



POA VALIDATION REPORT

“IMPROVED COOKSTOVES
PROGRAM IN HONDURAS
“VIDA MEJOR CON
ECOFOGONES DE ALTO
RENDIMIENTO”
IN
HONDURAS

REPORT No. 2012-9153

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DET NORSKE VERITAS



POA VALIDATION REPORT

Date of first issue: 15 March 2012	ConCert Project No.: PRJC-362931-2012-CCS-USA	DNV CLIMATE CHANGE SERVICES AS Veritasveien 1, 1322 HØVIK, Norway Tel: +47 67 57 99 00 Fax: +47 67 57 99 11 http://www.dnv.com Org. No: NO 994 774 352 MVA
Approved by: Michael Lehmann	Organisational unit: Accredited Climate Change Services	
Client: Envirofit International Ltd	Client ref.: Nathan Lorenz	

Summary:

Title of PoA: Improved Cookstoves Program in Honduras “Vida Mejor con Ecofogones de Alto Rendimiento”

Country: Honduras

Methodology: AMS-II.G

Version: 06

GHG reducing Measure/Technology: End use house hold energy efficiency

Sectoral scope(s): 3

ER estimate for CPA 001: 42 222tCO₂e 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 “Improved Cookstoves Program in Honduras “Vida Mejor con Ecofogones de Alto Rendimiento” in Honduras”, as described in the PoA-DD, version 5 of 16 January 2015, meets all relevant UNFCCC requirements for the CDM and correctly applies the baseline and monitoring methodology AMS-II.G, version 06. Hence DNV requests the registration of the PoA as a CDM programme of activity.

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Report title: “ Improved Cookstoves Program in Honduras “Vida Mejor con Ecofogones de Alto Rendimiento”” in Honduras		
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Abbreviations

CCT	Controlled cooking test
CDM-CPA-DD	CDM component project activity design document
CDM-POA-DD	CDM programme of activities design document
CEPAL	Economic Commission for Latin America and the Caribbean
CER	Certified Emission Reduction
CL	Clarification Request
CO ₂ e	Carbon dioxide equivalent
CPA	CDM programme activity
CME	Coordination / Managing Entity
DNA	Designated National Authority
DNV	Det Norske Veritas
DO	Distribution Organisations
DOE	Designated Operational Entity
EB	CDM Executive Board
EIA	Environmental Impact Assessment
ER	Emission Reduction
FAO	Food and Agriculture Organization of the United Nations
GHG	Greenhouse gas(es)
HH	Household
ICS	Improved Cook Stoves
ICF	National Institute of Forest Conservation and Development, Protected Areas and Wildlife
KP	Kyoto Protocol
KPT	Kitchen Performance Test
LoA	Letter of Approval
LSC	Local Stakeholder Consultation
LPG	liquefied petroleum gas
MP	Monitoring Plan
NGO	Non-governmental Organisation
NRB	Non-renewable Biomass
OPIC	Overseas Private Investment Corporation
PDD	Project Design Document
PoA	Programme of Activities
PP	Project participant
SERNA	Honduran governmental department of natural resources and environment, "Secretaria de Estado- Recursos Naturales y Ambiente"
SH	Stakeholder
UN-CEPAL	United Nations Commission for Latin America and the Caribbean
UNFCCC	United Nations Framework Convention on Climate Change
UK	United Kingdom
VER	Voluntary Emission Reduction
WBT	Water Boiling Test



1 EXECUTIVE SUMMARY – VALIDATION OPINION

DNV Climate Change Services AS (DNV) has performed a validation of the programme of activity (PoA) “Improved Cookstoves Program in Honduras “Vida Mejor con Ecofogones de Alto Rendimiento”” in Honduras including generic information relevant to all component project activities (CPAs) to be included in this PoA. The validation was performed on the basis of UNFCCC criteria for the Clean Development Mechanism as well as 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.

The host Party is Honduras. The host party Honduras fulfils the participation criteria and has approved the PoA and authorized the project participants Envirofit International Ltd. The DNA from Honduras confirmed that the PoA assists in achieving sustainable development.

The PoA correctly applies the baseline and monitoring methodology AMS-II.G, version 06 “Energy efficiency measures in thermal applications of non-renewable biomass”.

By replacing traditional inefficient cook stoves with improved cook stoves, the programme aims to reduce CO₂ emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the project is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the PoA.

The emission reductions of CPA No 001 expected to be included to the PoA are estimated to be on the average 42 222 tCO₂e per year.

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 “Improved Cookstoves Program in Honduras “Vida Mejor con Ecofogones de Alto Rendimiento”” in Honduras, as described in the PoA-DD, version 5 dated 16 January 2015 meets all relevant UNFCCC requirements for the CDM and correctly applies the baseline and monitoring methodology AMS-II.G, version 06. Hence, DNV requests the registration of the PoA as a CDM PoA.

Oakland and Oslo, 11 June 2015

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Michael Lehmann
Director of Services and Technology,
DNV Climate Change Services AS



2 INTRODUCTION

Envirofit International Ltd has commissioned DNV Climate Change Services AS (DNV) to perform a validation of the proposed small-scale CDM Programme of Activities (PoA) “Improved Cookstoves Program in Honduras “Vida Mejor con Ecofogones de Alto Rendimiento”” in Honduras (hereafter called “PoA”). This report summarises the findings of the validation of the PoA including generic information relevant to all component project activities (CPAs) to be included in this PoA, performed on the basis of UNFCCC criteria for CDM PoAs, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM modalities and procedures, the simplified modalities and procedures for small-scale CDM project activities and the subsequent decisions by the CDM Executive Board.

2.1 Objective

The purpose of a validation is to have an independent third party assess the small-scale PoA design document (PoA-DD) including the description of the generic component project activity (CPA) with generic information relevant to all CPAs to be included in this PoA. In particular, the eligibility criteria for inclusion and demonstration of additionality of CPAs, the programme's baseline determination, monitoring plan, and the programme's compliance with relevant UNFCCC 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 CDM PoAs and is seen as necessary to provide assurance to stakeholders of the quality of the programme and its intended generation of certified emission reductions (CERs).

