Tonnes of CO₂ reduced
Unit	mtCO ₂ e
Description	Number of tonnes of CO ₂ reduced in a given monitoring period
Measured/calculated/default	Measured
Source of data	Emission reduction calculations, as detailed and applied in the validated file "VP11-01 ER Calculations.xlsx."
Value(s) of monitored parameter	271,291
Monitoring equipment	N/A
Measuring/reading/recording frequency	Annual
Calculation method (if applicable)	Detailed in ER Calculations spreadsheet
QA/QC procedures	3 rd -party VVB verification; Sustain-Cert review
Purpose of data	Assess sustainability; calculation of baseline and project emissions
Additional comments	Further detail provided in Section E of this Monitoring Report

D.3. Comparison of monitored parameters with last monitoring period

Data/Parameter	Value obtained in this monitoring period	Value obtained last monitoring period		
ID 5 / fNRB,b,y Fraction of non-renewable biomass	69%	69%		
ID 6 / Np,y Number of project technology days	38,566,912	37,825,519		
ID 7 / Pp,b,y Average daily dry wood fuel reduction per person-meal (tonnes/household/day)	0.004618	0.004601		
	Year 0_1 Year 1_2 Year 2_3 Year 3_4 Year 4_5 Year 5_6	10% 12% 10% 10% 10% 12%	Year 0_1 Year 1_2 Year 2_3 Year 3_4 Year 4_5 Year 5_6	4% 7% 15% 14% 38% 54%
ID 8 / Up,y Abandonment (drop-off) rate				

ID 9 / LEp,y Assess leakage sources including (1) replacement of efficient household heating sources with less efficient fuel; (2) (2) continued use of baseline stove after installation; (3) double counting.	1,616 tonnes (0.7%)	2,797 tonnes (1%)
ID 10 / LEp,y Leakage due to Transportation	0%	0%
ID 11 / % reduction in release of PM2.5	79%	79%
ID 12 / % reduction in personal exposure to PM2.5	47%	47%
ID 13 / Time saved collecting fuelwood (Hours/week)	2.04	4.52
ID 14 / Money saved purchasing fuelwood	US\$ 1.42 (35 Honduran Lempiras) per week per HH, a reduction of 45%	US\$ 2.15 (53 Honduran Lempiras) per week per HH, a reduction of 50%
ID 15 / % of people reporting they used money saved purchasing fuelwood to buy food	52%	59%
ID 16 / % of households that report the air inside the home is cleaner	100%	100%
ID 17 / Training hours provided per year	346 hours	676 hours
ID 18 / Proportion of employees who are women	28% (direct employees) 6% (overall, including all field personnel)	36% (direct employees) 7% (overall, including all field personnel)
ID 19 / Improvement in cooking times	98%	99%
ID 20 / % of users who say there is something they don't like about the stove	3%	1%
ID 21 / % of Mirador employees and microenterprises who report they are satisfied with their jobs	96%	96%
ID 22 / Quantitative employment by job type	181	174
ID 23 / Tonnes of CO ₂ reduced	271,291	275,893

All the parameters reported are consistent with the previous verification period, with the exception of ID 8 / Up,y Abandonment (drop-off) rates for ages groups 3-4, 4-5 and 5-6 years old, which reported lower values. The CME didn't identify one single reason that could explain the difference; instead, the change may be attributed to several factors that in combination resulted in lower drop-off rates. The table below summarizes the measures applied in recent years that likely contributed.

Good practices and measures implemented to enhance the performance of the Dos por Tres Stoves

Item	Year of implementation	Strategy or measure applied	Description	Change expected or obtained
1	2013	Customer/beneficiary requirements compliance form	This form captures the general data from the client. The data collected is verified to ensure it is in compliance with the PoA requirements to receive the stove. The benefits of using the project stove are also explained. The client's interest in the stove and understanding of the project are confirmed.	Stoves are built for clients that indeed meet the requirements and have accepted the project conditions.
2	2013	Base metal sheets	Aluzinc (aluminum-zinc alloy) sheets were added at the bottom of the chimney and at the top of the smoke exhaust.	Less resistance to the smoke flow and an even surface that makes stove maintenance easier.
3	2013	Change of galvanized sheet to Aluzinc	Changed the material used to make chimneys. Galvanized metal sheet is no longer used; instead, Aluzinc (aluminum-zinc alloy) sheets are used to build the chimneys.	Aluzinc chimneys last longer and the material is of better quality.
4	2014	Team "Ghostbusters"	A team was created to give assistance to stoves that reported problems; many of the findings of this team have served to make modifications in training and in the construction of the stove.	Less stoves reported with problems; strategies for resolving stove problems increased significantly.
5	2014	Taller chimneys	The "Ghostbuster" team identified that the chimneys should protrude at least 1 foot above the highest part of the roof; this improves air suction and therefore, combustion in the stove.	Stoves with better suction and performance.
6	2017	thickness of the "Lomo" (the back-end wall of the rocket elbow)	Increased the thickness of the Lomo in the combustion chamber to make it stronger and prevent it from breaking when wood is introduced into the stove.	Reduction in the incidence of combustion chambers damaged by customers.
7	2018	Dimensions and aesthetics of the newly built stove	In the visit of the technician, emphasis was increased on verifying the exact dimensions in the construction of the stoves (internal measurements) as well as the aesthetics of the stove.	Stoves built in exact compliance with the dimensions of the "2x3" model; better performance in fuel savings compared to previous years.
8	2018	Construction inside the houses	Increased pressure on beneficiaries to allow stoves to be built inside the houses.	Fewer misplaced stoves that occasionally ended up in disuse.

9	2019	Technician Validation	Mirador's internal validation process requires each active stove technician to pass an annual evaluation in our stove workshop (office). During this validation he must build a stove and give a maintenance talk. The stove and the talk are evaluated and the technician gets a grade; details for improvement are observed; and corrections are made immediately.	Greater commitment on the part of technicians and Ejecutors to the quality of construction and the talk they give to the client.
10	2019	Quality control pieces and parts	A set of standards was implemented for each supplier of combustion chambers. This allows Mirador to determine if a manufacturer is delivering materials that are outside the requested specifications. This enables us to demand the mistakes are corrected. Samples of plates and chimneys are reviewed to verify that they meet the specifications.	More resistant combustion chambers, chimneys and plates with better finish and presentation.
11	2019	Ejecutor debugging	Following intensive evaluations and follow-up by Mirador management, several teams of Ejecutores were not allowed to continue providing their services to Mirador.	Teams of Ejecutores that remain continuously active improved work quality and performance.
12	2019	More cement and less steel	A whole bag was used for the mixture with which the stove is built; and the thickness of the reinforcing steel was reduced from 3/8" to 1/4".	Higher concrete strength and fewer cracks in stove top casting.
13	2019	Dos por Tres Stove Construction Guide	A guide was created and published that shows step by step how to build a Dos por Tres stove. This guide was shared with all work teams to serve as preparation and reinforcement material for technical staff.	Better trained technicians and higher quality stoves.
14	2020	Stove activation using TaroWorks	A form was created to activate the stove in our database once built. At that time, the following data are collected: photo of the built stove, photo of the stove chimney, GPS mark (to verify that the built stove is in the same location as originally specified), number of chimney pipes used.	The construction work of each technician can be observed in real time, day by day. This allows immediate follow-up of construction errors through photographs.

