POA VALIDATION REPORT

"PROYECTO MIRADOR ENHANCED DISTRIBUTION OF IMPROVED COOKSTOVES IN LATIN AMERICA"

REPORT NO. 2013-9490

REVISION NO. 02

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POA VALIDATION REPORT

Date of first issue: 07 October 2013	ConCert Project No.: PRJC- 482849-2013 -CCS-USA
Approved by: Michael Lehmann	Organisational unit: Accredited Climate Change Services
Client: Proyecto Mirador	Client ref.: Esther Adams

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Summary:

Title of PoA: Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America
Country: Honduras; Nicaragua; El Salvador; Guatemala, Mexico
Methodology: Technologies and Practices to Displace Decentralized Thermal Energy Consumption
Version: 1.0
Methodology: Methodology for Improved Cook-stoves and Kitchen Regimes
Version: 01
GHG reducing Measure/Technology: Distribution of improved cookstoves to replace traditional cookstoves in households or institutions.
Sectoral scope(s): 3
ER estimate of PoA: 543,693 tCO_2e per year (average)

Size ☒ Large Scale ☐ Small Scale

Validation Phases:

☐ Desk Review ☐ Follow up interviews
☐ Resolution of outstanding issues

Validation Status

☐ Corrective Actions Requested ☐ Clarifications Requested
☒ Submission for registration ☐ Rejected

In summary, it is DNV's opinion that the programme of activity "Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America", as described in the PoA-DD, version 01 of 5 November 2013, meets all relevant requirements for the Gold Standard and complies with the requirements of the approved baseline and monitoring methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption", version 1.0 except the requirements detailed in this report. However, as agreed with the Gold Standard, the PoA will have to be updated to fully comply with the approved baseline and monitoring methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption", version 1.0 prior to inclusion of future VPAs, as discussed in this report. DNV thus requests the registration of the PoA as a Gold Standard PoA.

Report No.: 2013-9490	Subject Group: Environment
Report title: "Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America"	
Work carried out by: Shruthi Poonacha and Kyle Silon	
Work verified by: Weidong Yang	

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Abbreviations

BFT	Baseline field test
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CH_4	Methane
CL	Clarification request
CME	Coordinating/managing entity
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DNV	Det Norske Veritas
DNA	Designated National Authority
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GS	Gold Standard
GWP	Global Warming Potential
HH	Households
ICS	Improved cookstoves
IPCC	Intergovernmental Panel on Climate Change
KPT	Kitchen Performance Test
KS	Kitchen survey
MICKR	Methodology for Improved Cook-stoves and Kitchen Regimes, version 01.
N_2O	Nitrous oxide
NGO	Non-governmental Organisation
ODA	Official Development Assistance
PFT	Project Field Test
PM	Proyecto Mirador
PoA	Programme of activities
PoA-DD	Programme of activities design document
PS	Clean Development Mechanism Project Standard
TPDDTEC	Technologies and Practices to Displace Decentralized Thermal Energy Consumption, version 1.0
tCO_2e	Tonnes of CO_2 equivalents
UNFCCC	United Nations Framework Convention on Climate Change
VPA	Voluntary project activity
VPA-DD	voluntary project activity design document
VVS	Clean Development Mechanism Validation and Verification Standard

1 EXECUTIVE SUMMARY – VALIDATION OPINION

DNV Climate Change Services AS (DNV) has performed a validation of the programme of activity (PoA) "Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America" including generic information relevant to all voluntary project activities (VPAs) to be included in this PoA. The validation was performed on the basis of Gold Standard criteria and criteria given to provide for consistent project operations, monitoring and reporting.

The review of the PoA design documentation and the subsequent follow-up interviews have provided DNV with sufficient evidence to determine the fulfilment of stated criteria.

As described in this report, the activity submitted as the first VPA was previously a stand-alone Gold Standard project that applied the baseline and monitoring methodology entitled Methodology for Improved Cook-stoves and Kitchen Regimes, version .01. While this methodology is no longer active, the Gold Standard approved its use for the first VPA. Subsequent VPAs will be required to use the baseline and monitoring methodology entitled "Technologies and Practices to Displace Decentralized Thermal Energy Consumption", version 1.0. The PoA correctly applies the baseline and monitoring methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption", version 1.0, with the exception of the emission reduction calculations and monitoring plan; these aspects of the PoA correctly follow the "Methodology for Improved Cook-stoves and Kitchen Regimes", version .01. The emission reduction calculations and monitoring plan shall be revised to comply with the baseline and monitoring methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption", version 1.0 and these revisions need to be validated prior to inclusion of future VPAs. This approach has been approved by the Gold Standard.

The PoA disseminates fuel-efficient stoves to reduce household biomass consumption related to cooking. As a result, the PoA results in reductions of CO_2 emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the PoA and typical voluntary project activities (VPAs) are not a likely baseline scenario. Emission reductions attributable to the PoA are hence additional to any that would occur in the absence of the PoA.

The monitoring plan provides for the monitoring of the PoA's emission reductions. The monitoring arrangements described in the monitoring plan are feasible within the PoA design and it is DNV's opinion that the project participants are able to implement the monitoring plan.

In summary, it is DNV's opinion that the PoA "Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America", as described in the PoA-DD, version 01 dated 5 November 2013 meets all relevant Gold Standard requirements and complies with the approved baseline and monitoring methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption", version 1.0, except the requirements described above. The PoA will thus have to be updated to fully comply with the approved baseline and monitoring methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption", version 1.0 prior to inclusion of future VPAs. DNV requests the registration of the PoA as a Gold Standard PoA.

Oakland and Oslo, 10 April 2014

Kyle Silon
Validator
DNV Oakland, USA

Michael Lehmann
Director of Services and Technologies
DNV Climate Change Services AS

2 INTRODUCTION

Proyecto Mirador has commissioned DNV Climate Change Services AS (DNV) to perform a validation of the proposed voluntary Gold Standard Programme of Activities (GS PoA) "Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America" (hereafter called "PoA"). This report summarises the findings of the validation of the PoA including generic information relevant to all voluntary project activities (VPAs) to be included in this PoA. DNV has performed the validation of the project on the basis of Gold Standard, version 2.2 /10/. This report summarizes the findings of the validation of the PoA performed on the basis of the Gold Standard criteria for Gold Standard VER PoA.

2.1 Objective

The purpose of a validation is to have an independent third party assess the PoA design document (PoA-DD) including the description of the generic voluntary project activity (VPA) with generic information relevant to all VPAs to be included in this PoA. In particular, the eligibility criteria for inclusion and demonstration of additionality of VPAs, the programme's baseline determination, monitoring plan, and the programme's compliance with relevant Gold Standard criteria are validated in order to confirm that the programme design, as documented, is sound and reasonable and meets the identified criteria. Validation is a requirement for all GS PoAs and is seen as necessary to provide assurance to stakeholders of the quality of the programme and its intended generation of voluntary emission reductions (VERs).

2.2 Scope

The validation scope is defined as an independent and objective review of the PoA-DD including the description of the generic voluntary project activity (VPA) with generic information relevant to all VPAs to be included in this PoA. The PoA-DD was reviewed against the criteria of the Gold Standard, version 2.2, including the baseline and monitoring methodology entitled "Technologies and Practices to Displace Decentralized Thermal Energy Consumption", version 1.0 (TPDDTEC). In addition, the first VPA applies the "Methodology for Improved Cookstoves and Kitchen Regimes, version 01 (MICKR). While this methodology is not eligible for use with new project activities, the Gold Standard approved its application to the first VPA only /29/.

The first VPA is currently a small-scale, Gold Standard registered cookstove project entitled "Enhanced Distribution of efficient wood stoves in Honduras," (hereafter, stand-alone project). The stand-alone project is operated by Proyecto Mirador, and was registered on 29 June 2010 /26/ utilizing the Methodology for Improved Cook-stoves and Kitchen Regime, version 01. The small-scale stand-alone project is transferred to a large-scale VPA, and is submitted as the first VPA with the title Proyecto Mirador Enhanced Distribution of Dos por Tres Cookstoves, as approved by the Gold Standard /29/. Future VPAs shall be required to utilize the TPDDTEC methodology. The PoA is largely compliant with the TPDDTEC methodology, but will have to undergo a design change prior to inclusion of any future VPAs, to ensure that all requirements associated with the TPDDTEC methodology are met.

The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the PoA design.

3 METHODOLOGY

The validation consisted of the following three phases:

I document review

II follow-up actions (e.g. on-site visit and telephone or email interviews)

III the closing out of validation findings and the issuance of the final validation report and opinion

The following sections outline each step in more detail.

3.1 Document review

The following tables list the documentation that was reviewed during the validation.