2.2 Scope

The validation scope is defined as an independent and objective review of the PoA-DD including the description of the generic information relevant to all CPAs to be included in this PoA. The PoA-DD was reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures as agreed in the Marrakech Accords, the simplified modalities and procedures for small-scale CDM project activities, Standard for the demonstration of additionality, development of eligibility criteria, and application of multiple methodologies for programme of activities /18/and the relevant decisions by the CDM Executive Board, including the approved baseline and monitoring methodology AMS-II.G (version 06).

The validation of the programme has also considered the completed CPA-DD for the CPA with the title “Improved Cookstoves Project Activity in Honduras “Vida Mejor con Ecofogones de Alto Rendimiento” – CPA No 001” submitted together with the PoA-DD.

The validation was carried out in accordance with the principles and the requirements for validation contained in the Validation and Verification Standard/12/.

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/ Envirofit International Ltd: *CDM-SSC-PoA-DD for PoA titled ““ Improved Cookstoves Program in Honduras “Vida Mejor con Ecofogones de Alto Rendimiento”” in Honduras*, version 5 dated 16 January 2015, earlier versions and version 01 dated 20 January 2012
- /2/ Envirofit International Ltd: *CDM-SSC-CPA-DD for CPA titled Improved Cookstoves Program in Honduras “Vida Mejor con Ecofogones de Alto Rendimiento”– CPA No 001*, version 5 dated 16 January 2015, earlier versions and 01 dated 20 January 2012
- /3/ Envirofit International Ltd: *CDM-SSC-CPA-DD for CPA titled “ Improved Cookstoves Program in Honduras “Vida Mejor con Ecofogones de Alto Rendimiento”” in Honduras, CPA – Generic*, version 01 dated 20 January 2012
- /4/ Envirofit International Ltd: 4. SSC-PoA Annex 2- ODA Letter from Shell Foundation, 12 March 2012
- /5/ Envirofit International Ltd: 6.1 *SSC-PoA Annex 6- NRB Study Honduras- Calculator, Excel spread sheet*, version 04 dated 16 January 2015
- /6/ Envirofit International Ltd: 6.2 *SSC-PoA Annex 6- NRB Study Honduras-*, version 04 dated 16 Jan 2015
- /7/ Envirofit International Ltd: *CPA-DD Real Annex 5- Ex-ante ER Calculation - Option 2, Excel spread sheet*, version 05 dated 16 January 2015
- /8/ Envirofit International Ltd: 4. SSC-PoA Annex 2- ODA Letter from FUNDEIH, 27 March 2012
- /9/ Envirofit International Ltd: *Miscellaneous Calculation*, version03 dated 22 July 2013
- /10/ Envirofit International Ltd: *Modalities of Communication*, 20 November 2012

3.1.2 Letters of approval

- /11/ DNA of Honduras: PoA DD- Annex 7.1- *Letter of Approval*; 17 May 2012

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

- /12/ CDM Executive Board: *Clean Development Mechanism Validation and Verification Standard*, version 7.0
- /13/ CDM Executive Board: *Clean Development Mechanism Project Standard*, version 7.0



- /14/ CDM Executive Board: *Baseline and monitoring methodology* AMS-II.G “Energy efficiency measures in thermal editions of non-renewable biomass”, version 06
- /15/ CDM Executive Board: *General Guidelines to SSC CDM methodologies*, version 21
- /16/ CDM Executive Board: *Clean development mechanism project cycle procedure*, version 07.0
- /17/ CDM Executive Board: *Guidelines on assessment of de-bundling for SSC project activities*, version 3
- /18/ CDM Executive Board: *Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities*, version 3.0
- /19/ CDM Executive Board: “*Guidelines on the demonstration of additionality of small-scale project activities*”, version 9.0
- /20/ CDM Executive Board: “*Guidelines For Sampling And Surveys For CDM Project Activities And Programme Of Activities*”, version 3.0

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

- /21/ Department of Natural Resources and Environment: Secretary of Natural Resources and Environment “*Secretaria De Recursos Naturales Y Ambiente*”, Honduras, 1 December 2003
- /22/ Victor Hugo Ventura and Ryan Carvalho: “Energy Efficiency in Central America: Progress and Action towards the fulfilment of Goals of the Central American Sustainable Energy Strategy” UN-CEPAL, 2014.
- /23/ MacCarty N. (2008) Proposed Benchmarks For Wood Burning Cookstoves, page 2, table 1, see “Three Stone Fire”, and Aprovecho Research centre, Test Results of Cookstove Performance, chapter 1, page 15, chapter 2, page 51-53
- /24/ MacCarty N. (2008) Proposed Benchmarks For Wood Burning Cookstoves, page 4, table 5, see “Griddle with Holes for Pots” and “Griddle Only” and Aprovecho Research centre, Test Results of Cookstove Performance, chapter 1, page 25, 29, 31, 33, chapter 2, page 51-53
- /25/ Shell Foundation: Letter on financial support, 12 March 2012
- /26/ FUNDEIH, Envirofit International Ltd, Impact Carbon: Public Consultation, Living Better with Ecofogones “*Vida Mejor con Ecofogones*”, Program for Honduras, 7 December 2011
- /27/ Adria’n Ghilardi, Gabriela Guerrero, Omar Masera: A GIS-based methodology for highlighting fuelwood supply/demand imbalances at the local level: A case study for Central Mexico, Mexico, 2009
- /28/ Secretary of Agriculture: Forest National Assessment project supporting national inventory and evaluation forests and trees, Honduras, 2005-2006
- /29/ FAO: Resource Assessment for Global Forest, Honduras, 2010
- /30/ Sanders, A. and Morazan, L. Firewood Consumption in Honduras “*Consumo de Leña en Honduras – 2011*”. Economic Commission for Latin America and the Caribbean (CEPAL), 2011
- /31/ Larios, Mario Vallejo. Screening for Causes of Deforestation and Forest Degradation in Honduras, July 2011. Page 13