15	2020	Inspector Validation	Evaluation of new inspectors to verify that they are proficient with procedures and can successfully perform a customer engagement exercise. Their work is evaluated and corrections are made immediately.	Inspectors who are better prepared to approach clients.
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It was pertinent to include in the above summary the measures taken years ago, because the impact or effect of each measure is seldom perceived immediately, but it is more evident after several years: precisely, in the older age groups where drop-off figures have improved.

Despite the fact older stoves reported lower drop-off rate, the overall emission reductions did not increase (VP10 – 275,893 tCO₂e vs. VP11 – 271,291 tCO₂e); therefore, the difference in the drop-off rate may not be considered critical.

The two tables below help to compare the share of operational stoves by age group, between this and the previous verification period. Although the drop-off rates for older age groups are lower, proportionally (as % of operational stoves and weighted fuel savings), the values are not anomalous.

11th Verification Period: Operational stove and share as per age group

Age of Stoves	Operational Stoves	% of operational stoves	Weighted fuel saving
Age 0_1	19,432	19%	0.000952
Age 1_2	20,876	20%	0.000973
Age 2_3	18,904	18%	0.000889
Age 3_4	15,214	15%	0.000670
Age 4_5	14,614	14%	0.000562
Age 5_6	14,594	14%	0.000561
Total operational stoves (average)	103,633	100%	0.004608

11th Verification Period: Operational stove and share as per age group

Age of Stoves	Operational Stoves	% of operational stoves	Weighted fuel saving
Age 0_1	12,680	13%	0.000643
Age 1_2	18,323	18%	0.000885
Age 2_3	20,730	21%	0.001009
Age 3_4	19,656	20%	0.000897
Age 4_5	14,481	14%	0.000576

Age 5_6	14,200	14%	0.000617
Total operational stoves (average)	100,069	100%	0.004627

Finally, the special circumstance of COVID-19 may cause changes in the patterns of usage; people staying at home longer due to the quarantine resulted in higher usage rates and thus, higher absolute fuelwood reduction per household.

D.4. Implementation of sampling plan

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A single sampling plan was applied to VPA1, the only VPA currently registered under this PoA. The sampling plan is noted below.

(a) *Description of implemented single sampling plan:*

CME follows all requirements set forth in the Gold Standard methodology *Technologies and Practices to Displace Decentralized Thermal Energy Consumption, Version 2.0*; and the CDM EB 69, Annex 4, *Standard for Sampling and Surveys for CDM Project Activities and Programme of Activities*. The objective of the sampling effort is to monitor the value of each parameter (PoA Section B.7.1). Monitoring for all VPAs has been ongoing since VPA implementation. CME carries out all survey procedures so as to ensure monitoring is representative of typical technology and fuel use practices among the target group.

Target population is the total population served under the PoA, defined as household or institutional users of inefficient biomass stoves. For sampling the project population, the sampling frame is the sales/project database. For sampling baseline households, the sampling frame is Mirador's collection of solicitations from villages that wish to receive the Dos por Tres, with each solicitation containing the names, government ID numbers and phone numbers (as available) of all interested *fogón* users in each village who wish to have their stoves replaced. Project KPTs and surveys were conducted throughout the 11th Verification Period.

(b) *Collected data*

Leakage and Sustainability Survey

During the 11th Verification Period 213 Leakage and Sustainability surveys were administered across 187 villages in 14 Departments to every *n*th household that received a household visit from a Mirador supervisor. At the time households were selected for regular follow-up visits following installation, office staff marked every *n*th household to receive the survey in addition to the follow-up visit and regular Maintenance Survey. As such, the Supervisor has no control over which household is surveyed; the surveys are taken throughout the year by different personnel, and a full geographic and demographic spectrum of project beneficiaries is represented. Thus, the sample group is representative of the entire target population.

For older stoves, households were selected at random from villages that are close to routes used to access villages in the regular follow-up visit schedule for stoves in their first 1.5 years of operation. Since stoves are built and surveyed in diverse areas throughout the project area on an ongoing basis, the sample base is wide enough to provide a fully representative sampling for older stoves. 12% of the surveys (25 in total) were taken in households with stoves older than 1.5 years.

Usage Survey

Applicable Parameters: ID 8

Sample group was determined as follows:

Using the electronic monitoring database, a supervisory team manager generates a complete list of villages containing stoves within a given age group. In order to streamline workflow and minimize cost while providing a broad representation of each age group, each list is compared against the locations where all Supervisors are programmed to perform follow-up visits on new installations. Keeping geographic diversity as a primary objective, each Supervisor is assigned several villages along or near his or her planned routes in which to perform surveys on older stoves. At any given moment Mirador's team of Supervisors is divided amongst several Departments; likewise, each Supervisor visits and performs follow-up surveys in several departments over the course of a year. Thus, the entire project area is adequately represented by this approach.

Once the villages are selected, a complete list of beneficiaries is generated showing all households included each installation; then households are chosen at random from the list. Sample sizes follow the Gold Standard approved baseline and monitoring methodology, *Technologies and Practices to Displace Decentralized Thermal Energy Consumption*, v.2 (hereinafter referred to as TPDDTEC), which requires that at least 30 surveys be taken of stoves in each age group to determine drop-off, with a minimum total sample size of 100. In every case the minimum sample of size of 30 houses per age group was exceeded and the total sample size exceeds 100. (The large first- and second-year sample sizes reflect that an abandonment survey is conducted in every household that receives a regular supervisory visit from Mirador.)

Actual drop-off survey sample sizes for the 11th Verification Period are as follows:

Stove Age Group	# of Drop-off surveys	# of villages included	Minimum size achieved?
0_1 Years	3,725	244	Yes
1_2 Years	1,324	88	Yes
2_3 Years	146	15	Yes
3_4 Years	42	11	Yes
4_5 Years	30	8	Yes
5_6 Years	38	9	Yes

The "Rule Update: Requirements and Guidelines for carrying out usage surveys for projects implementing improved cooking devices" was accounted for as follows:

The weighted average usage rate across the total stove population for which ERs are claimed is 89% (see "VP11-18 Usage Weighted Average"). As this figure is below 90%, PP shall monitor in compliance with Level B – Good Practice. Accordingly, the requirements for both Level A and Level B are observed, as detailed below.

A. Mandatory Monitoring Requirements

Step 1. Defining stove use and non-use

Stove is considered out of use if the visual or verbal check reveals any of the following:

- The beneficiary states they have stopped using the stove
- The stove mouth, chimney or plancha have been removed or modified
- The chimney has deteriorated beyond the point of efficiency
- The stove is otherwise no longer reasonably intact as built
- The stove appears to be out of use (i.e., the stove is cold at the time survey is taken, and clothes/dishes/other household items are sitting on top of it, etc.)