3.1.1 Documentation provided by the project participants

/1/	Proyecto Mirador: GS-PoA-DD for PoA "Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America", version 01 dated 05 November 2013 and version 01 dated 24 June 2013
/2/	Proyecto Mirador: GS-VPA-DD for VPA "Proyecto Mirador Enhanced Distribution of Dos por Tres Cookstoves", Version 01 dated 05 November 2013, and version 01 dated 1 June 2013.
/3/	Proyecto Mirador: PoA Passport, version 1, 21 June 2013
/4/	Proyecto Mirador: Stakeholder consultation report, 24 February 2013
/5/	Proyecto Mirador: Use and Maintenance Brochure
/6/	Proyecto Mirador: Cost per stove 1Q 2013 (Confidential Document): 30 March 2013
/7/	Proyecto Mirador: Cost per stove 2Q 2013 (Confidential Document): 30 June 2013
/8/	Proyecto Mirador: Emission reduction calculations, 24 September 2013
/9/	Proyecto Mirador: Enhanced distribution of efficient wood stoves in Honduras, version 04, dated 15 June 2010

3.1.2 Methodologies, tools and other guidance by the Gold Standard

/10/	Gold Standard: *The Gold Standard Requirements, version 2.2*
/11/	Gold Standard: The Gold Standard PoA Rules and Guidelines, Annex F, GSV2.2
/12/	Gold Standard: The Gold Standard Continuous Input & Grievance Mechanism, Annex W, GSV2.2
/13/	Gold Standard: Technologies and Practices to Displace Decentralized Thermal Energy Consumption, version 1.0
/14/	Gold Standard: Methodology for Improved Cook-stoves and Kitchen Regimes, version 01
/15/	Gold Standard: Guidance on LSC Best Practice, Annex J, GSV2.2
/16/	Gold Standard: Annex D – Official Development Assistance Declaration, GSV2.2

3.1.3 Methodologies, tools and other guidance by the CDM Executive Board

/17/	CDM Executive Board: *Clean Development Mechanism Validation and Verification*

	Standard, version 04.0
/18/	CDM Executive Board: *Standard for the demonstration of additionality, development of eligibility criteria, and application of multiple methodologies for programme of activities*, version 03.0
/19/	CDM Executive Board: *Standard for sampling and surveys for CDM project activities and programme of activities*, version 04.0
/20/	CDM Executive Board: *Tool for the demonstration and assessment of additionality*, version 07.0.0
/21/	CDM Executive Board: AMS II.G., *Energy efficiency measures in thermal applications of non-renewable biomass*, version 5.0
/22/	CDM Executive Board: *Guidelines for objective demonstration and assessment of barriers, version 01*
/23/	CDM Executive Board: *Guidelines on common practice, version 02.0*

3.1.4 Documents used by DNV to validate / cross-check the information provided by the project participants

/24/	DNV: *Gold Standard Verification Report: Enhanced Distribution of Efficient Cookstove in Honduras* for monitoring period 01 December 2010 to 30 November 2011, 17 March 2012
/25/	DNV: *Gold Standard Verification Report: Enhanced Distribution of Efficient Cookstove in Honduras* for monitoring period 01 December 2011 to 30 November 2012, 17 March 2013
/26/	SGS: Gold Standard VER Validation Report: Enhanced distribution of efficient wood stoves in Honduras, 22 January 2010
/27/	Wang, Xiaoping; Franco, Janina; Masera, Omar R.; Troncoso, Karin; Rivera, Marta X.. 2013. What have we learned about household biomass cooking in Central America?. Washington DC; World Bank.
/28/	**El Salvador:** National Energy Policy, available at: http://www.cne.gob.sv/index.php?option=com_content&view=article&id=153&Itemid=201 http://www.cne.gob.sv/index.php?option=com_phocadownload&view=category&id=22:p&Itemid=63 **Guatemala:** Internal Bylaws of the Ministry of Energy & Mines. http://www.mem.gob.gt/ http://www.cnee.gob.gt/pdf/marco-legal/Ley%20de%20incentivos%20Recursos%20Renovables%20Decreto-52-03.pdf **Honduras:** Compendio de Legislación Ambiental de Honduras, SERNA 2011. General Laws for the Environment, Electricity Sector laws. http://cambioclimaticohn.org/?cat=1015&title=Legislaci%F3n&lang=es **Nicaragua:** Establecimeiento de la Política Energética Nacional (National Energy Policy), 2004

	http://www.mem.gob.ni/media/file/MARCO%20LEGAL/NORMATIVAS/ESTABLECIMIENTO%20DE%20LA%20POLITICA%20ENERGETICA%20NACIONAL.pdf Ley Para la Promoción de Generación Eléctrica con Fuentes Renovables (Law to Promote Renewable Generation of Electricity) http://legislacion.asamblea.gob.ni/Normaweb.nsf/($All)/291F7E6A862DB72D062570A100582A64?OpenDocument,http://www.mem.gob.ni/media/file/MARCO%20LEGAL/LEYES/LEY%20532-%20LEY%20DE%20GENERACION%20%20CON%20FUENTES%20RENOVABLES.pdf **Mexico:** Ley de la Comisión Reguladora de Energía (Regulatory Law for the Commission of Energy), 28-11-2008 http://www.diputados.gob.mx/LeyesBiblio/pdf/48.pdf Secretary of Energy: http://www.conae.gob.mx/wb/

3.2 Follow-up actions

The validation of this PoA included a desk review only, and did not include a site visit. This was approved by the Gold Standard /29/ for the following reasons:

1. The boundary of the first VPA is unchanged relative to the stand-alone project. DNV has verified the stand-alone project twice, conducting site visits each time, and is already familiar with the project implementation and local conditions.
2. The PP is required to conduct Kitchen Surveys (KS) in order to expand beyond the boundary of the first VPA. These KSs will confirm the accuracy of the PoA baseline, and will be confirmed by a DOE prior to verification. .

	Date / Type of interview	**Name / Organization**	**Topic**
/29/	08 August 2013 ☐ On-site ☐ Face-to-face at office ☒ Telephone ☐E-mail	Gold Standard - Ivan Hernandez - Abisheck Goyal Proyecto Mirador - Esther Adams	• Approval to submit GS as first VPA • PoA validation requirements, including site visit

3.3 Closing out of validation findings

The objective of this phase of the validation was to resolve any issues which needed to be clarified prior to DNV's conclusion on the PoA's compliance with applicable Gold Standard requirements. In order to ensure transparency a validation protocol was customised for the PoA. Table 1 in Appendix A documents the findings of the desk review of the PoA design documentation and follow-up interviews with PoA stakeholders.

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

(a) The project participants have made mistakes that will influence the ability of the PoA to achieve real, measurable additional emission reductions;

(b) Applicable Gold Standard requirements have not been met;

(c) There is a risk that emission reductions cannot be monitored or calculated.

A clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable Gold Standard requirements have been met.

A forward action request (FAR) is raised during validation to highlight issues related to PoA implementation that require review during the first verification of VPAs of the PoA. FARs shall not relate to the Gold Standard requirements for registration.

The validation identified fourteen CARs, zero CLs and one FAR. The CARs were satisfactorily addressed by the project participants by among other revising the PoA-DD (please refer to Table 1 in Appendix A for further details).

Validation Protocol Table 1: Resolution of Corrective Action and Clarification Requests		
Corrective action and/ or clarification requests	***Response by project participants***	***Validation conclusion***
*The **CARs** and/ or **CLs** are described here.*	*The responses given by the project participants to address the CARs and/or CLs.*	*The validation team's assessment and final conclusions of the CARs and/or CLs.*

Validation Protocol Table 2: Forward Action Requests	
Forward action request	***Response by project participants***
The FARs are described here.	*Response by project participants on how forward action request will be addressed prior to first verification.*

Figure 1: Validation protocol tables

3.4 Internal quality control

The validation report underwent a technical review performed by a technical reviewer qualified in accordance with DNV's qualification scheme for CDM validation and verification.

3.5 Validation team

				Type of involvement					
Role	***Last Name***	***First Name***	***Country***	Desk review	Site visit / Interviews	Reporting	Supervision of work	Technical review	TA 3.2 competence
Team leader (Validator)	Silon	Kyle	USA	✓	✓	✓	✓		✓
Project Manager	Poonacha	Shruthi	USA				✓		✓
Technical reviewer	Yang	Weidong	USA					✓	

The qualification of each individual validation team member is detailed in Appendix B to this report.

4 VALIDATION FINDINGS

The findings of the validation are stated in the following sections. The validation criteria (requirements), the means of verification and the results from validating the identified criteria are documented in more detail in the validation protocol in Appendix A.

The final validation findings relate to the PoA design as documented and described in the PoA-DD, version 01 dated 5 November 2013.

4.1 Project description

Proyecto Mirador LLC (PM), the coordinating/managing entity (CME), is developing the Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America, a voluntary Gold Standard PoA, in order to provide improved cookstove (ICS) technology to the underserved, poor, rural populations of Central America. Specifically, the PoA boundary shall encompass Honduras, Nicaragua, El Salvador, Guatemala, and the following states of Southern Mexico and the Yucatan Peninsula: Guerrero, Oaxaca, Chiapas, Tabasco, Veracruz, Puebla, Campeche, Quintana Roo, and Yucatan.