- /32/ Global Forest Resources Assessment 2010 (FRA 2010). Global Table 11 Trends in carbon stock in living forest biomass 1990-2010
<http://www.fao.org/forestry/fra/fra2010/en/>
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- /34/ Evaluation of the Global Forest Resources 2010. National Report Honduras. FAO 2010, Page 8
- /35/ Results of the Inventory of Forests and Trees 2005-2006. Project Inventory and Evaluation Support to National Forest and Trees. Page 35
- /36/ CNE National Policies
<http://cne.gob.hn/transparencia/phocadownload/informe%20seplan.pdf>
- /37/ Longwell, T. *Zamorano Improved Stove Certification Center: Evaluation of seven improved efficiency stoves in the laboratory and local community*, Table X, 2011
- /38/ Jimenez, Rodolfo D. Informe: Project supported by the matrix of actions for the integration and development entroamerica energy. Latin American Energy Organization (OLADE). 2010. Pg. 20
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- /40/ UK AR6. CcP.Vol.727 *Gold Standard VER Validation Report: Enhanced distribution of efficient wood stoves in Honduras*. January 2010, pgs. 12-14. Available at: <https://gs2.apx.com/mymodule/ProjectDoc/EditProjectDoc.asp?id1=690>
- /41/ World Bank: Ease of doing business report, June 2011
<http://www.doingbusiness.org/rankings>
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FAO (1983). Wood fuel surveys, UN Food and Agriculture Organization: Forestry for local community development programme, GCP/INT/365/SWE. Available at:
<http://www.fao.org/docrep/X5555E/x5555e00.htm#Contents>.
http://ehs.sph.berkeley.edu/hem/content/KPT_Version_3.0_Jan2007a.pdf on P.7
footnote 5 notes that COV for WBT and CCT = 0.05- 0.1, and for KPTs = 0.4.
- /43/ Evaluation of the Global Forest Resources 2010. National Report Honduras. FAO 2010 Table 4 Page 34
- /44/ Forestry Statistical Yearbook 2010. Evaluation of the Global Forest Resources 2010. National Report Honduras. Vol 25. March 2010. Page 11-12
- /45/ Larios, Mario Vallejo. Screening for Causes of Deforestation and Forest Degradation in Honduras. Jul 2011. Page 27
- /46/ Categories National Protected Area Management 2009
- /47/ Forest Resources Assessment 2010 World Table 21. Honduras Country Report. FAO 2010, Page 17, Page 18, Page 76
- /48/ Galdames Fuentes, Jose Antonio. Capacity Assessment Project and Country Priorities for Implementing the Plan of Action of the National Biodiversity Strategy 0028170.



- Ministry of Natural Resources and Environment Directorate General of Biodiversity. Page 24
- /49/ Regulation of the National Protected Areas System of Honduras (SINAPH). Ministry of Natural Resources and Environment Presidential Agreement Number 921-97. 1997 Page 5
- /50/ Honduras Government, Forestry Law Protected Areas and Wildlife “Ley Forestal Areas Protegidas y Vida Silvestres”, 2011 Page 66
- /51/ Project Inventory and Evaluation Support to National Forest and Trees, Results of the Inventory of Forests and Trees 2005-2006. Page 54
- /52/ Larios, Mario Vallejo. Screening for Causes of Deforestation and Forest Degradation in Honduras. July 2011. Page 14
- /53/ Project Inventory and Evaluation Support to National Forest and Trees, Results of the Inventory of Forests and Trees 2005-2006. Table 21 Page 76
- /54/ Caroline Howe, Sara Bushey, and Rob Bailis, “Fuel Efficiency Improvements in Rural Honduras: Research Study for the Overlook International Foundation.”2008. pg 20. <http://www.proyectomirador.org/sites/default/files/documents/fuel-efficiency-improvements-rural-honduras.pdf>
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- /60/ Envirofit International Ltd: Manufacturers specification for HM-5000, submitted on 2 October 2013.
- /61/ SERNA: Environmental Impact Assessment Requirement, January 2012
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- /63/ FUNDEIH: Note of Authorization, Tegucigalpa, 16 January 2012
- /64/ Shell Foundation: Letter stating that investment is not a diversion of ODA, 12 March 2012
- /65/ The Secretary of State of State of Colorado: Certificate of registration as a Non-profit Corporation in Colorado, 19 September 2011
- /66/ Envirofit International, Ltd: Employment Agreement, 12 November 2004
- /67/ Email from Nathan Lorenz with a copy of the MoC, 14 October 2013
- /68/ Regional Collaboration Centre, Lomé, CDM: Letter accepting the approach proposed by the PP to avoid double counting without use of PoA Logo, 12 November 2013



3.2 Follow-up actions

DNV conducted site visit in Honduras from 22 February 2012 to 24 February 2012. DNV conducted stakeholder interviews in Tegucigalpa on 22 February 2012. DNV interviewed the below listed persons. The persons or organisations have also provided documentation that was used for cross verifications of information/data submitted to DNV.

The household visits were conducted on 23 and 24 February 2012. DNV visited the following regions as part of the household visits. In each region, DNV visited one urban and one rural area. Francisco M departamento (rural: Valle Angeles, urban: Sabana Grande), Choluteca district (rural and urban: Marcovia community), Paraiso departamento (urban: Danli, rural: Jacaleapa). DNV visited a total of 50 households as a sample size.

	Date	Name	Organization	Topic
/69/	22/02/2012	Nathan Lorenz Elisabeth Gomez Jimmy Tran	Envirofit International Ltd Impact Carbon	Opening Meeting Validation process Site visit agenda
/70/	22/02/2012	Tim Longwell Professor & certified forestry expert	Zamorano University	Questions related to availability of biomass (renewable and non-renewable) Types of biomass used in cooking, please specify the types of renewable and non-renewable biomass used. Questions related to the proportion of renewable and NRB. Studies/data related to NRB Time spent to collect firewood Distance travelled to collect firewood Regulations related to fuel wood collection / protection of forests % NRB in the region/country Studies/data related to NRB
/71/	22/02/2012	Arie Sanders lead author of UN-CEPAL baseline report	Zamorano University	Assessment of Sampling Plan Qualification of staff conducting the survey Areas covered in the sample size Determination of clusters QA/QC of the sampling plan Procedure used for conducting KPT The procedure to identify the Households