- The beneficiary has moved out of the house
- Traditional cookstove or project cookstove other than the Dos por Tres is in primary use (note that minimal use of other stove types for isolated cooking tasks is factored into ER calculations as leakage)
- Ash is not present, indicating the stove has not been used

Step 2. Household Usage Survey

- Kitchen Observation – Mirador surveyors visit each household and interview the beneficiary in person.
- Interview with the primary cook – At each household visit, the primary cook is interviewed if present, verbal responses are corroborated by visual check and hand-on assessment of the cookstove, and stove stacking is accounted for when applicable.
- Photos of the cooking area – At each household visit, Mirador supervisors take a photo of the cook next to the Dos por Tres. Photos are stored in our Salesforce.com monitoring database and correlated to each household record such that the photos can be downloaded in whole or in part, with household data attached, at any time.
- GPS Coordinates – GPS location is noted and automatically entered into our Salesforce.com monitoring database at the time of each household visit.

Step 3. Verification Checks

- Rule update requires that the project developer telephone a randomly selected 5-10% of the surveyed households to verify that homes were visited by surveyors and the recorded responses are correct. While this may make sense for a smaller sample size, Mirador collected 9,548 usage surveys in the 11th VP, indicating we would be required to call between 477 and 954 households, which is not practical. Understanding that the spirit of this rule is to ensure our supervisors are performing their duties with accuracy, we have several safeguards in place to ensure this is the case.
 - Mirador's IT Manager and Director of Supervisors track every supervisor by GPS tracking software that shows where each supervisor is at a given time, as well as maintains a permanent record of which households were visited and how long the supervisor spent in each home. This information is reviewed daily and supervisors are contacted if anything looks amiss.
 - When a home is closed, and thus a survey cannot be collected, it is marked as closed. When a home is open, a survey is collected. The GPS tracking software makes it is easy to tell if a supervisor has not spent enough time in an open household to perform a complete survey, thus protecting against false data collection.
 - Supervisors collect a GPS mark at each household which is tied to the survey record in Salesforce.com. Each survey record is in turn correlated with the main household record for each stove.
 - Supervisors perform repeat visits to each village, and typically a household is surveyed 3 times post-construction. If there are inconsistencies between data from one visit to the next, it is likely to be caught by a supervisor.
 - The sheer number of detailed, on-site usage surveys we conduct indicates a much higher level of attention to detail than most projects are able to replicate. Talking with beneficiaries on the phone cannot provide the same assurance that the stove is in use, regardless of how beneficiaries respond.

B. Good Practice Monitoring Requirements

Field team training and supervision:

- Mirador supervisors undergo a 2-3 day intensive training workshop, plus a full month of training before they are allowed to collect surveys without another supervisor or manager present.
- Mirador maintains consistency by ensuring all supervisors are trained directly by the Director of Supervisors, using consistent training materials; and all supervisors are trained in use of the Salesforce.com monitoring system and use the same survey form.
- In Salesforce.com, the survey form itself ensures supervisors are not left to guess whether a stove is in use. Detailed questions are included and based on those answers, the system (based on predetermined rules) makes the decision as to whether or not the stove is in use. This is recorded automatically in a calculated field that is used for reporting abandonment to the Gold Standard.
- Mirador's Director of Supervisors and IT Manager work together to continually monitor and review field staff and provide re-training on data collection practices as necessary.

End-user Training and follow up visits:

- When it comes to beneficiary training, Mirador is a leader in the cookstove arena. As stated earlier in the Monitoring Report, "Proyecto Mirador's Monitoring System includes extensive training of stove beneficiaries at various stages in the stove construction process, including Community Meetings staged by the Ejecutor before construction; a home visit by an inspector to determine the correct stove location and assess appropriateness of the household prior to construction; direct training at the time of construction; and multiple follow-up visits after construction. Mirador has invested in a sophisticated, highly customized electronic monitoring system built on the Salesforce.com platform to monitor all aspects of our operations and to bring us closer to our clients. We are constantly refining our design, construction and supervision practices to optimize efficiency and guarantee successful stove adoption."

Awareness campaign:

- Beneficiaries are informed of the benefits of proper use and maintenance at each pre-construction Community Meeting, then individually trained at construction, and again individually trained (and the maintenance process fully reviewed) at each subsequent supervisory visit.
- Each beneficiary receives a *Cinco* maintenance tool to perform the 5 steps needed to keep their stove in good order and functioning efficiently.
- Additionally, a Use and Maintenance brochure is left behind with each beneficiary, reminding them of the maintenance steps and use of the *Cinco* (see VP11-08 Training Brochure.pdf).
- All training and follow up visits are recorded permanently in our Salesforce.com database.

Project Field Test

Applicable Parameters: ID 7

As per the provisions of the TPDDTEC, Section 7, *Performance Field Tests and Calculation of Emission Reductions*, The baseline and project performance field tests (BFT and PFT) measure real, observed technology performance in the field.

Consumption is measured with a representative sample of end users under the defined baseline scenario (in the absence of project technology) and project scenario using the Kitchen Performance Test (KPT). Simple random sampling is employed; testing is transparent, easily replicable and conservative; and the impact of day-to-day variation in cooking practices is accounted for as we calculate emission reductions on absolute fuelwood savings as observed in the KPT over a complete four-day cycle. File attachments "VP11-03 KPT Data Sheet SPANISH.pdf" and "VP11-04 KPT Data Sheet

ENGLISH.pdf" show the actual data sheets used during the four-day KPT and "VP11-05 KPT Guidelines.pdf" articulates the process that was observed.

At the time of PoA renewal, Mirador already had a large base of existing KPT data for stove ages ranging from 1 month to 5.5 years in age. Rather than jettison the existing research, Mirador has continued to aggregate new KPTs to the existing data for each age group. Geographic diversity is carefully considered so that the data for each age group becomes more diverse over time.

As per the VPA-DD, once the requisite sample size of 100 is reached for each age group, a yearly plan similar to the following will be observed thereafter, with the data from each subsequent KPT added to existing data to strengthen the sample in both size and geographic diversity. The following table mirrors the sample size and geographic distribution specified in the VPA-DD:

Stove Age Group	0_1	1_2	2_3	3_4	4_5	5_6	Total
Number of Surveys	10	10	10	10	10	10	50 Surveys
Number of Villages	2	2	2	2	2	2	10 Villages
Surveys per Village	5	5	5	5	5	5	

The following table shows how many KPTs are applied in the 11th Verification Period for each age group, as well as the total number of KPTs that have been performed for each age group, for all test years overall. The latest KPTs were performed in 13 villages across 6 departments. In the stove age groups for which emission reductions are being claimed, the KPT data now includes a total of 894 project scenario KPTs in 15 departments.