Under the PoA, project implementation, stove construction and supply sourcing shall be managed locally by the VPA implementer through the creation of local microenterprises. While the nature of each microenterprise will vary, the key roles involved generally consist of ejecutores and stove technicians. Ejecutores have overall responsibility for the microenterprise, and are responsible for community outreach and training of program beneficiaries, and hiring of stove building teams. Stove technicians are responsible for stove construction. All microenterprises are centrally managed by the CME, and the CME provides training to ensure consistent implementation amongst VPAs.

When the PoA enters a new community, partnerships are formed with local community leaders to determine appropriate technologies and facilitate stove construction. Ejecutores lead meetings to explain the program to local beneficiaries, and to provide training to end-users on use of the technology.

The CME currently operates a small-scale, Gold Standard certified cookstove project entitled "Enhanced Distribution of efficient wood stoves in Honduras," (hereafter, stand-alone project) with a /11/ of 1 May 2009. This project is submitted as the first VPA under the PoA.

The start date of the PoA is 7 February 2013 /1/, or the date that the PoA design consultation report was submitted to the Gold Standard. The duration of the PoA is 28 years. VPAs will define the duration of the crediting period at the time of inclusion, and have the option of a 10-year fixed crediting period or a 7-year crediting period that is twice renewable. VPA crediting periods shall not extend beyond the lifetime of the PoA. This is in line with Gold Standard requirements /11/. As described above, the CME currently operates a stand-alone project that is submitted as the first VPA /2//26/. Following approval of the PoA, the CME will close the registration account for the project as a stand-alone project, ensuring that no credits are double-counted.

The duration of the crediting period of the first VPA will be reduced by the total amount of time that the stand-alone project collected VERs, as confirmed by the Gold Standard /29/.

DNV considers the design description of the PoA contained in the PoA-DD to be complete and accurate. The PoA-DD complies with the relevant forms and guidance for completing the GS-PoA-DD.

4.2 Baseline and Monitoring Methodology Check

VPAs implemented under the PoA shall utilize the approved Gold Standard methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption", version 1.0 /13/. The stand-alone project being submitted as the first VPA utilizes an earlier version of the methodology, "Methodology for Improved Cook-stoves and Kitchen Regimes", version .01 /14/. The first VPA will continue to use this methodology, as approved by the Gold Standard. However, future VPAs will not have the option to use this methodology. Therefore, the discussion below focuses on TPDDTEC requirements.

The methodologies have the following applicability conditions:

Applicability Conditions	PoA/VPA requirements
1. Project boundary can be clearly identified and technologies are not included in another carbon project.	The PoA boundary is clearly identified as Honduras, Nicaragua, El Salvador, Guatemala, and the following states of Southern Mexico and the Yucatan Peninsula: Guerrero, Oaxaca, Chiapas, Tabasco, Veracruz, Puebla, Campeche, Quintana Roo, and Yucatan. VPA inclusion criteria #1 requires each VPA to define a project boundary under section A.7 of the VPA-DD that falls within the boundary of the PoA The CME anticipates that it will implement all VPAs directly, ensuring that the VPA is not included in another carbon project. In the event that another entity implements a VPA, the CME will sign a contract to ensure that all parties are aware of the PoA and have agreed that their activity is being subscribed to the PoA. DNV confirms that this is sufficient safeguards against double-counting.
2. Project technologies have continuous useful energy outputs of less than 150 kW per unit.	New technologies added to the PoA shall be tested by a third-party to ensure that the useful energy output is less than 150kW. VPA inclusion criterion #3 requires each VPA to provide a third-party report demonstrated that the useful energy output of the ICS is less than 150kW.
3. Use of baseline technology in parallel with the project technology is permitted as long as a mechanism is in place to encourage removal of the	As a precondition for the installation of ICS, beneficiaries shall be required to remove the traditional stove that is being replaced. Beneficiaries shall be made aware of the requirement to remove the traditional

old technology.	cookstove at the time they sign up to receive the stove. Also, during PM training exercises, VPA shall instruct stove technicians to require the beneficiary to remove the traditional stove /1/.
4. PP clearly communicates to all project participants the entity that is claiming ownership rights.	PP shall clearly communicate to all beneficiaries, verbally (in training sessions) /1/ and in writing (in the Use & Maintenance Brochure) /5/, that the ownership of emission reductions shall reside with the CME. CME ownership of emission reductions shall also be included in training of all subcontractors, including ejecutores and stove technicians /1/. DNV confirms that this is sufficient communication of ownership rights.
5. Project activities making use of a new biomass feedstock must comply with the relevant Gold Standard specific requirements for biomass related project activities	The project is not encouraging use of a new feedstock, and therefore this criterion does not apply.

The baseline scenario for each VPA is the continued use of inefficient biomass stoves by the target group (either HH or institutions). This scenario is supported by a World Bank report /27/ that estimates 20 million people in Central America cook with biomass using "open fires or rudimentary stoves", and that penetration of ICS remains below 10%. As the World Bank is a credible, independent agency, DNV does not doubt the accuracy of the results.

As required by the methodology /13/, a VPA must conduct kitchen surveys prior to expanding into a new region to determine the baseline characteristics of the population, and will only expand into regions where it can be shown that the baseline scenario is the use of inefficient biomass stoves. DNV thus confirms that this baseline is appropriate for the PoA.

4.3 Project Scenario

The project scenario is defined by a switch to an improved cook stove. The fuel consumption associated with the project scenario will vary depending on the target population and the type of improved cookstove distributed.

4.4 Project Eligibility

According to Annex F of the Gold Standard requirements/11/, each VPA must be in compliance with The Gold Standard eligibility criteria. The project eligibility criteria specified in GS v2.2, and how the PoA ensures VPA compliance, are shown in the table below:

Eligibility Criteria	Demonstration of compliance
Previous announcement statement	Project proponents must provide a previous announcement statement in the GS Passport for each VPA.
Project location	The PoA boundary is Honduras, Nicaragua, El Salvador, Guatemala, and the following states of Southern Mexico and the Yucatan Peninsula: Guerrero, Oaxaca, Chiapas, Tabasco, Veracruz, Puebla, Campeche, Quintana Roo, and Yucatan /1/. As stated in GS v2.2 /10/, voluntary GS project activities may be located in any host country or state, and therefore the PoA boundary is acceptable. The host countries within the PoA boundary do not have any GHG emissions caps.
Eligible project gases	The PoA includes CO_2 and CH_4, as allowed by GS v2.2 /10/. Each VPA that follows the emission reduction calculations described in the PoA-DD/1/ therefore complies with this requirement
Project Type	The GS permits three types of project activities: renewable energy supply, end-use energy efficiency and waste handling & disposal /10/. The VPAs included in this PoA will replace traditional cook stoves with higher efficiency models, reducing the amount of energy required for cooking /1/. These VPAs are therefore defined as end-use energy efficiency project.

DNV confirms that the PoA and all associated VPAs meet the GS eligibility requirements.

4.4.1 VPA inclusion criteria

As required by the Gold Standard, PoAs shall define eligibility criteria in accordance with the CDM PoA Standard /18/. Accordingly, the PoA defines the following criteria:

PoA Standard Criteria	DNV Assessment
A - Geography boundary	VPA inclusion criteria #1 requires each VPA to define a project boundary under section A.7 of the VPA-DD that falls within the boundary of the PoA. Each stove installed by a VPA will be associated with GPS coordinates, making it possible to confirm that the project is actually implemented within the boundary /1/.
B- Conditions that avoid double-counting	VPA inclusion criterion #2 requires VPA shall apply a unique identifier to each cookstove installed and apply routine data checks and other management protocols that ensure double counting is avoided /1/. Further, inclusion criterion #10 ensures that, if VPAs are implemented by entities other than the CME, that a contract

	establishes ownership of the credits with the CME.
C – Specification of technology/measure	VPA inclusion criterion #3 requires each VPA to provide a third-party report demonstrating that the useful energy output of the ICS is less than 150kW /1/.
D – Conditions to check the start date of the VPA	The start date of each VPA is documented in the VPA-DD , and supported by the first date of stove construction as recorded in the electronic sales database /1/, as required by VPA inclusion criterion #4. DNV confirms that this is acceptable demonstration of VPA start date, as defined by the GS /10/ VPAs can be included at any time, in accordance with Annex F /11/.
E – Conditions that ensure compliance with methodology applicability conditions	Inclusion criterion #5 requires all VPAs to use Technologies and Practices to Displace Decentralized Thermal Energy Consumption, with the exception of the first VPA, which shall use Version .01. Compliance with the methodology applicability conditions is demonstrated in the VPA-DD, and is reviewed in section 4.2 above.
F – Conditions that ensure the VPA meets the requirements pertaining to the demonstration of additionality specified	Additionality is demonstrated through use of the CDM Tool for the demonstration of additionality, v07.0.0, as required by eligibility criterion #9. Each VPA shall use the barriers analysis. In accordance with the Guidelines for objective demonstration and assessment of barriers **/22/**, the analysis will be structured to include three potential sources of income (equity investment, financing institutions and donations), and each source shall be analysed from the perspective of individual households, governmental institutions and private organizations. Further, the common practice analysis shall be conducted according to the Guidelines on common practice **/23/**.
G – Conditions related to LSC and EIA	VPA inclusion criterion # 6 requires the LSC to be conducted in accordance with GS guidance on LSC Best Practice **/15/**. This is demonstrated through the GS LSC report. VPA inclusion criterion # 7 requires each VPA to determine whether an EIA is required by local regulation **/1/**. If not, no EIA is required. If so, then the VPA must provide official documentation from the host country that the EIA has been adequately completed. DNV confirms that the inclusion criteria are sufficient to demonstrate compliance with the standard.
H – If official development assistance (ODA) is provided, it is not contingent on transfer of carbon	VPAs located in a country named by the OECD Development Assistance Committee's ODA recipient list must sign and submit the ODA Declaration Form provided in Gold Standard Annex D **/16/**, as required by the Gold Standard **/10/**.