				Representativeness of the sample Size (The UN_CEPAL Report is no longer used as reference for baseline biomass consumption)
/72/	22/02/2012	Dir Gen de Energia: Ing. Wilmer Alexander, Especialista Energético Dir Gen de Energía y Sr Manzanares	Ministry of Energy, Dept of Energy Resources	Similar programs or surveys conducted by the department of energy resources. Similar programs implemented or promoted by Department of energy Regulations and Policies related to energy
/73/	22/02/2012	Sr Ramirez – Dir Reforestacion	Forestry expert at Government	Sustainably managed forest land Protected forest areas that are sustainably managed Forest area or plantations managed by the forestry department Types of biomass used in cooking, please specify the types of renewable and non-renewable biomass used. Proportion of renewable and NRB. Studies/data related to NRB Time spent to collect firewood Distance traveled to collect firewood Regulations related to fuelwood collection / protection of forests % NRB in the region/country Studies/data related to NRB
/74/	22/02/2012	Danne Yakeline Chavez M. Executive Director	FUNDEIH	Operation, training, distribution, replacement, record keeping, tracking, coordination with PP.
/75/	23/02/2012	Household visits	Rural: Valle Angeles (Francisco M departamento) Urban: Sabana Grande (Francisco M departamento) Rural: Marcovia	What type of cook stoves do you use for cooking? Sources of fuel geographical source type of fuel (firewood/charcoal, etc.) From where do you obtain the fuel (wood) and what type is it? Is it difficult to obtain wood for use as



			community in fuel?
			Choluteca % of income spent on fuel
			district
/76/	24/02/2012	Household visits	Urban: Danli in income/location
			Paraiso How frequently do you go to
			departamento gather/buy wood fuel?
			Rural: Jacaleapa How much wood fuel do you gather
			in Paraiso each time? Do you dry the wood fuel?
			departamento
			Urban: Would you dispose your old stove,
			Marcovia once you get a new one? How would
			community in you dispose it?
			Choluteca
			district

3.3 Closing out of validation findings

The objective of this phase of the validation was to resolve any issues which needed be clarified prior to DNV's conclusion on the PoA's compliance with applicable CDM requirements. In order to ensure transparency a validation protocol was customised for the PoA. The protocol shows in a transparent manner the criteria (requirements), means of verification and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements a PoA is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The validation protocol consists of four tables. The different columns in these tables are described in the figure below. The completed validation protocol for the PoA "Improved Cookstoves Program in Honduras "Vida Mejor con Ecofogones de Alto Rendimiento" in Honduras is enclosed in Appendix A to this report.

Table 2 of the validation protocol documents the findings of the desk review of the PoA design documentation and follow-up interviews with PoA stakeholders. Any findings raised in Table 2 are listed in Table 3 of the protocol, and changes to the description of the PoA design as a result of these findings are addressed in Table 3. Table 2 thus may not reflect all aspects of the PoA as described in the final PoA-DD submitted for registration.

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 CDM 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 CDM 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 CPAs of the PoA. FARs shall not relate to the CDM requirements for registration.

The validation identified twenty five CARs, ten CLs and three FARs. The CARs and CLs were satisfactorily addressed by the project participants by among other revising the PoA-DD (please refer to Table 3 in Appendix A for further details). In addition to the changes made to the PoA-DD as a result of the validation findings, the following changes to the PoA-DD (version 5 of 16 January 2015) were made compared to the version of the PoA-DD published for stakeholder comments (version 1 dated 20 January 2012):

- The PoA DD and CPA DD were updated to the latest template version, i.e. F-CDM-SSC-PoA-DD - Programme design document form for small-scale CDM programmes of activities, version 3 and F-CDM-SSC-CPA-DD - Component project design document form for small-scale component project activities, version 3
- The eligibility criteria for the PoA were revised compared to the PoA-DD, CPA-DD and CPA Generic that was published;
- The procedure for baseline study for future CPAs, sampling design plan for baseline and monitored parameters was revised;
- The additionality demonstration was revised. The initial PoA-DD used investment barrier to demonstrate additionality. This was revised to demonstrate additionality using EB68 Annex 27 “Additionality Guidelines of Small-Scale Projects” paragraph 2(c) as described in the PoA DD.
- The monitoring plan was revised. The PP included additional measures to ensure that there will be no double counting across CPAs and across other CDM projects implemented in Honduras.
- Annex I Party was removed from the PoA DD, as the LoA received had an error in the name of the title of the PoA. The PP will submit the LoA from Annex I country (United Kingdom after registration of the PoA)
- The PoA-DD and CPA-DD were updated in response to Information and Reporting check queries received from UNFCCC on 07 March 2014.
- The PoA-DD and CPA-DD were updated in response to information and reporting check queries received from UNFCCC on 27 November 2014. To address the concern raised by the UNFCCC regarding how the quantity of woody biomass per device is considered equivalent to the quantity of woody biomass per household in the CPA submitted for validation with the PoA, the PP has revised the CPA-DD to apply 3.10 tonnes per device per year instead of 7.15 tonnes per household per year for the parameter *Bold,i* and provided further clarifications on the adjustment being made in case multiple project devices in a household are identified during monitoring of the parameter *Ny,i,a*. Moreover, as in the meantime version 5 of AMS-II.G had expired, the PoA was also revised to apply AMS-II.G, version 6.



Validation Protocol Table 1: Mandatory Requirements for CDM programme of activities (PoA)				
Requirement	Reference	Conclusion		
The requirements the PoA must meet.	Gives reference to the legislation or agreement where the requirement is found.	This is either acceptable based on evidence provided (OK) or a corrective action request (CAR) if a requirement is not met.		

Validation Protocol Table 2: Requirement Checklist				
Checklist question	Reference	Means of verification (MoV)	Assessment by DNV	Draft and/or Final Conclusion
The various requirements in Table 1 are linked to checklist questions the PoA should meet. The checklist is organised in different sections, following the logic of the PoA-DD	Gives reference to documents where the answer to the checklist question or item is found.	Means of verification (MoV) are document review (DR) , interview (I) or any other follow-up actions (e.g., on site visit and telephone or email interviews) and cross-checking (CC) with available information relating to projects or technologies similar to the proposed CDM PoA under validation.	The discussion on how the conclusion is arrived at and the conclusion on the compliance with the checklist question so far.	OK is used if the information and evidence provided is adequate to demonstrate compliance with CDM requirements. A corrective action request (CAR) is raised when project participants have made mistakes, the CDM requirements have not been met or 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 CDM requirements have been met. A forward action request (FAR) during validation is raised to highlight issues related to PoA implementation that require review during the first verification of the PoA.