Stove Age Group	# of KPTs available in 11th VP	# of KPTs overall	Statistical confidence satisfied?
0_1 Years	30	136	Yes
1_2 Years	42	121	Yes
2_3 Years	17	148	Yes
3_4 Years	17	176	Yes
4_5 Years	23	141	Yes
5_6 Years	33	155	Yes

(c) Analysis of the collected data

Leakage

The TPDDTEC provides 5 potential sources for leakage, most of which do not apply to a project that builds permanent, unmovable stoves *in situ*, in replacement of traditional stoves that are also built *in situ*. For the 11th Verification Period, Mirador reports a leakage factor of less than 1%.

Following is analysis of each source and its applicability in Mirador's case.

(i) The displaced baseline technologies are reused outside the project boundary in place of lower emitting technology or in a manner suggesting more usage than would have occurred in the absence of the project.

Baseline stoves are built *in situ*, cannot be relocated, and therefore cannot be reused in another location. Mirador requires as a precondition of installation that the client agree to destroy the old *fogón*, and Mirador monitors the presence or absence of a *fogón* on every follow-up visit.

During the 11th Verification Period 213 households were assessed for the presence of an auxiliary *fogón*. A traditional *fogón* was still present in 25 of households surveyed (12%). Among those households, the *fogón* was in use an average of 2.79 hours/week, whereas the Dos por Tres was in use 8.42 hours per day, 7 days a week (total 58.94 hours per week). Thus, the *fogón* was responsible for just 5% of total cooking times in 12% of households (precise calculation without respect to rounding error). Leakage was determined as stated in Parameter ID 9.

(ii) Non-project users who previously used lower emitting energy sources use the non-renewable biomass or fossil fuels saved under the project activity.

Traditional biomass cookstove use is by far the most common baseline scenario in villages where Mirador builds cookstoves. Given the high percentage of forest cover in Honduras (41.54% of total land area), fuelwood is generally available for harvest or purchase. People who use more efficient fuel types are not doing so for lack of availability of biomass. The non-renewable biomass saved under the project activity contributes to healthier forests by detracting from forest degradation but does not incur a risk that users of efficient stoves will convert to biomass.

(iii) The project significantly impacts the NRB fraction within an area where other CDM or VER project activities account for the NRB fraction in their baseline scenario.

Although fuelwood reduction does have a mitigating effect on forest degradation, Mirador's construction activities are not at a level that would impact NRB significantly enough to affect other projects. Based on our highest build rate to date (~24,000 stoves/year), we estimate 1000 hectares of forest are protected annually as a result of Mirador's project activity, as compared to a total of 4,648,000 hectares of forest cover in Honduras.¹⁶

(iv) The project population compensates for loss of space heating effect of inefficient technology by adopting some other form of heating or by retaining some use of inefficient technology.

Mirador's Leakage & Sustainability Survey includes questions to determine whether or not the beneficiaries use/used their project/baseline stoves to heat their homes, and whether or not there is/was an auxiliary heater present in the project/baseline scenario.

During the 11th Verification Period 213 households were randomly assessed to determine whether the Dos por Tres is used to heat their home (aside from the heat generated by regular cooking activity), and if so, whether it replaced a

¹⁶ Mongabay Environmental News, "Honduras." <http://rainforests.mongabay.com/deforestation/archive/Honduras.htm>

more efficient heater that was present prior to installation of the 2x3. Of the respondents, zero answered that they use their 2x3 to heat the home outside of regular cooking activity.

(v) By virtue of promotion and marketing of a new technology with high efficiency, the project stimulates substitution within households who commonly used a technology with relatively lower emissions, in cases where such a trend is not eligible as an evolving baseline.

Households are only eligible to use the 2x3 if they are using a traditional *fogón* as their baseline stove. The 2x3 is built *in situ* and Mirador sends an Inspector to every household in advance of stove construction to assess its suitability to receive a 2x3; thus, we are able to verify in every case that the Dos por Tres is replacing a traditional *fogón* and that the *fogón* is the primary stove used for cooking.

Leakage Due to Transportation

Leakage due to transportation is determined by assessing whether significant emissions from transportation suggest more impact than if the project did not exist. To that end, an annual report is compiled to assess changes in mileage from year to year. A standard online carbon calculator is used to calculate the total CO₂ produced from driving the total of number of miles reported. That figure is then compared against the total emissions being claimed during the verification period in order to determine leakage. It should be noted that in the baseline scenario a similar or greater amount of transportation would be required to provide labor and distribute materials for construction of the traditional *fogón*.

Usage

In 2016 Mirador implemented a new system whereby an Inspector visits every household in advance of stove construction in order to review the space, assess compliance with the requirements for installation, and determine optimum positioning of the stove to maximize air flow and thermal efficiency. By avoiding construction problems that have historically caused some users to abandon their stoves within the first year, Mirador was able to accomplish a dramatic improvement in the adoption rate for first-year stoves. Drop-off survey data is provided in the attached file "VP11-13 Dropoff Data.xlsx." Cumulative abandonment rates (as provided in Parameter ID6) are applied in the document "VP11-01 ER Calculations.xlsx" and are in turn used to determine project technology-days.

Project Field Test

Fuelwood consumption data from 1160 , 4-day project KPTs is compiled and summarized in the document "VP11-02 KPT Data.xlsx." These project KPTs, which were collected from 2010 to the present, include 162 KPTs from the 11th Verification Period covering 6 stove age groups in 8 Departments. The following outputs are applied to the ER Calculations for each age group:

- Household size
- Person-meals per day
- Dry wood use per person-meal

Per TPDDTEC methodology, when the sample sizes are large enough to satisfy the "90/30 rule," i.e., the endpoints of the 90% confidence interval lie within +/- 30% of the estimated mean, overall emission reductions can be calculated on the basis of the estimated mean annual emission reduction per unit of the mean fuel annual savings per unit. Accordingly, since all age groups meet the 90/30 test, use mean figures are applied to the ER Calculations to determine fuelwood savings.

Data analysis is conducted by Robert Bailis, PhD, of the Stockholm Environmental Institute.

- (d) *Demonstration of whether the required confidence/precision has been met:*

Leakage and Sustainability Surveys

The validated PoA requires a minimum sample size of 100. During the 11th Verification Period 213 surveys have been collected.

Usage Surveys

The validated PoA requires that a minimum sample size of 30 must be met for each age group, with a minimum total sample size of 100. For each age group surveyed, the sample size met or exceeded 100. The total sample size for all age groups exceeded 9,548.

Project Field Test

Aggregated data satisfies the 90/30 rule for all age groups, i.e., the endpoints of the 90% confidence interval in each case lie within $\pm 30\%$ of the estimated mean. The statistical analysis is provided in the file "VP11-02 KPT Data.xlsx" (see worksheet "90-30 tests").