credits to the donor country providing ODA support.	
I – Target group	The PoA specifies that the target group are household and institutional users of inefficient biomass stoves **/1/**. This is demonstrated through Kitchen Surveys, completed in accordance with the requirements of the methodology **/13/**, as required by inclusion criterion #8.
J – Conditions related to sampling requirements	This requirement is not directly addressed in the VPA inclusion criteria. However, the monitoring plan **/1/** is in compliance with the sampling requirements of the methodology, and follows the CDM sampling standard **/19/** when the methodology is not prescriptive. As all VPAs are required to implement the monitoring plan contained in the PoA-DD, DNV confirms that a VPA inclusion criterion focused on sampling requirements is not necessary.
K – Conditions to ensure that VPAs meet the small-scale/micro-scale threshold	The PoA is a large-scale PoA and is therefore not bound by the small/micro-scale limits.
L – Debundling check requirements	According to Annex F of the GS , the CDM debundling provisions do not apply to voluntary PoAs.

DNV thus confirms that the VPA inclusion criteria are sufficient to demonstrate compliance with the CDM PoA Standard /18/, and that the supporting evidence is verifiable.

In addition, inclusion criterion #12 requires each VPA to align with the Sustainability Assessment (including Do No Harm and Sustainable Development Matrix). DNV reviewed the Passport for the first CPA, and confirms that the Sustainability Assessment meets Gold Standard requirements..

4.5 Demonstration of additionality

The host countries included within the PoA boundary do not have any regulations requiring the adoption of improved cookstoves, as confirmed by a review of national energy policies /28/. The PoA is thus confirmed to be a voluntary.

In accordance with the GS PoA Rules and Guidance, additionality is demonstrated at the VPA level using the “Tool for the Demonstration and Assessment of Additionality”, version 0.7.0 /20/, As required by inclusion criterion #9 /1/, each VPA shall conduct a barriers assessment following the Guidelines for the objective demonstration of barriers /22/, and a common practice assessment following the Guidelines for Common Practice /23/. Compliance with these guidelines demonstrates that they would not occur in the absence of CDM.

4.6 GHG emission reduction estimation check

The procedure for emission reduction estimation described in the PoA-DD follows the steps described in TPDDTEC, version 1.0 /13/. The calculation of emission reductions requires three key parameters:

1. Baseline and project performance field tests (BFT and PFT) to measure consumption of a representative sample of end-users.
    a. As the PoA does not encourage fuel shifting, the baseline and project fuel are the same and the FTs will be conducted with respect to fuel savings per unit /1/. BFTs will be randomly selected from the subset of HHs surveyed as part of the baseline survey, which meet the target group requirements of the VPA. PFT surveys will be conducted on HHs that are randomly selected from the relevant project population (sharing the same baseline and project scenario). Samples sizes and confidence/precision prescribed by the PoA follow the requirements of the approved methodology /13/.
2. Determination of non-renewable biomass –
    a. f_{NRB} is estimated at the VPA level following the requirements of CDM AMS II.G., *Energy efficiency measures in thermal applications of non-renewable biomass*, or another methodology accepted by the Gold Standard. This meets the requirements of TPDDTEC, version 1.0.
3. Determination of leakage

    The PoA requires surveys to assess leakage, and use of mileage records to determine transportation leakage. This is the same procedure utilized by the stand-alone project, and meets the requirements of MICKR /14/; thus, its use is acceptable for the first VPA. The leakage provisions of TPDDTEC are slightly different from those of MICKR /14/, and therefore the leakage provisions will need to be revised prior to inclusion of future VPAs. This approach has been approved by the Gold Standard /29/.

DNV confirms that the procedure described in the PoA-DD is in compliance with TPDDTEC /13/. However, the PoA-DD does not specify the calculations associated with the TPDDTEC methodology /13/. Instead, the PoA currently specifies equations associated with MICKR /14/. The CME shall revise these calculations during a design change prior to inclusion of any future VPAs, as permitted by the Gold Standard /29/.

4.7 Stakeholder Consultation

The CME conducted a PoA Design Consultation, as required by the Gold Standard. All comments and feedback are documented in the Design Consultation Report /4/. No negative comments were received, and it was not necessary to revise the PoA framework following stakeholder comments. Further, each VPA is required to conduct an LSC at the VPA level /1/, as required by the Gold Standard /11/.

The PoA-DD effectively addresses the grievance mechanism requirement established by the Gold Standard /12/. As required, the PoA maintains a physical process book in the Proyecto Mirador headquarter in Santa Barbara, Honduras. End-users are provided with telephone and email contact information to report any feedback during project operation. In addition, new VPAs consult with local stakeholders prior to expanding into new areas, providing additional opportunities for feedback from local populations. All comments will be appropriately

documented /3/, as required by the Gold Standard /12/. DNV thus confirms that the grievance mechanism framework is acceptable.

4.8 PoA Management System

The management system described in the PoA-DD /1/ is in accordance with the "Standard for demonstration of additionality, development of eligibility criteria, and application of multiple methodologies for programme of activities" /18/. According to this standard, the CME must develop and implement a management system that includes the following:

- A clear definition of roles and responsibilities of personnel involved in the process of VPA inclusions
    - The PoA-DD /1/ adequately specifies responsibilities for VPA inclusion, including development and review of documents.
- Records of arrangements for training and capacity development for personnel
    - The CME trains all ejecutores and stove technicians in areas specific to their tasks. Ejecutores are trained in human resource management (to manage teams of Stove Technicians), basic accounting, public relations, and quality assurance /1/. Technicians shall be permitted to build cookstoves only after completing the Training & Certification Workshop under Proyecto Mirador's regimes. This training includes: history & objectives of Proyecto Mirador, materials used to build stoves, obligations & responsibilities of Technicians, process of stove construction, and how to properly train stove beneficiaries in correct stove use, maintenance. The CME's Manager of Human Resources is responsible for ensuring that all staff receive the required training, and for maintaining records of their completion /1/.
- Procedures for technical review of inclusion of VPAs:
    - According to the PoA-DD, the Director of Operations determines whether a new VPA should be added to the PoA. U.S. staff are responsible for drafting the VPA documentation, and the Manager of Technology, Manager of Human Resources, Director of Operations and country director will then review the documentation, before it is submitted to a DOE /1/.
- A procedure to avoid double counting of VPAs
    - The CME anticipates that it will implement each VPA, eliminating the risk that the VPA is part of . In the event that future VPAs are not directly managed by the CME, the CME will require a contract, confirming that the VPA is aware of the requirement that VPA not be included in another voluntary market or CDM project activity; and that VPA will not sell credits from project technology to any carbon developer, project, or any entity other than the CME /1/.

      DNV can confirm that the measures implemented are sufficient to prevent double counting.
- Records and documentation control process for each VPA under the PoA
    - As stated in the PoA-DD/1/, an electronic database will be maintained for each VPA. Within this database, a household record is created for each stove constructed that includes the following information:

- End-user name and government ID number
- GPS reading, when possible. If not possible, the end-users address will be recorded.
- Stove ID number
- Date of stove construction

In addition, the electronic database will maintain all information associated with monitoring of all variables described below. Monitoring information will be associated with a household record, so that data for each individual stove is tracked.

The Manager of Supervision & Verification is primarily responsible for data collection associated with Gold Standard monitoring, and the Manager of Technology is responsible to ensure that accurate electronic monitoring records are kept across all VPAs /1/.

DNV confirms that the document control process is sufficient for the operation of each VPA under the PoA.

- Measures for continuous improvement of the PoA management system
  - When VPAs enter a new area, community leaders and local NGOs are informed and consulted, and stakeholder feedback is channeled to CME management /1/. In addition, 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 the 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 /1/.
- Any other relevant elements
  - DNV can confirm that the PoA management system provides comprehensive guidelines for operation of the PoA.