Validation Protocol Table 3: Resolution of Corrective Action and Clarification Requests			
Corrective action and/or clarification requests	Ref. to checklist question in table 2	Response by project participants	Validation conclusion
The CARs and/ or CLs raised in Table 2 are repeated here.	Reference to the checklist question number in Table 2 where the CAR or CL is explained.	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 4: Forward Action Requests		
Forward action request	Ref. to checklist question in table 2	Response by project participants
The FARs raised in Table 2 are repeated here.	Reference to the checklist question number in Table 2 where the FAR is explained.	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

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

<i>Role</i>	<i>Last Name</i>	<i>First Name</i>	<i>Country</i>	<i>Type of involvement</i>							
				Desk review	Site visit / Interviews	Reporting	Supervision of work	Technical review	TA 3.2 competence	TA 14.1 competence	Financial expertise
Team Leader (CDM Validator) from 1 June 2013	Bachamanda	Shruthi	USA	✓	✓	✓	✓				
Team Leader (CDM Validator) until 30 May 2013	Sandoval	Gonzalo	Mexico	✓	✓	✓			✓		
Expert	Kapambwe	Misheck	Australia							✓	
Expert	Burns	Scott	USA								✓
Technical reviewer	Yang	Weidong	USA					✓			
Person assisting technical reviewer with TA competence	Little	Grant	UK							✓	
Person assisting technical reviewer with TA competence	Kaliaperumal	Thamizh arasi	India						✓		



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 5 dated 16 January 2015.

4.1 Comments by Parties, stakeholders and NGOs

The PoA-DD, version 1 dated 20 January 2012, was made publicly available on the CDM website and Parties, stakeholders and NGOs were through the CDM website invited to provide comments during a 30 days period from 28 January 2012 - 26 February 2012.

The following comments were received from one stakeholder “Proyecto Mirador”, an organisation who has implemented a similar project registered with the Gold Standard as a Voluntary Emission reduction (VER) project in Honduras.

The comments from the stakeholder (SH) and responses to these comments have been listed below:

Comment by: <input type="checkbox"/> Accredited NGO <input type="checkbox"/> Party <input checked="" type="checkbox"/> Stakeholder		
Comment:		
1.	SH	<p>The “Kitchen Performance Test”</p> <p>The methodology for the “KPT” baseline study on wood use was referenced in the PoA in Annex 3, page 37. The source document for this baseline study was cited as the “UN-CEPAL” report. The actual source report, Consumo de Leña en Honduras’– May 2011 (Consumption of Wood in Honduras – May 2011), was authored by Zamorano University and jointly executed with SERNA a Honduran governmental organization) in a close relationship with the Comisión Económica para América Latina y el Caribe CEPAL). The methodology used for the “Kitchen Performance Test” of the PoA is outlined on page 511. We requested the raw data from this study for our own review but the request was not acknowledged.</p> <p>The methodology for the “Kitchen Performance Test” of this PoA appears to differ from the standard methodology for the Kitchen Performance Test for improved cookstoves as established by the United States Environmental Protection Agency and sponsored Partnership for Clean Indoor Air PCIA) in conjunction with other research organizations. This standard methodology is acknowledged in the PoA on page 22 and can be found online at this location: http://www.pciaonline.org/files/KPT_Version_3.0_0.pdf.</p> <p>We would ask that the following points be reviewed:</p> <ol style="list-style-type: none"> The sample size and selection of households used based on the requirements of standard Kitchen Performance Test methodology. While it is stated in the PoA page 37, paragraph 1) that a subset of 485



		<p>households were covered in the KPT, it is unclear how many of those households underwent quantitative fuel wood testing as opposed to qualitative surveys.</p> <p>b. The length of time in each household in number of days) over which the “Kitchen Performance Test” was conducted in order to assess whether it meets the requirements of recognized Kitchen Performance Test.</p>
	CME	<p>The PoA design has been revised such that the baseline fuel consumption for CPAs shall be determined at CPA level depending upon the target consumer group in that CPA. Thus, the revised PoA-DD does not specify any baseline fuel consumption value for any target consumer groups defined.</p> <p>The CPA 001 of the PoA includes only residential consumers as the target consumer group and baseline fuel consumption for the same has been defined ex-ante in the respective CPA-DD. CDM methodology AMS-IL.G version 06 allows determination of $B_{old,i}$ using historical data as per paragraph 19(a), which the CPA001 chooses to do instead of conducting KPTs.</p> <p>Consumo de Leña en Honduras 2011 is no longer used to determine the value of $B_{old,i}$, in CPA001. Instead the historical data as available in published report, “Energy Efficiency in Central America: Progress and Action towards the fulfillment of Goals of the Central American Sustainable Energy Strategy” by Victor Hugo Ventura and Ryan Carvalho, published by UN-CEPAL, 2014 has been used to determine the baseline fuel consumption value or CPA001</p>
	DNV	<p>AMS-IL.G, version 06 allows the use of historical data or a survey of local usage for the determination of $B_{old,i}$. The PP no longer uses the survey data from the ‘Consumo de Leña en Honduras’ UN-CEPAL report as in the earlier versions of the POA-DD and CPA-DD 001, but uses historical data on firewood consumption per capita from year 2007-2011 in the revised CPA-DD from “Energy Efficiency in Central America: Progress and Action towards the fulfillment of Goals of the Central American Sustainable Energy Strategy” by Victor Hugo Ventura and Ryan Carvalho, published by UN-CEPAL, 2014 /21/..</p>
2.	SH	<p>Information on the proposed improved stove for dissemination</p> <p>The PoA-DD and the CPA-DD provide no details of the proposed ICS stove either from laboratory or field testing; therefore, it is difficult to assess whether the proposed ICS is more efficient than the baseline fogón.</p> <p>It is possible, from our interpretation of the documentation “UN-CEPAL” report, that estimated improvements in fuel efficiency for the ICS stove were made by using results for another type of fuel efficient stove deployed in Honduras. If the proposed ICS is built under unique specifications, then data used in the PoA which pertains to existing types of improved stoves, even if similar in structure and appearance, should not serve to estimate the characteristics of the ICS presented in this</p>