- (e) *Demonstration of whether the samples were randomly selected and are representative of the population:*

Leakage and Sustainability Surveys

During the 11th Verification Period 213 surveys were collected across 187 villages in 14 Departments (provinces) and are thus representative of the entire project area. For newer stoves (<1.5 years), a survey was administered to every *n*th household that received a post-construction visit in order to guarantee a random sample. Older stoves (>1.5 years) also received surveys chosen at random by office staff, in advance of the visits, using villages that were close to routes used in the current follow-up visit schedule for newer stoves.

Usage Surveys

For stoves in their first two years of age, usage surveys were conducted at the time of every post-construction visit, so sample sizes are outstandingly large and cover the vast majority of applicable households. For subsequent years, usage rates were monitored among a random sample of households in each village that was included. Villages were chosen at random based on the availability of samples close to current supervision routes (to simplify logistics), with each age group including a broad geographic distribution (ranging between 8 and 244 separate villages per age group).

Project Field Test

Households from 12 separate villages in 6 Departments were included in the new data set and project households were selected at random from each community. Raw data has been added to existing data from previous years and the analysis is provided in the file "VP11-03 KPT Data.xlsx."

SECTION E. CALCULATION OF SDG IMPACTS

E.1. Calculation of baseline value or estimation of baseline situation of each SDG Impact

>>

SDG #1 – No Poverty

Absolute values are collected for time and money spent collecting fuelwood in the baseline scenario, as reported by stove beneficiaries.

SDG #2 – Zero Hunger

Only the people who have reported saving money on fuelwood (see SDG #1) are surveyed to find out if they used that money to buy food. Thus, a baseline value calculation is inapplicable and direct calculation is used for this SDG outcome (as described in E.3 below).

SDG #3 – Good Health and Well-Being

In both the baseline and the project scenario, exposure to PM2.5 was measured using a light scattering nephelometer (HAPEx Nano). This device provides real time readings on PM2.5 and takes a new measurement every minute. It was worn by the study participant during a 48-hour period. This class of device required a field calibration performed with gravimetric samplers. A sub sample of the study participants wore the gravimetric sampler collocated with the HAPEx. The gravimetric sampler was comprised of a constant flow pump (AP Buck Libra Elite) and a size selective inlet SKC PME Impactor which selected only particulates smaller than 2.5 µm in diameter (PM2.5). The filters were weighed before and after the sampling.

SDG #4 – Quality Education

In the absence of project activity Mirador's stove training would not be provided. Thus, baseline value is understood to be zero.

SDG #5 – Gender Equality

For Parameter ID 18 (Proportion of employees who are women), in the absence of project activity these jobs would not exist. Thus, baseline value is understood to be zero.

For Parameter ID 19 (Improvement in cooking times), qualitative values are collected for time spent cooking in the baseline scenario, as reported by stove beneficiaries.

For Parameter ID 20 (% of users who say there is something they don't like about the stove), only Dos por Tres stove users are surveyed. Thus, a baseline value calculation is inapplicable and direct calculation is used for this SDG outcome (as described in E.3 below).

SDG 7 – Affordable and Clean Energy

The Water Boiling Test (WBT) was used to determine relative PM2.5 emissions in both the baseline and project stove, as measured by Aprovecho's Research Center's commercially available Portable Emissions Measurement System (PEMS), in which real-time emissions of (PM) are recorded. Specific consumption is reported as a measure of the fuel used to boil (or simmer) one liter of water. Fuel use and emissions made to complete the WBT are reported as the average specific consumption (emissions) of cold and hot start plus simmer, multiplied by 5 Liters. The amount of particulate matter (PM) was measured as emitted to complete the WBT. All of the measured percentage reductions are significant at 95% confidence.

SDG 8 – Decent Work and Economic Growth

For Parameter ID 21 (% of Mirador employees and microenterprises who report they are satisfied with their jobs), only Mirador project employees are surveyed. Thus, baseline value calculation is inapplicable.

For Parameter ID 22 (Quantitative employment), in the absence of project activity these jobs would not exist. Thus, baseline value is understood to be zero.

SDG #13 – Climate Action

Baseline values are defined as per the 2010 Fuelwood Consumption Study. Field results are

adjusted to account for moisture variation and adult equivalent persons. Any lab testing involves tending to replicate stove use as would be done by cooks.

The KT focused exclusively on typical baseline fogón stoves and involved taking physical measurements of daily wood consumption with the required return visits over a four-day period.

During the KT it was found that households have a degree of typical fuel and stove-type mixing; however, during the KT only the primary fuel—woody biomass—was measured by measuring the amount of wood not used, from a previously measured pile. The effect of fuel mixing reduces the savings made in primary fuel between the baseline and project scenarios. The quantity of secondary fuel is treated as zero. Wood consumption in the baseline study was calculated on a “dry wood basis” to account for variations in fuelwood moisture between households. Based on the above, the option to measure fuel consumption of the primary fuel only was selected for the calculation of the emission reductions.

A secondary baseline study was conducted in 2013 among 117 households to enhance the geographic spread of the baseline and test the validity of the 2010 results. Rob Bailis, PhD, of the Yale School of Forestry and Environmental Studies, performed the analysis and concluded the following:

The results show that baseline daily consumption was 10.6 kg of dry-wood per household (1.1 kg per person-meal) in 2010 and 10.9 kg of dry-wood per household (1.0 kg per person-meal) in 2013. These differences are insignificant and we can conclude that there has been no variation in baseline fuel consumption in this time period. The results of the 2013 baseline study thus corroborated those of the 2010 study.

SDG 15 – Life on Land

For ID 5 – fNRB,b,y, baseline assessment focused on the fuel supply of Honduras, to determine the fraction of non-renewable biomass in the supply area, as described in the Gold Standard Methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (11/04/2011), Annex 1, Section A1.3, “NRB Assessment similar to approach of CDM methodology AMS-II.G. fNRB was calculated using the equation $fNRB = NRB / (NRB + DRB)$.

For ID 7 / Pp,b,y, baseline and project household fuel consumption is measured in the same way, per Kitchen Performance Test (KPT) protocols. Fuel consumption is measured by weighing fuelwood over a 4-day period and moisture content is noted at each weighing. Also noted are the number of people by age group and gender who are eating meals in the household. Final data is expressed as per-capita daily fuel consumption.

E.2. Calculation of project value or estimation of project situation of each SDG Impact

>>

SDG #1 – No Poverty

Absolute values are collected for time and money spent collecting fuelwood in the project scenario, as reported by stove beneficiaries.

SDG #2 – Zero Hunger

Only the people who have reported saving money on fuelwood (see SDG #1) are surveyed to find out if they used that money to buy food. Thus, a project value calculation is inapplicable and direct calculation is used for this SDG outcome (as described in E.3 below).

SDG #3 – Good Health and Well-Being

Please refer to the baseline description in Section E.1 above – baseline and project scenario values were measured in the same way.

SDG #4 – Quality Education

Human Resources director keeps an ongoing log of all Mirador training activities, including the hours spent on training. Total training hours are tabulated annually.