Responsibilities and authorities for project management, monitoring and reporting activities, measurement, training and reporting techniques and QA/QC procedures are defined in PoA-DD. Further, the frequency, responsibility and authority for registration, monitoring, measurement and reporting activities is clearly described in the PoA-DD.

4.9 Monitoring requirements and plan

The monitoring plan described in the PoA-DD is based on the monitoring plan contained in the stand-alone project, and meets the requirements of MICKR /14/. Since the first VPA is based on this version, this is acceptable for the inclusion of the first VPA. However, the monitoring plan shall be revised to comply with TPDDTEC /13/ requirements prior to any future inclusion of VPAs, to ensure that all parameters are accurately specified. . This approach has been approved by the Gold Standard /29/.

The monitoring plan in the PoA-DD /1/ is identical to the monitoring plan contained in the validated PDD /9//26/ for the stand-alone project. As required by the approved methodology, a total sales record and project database are continuously updated. The sales record consists

of an electronic database, maintained for each VPA. Within this database, a household record is created for each stove constructed that includes the following information:

- End-user name and government ID number
- Telephone number (if available)
- GPS reading, when possible. If not possible, the end-users address will be recorded.
- Stove ID number
- Stove model/type
- Date of stove construction

In addition, the electronic database will maintain all information associated with monitoring of all variables described below. Monitoring information will be associated with a household record, so that data for each individual stove is tracked. This allows the sales database to be separated into different project scenarios, facilitating ER calculations for each scenario, as required by the applied methodology.

All monitoring is performed separately for each unique combination of baseline and project scenarios. According to the methodology, the target area for a project activity can span political borders if the baseline scenario is uniform. DNV thus confirms that this grouping is acceptable.

The monitoring plan requires:

1. Quantitative fuel wood consumption studies, conducted biennially.
2. Annual usage (drop-off) surveys
3. Bi-annual leakage assessments
4. Baseline monitoring KTs shall be conducted in the event that KSs reveal a change in baseline conditions
5. Leakage & Sustainability monitoring, including all indicators that received positive scores in the PoA Passport /3/, including Air Quality, Livelihood of the Poor, and Human and Institutional Capacity (these monitoring requirements are discussed further below).
6. Non-renewable Biomass Assessment Update – NRB shall be assessed prior to VPA inclusion in accordance with CDM methodology AMS II.G. Though this is not permitted under version

The details of these monitoring requirements are discussed below.

4.9.1 Parameters

Ex-ante - The following parameters will be fixed ex-ante prior to the inclusion of each VPA

- $X_{nrb,bl,y,}$ the non-renewable fraction of the woody biomass harvested in the project collection area in year y in the baseline scenario, will be determined prior to VPA inclusion for the VPA boundary.
- $B_{bl,y}$, the mass of woody biomass consumed during cooking in the baseline scenario, shall be determined prior to VPA inclusion for the target group.
- $EF_{bl,bio,co2,}$ the CO_2 emission factor for use of the biomass fuel in the baseline scenario, shall be determined prior to VPA inclusion for the biomass fuel
- $EF_{bl,bio\ nonCO2,CH4,}$ the CH_4 emission factor for use of the biomass fuel in the baseline scenario

- $EF_{bl,bio,nonCO2,N2O,}$ the N_2O emission factor for use of the biomass fuel in the baseline scenario
- $EF_{pe,bio,co2,}$ the CO_2 emission factor for use of the biomass fuel in the project scenario
- $EF_{pe,bio\ nonCO2,CH4,}$ the CH_4 emission factor for use of the biomass fuel in the project scenario

Ex-post - The following parameters will be monitored ex-post for each VPA

- Stove Sales, or the total number of households that receive an improved cookstove, is recorded continuously in the Installation Record Database.
- $B_{,pj,y}$, or the fuel wood consumed per household per year, is measured biennially
- $EF_{pj,bio,co2,}$ The CO_2 emission factor for use of the biomass fuel in the project scenario in tonnes CO_2 per tonne of woody biomass fuel, is determined prior to VPA inclusion via lab testing. As required by the methodology, it is reassessed if the verifier has reason to believe that the parameter value has changed.
- Continued use of stoves over time (drop-off rate) shall be measured annually via survey.
- Leakage shall be measured annually via surveys to determine
    - Rebound Effect
    - Stimulation of increased use of a high emission fuel
    - Promotion of new stove type stimulates substitution of a cooking fuel or stove type with relatively high emissions
    - Loss of space heating causes users to use alternative sources of (and thus, a greater amount of) fuel
    - Traditional stoves are reused
    - Other types of stoves are present in the household
    - Length of time auxiliary stoves are used each day
- Leakage due to transportation shall be measured via mileage records

The sustainability monitoring plan was reviewed, and it reflects a thorough description of indicators and measurement methods to monitor all the parameters in the sustainable development matrix.

Indicator	
1. Air Quality	VPAs will directly reduce the amount of smoke and indoor air pollution. This will be monitored through annual surveys.
2. Quality of employment	The PoA-DD requires annual employee satisfaction questionnaire, including a review of employment quality. During verification of the stand-alone project /25/, DNV has reviewed these questionnaires and cross-checked the results with a random sample of employee interviews, and confirmed the positive impact of the project on employment quality. Future VPAs will follow a similar model and are

	thus expected to have similar employment quality benefits.
3. Livelihood of the poor	The dissemination of improved stoves has several positive impacts on the livelihoods of the poor; by reducing resources for collection of fuel means more disposable income or time for children. This will be monitored through surveys of end-users, addressing questions of time and fuel savings, and how discretionary spending is spent.
4. Access to affordable and clean energy services	Reduction in indoor air poll. This will be monitored through the sales database, which records the number of stoves installed, as well as beneficiary data.
5. Human and institutional capacity	ICS will reduce time and resources required for cooking and collecting wood, allowing beneficiaries to devote additional time to improving living conditions. This will be monitored via surveys to determine reduced time/money required to collect fuel wood, and how the savings are invested.
6. Quantitative employment and income generation	Project implementation, stove construction and supply sourcing shall be managed locally under VPA supervision through the creation of local microenterprises. Such microenterprises may include stove construction organizations, suppliers to provide specific stove construction components, and other vendors.
12. Technology transfer and technological self-reliance	The CME trains local employees on the manufacture and maintenance of the project stoves, building local capacity. DNV thus confirms that the project will have a positive impact on this indicator, as stated in the Passport/3/.

4.10 Sustainability assessment

The sustainability assessment, including Do No Harm assessment and Sustainable Development Matrix, is done at the CPA level.

4.10.1 Do no harm

The PoA Passport /3/ demonstrates that the PoA is expected to be in compliance with the Gold Standard list of safeguarding principles. DNV has previously interviewed end-users, PM employees during verification of the stand-alone project, and can confirm that the risk of the project violating these principals is low, as described in the PoA Passport.

4.10.2 Sustainable development matrix

The Sustainability Matrix is identical to the matrix submitted for the stand-alone project. In the course of two verifications /24//25/, DNV has confirmed that the overall impact of the project is positive. As each VPA will follow a similar format to the stand-alone project, DNV confirms the positive impact described in the PoA Passport.

4.11 Environmental impact assessment

No significant environmental impacts are expected from the project activity. This is confirmed by the stakeholder consultation for the first VPA /4/ and the PoA design consultation /5/, as well as from observations during two site visits conducted for the verification of the stand-alone project /24//25/.

As required by inclusion criterion #7, each VPA shall confirm whether the project activity is required to conduct an EIA by local regulations.