PoA VALIDATION REPORT

		document. Even subtle variations in structure and materials can introduce major differences in terms of emission reductions and duration. Therefore, the combination of points one and two suggests that the issuance of this PoA is premature to the establishment of a stove project and is simply intended to place the PoA before the CDM organization before its December, 2012 deadline.
	CME	Proof of evidence of the thermal efficiency for the proposed technology under CPA001 has been provided to the DOE as part of the validation process. This evidence demonstrates the project stoves efficiency under CPA001.
	DNV	The PP has submitted the thermal efficiency test certificate conducted for the model that is being distributed in the first CPA. The test has been conducted by an independent body – Colorado State University using the “Emissions and performance test protocol.” The thermal efficiency of the ICS is higher than the baseline stoves. Additionally, the efficiency of the ICS will be monitored annually as per the guidance provided in the methodology and described in the PoA DD. Additionally, the CPA eligibility criteria and the methodology AMS-II.G, version 06 requires the ICS to have a minimum efficiency of 20%, and thus any stove model that has a thermal efficiency lower than 20% will not be included in the PoA. DNV considers this to address the stakeholder’s comment adequately.
3.	SH	<p>Baseline stove & baseline fuelwood consumption</p> <p>PoA, Page 37, Paragraph 4: Average fuelwood consumption in homes was $19.6 \pm 8.6 \text{ kg HH}^{-1} \text{ day}^{-1}$, and $5.2 \pm 3.8 \text{ kg capita}^{-1} \text{ day}^{-1}$. Baseline fuelwood consumption was reported in Table 10 (page 20) of the study Consumo de Leña en Honduras and was estimated using figures published by the Honduran National Institute of Statistics in 2004 under the Encuesta De Condiciones De Vida, or ENCOVI. Footnote 5 on page 20 states that the ENCOVI (2004) estimated that 9,821,907 kg/day of fuelwood per day is consumed overall at the national level, and that an estimated 501,117.7 households use fuelwood to cook their food. 19.6 kg/day is a simple result of dividing the fuelwood consumption by the estimated number of households using fuelwood to cook. We question the accuracy of this estimate as it measurably conflicts with our own, real-world test data, rigorously obtained in paired-sample Kitchen Performance Tests using the globally accepted standard KPT methodology. The results of our baseline studies, which have been verified by two DOEs and approved by the Gold Standard Foundation, show baseline fuelwood consumption of nearly half what is reported here. While some variation is to be expected, we believe that the estimated 19.6 kg/day runs the risk of overvaluing emission reductions. PoA, Page 22, Paragraph 11: “A default value of .10 is used since the replaced system is a three stone fire or a conventional system with no improved combustion air supply or flue gas ventilation system, i.e. without a grate or chimney.” We would comment that in our 8 years of field experience, a conventional stove in Honduras is not a three stone fire, but a U-shaped adobe mud stove with a plancha top. While not all of these</p>



POA VALIDATION REPORT

		types of stoves have chimneys, many do; thus, there is some removal of smoke and soot from the indoor environment. Therefore, the default value may be at issue if used for subsequent CPA's.
	CME	<p>Response to first sub-comment:</p> <p>The PoA design has been revised such that the baseline fuel consumption for CPAs shall be determined at CPA level depending upon the target consumer group in that CPA. Thus, the PoA-DD does not specify any baseline fuel consumption value for any target consumer groups defined.</p> <p>Consumo de Leña en Honduras 2011 is no longer used to determine the value of $B_{old,i}$ for CPA001. Instead historical data as available in published report, "Energy Efficiency in Central America: Progress and Action towards the fulfillment of Goals of the Central American Sustainable Energy Strategy" by Victor Hugo Ventura and Ryan Carvalho, published by UN-CEPAL, 2014 has been used to establish the same ex-ante.</p> <p>The use of aforesaid 2014 report for CPA001 results in the baseline fuel consumption value of 3.10 tonnes per annum which is less than half of what was reported originally for CPA001 as per 2011 report. It is worth noting that in the first version of CPA001-DD while 10,125 stoves were contributing to 42,222 tCO_{2e} per annum now 23,350 stoves result in the same amount of emission reductions in final version of CPA-DD due to reduction of $B_{old,i}$ from 7.15 tonnes per annum to 3.10 tonnes per annum respectively</p> <p>Response to second sub-comment:</p> <p>As explained above, the PoA design has been changed to determine baseline at the CPA level. Thus, the PoA-DD now only provides the choices of default baseline efficiency values to be used depending upon the applicable baseline in the CPA.</p> <p>The baseline stove efficiency of 0.1 has been selected for CPA001 based on the following:</p> <ol style="list-style-type: none"> 1. Ashden Awards Case Study, TWP, Honduras, Ashden Awards 2005 – The case study states that "About 90% of rural households and 50% of urban households in Honduras use fuelwood for cooking, which is done mostly on open fires and often indoors." http://www.ashden.org/files/TWP%20full.pdf "These stoves waste 90% of the potential wood energy and the burning contributes to global warming." http://stoves.bioenergylists.org/stovesdoc/TWP/honduras/Honduras%202%20pager%20Ashden.pdf 2. Promotion of Sustainable Use of Natural Resources and Local Economic Development (PRORENA – EnDev component) – Report by GTZ, July 2007 – "In Honduras, wood is up to date the most important cooking fuel with a share of 84 % of the households using it exclusively