SDG #5 – Gender Equality

For Parameter ID 18 (Proportion of employees who are women), Mirador's Director of Human Resources keeps an ongoing log showing the number of Mirador employees (direct and indirect) by job type, as well as by gender. The number of employees who are women (direct and indirect) is specifically tracked and reported as an absolute figure.

For Parameter ID 19 (Improvement in cooking times), qualitative values are collected for time spent cooking in the project scenario, as reported by stove beneficiaries.

For Parameter ID 20 (% of users who say there is something they don't like about the stove), Dos por Tres users are asked directly if there is anything they don't like about the stove and "yes/no" values are tabulated. Thus, a project value calculation is inapplicable and direct calculation is used for this SDG outcome (as described in E.3 below).

SDG #7 – Affordable and Clean Energy

Please refer to the baseline description in Section E.1 above – baseline and project scenario values were measured in the same way.

SDG 8 – Decent Work and Economic Growth

For Parameter ID 21 (% of Mirador employees and microenterprises who report they are satisfied with their jobs), Mirador employees are surveyed to determine if they are satisfied with their jobs and "yes/no" values are tabulated.

For Parameter ID 22 (Quantitative employment), Director of Human Resources keeps an ongoing log showing the number of Mirador employees (direct and indirect) by job type. The number of employees is specifically tracked and reported as an absolute figure.

SDG #13 – Climate Action

As per the provisions of the TPDDTEC v2, Section 7, Performance Field Tests and Calculation of Emission Reductions, project performance field tests (PFT) measure real, observed technology performance in the field. Consumption is measured with a representative sample of end users under the defined project scenario using the Kitchen Performance Test (KPT). Simple random sampling is employed; testing is transparent, easily replicable and conservative; and the impact of day-to-day variation in cooking practices is accounted for as we calculate emission reductions on absolute fuelwood savings as observed in the KPT over a complete four-day cycle. In order to maximize accuracy and minimize volatility, emission reductions are calculated on the basis of mean fuelwood consumption per person-meal.

SDG #15 – Life on Land

For ID 5 – fNRB,b,y, project calculation is not applicable as fNRB is by definition a baseline value.

For ID 7 / Pp,b,y, please refer to the baseline description in Section E.1 above – baseline and project scenario values were measured in the same way.

E.3. Calculation of leakage

>>

The assessment of leakage includes:

(1) Leakage due to the replacement of efficient household heating sources was determined to be zero. Out of 924 respondents, zero answered that they use their 2x3 to heat the home outside of regular cooking activity.

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

- Multiply the % of homes that have a fogón (12%) by the net stoves in operation, being the total stoves in the population for which ERs are being claimed, net of abandonment (98,998: see ER Sheet, cell EK53), which returns a value of 11,880 households affected.

- Reduce 11,880 according to the percent of total cooking time during which the fogón is in use in those households (5%: see Leakage Sustainability Results, "Summary" sheet, Cell G19), resulting in a value of 594. This is the number of cookstove equivalents for which emissions are not reduced.
- Multiply 594 (cookstove equivalents) by the annualized average of 2.72 ERs/stove (see ER Sheet, Row 69) = 1,616, the number of tonnes lost due to the presence of the auxiliary stove. ER claims are directly discounted by the absolute figure of 1,616 (see ER Sheet, cell EK72).

(3) Double counting was determined as follows:

- Count the total number of households surveyed for the presence of another ICS between November 2019-November 2020: 20,876
- Count the total number of households surveyed in which another ICS was present in the household: 22
- Divide these two figures to determine the ratio of households in which another ICS is present: 0.11%
- Multiply 0.11% by the net stoves in operation, being the total stoves in the population for which ERs are being claimed, net of abandonment (98,998: see ER Sheet, cell EK53), which returns a value of 109 households affected.
- Multiply 109 households by the annualized average of 2.72 ERs/stove (see ER Sheet, Row 69) = 296, the number of tonnes lost due to the presence of the auxiliary stove. ER claims are directly discounted by the absolute figure of 296 (see ER Sheet, cell EK73).

Considering the sources of leakage identified above, including discounts to prevent double counting, total leakage for the 11th Verification Period is 1,912 VERs, which equates to 0.7% of gross ERs (see ER Sheet, cell EK78).

Additionally, the project assessed the leakage due to transportation including mileage records, transportation and maintenance records maintained and tabulated by the Assistant to the Director of Operations during the course of the 11th Verification, including all vehicle types in use by the project at all levels (large trucks, light trucks and motorcycles).

The leakage due to transportation resulted in 42.65 tCO₂e, which represents the 0.02% of the total ERs for this verification period. This is *de minimis* and is not deducted from the ERs calculations balance.

E.4. Calculation of net benefits or direct calculation for each SDG Impact

SDG SDG Impact	Baseline Project Net estimate	Net benefit
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13	Emission Reductions	NA	443,476	271,291
1	USD saved per week per household	0	NA ¹⁷	1.43 ¹⁸
1	Reduction in time spent collecting fuelwood	0	NA	56% ¹⁹
2	Wood purchasers report they used the money saved to buy food	0	NA	52%
3	Reduction in personal exposure to PM2.5	0	NA	47% ²⁰
4	Annual training hours provided	0	NA	346
5	Satisfaction among stove beneficiaries	0	NA	97%
5	Stove users report improved cooking times	0	NA	98%
5	Mirador's direct employees are women	0	NA	28%
7	Reduction of PM2.5 emissions resulting from cookstove intervention	0	NA	79% ²¹
8	Jobs created	0	NA	174
8	Job satisfaction rate	0	NA	96%

E.5. Comparison of actual SDG Impacts with estimates in approved PDD

SDG	Values estimated in ex ante calculation of approved PDD for this monitoring period	Actual values ²² achieved during this monitoring period
13	443,476	271,291
	No estimated values for SDG impacts are defined in the PDD nor in the GS4GG Transition Annex (see footnote 16 below).	
Y		

E.5.1. Explanation of calculation of value estimated ex ante calculation of approved PDD for this monitoring period

¹⁷ Not available. This is because the project was originally registered as stand-alone project under the GSv1 upgraded as PoA under GSv2.0, therefore, transitioned to GS4GG. SDG impacts are defined in the transition (Mirador GS4GG Transition Annex v4 041219.pdf), but specific baseline and project estimates values are not said annex.

¹⁸Average wood cost with a traditional fogon US\$ 3.28 per week vs. Average wood cost with a 2x3 stove US expected saving in baseline scenario is zero.

¹⁹Average hours per week collecting wood with a traditional fogon 4.66 hours vs. Average hours per week wood with a 2x3 stove 2.61 hours.

²⁰Exposure to PM2.5 is reduced from 221 µg/m³ to 117 µg/m³ (47% reduction).

²¹The total emission PM (mg) dos por tres stove 3,658 vs 17,631 PM (mg) of the traditional fogon, a reduc-

²² Whenever emission reductions are capped, both the original and capped values used for calculation transparently reported. Use brackets to denote original values.

>>

No anomalous results reported in this monitoring period as compared to what was validated in the PDD.