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APPENDIX A

POA AND GENERIC VPA VALIDATION PROTOCOL

Table 1 Resolution of corrective action requests and clarification requests

Corrective action and/ or clarification requests	Response by project participants	Validation conclusion
CAR 1 Section A.2, #3 of the PoA-DD states that there are no mandatory/regulatory requirements in Honduras to install improved cookstoves. PP shall provide positive evidence demonstrating this statement. Furthermore, the PoA encompasses several countries, but this statement only refers to Honduras. PoA-DD shall be revised to state whether there are mandatory/regulatory requirements in other countries within the PoA boundary.	The specific reference to Honduras has been removed from Section A.2, #3 as it was placed in error. A review of the national energy policies of each country reveals no mandatory laws, policies or requirements to install improved cookstoves. Footnotes have been added to the PoA under Section A.2, #3, containing a list of applicable agencies and links. Furthermore, in Central America no legal framework exists that requires the mandatory certification of cookstoves.[1] The World Bank (2013) states that the governments of Central America "need to determine and implement mandatory or voluntary standards, so that the results of the certification of stoves truly serve to increase the commercialization of	PP has provided evidence demonstrating that improved cookstoves are not required within any of the countries included in the PoA boundary. This CAR is Closed

[1] Wang, Xiaoping, et. al., "¿Qué Hemos Aprendido del Uso de Biomasa para Cocinar en los Hogares de America Central?" World Bank; Energy Sector Management Assistance Program (2013), p. 61

Corrective action and/ or clarification requests	Response by project participants	Validation conclusion
	stoves that are efficient, durable, and clean." [2] Although this does not speak to the absence of laws mandating implementation of ICS, it does illustrate the lack of governmental regulation surrounding the issue of cookstoves in general.	
CAR2 According to Annex F, Programme level additionality is demonstrated by showing the following: - The proposed voluntary measure would not be implemented - The mandatory policy/regulation would not be systematically enforced - The PoA will lead to greater level of enforcement of the existing regulation The additionality discussion in the PoA-DD shall be revised accordingly.	The additionality discussion has been revised to demonstrated that the proposed measure is voluntary.	DNV has reviewed the revised additionality assessment. The PP has provided sufficient evidence to demonstrate that the PoA is not required by regulation and is a voluntary program. This CAR is closed.
CAR3 Section B.2 of the PoA-DD refers to GS methodology v2.2. PP shall clarify the reference.	As described in Section B.3, "Application of Methodologies," the First VPA follows *Methodology for Improved Cook-stoves and Kitchen Regimes V.01*. Subsequent VPAs shall follow *Technologies and Practices to Displace Decentralized Thermal Energy*	The reference to the methodology has been corrected. This CAR is closed.

[2] ibid., p. 72

Corrective action and/ or clarification requests	Response by project participants	Validation conclusion
	Consumption - 11/04/2011. In order to eliminate confusion in the PoA, the reference to v.2.2 in question was removed. The criterion now reads: "Uses approved Gold Standard Methodology and satisfies all its requirements."	
CAR4 Eligibility Criteria		
- Conditions that ensure compliance with the applicability conditions of the applied methodology	Eligibility criterion has been added to require that VPA "Comply with all requirements of the applicable methodology. (First VPA shall conform to *Methodology for Improved Cook-stoves and Kitchen Regimes v.01* and subsequent VPAs shall conform to *Technologies and Practices to Displace Decentralized Thermal Energy Consumption (11/4/2011).)"*	Since compliance with applicability conditions is demonstrated in section B.2, this is sufficient. This CAR is Closed.
- Eligibility criterion #2 shall clarify that each VPA shall be located within one host country	The GS has approved that VPA may span multiple countries as long as baseline and project technologies are the same. Eligibility criteria in the PoA require each VPA to "involve the distribution of ICS within the geographical boundary of Host	The Gold Standard confirmed that a VPA can span geographical borders. This CAR is Closed.

Corrective action and/ or clarification requests	Response by project participants	Validation conclusion
	Countries." The words "defined by the PoA" have been added following "Host Countries" in order to clarify.	
- Eligibility criterion #5 – According to the CDM PoA Standard, the eligibility criteria shall include conditions that avoid double counting like unique identification of product and end-user locations. PoA-DD shall clarify how the measures described will prevent double-counting	Eligibility criterion has been added to require that VPA "Apply a unique identifier to each cookstove installed and apply routine data checks and other management protocols that ensure double counting is avoided."	The PoA-DD now specifies the procedures a VPA must follow to ensure compliance with this criterion. This CAR is Closed.
CAR 5 According to the CDM PoA Standard, the management system defined in the PoA must contain the following: (a) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of VPAs, including a review of their competencies; (b) Records of arrangements for training and capacity development for personnel; (c) A procedure for technical review of inclusion of VPAs; (d) A procedure to avoid double counting (e.g. to avoid the case of including a new VPA that has already been registered either as	(a) A definition of roles and responsibilities has been added to Section C ("Management System") corresponding to the leadership roles provided in the corresponding Organizational Chart. (b) A general description of PM's training process has been added to the PoA, Section C. (c) Technical review procedures have been added to the PoA, Section C. (d) A procedure for double counting has been copied from the Generic VPA-DD into Section C.	DNV reviewed the management system defined in the PoA-DD and can confirm that it meets all requirements of the PoA Standard. This CAR is Closed

Corrective action and/ or clarification requests	Response by project participants	Validation conclusion
a CDM project activity or as a VPA of another PoA); (e) Records and documentation control process for each VPA under the PoA; (f) Measures for continuous improvements of the PoA management system; (g) Any other relevant elements.	(e) Records and documentation control procedures have been added to Section C. (f) Measures for continuous improvements of the PoA management system have been added to Section C.	
CAR6 The first submission date for a GS PoA is defined as the date when the PoA Design Consultation Report is submitted for GS review. The PoA-DD states that the start date is December 1, 2013. PP shall provide verifiable evidence to support the selected start date.	PP acknowledges DNV has received further guidance on this subject. According to DNV's agreement with the GS, PP has changed the PoA start date to February 7, 2013, the date the Design Consultation Report was first uploaded to the GS Registry.	The revised PoA start date meets the requirements of the GS v2.2. This CAR is Closed.
CAR7 The PoA-DD states the EIA is conducted at the PoA level. However, only Honduras is described. PP shall provide evidence that the EIA is appropriate for the entire PoA boundary.	The comments in Section E.2 refer to the entire project boundary. The 2008 LSC is referenced only for additional proof; however, the 2013 Design Consultation Meeting encompassed our objective for the entire PoA project boundary. Because the VPA will continue to operate under identical regimes throughout the project boundary, PP sees no reason to revise the	The PoA-DD shall provide evidence that an EIA is not required by any of the host countries, or shall require compliance with host country laws in the event that an EIA is required. This CAR is continued

Corrective action and/ or clarification requests	Response by project participants	Validation conclusion
	PoA.	
CAR8 The PoA-DD shall provide evidence that an EIA is not required by any of the host countries, or shall require compliance with host country laws in the event that an EIA is required.	The eligibility criteria have been revised to require an EIA if the host country requires it.	The inclusion criteria have been revised to require that an EIA be conducted if required by the host country. This CAR is Closed
CAR9 The PoA-DD shall clarify whether the LSC is conducted at the PoA or VPA level.	LSC is conducted at the VPA level. A sentence was added to Section F.1, "Solicitation of Comments from Local Stakeholders," to clarify.	The design consultation was conducted at the PoA level, while an LSC shall be required at the VPA level. This CAR is closed.
CAR 10 Part II, Section A.1 of the PoA-DD describes the first VPA. However, it should set a description of generic VPAs, including an overview of target groups, distribution method, and collaboration with local partners.	Description of generic VPAs has been added to Section A.1 as requested.	The description of a generic VPA is sufficient to provide the reader with an understanding of how a VPA will generally operate. This CAR is closed.
CAR 11 Part II, Section B.2 shall provide a description of how the generic VPA meets the applicability criteria of the applied methodology.	Section B.2 of the Generic VPA has been amended to reflect all applicability criteria required by the methodology, *Technologies and Practices to Displace Decentralized Thermal Energy Consumption – 11/04/2011*.	The PoA-DD describes how each generic VPA shall demonstrate compliance with the applicability conditions, and includes verifiable evidence that will be provided. This CAR is closed.
CAR 12 The GS methodologies applied in the PoA describe several aspects of the project boundary that must be defined, including	Project shall primarily target the poor, rural areas within the project boundary wherever inefficient, traditional cookstoves are used. As	The PoA-DD and VPA-DD have been revised to specify the project boundary, target area and fuel collection/production area.

Corrective action and/ or clarification requests	Response by project participants	Validation conclusion
project boundary, target area and fuel collection area, and fuel production area (version 11/04/2011). These aspects are not described in the PoA-DD or VPA-DD	beneficiaries either collect fuel wood close to home or purchase it from local vendors who collect it locally, both fuel collection area and fuel production area shall mirror the target area. VPA (Section A.3) and PoA (Section A.5) have been amended accordingly.	This CAR is closed.
CAR 13 The monitoring methodology shall require documentation of trainings received by PM representatives. In addition, PM shall describe the training received by stove builders, and provide for monitoring of stove quality.	A requirement of training documentation has been added to Section B.7.2 under "Training, Manual of Procedures, and Audit of Proyecto Mirador Representatives," and a description for training and monitoring of stove builders articulated below that.	The PoA-DD has specified adequate training for stove builders, and will monitor stove quality to ensure that builders meet minimum quality standards. The monitoring plan requires documentation of all trainings. This CAR is closed.
CAR 14 According to Annex F of the GS toolkit, the PoA-DD shall clarify whether verification will be conducted via sampling or if each VPA will be verified individually.	A sampling approach is chosen for Verification of multiple VPAs. In order to facilitate a sampling approach, upon inclusion of the second VPA, PP shall concurrently upgrade the First VPA to *Technologies and Practices to Displace Decentralized Thermal Energy Consumption - 11/04/2011*. The second VPA will also follow the 11/04/2011 methodology. Section A.2, Item 1 ("General	This approach has been accepted by the Gold Standard. This CAR is Closed.