		<p>for cooking. Another 13 % of the households use both, fuelwood and gas or electricity for cooking and only 3 % of the households cook exclusively with LPG or electricity. In majority the traditional not efficient stoves are in use....”</p> <p>https://energypedia.info/images/6/63/Honduras_final_report.pdf</p> <p>3. Programa de aumento del aprovechamiento de fuentes renovables de energía (srep) plan de inversiones de honduras – refer page 24, table 13: the source of this information is Study on fuelwood consumption, April 2011 Produced by SERNA, EAP and ECLAC. As per the same 44.7% urban households and 76.8% of rural households use fuelwood stoves for cooking. The remaining users rely on gas / electricity based cookstoves. However, in the fuelwood stove category (i.e. 44.7% urban and 76.8% rural households) more than 90% of households (both in case of urban as well as rural) rely on traditional / conventional stoves for cooking.</p> <p>The report also states that (para 64), “The energy matrix has a high consumption of firewood, which is done more in inefficient stoves..... The experience of the main institutional actors and cooperation International shows that the problem lies not in the use of firewood, but the inadequacy of the traditional technology.....”</p> <p>“Although it has been well received by users, the introduction of improved stoves in Honduras has been limited: its current share is only 9.9% in rural areas and 2.9% in the urban area” (para 65)</p> <p>http://www.sefin.gob.hn/wp-content/uploads/2011/09/Honduras_Plan_de_Inversiones-SREP.pdf</p> <p>4. Lastly, most available improved wood stoves in Honduras are planchas typically placed over inefficient open fires or rudimentary “improved” cookstoves which historically, have been distributed by NGOs or through other non-commercial programs. While these “improved” cookstoves can remove smoke from the kitchen via a chimney if they are properly installed and maintained, they can still have higher wood use and lower thermal efficiency than a three-stone fire. In 2008, Aprovecho Research group evaluated the wood use of a range of stoves, including several “improved” plancha stoves. The study found that three stone fires consumed approximately 1250g to complete the Water Boil Test (WBT) (refer CPA01-DD for reference), while all of the plancha/griddle stoves used 1400 to 2100 g for the same task. The results demonstrate that in all cases the plancha stove actually have higher wood consumption compared to a three stone fire. Separate and independent stove testing completed using the same WBT protocol at Zamorano University in Honduras also showed that all of the locally available stoves used more wood than an open fire:</p>
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Indicadores	Unit	1	2	3	4	5	6	7
		Justa Tradicional	Justa 2 x 3 Proyecto Mirador	Onil	Ecofogón	Incawasi	Patsari	Malena
Fuel to Cook 5L (850/1500)	g	3176.0	2962.2	3291.8	3033.5	1860.0	5092.5	3874.1
CO to Cook 5L (20)	g	56.5	37.8	28.6	38.1	21.7	252.3	42.0
PM to Cook 5L (1500)	mg	8270.7	5656.5	2377.3	4297.2	4228.1	34236.3	7550.0
Energy to Cook 5L (15,000/25,000)	kJ	58,483	54,546	60,616	55,860	34,249	93,773	71,338
Time to Boil	min	57.1	54.2	50.7	79.5	54.2	39.7	60.0
CO2 to Cook 5L	g	4488.7	3745.3	4207.8	4324.9	2444.5	3262.5	3669.7

Image: Comparison of WBT results for seven improved efficient fuel wood stoves. Testing conducted by Zomorano University, Honduras.

In light of aforesaid, it is substantiated that the used of traditional, inefficient conventional stoves is a prevailing practice in Honduras and the default value of 0.1 for baseline stove efficiency is deemed appropriate.

4.	DNV	In 2008, Approvecho Research group evaluated the wood use of a range of stoves, including several “improved” plancha stoves. The study found that three stone fires consumed approximately 1250g /23/ to complete the Water Boil Test (WBT), while all of the plancha/griddle stoves used 1400 to 2100 g for the same task /24/. The results demonstrate that in all cases the plancha stove have higher wood consumption compared to a three stone fire. This demonstrates that the plancha stoves are more inefficient than three stone and hence 10% is an acceptable value for the traditional stoves, including the plancha stove in Honduras
	SH	No use of government funding for the project PoA (A.4.5, pg 13) and in the CPA-DD, Page 5 (A.4.5) a. We note that baseline data, “Kitchen Performance Test” data and improved stove data used by the CME in the PoA originates from a government sponsored study: Consumo de Leña en Honduras - Mayo 2011, authored by Escuela Agricola Panamerica, El Zamorano (Zamorano), jointly executed by Zamorano and the Secretaria de Recursos Naturales y Ambiente (SERNA), and in close relationship with the Unidad de Energica y Recursos Naturales (UERN) which is based at the regional sub headquarters of the Comision Economica para America Latina y el Caribe (CEPAL). b. Can the CME provide clarification of the relationships between the employees as well as the entities of FUNDEIH and Vida Mejor with SERNA and the Congreso Nacional de Honduras.
	CME	Response to first sub-comment: In line with CDM rules, the PoA has been updated with the following statement to clarify funding usage: “This PoA does not receive funding from Annex I parties that could result in a diversion of official development assistance”. The <i>Consumo de Leña en Honduras 2011</i> study and resulting report, was commissioned by the United Nations branch Comisión Económica para América Latina y el Caribe (CEPAL). UN-CEPAL was responsible for preparing and designing the study, including sample selection, survey design, and locations. The actual field work was executed by local researchers at Zamorano University. The study was not commissioned by the CME or any



		<p>partner organization involved in this program of activity. These facts were substantiated by the DOE during the site visit.</p> <p>Besides, this study is no longer used to establish the baseline of the CPA001.</p> <p>a) Response to second sub-comment:</p> <p>The employees and the entities of Fundación para el Desarrollo Integral de Honduras (FUNDEIH) and Vida Mejor have no relationship with the Honduras Secretary of Natural Resources and Environment (SERNA) or National Congress. Vida Mejor, an improved cookstove project, was one of the original pilot activities of FUNDEIH. Through this program, FUNDEIH has reached out to numerous entities and organizations, some government related, with proposals for seeking partnerships to help scale the outreach and impact of in the project. FUNDEIH also approached SERNA for legal approval of the CDM registration process for the program of activity.</p>
	DNV	The UN-CEPAL “ <i>Consumo de Leña en Honduras 2011</i> ” is no longer referenced as part of this PoA-DD and CPA-DD.
5	SH	<p>PoA, Pages 18 and 25, Leakage</p> <p>The PoA does not appear to have included estimates of leakage from importation, warehousing and distribution for imported stoves or for the large-scale distribution network required to sustain a locally produced model.</p>
	CME	The leakage associated with the program of actives has been assessed based on the requirements of CDM methodology AMS-II.G 06.
	DNV	The default leakage value 0.95 has been used to account for leakage. This is in lines with the methodology AMS II-G, version 06. No other leakage is required to be considered by the methodology AMS-II.G, version 06.
Specific Comments to Clean Development Mechanism, Small-scale programme of activities document form (CDM-SSC-PoA-DD) Version 01		
1	SH	<p>Recent studies on household energy use in Honduras provide further evidence that the current ‘ICS’ used in-country are of lower quality and efficiency than that of the ICS provided by this POA.</p> <p>We were unable to find any quantitative fuelwood consumption data in the resource document <i>Consuma de Leña en Honduras</i> to substantiate this statement according to standard industry methodology. Not only is the relative efficiency of the proposed stove unsubstantiated by test results or comparative data, but there is no information describing the stove’s design that might prompt such an assumption.</p>
	CME	Comment has been addressed through response to “Overview Comment 1 and comment 3 which details the value of fuel consumption in the baseline and the value of project stove efficiency respectively compared to the baseline. Since the CPA001 is not using option 1 of the methodology for determining biomass savings using KPTs hence project fuel consumption values are not specified in the CPA001-DD. The basic stove design is provided in the CPA-DD”.
	DNV	CPA001 does not use Option 1 of methodology to determine biomass