E.6. Remarks on increase in achieved SDG Impacts from estimated value in approved PDD

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No estimated values for SDGs impact defined in the PDD, nor in the Transition Annex (see footnote 16 below).

SECTION F. SAFEGUARDS REPORTING

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SECTION G. STAKEHOLDER INPUTS AND LEGAL DISPUTES

G.1. List all Inputs and Grievances which have been received via the Continuous Input and Grievance Mechanism together with their respective responses/mitigations.

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During the 11^h Verification Period, stakeholder feedback was either submitted directly by beneficiaries or gathered by Mirador's Supervisors and Ejecutores. In either case it was tracked electronically in Mirador's Electronic Feedback Log using Salesforce.com. All comments logged in the physical process book (kept in Mirador's office) were added to the electronic system as well. When relevant, stakeholder feedback was reviewed at weekly staff meetings and Mirador's responses were documented. In many cases stakeholder feedback resulted in follow-up visits to beneficiaries' homes by a specialized Mirador supervisor to address outstanding issues and repair any defects in construction. Responses and follow up interactions were tracked appropriately. An export of the Electronic Feedback Log is provided to the VVB for review (see VP11-15 Stakeholder Comment Log.xlsx) and anonymously restated below.

English translations are provided below, in the original Spanish.

Comment ID	Comment	Request	Form of Resolution	Mirador response	Mirador Response	Resolved 1=yes, 2=no
SP-1133	Es buena y rápida para cocinar Th stove is good and cooks quick	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Alex Edgardo Alvarado	1
SP-1094	Me siento satisfecha con mi estufa, sin humo no nos enfermamos I'm satisfied with the stove, no smoke, no illnesses	Ninguna None	Agradecer la opinión Thank for the opinion	Visita de Supervisor Supervisor Visit	Carlos Miguel Pagoada Mata	1

SP-1089	Mi estufa calienta bien, las tortillas salen muy limpias My stove woks well, the tortillas are cooked nea.	Ninguna None	Agradecimiento Thanks given por el supervisor Thanks given by the supervisor	Visita del Supervisor Supervisor Visit	Bayron Paz	1
SP-1121	Es muy buena y no da problemas Th stove is good, I da no problems	Ninguna None	Agradecer el comentario. Thank for the comment	Visita del Supervisor Supervisor Visit	Roberto Lorenzo	1
SP-1109	Son muy buenas y no hacen humo y se cocina todo The stoves are very good, no smoke, can cook everything	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Kenci Nelin Lopez Rodriguez	1
SP-1111	Estos fogones son excelentes los felicito por fin un proyecto que nos ayude a ahorrar en nuestro hogar. These stoves are excellent, congratulations!! Finally, a project that help us to save money at home.	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Kenci Nelin Lopez Rodriguez	1
SP-1090	No quemo mucha leña, no tengo humo dentro de mi casa, estoy contenta. I burn very little firewood, no smoke indoors, I'm very happy.	Ninguna None	Agradecimiento Thanks given por el supervisor Thanks given by the supervisor	Visita del Supervisor Supervisor Visit	Bayron Paz	1
SP-1113	Estoy muy feliz y contenta con mi estufa, yo deseaba una de estas estufas, muchas gracias a Proyecto Mirador I'm very happy,	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Eliani Otoniel Claros	1
SP-1100	Me siento muy agradecida por la estufa que me regalaron ya no sufrimos por el humo I'm thankful for the stove, we no longer suffer due the smoke.	Ninguna None	Agradecer su comentario. Thank for the comment	Visita de supervisor	Alex Edgardo Alvarado	1

SP-1143	Mi suegro vive en nuestra casa a la par de la cocina, respiraba el humo y pasaba con tos. Desde que hicieron la 2x3 la salud de todos en la casa mejoró My father-in-law lives with us, he used to breath the smoke. Since we have the 2x3 stove the health of all family has improved.	Ninguna None	Agradecer el comentario. Thank for the comment	Visita del Supervisor Supervisor Visit	Eliani Otoniel Claros	1
SP-1108	Es excelente que lo hacen con toda la gente y están pendientes de revisar The Project is excellent with all the people, the project is working closed checking the stoves.	Ninguna None	Agradecer su comentario. Thank for the comment	Visita del Supervisor Supervisor Visit	Roberto Lorenzo	1
SP-1107	Muy satisfecha con mi estufa porque no ha dado ningún problema I'm very satisfied with the stove, I had no problems.	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Roberto Lorenzo	1
SP-1091	Me gusta porque cocina los alimentos rápido, porque no me tira humo y con poca leña cocina I like the stove because it cooks quickly everything with very little firewood.	Ninguna None	Agradecimiento Thanks given	Visita del Supervisor Supervisor Visit	Bayron Paz	1
SP-1114	El técnico que la hizo es muy amargado y andaba de prisa The technician was very grumpy when built the stove	Ninguna None	Dialogar con el técnico Talk with the technician	Hacer sugerencias al técnico	Eliani Otoniel Claros	1
SP-1088	Es muy buena, calienta rápido y estoy contenta The stove i the stove heats up fast, I'm very happy	Ninguna None	Agradecimiento Thanks given	Visita del Supervisor Supervisor Visit	Bayron Paz	1
SP-1118	Para mi es un Proyecto muy bueno y con la estufa 2x3 se ahorra	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor	Roberto Lorenzo	1

	In my view, this is a good Project, I can save with the 2x3 stove			Supervisor Visit		
SP-1101	Me siento muy agradecida porque antes consumía mucha leña y ahora no hay humo I'm very thankful because I used to consume a lot of firewood, but now there is no smoke.	Ninguna None	Agradecer su respuesta Give thanks for the answer	Visita del Supervisor Supervisor Visit	Alex Edgardo Alvarado	1
SP-1095	Cocino mas rápido, menos gasto de leña, hago todo al mismo tiempo y menos contaminación I can cook faster, I consume less firewood, I can do everything in less time and with lower pollution	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Carlos Octavio Hernandez	1
SP-1106	Para mi esta buena la estufa que me hicieron In my view, the stove built is good.	Ninguna None	Agradecer su opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Roberto Lorenzo	1
SP-1098	Estoy agradecida porque ahorro leña I'm thankful because I save firewood.	Ninguna None	Agradecer el comentario. Thank for the comment	Visita del Supervisor Supervisor Visit	Carlos Octavio Hernandez	1
SP-1103	La estufa es muy buena Th stove is really good	Ninguna None	Agradecer su comentario. Thank for the comment	Visita del Supervisor Supervisor Visit	Alex Edgardo Alvarado	1
SP-1097	Estoy agradecida porque me funciona bien. I'm thankful because the stove works very well	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Carlos Octavio Hernandez	1
SP-1104	Las estufas son muy excelentes, me gusta que no tira humo Th stoves are excellent, I like there is no longer smoke	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Roberto Lorenzo	1
SP-1135	Las estufas son muy buenas y ahoran leña	Ninguna None	Agradecer la opinión	Visita del Supervisor	Alex Edgardo Alvarado	1