Corrective action and/ or clarification requests	Response by project participants	Validation conclusion
	operating and implementation framework of the PoA") was amended to include the above explanation.	

Table 2 Forward action requests

Forward action request	Response by project participants
FAR 1 The PoA correctly applies the baseline and monitoring methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption", version 1.0, with the exception of the emission reduction calculations and monitoring plan; these aspects of the PoA correctly follow the "Methodology for Improved Cook-stoves and Kitchen Regimes", version .01. The emission reduction calculations and monitoring plan shall be revised to comply with the baseline and monitoring methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption", version 1.0 and these revisions need to be validated prior to inclusion of future VPAs. This approach has been approved by the Gold Standard.	Proyecto Mirador accepts the FAR and will revise the required elements as necessary.

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APPENDIX B

PROTOCOL FOR ASSESSING COMPLIANCE OF SPECIFIC VPA WITH POA REQUIREMENTS

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
A Description of VPA (PS § 31, VVS § 62-63, § 189)					
A.1. Title, Technical description of VPA and Parties involved					
A.1.1 Does section A.1 of the VPA-DD include a clearly identifiable VPA title, version number of the VPA-DD and date of the VPA-DD?	/1/	DR	☐ Clearly identifiable title of the VPA ☐ Version number of the VPA-DD is included ☐ Date of the VPA-DD is included.		
A.1.2 Is the VPA-DD is in accordance with the applicable requirements for completing VPA-DDs?	/1/	DR			
A.1.3 Does the description of the VPA sufficiently cover all relevant elements, is accurate and does it provides the reader with a clear understanding of the nature of the proposed VPA?	/1/	DR			
A.1.4 Does the VPA-DD provide information on the VPA implementer(s)? VPA implementers can be project participants of the PoA, under which the VPA is submitted, provided the name is included in the registered PoA.	/1/	DR			
A.1.5 Does the VPA-DD describe all the technologies and/or measures to be employed and/or implemented by the VPA including a list of the facilities, systems and equipment that will be installed and/or modified by the VPA	/1/	DR			
A.1.6 Does the VPA-DD adequately list all Party(ies) and VPA implementer(s) involved in the VPA and provide contact information in Appendix 1? Are all listed Party(ies) and VPA implementer(s) included in the PoA?	/1/	DR			
A.1.7 Does the VPA-DD provide geographic reference or other means of identification that allows for the unique identification of the VPA?	/1/	DR			
A.2. Duration of the VPA and crediting period					

Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
A.2.1	Is the VPA starting date clearly defined and evidenced? Is the start date of the VPA the earliest date at which either the implementation or construction or real action of the VPA begins?	/1/	DR			
A.2.2	Is the VPA operational lifetime clearly defined and evidenced?	/1/	DR			
A.2.3	Has the crediting period been clearly defined and is the start of the crediting period deemed to be reasonable?	/1/	DR			
A.2.4	Has it been confirmed that the length of the VPA crediting period does not exceed the end of PoA?	/1/	DR			
A.3.	**Estimated amount of emission reductions from the VPA**					
A.3.1	Has the emission reduction forecast been checked and is it deemed likely that the stated amount is achieved given that the underlying assumptions do not change?	/1/	DR			
A.4.	**Public funding**					
A.4.1	In case public funding from Parties included in Annex I is used for the VPA, have these Parties provided an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of these Parties?	/1/	DR			
A.5.	**Confirmation for VPA**					
A.5.1	Has a confirmation been provided that the VPA is neither registered as an individual GS project activity nor is part of another registered PoA?	/1/	DR			

Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
B Environmental impacts (PS § 63-64, VVS § 134-135) It is assessed whether environmental impacts of the VPA have been properly addressed.						
B.1.	Has an analysis of the environmental impacts of the VPA been sufficiently described?	/1/	DR			
B.2.	Are there any Host Party requirements for an Environmental Impact Assessment (EIA)?	/1/	DR			
B.3.	Will the programme create any adverse environmental effects?	/1/	DR			
B.4.	Are transboundary environmental impacts considered in the analysis?	/1/	DR			
B.5.	Have identified environmental impacts been addressed in the programme design?	/1/	DR			
B.6.	Does the programme comply with environmental legislation in the host country?	/1/	DR			
C Stakeholders' comments (PS § 65-69, VVS § 138-140) It is assessed whether stakeholders have been properly consulted in the development of the VPA.						
C.1.	Have relevant stakeholders been consulted?	/1/	DR			
C.2.	Have appropriate media been used to invite comments by local stakeholders?	/1/	DR			
C.3.	If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	/1/	DR			
C.4.	Is a summary of the stakeholder comments received	/1/	DR			

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
provided?					
C.5. Has due account been taken of any stakeholder comments received?	/1/	DR			
D Application of a baseline and monitoring methodology(ies)					
D.1. Title and reference of the approved baseline and monitoring methodology(ies) selected					
D.1.1. Are the exact title and version of approved methodology(ies) and tools listed?	/1/	DR			
D.2. Applicability of methodology (and tools) (VVS § 73-77) The applicability of the methodology is checked through the eligibility criteria specifying the conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by VPAs					
D.3.2. Do the eligibility criteria in D.5 below, in particular the eligibility criteria specifying the conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by the VPA, sufficiently demonstrate that the VPA complies with the applicability criteria of the applied methodology (and tools)? If not, provide below and assessment of the VPAs compliance with the applicability criteria.	/1/	DR			
D.3. Project boundary of VPA (VVS § 82-87)					
D.3.1. Is the VPA located within the geographical boundary of the proposed or registered PoA?	/1/	DR			
D.3.2. Which GHG sources are identified for the VPA? Does the identified boundary cover all possible sources linked to the VPA? Give reference to documents considered to arrive at	/1/	DR			

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
this conclusion.					
D.3.3. Does the VPA involve other emissions sources not foreseen by the methodologies that may question the applicability of the methodology? Do these sources contribute with more than 1% of the estimated emission reductions of the VPA?	/1/	DR			
D.4. Baseline scenario determination and description (VVS § 88-95 / Identification of alternatives to the project activity (VVS § 113-116) Ensure that the evaluation of all alternatives provided and required by the methodology and also possible alternatives/offshoots of alternatives are discussed. If baseline alternatives required to be considered by the methodology are considered not applicable, please assess the justification for this					
D.4.1. Which baseline scenarios have been identified? Is the list of baseline scenarios complete? Does the list include as one of the options that the VPA is undertaken without being registered as a proposed VPA? Does the list contains all plausible alternatives which are viable means of supplying the comparable outputs or services that are to be supplied by the proposed VPA?	/1/	DR			
D.4.2. Could the project activity in absence of the GS or other baseline alternatives also be implemented by other entities than the GS project participants? If so, has this also been included in the list of baseline scenarios?	/1/	DR			
D.4.3. How have the other baseline scenarios been eliminated in order to determine the baseline?	/1/	DR			
D.4.4. What is the baseline scenario?	/1/	DR			
D.4.5. Is the determination of the baseline scenario in accordance with the guidance in the methodology?	/1/	DR			
D.4.6. Has the baseline scenario been determined using conservative assumptions where possible?	/1/	DR			

Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
D.4.7.	Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies? Does the baseline scenario comply with all applicable and enforced legislation?	/1/	DR			
D.4.8.	Is the baseline scenario determination compatible with the available data and are all literature and sources clearly referenced?	/1/	DR			
D.4.9.	Is the baseline determination adequately documented in the VPA-DD? • All assumptions and data used by the project participants are listed in the VPA-DD and related document to be submitted for registration. The data are properly referenced. • All documentation is relevant as well as correctly quoted and interpreted. • Assumptions and data can be deemed reasonable • Relevant national and/or sectoral policies and circumstances are considered and listed in the VPA-DD. • The methodology has been correctly applied to identify what would occurred in the absence of the proposed VPA	/1/	DR			
D.5.	**Demonstration of eligibility for the VPA**					
D.5.1.	Has it been sufficiently justified that the VPA complies with the following eligibility criteria? VPA shall involve the distribution of ICS within the geographical boundary of Host Countries defined in the PoA	/1/ /2/	DR			
D.5.2.	Has it been sufficiently justified that the VPA complies with the following eligibility criteria? VPA shall apply a unique identifier to each cookstove installed and apply routine data checks and other management protocols that ensure double counting is avoided.	/1/ /2/	DR			

	Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
D.5.3.	Has it been sufficiently justified that the VPA complies with the following eligibility criteria? VPAs shall utilize ICS technologies with useful energy output of less than 150kW	/1/ /2/	DR			
D.5.4.	Has it been sufficiently justified that the VPA complies with the following eligibility criteria? The start date of each VPA shall be the first date of stove construction.	/1/ /2/	DR			
D.5.5.	Has it been sufficiently justified that the VPA complies with the following eligibility criteria? VPA uses approved Gold Standard Methodology and satisfies all its requirements. (First VPA shall conform to Methodology for Improved Cook-stoves and Kitchen Regimes v.01 and subsequent VPAs shall conform to Technologies and Practices to Displace Decentralized Thermal Energy Consumption – 11/4/2011.)	/1/ /2/	DR			
D.5.6.	Has it been sufficiently justified that the VPA complies with the following eligibility criteria? VPA shall conduct an LSC that follows the GS LSC guidance	/1/ /2/	DR			
D.5.7.	Has it been sufficiently justified that the VPA complies with the following eligibility criteria? EIA shall be conducted if required by the host country	/1/ /2/	DR			
D.5.8.	Has it been sufficiently justified that the VPA complies with the following eligibility criteria? VPAs shall target household or institutional users of inefficient biomass stoves.	/1/ /2/	DR			
D.5.9.	Has it been sufficiently justified that the VPA complies with the following eligibility criteria? VPA must demonstrate that the project meets additionality requirements of the Gold Standard.	/1/ /2/	DR			

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D.5.10. Has it been sufficiently justified that the VPA complies with the following eligibility criteria? VPA shall be developed and implemented by the CME. In case contracted entities are retained to manage future VPAs, the contractual agreements between each partner and the CME will clearly establish ownership of emission reduction credits generated through the PoA as belonging to the CME.	/1/ /2/	DR			
D.5.11. Has it been sufficiently justified that the VPA complies with the following eligibility criteria: If official development assistance (ODA) is provided, it is not contingent on transfer of carbon credits to the donor country providing ODA support.	/1/ /2/	DR			
D.5.12. Has it been sufficiently justified that the VPA complies with the following eligibility criteria: VPA is required to align with 'Do-no harm' assessment and SD matrix.	/1/ /2/	DR			
D.5.13. Is verifiable evidence provided to demonstrate compliance with the above criteria/	/1/ /2/	DR			
D.6. Algorithms and/or formulae used to determine emission reductions of the VPA (VVS § 96-100)					
Data and parameters that are available at validation and that are not monitored					
D.6.1. How was $X_{nrb,bl,y}$ verified?	/1/	DR			
D.6.2. How was $B_{bl,y}$ verified?	/1/	DR			
D.6.3. How was $EF_{bl,bio,co2}$verified?	/1/	DR			
D.6.4. How was $EF_{bl,bio\ nonCO2,CH4}$verified?	/1/	DR			
D.6.5. How was $EF_{bl,bio,nonCO2,N2O}$ verified?	/1/	DR			
D.6.6. How was $EF_{pe,bio,co2}$ verified?	/1/	DR			
D.6.7. How was $EF_{pe,bio\ nonCO2,CH4}$ verified?	/1/	DR			

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D.6.8. In case any of the parameters above were determined based on sampling, was the sample adequate and did it comply with the specific guidance in the applicable methodology or, if no such guidance is available in methodology, did it achieve a 90/10 confidence/precision as the criteria for reliability of sampling efforts for small-scale project activities and 95/10 for large scale project activities?	/1/	DR			
Baseline emissions					
D.6.9. Are the calculations documented according to the approved methodology and tool and in a complete and transparent manner?	/1/	DR			
D.6.10. Are uncertainties in the baseline emission estimates properly addressed?	/1/	DR			
D.6.11. If the calculations of baseline emissions are based on sampling, does this comply with the Standard for sampling and surveys?	/1/	DR			
Project emissions					
D.6.12. Are the calculations documented according to the approved methodology and tool and in a complete and transparent manner?	/1/	DR			
D.6.13. Are uncertainties in the project emission estimates properly addressed?	/1/	DR			
D.6.14. If the calculations of project emissions are based on sampling, does this comply with the Standard for sampling and surveys?	/1/	DR			
Leakage					
D.6.15. Are the leakage calculations documented according to the	/1/	DR			

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
approved methodology and in a complete and transparent manner?					
D.6.16. Have conservative assumptions been used when calculating the leakage emissions?	/1/	DR			
D.6.17. Are uncertainties in the leakage emission estimates properly addressed?	/1/	DR			
D.6.18. If the calculations of leakage emissions are based on sampling, does this comply with the Standard for sampling and surveys	/1/	DR			
Emission Reductions					
D.6.19. Algorithms and/or formulae used to determine emission reductions: • All assumptions and data used by the project participants are listed in the VPA-DD and related document submitted for registration. The data are properly referenced • All documentation is correctly quoted and interpreted. • All values used can be deemed reasonable in the context of the VPA • The methodology has been correctly applied to calculate the emission reductions and this can be replicated by the data provided in the PoA-DD and supporting files to be submitted for registration.	/1/	DR			
D.7. Monitoring plan (VVS § 131-133)					
Data and parameters monitored					
D.7.1. Do the means of monitoring described in the plan comply with the requirements of the methodology?	/1/	DR			
D.7.2. Does the monitoring plan contains all necessary parameters, and are they clearly described?	/1/	DR			
D.7.3. In case parameters are measured, is the measurement equipment described? Describe each relevant parameter.	/1/	DR			

	Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
D.7.4.	In case parameters are measured, is the measurement accuracy addressed and deemed appropriate? Describe each relevant parameter.	/1/	DR			
D.7.5.	In case parameters are measured, are the requirements for maintenance and calibration of measurement equipment described and deemed appropriate? Describe each relevant parameter.	/1/	DR			
D.7.6.	Is the monitoring frequency adequate for all monitoring parameters? Describe each parameter.	/1/	DR	-		
D.7.7.	Is the recording frequency adequate for all monitoring parameters? Describe each parameter.	/1/	DR			
D.7.8.	In case any of the parameters will be determined based on sampling, is the sample plan adequate and does it comply with the specific guidance in the applicable methodology or, if no such guidance is available in methodology, does it achieve a 90/10 confidence/precision as the criteria for reliability of sampling efforts for small-scale project activities and 95/10 for large scale project activities?	/1/	DR			
	Ability of project participants to implement monitoring plan					
D.7.9.	How has it been assessed that the monitoring arrangements described in the monitoring plan are feasible within the VPA design?	/1/	DR			
D.7.10.	Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)?	/1/	DR			
D.7.11.	Are the data management and quality assurance and quality control procedures sufficient to ensure that the emission reductions achieved by/resulting from the VPA can be reported ex post and verified?	/1/	DR			

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	Monitoring of sustainable development indicators/ environmental impacts					
D.7.12.	Is the monitoring of sustainable development indicators/ environmental impacts warranted by legislation in the host country?	/1/	DR			
D.7.13.	Does the monitoring plan provide for the collection and archiving of relevant data concerning environmental, social and economic impacts?	/1/	DR			

APPENDIX C

CURRICULA VITAE OF THE VALIDATION TEAM MEMBERS

Kyle Silon holds a Masters Degree in Energy and Environmental Economics, and has 9 years' experience climate change mitigation strategies and carbon reduction projects. Prior to joining DNV, Kyle worked for 7 years in the climate change industry, devising corporate level marginal abatement cost curves and developing mitigation strategies for the financial, oil & gas, mining, and electric power sectors. His experience has focused particularly on California, where he has worked with several major California utilities to develop GHG strategies surrounding the developing carbon markets under AB32 and the Low Carbon Fuel Standard.

Mr. Silon has 2 years of experience related to the validation and verification of CDM projects/JI and other 3rd party validation/verification services. He has worked on the validation and verification of 8 household energy demand projects, including 5 CDM projects, located throughout the world.

His qualifications, experience and experience in CDM demonstrate his sufficient sectoral competence in household energy demand.

Weidong Yang holds a Master's Degree in Chemical Engineering and has studied MBA in general management, with an overall experience of around 20 years. Prior to joining DNV he had around 4 years' experience in chemical process industry covering technology, production, and quality control. He worked in research institute of pharmaceutical industry for about 8 years. His experience also covers the fields of quality management, environmental management and health & safety management. He has also been an IRCA registered lead auditor of management systems such as ISO 9001, ISO 140001 and OHSAS 18001 standards for various industrial sectors, including chemical process industry for 6 years.

He has experience of around 4 years in validation and verification of numerous GHG emission projects and inventory in DNV, both in China and other countries. The GHG emission projects and inventory include various types, such as, CDM, VCS, CAR and CCAR.

His qualification, industrial experience and experience in CDM demonstrate his sufficient sectoral competence in chemical process.

Shruthi Poonacha is a consultant for DNV Climate Change Services. Ms. Poonacha has over 6 years of experience in the climate change validating and verifying CDM carbon offset projects. Shruthi is qualified to act as lead verifier for Livestock, Landfill and Forestry Projects under the Climate Action Reserve and the Livestock under State of California Air Resource Board (ARB) Climate Change Program. Shruthi is also certified lead verifier and an Oil and Gas Expert for Greenhouse Gas Emissions Verification under the State of California Air Resource Board GHG Mandatory Reporting Program. , and has worked on the verification of global GHG inventories for Corning, Shell Oil Company , Valero, Tesoro, Chevron and ConocoPhillips.

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