	Th stoves are very good, they save firewood		Thank for the opinion	Supervisor Visit		
SP-1093	Muy agradecida por la estufa 2x3, muy feliz y contenta, me gusta I'm very thankful for the 2x3 stove, I'm happy, I like it very much.	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Carlos Miguel Pagoada Mata	1
SP-1116	Estoy muy alegre porque me construyeron la Estufa 2x3, hoy hago las cosas mas rápido, calienta bien y ahorro mucha leña I'm happy because the project built me a 2x3 stove, I can cook quickly, it heat ups very fast and saves a lot of firewood.	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Eliani Otoniel Claros	1
SP-1102	Para mi la estufa es muy buena gasta menos leña In my view the stove is really good, it uses less firewood	Ninguna None	Agradecer su opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Alex Edgardo Alvarado	1
SP-1105	La estufa es muy buena Th stove is really good	Ninguna None	Agradecer su opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Roberto Lorenzo	1
SP-1129	Me funciona bien calienta rápido It Works very well; it heats up quickly	Ninguna None	Agradecer el comentario. Thank for the comment	Visita del Supervisor Supervisor Visit	Luis Miguel Funez	1
SP-1092	Me gusta por que calienta al 100% I like it because it heats up 100%	Ninguna None	Agradecer el comentario. Thank for the comment	Visita del Supervisor Supervisor Visit	Bayron Paz	1
SP-1110	Son muy perfectas, cocino bien y solo el latón (plancha) se me ha dañado It is perfect, It can cook well, but the grate was damaged.	Ninguna None	Revisión Request a check	Revisión la plancha para considerar cambio.	Kenci Nelin Lopez Rodriguez	1

SP-1123	Calienta muy bien y es muy rápida It heats up very well and works faster	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Alex Edgardo Alvarado	1
SP-1099	Me siento bien con menos humo, me ahorra leña y cocino mas rápido. I feel better with less smoke, it saves firewood and I cook faster	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Carlos Octavio Hernandez	1
SP-1125	Me gusta porque calienta bastante y ahorra leña I like it because it heats up very well and saves firewood.	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Alex Edgardo Alvarado	1
SP-1140	Para mi todo calienta muy bien It heats up very well	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Bayron Paz	1
SP-1096	Estoy muy agradecida con el Proyecto Mirador por la estufa economizo y no hay humo I'm thankful with Proyecto Mirador, with the stove I'm saving, there is no longer smoke.	Ninguna None	Agradecer el comentario. Thank for the comment	Visita del Supervisor Supervisor Visit	Carlos Octavio Hernandez	1
SP-1120	Me gusta mucho la estufa porque ahorro leña y no da problema para cocinas I like it very much because I save firewood, I had no problems	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Roberto Lorenzo	1
SP-1117	Hoy que tengo una Estufa 2x3 dejé de usar el fogón tradicional, hoy en la 2x3 hago todo mas rápido estoy contenta por la estufa. Muchas Gracias I stoped using the traditional fogon, now	Ninguna None	Agradecer su opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Eliani Otoniel Claros	1

	I use the 2x3 stove, I can cook faster. Many thanks!					
SP-1119	Para mi la estufa es muy buena porque se ahorra leña In my view the stove is very good because it saves firewood	Ninguna None	Agradecer su opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Roberto Lorenzo	1
SP-1112	Cocino muy bien, excelente proyecto I can cook very well, excellent project	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Kenci Nelin Lopez Rodriguez	1
SP-1126	Es muy buena la estufa y no da problema The stove is really good, I have no problems	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Alex Edgardo Alvarado	1
SP-1128	Me siento enormemente agradecida porque ahora tengo mas tiempo para otros quehaceres en el hogar I'm greatly thankful because now I have more time for the housekeeping	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Martín Avilez	1
SP-1138	Estoy alegre porque es excelente, funciona bien y ahorro mucha leña I'm happy because the stove is excellent, it saves a lot of firewood	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Martín Avilez	1
SP-1134	Es muy buena, cuesta rápido y se ahorra leña It is really good it heats up quickly and saves firewood	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Alex Edgardo Alvarado	1
SP-1127	Me siento contenta y agradecida con el Proyecto por la Estufa I'm happy and thankful with the Project for the stove	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Martín Avilez	1
SP-1141	Por ser la mejor de todas las estufas y calienta en un 2x3 It is the best stove, it heats up very quick	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Bayron Paz	1

SP-1124	Calienta rápido, me gusta la estufa It heats up quickly, I really like the stove	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Alex Edgardo Alvarado	1
SP-1131	Me gusta porque calienta rápido y la comida se hace rápido I like the stove because it heats up quickly, I prepare the meals quickly	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Luis Miguel Funez	1
SP-1132	Me gusta porque calienta, no produce hollín y es rápido para cocinar. I like it because it heats up, there is no soot and I can cook quickly	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Luis Miguel Funez	1
SP-1139	Se quebró el codo de fuego y el técnico dijo que no había problema The fire chamber broke, the technician said it was not a problem.	Revisar	Revisar el codo de fuego To check the fire chamber	Visita del Supervisor Supervisor Visit	Willian Peña	1
SP-1130	Me gusta por que calienta, la plancha es grande y se hace luego la comida I like the stove because it heats up, the grate is large and I can prepare the meals quickly	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Luis Miguel Funez	1
SP-1122	Es buena y funciona bien It is good and works well	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Alex Edgardo Alvarado	1
SP-1137	Estoy muy feliz , me ha funcionado muy bien, no sale humo y ahorro leña I'm very happy, it works very well, there is no smoke and I save firewood	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Martín Avilez	1

SP-1136	Estoy muy agradecida porque ahorra mucho. I'm thankful because the stove saves a lot of firewood	Ninguna None	Agradecer la opinión Thank for the opinion	Visita del Supervisor Supervisor Visit	Yony Chavez	1
SP-1142	Estoy muy alegre por el Proyecto, mi estufa funciona muy bien I'm happy with the Project, my stove works really well	Ninguna None	Agradecer su comentario. Thank for the comment	Visita del Supervisor Supervisor Visit	Carlos Miguel Pagoada Mata	1

G.2. Report on any stakeholder mitigations that were agreed to be monitored.

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NA

G.3. Provide details of any legal contest that has arisen with the project during the monitoring period

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NA

Revision History

Version	Date	Remarks
1.1	14 October 2020	<p>Hyperlinked section summary to enable quick access to key sections</p> <p>Improved clarity on Key Project Information Section for POA monitoring</p> <p>Forward action request section</p> <p>Improved Clarity on SDG contribution/SDG Impact term used throughout</p> <p>Clarity on safeguard reporting</p> <p>Clarity on design changes</p> <p>Leakage section added for VER/CER projects</p> <p>Addition of Comparison of monitored parameters with last monitoring period</p> <p>Provision of an accompanying Guide to help the user understand detailed rules and requirements</p>
1.0	10 July 2017	Initial adoption