		consumption using KPTs. Hence, project fuel consumption values are not specified in the CPA001-DD.
2	SH	<p>Page 8, Paragraph 2</p> <p>Limited penetration of Cookstoves is due to constraints related to supply chain barriers. The document <i>Consuma de Leña en Honduras - Mayo 2011</i> (referred to in the PoA as UN-CEPAL study) estimates that only 3 000 improved cookstoves have been installed in the country. We know that this information is erroneous, as our project has recorded the installation of more than 15 000 Dos por Tres stoves in the last two years alone.</p> <p>After 8 years of experience building cookstoves in Honduras, we are comfortable stating that the expansion of a cookstove project does not have to do with the supply chain as much as it has to do with funding and building an organization capable of scale and training of the beneficiaries.</p> <p>The erroneous estimate of market penetration may originate from Zamorano's sampling method, which called for a small sampling of homes from as much of the entire country as possible. Proyecto Mirador efforts have been concentrated in four provinces and would not show up in this sampling methodology. Further, Zamorano did not cite or compare their estimates with other sources (such as the Partnership for Clean Indoor Air) to obtain stove installation figures, but rather relied solely on its own sampling for the estimates.</p> <p>Therefore we would dispute the statement that supply chains are a barrier.</p>
	CME	The demonstration of additionality has been revised as per the latest "Guidelines on the demonstration of additionality of small-scale project activities"
	DNV	The PP has demonstrated additionality using <i>Guidelines on the demonstration of additionality of small-scale project activities/19/</i> , which does not require the investment or barrier analysis. The barrier analyses including the description of barriers to supply chain have been removed from the additionality assessment.
3	SH	<p>Financial barriers</p> <p>Project developers face continued barriers to distribution and financial tracking.</p> <p>We believe that the World Bank report of 2011 (cited here) is largely aimed at stove initiatives in China and India (as outlined by the business plan published by the Global Alliance for Clean Cookstoves in 2012). In Honduras, in our 8 years of experience, we dispute the blanket claim made by the World Bank that, "New initiatives for advanced cookstove still require market testing, improving retail distribution chains, and ensuring that stoves perform as claimed by manufacturers as expansion moves forward."</p>



		<p>In Honduras, for purposes of this PoA, we have not found market testing necessary beyond rudimentary inquiries, we have not required an improvement in retail distribution chains to disseminate large numbers of stoves, and we have monitoring systems in place to insure that stoves perform as intended.</p> <p>We have found that it is not necessary to produce a factory built stove in order to provide a high quality product that can be scaled up. Further, we have found no “barriers to distribution of our model to rural and underserved communities.”</p> <p>b. Page 8, Paragraph 6: Partnering with local distributors requires the financing and establishment of not only physical delivery with transparent tracking systems for small and large quantities of products, but also the development of credit mechanisms that allow entrepreneurs to purchase advance inventory in large amounts.</p> <p>It has been our experience that large credit mechanisms for entrepreneurs that wish to distribute stoves are not necessary. With sufficient initial capital and income from carbon finance, the project should be able to sustain dissemination without accessing the credit markets.</p> <p>(Page 9) We have also not found it necessary to implement increased management and accounting systems to handle elevated risk margins. There is a cash free model of a stove being disseminated that largely eliminates these risks.</p> <p>Therefore we question the efficacy of these financial barriers.</p>
	CME	The demonstration of additionality has been revised as per the latest “Guidelines on the demonstration of additionality of small-scale project activities”
	DNV	The additionality demonstration was revised. The initial PoA-DD used investment barrier to demonstrate additionality. This was revised to demonstrate additionality using <i>Guidelines on the demonstration of additionality of small-scale project activities/19/</i> .
4	SH	<p>Page 10, Conclusion</p> <p>Enabling the sourcing of raw materials, knowledge, design, production, warehousing, logistics, financing, sales services and customer support are integral components of creating a sustainable climate for improved stoves. The project activity must actively continue to create and build these systems to overcome the large barriers to implementation and distribution of cooking stoves. Without carbon finance it is clear that the project activity would not occur due to the different barriers incurred by each technology and related lack of stable infrastructure to support ongoing activities.</p> <p>We do not agree that the aforementioned components are integral to creating a sustainable climate for improved stoves, nor that they must be actively continued to overcome large barriers to implementation and</p>



		distribution of cooking stoves. As stated earlier, this has not been our experience in Honduras with a carbon market based cookstove distribution model.
	CME	The demonstration of additionality has been revised as per the latest "Guidelines on the demonstration of additionality of small-scale project activities"
	DNV	The PP has demonstrated additionality using Guidelines on the demonstration of additionality of small-scale project activities /19/, which does not require the investment or barrier analysis. The barrier analyses including the description of barriers to supply chain have been removed from the additionality assessment.
5	SH	<p>The CME will ensure that each SSC---CPA maintains appropriate records. Each SSC-CPA will use a record keeping tool as describe in section E.7.2.</p> <p>The information in section E.7.2 does not describe the method by which distributors and CPA's will be periodically inspected to insure that this information is being kept accurately in either paper or electronic files. Further it does not explain how it can be determined whether or not DO's are excluding any stoves using fossil fuels.</p> <p>Paragraph 4: These systems are costly and not yet widely available in the marketplace...</p> <p>An electronic monitoring system is available at this time in Honduras.</p>
	CME	<p>Response to first sub-comment:</p> <p>Section E.6.2 and the monitoring plan of the PoA-DD have been updated to consistently reflect the method by which distributors and CPA projects will be periodically inspected to ensure that this information is being accurately maintained.</p> <p>Response to second sub-comment:</p> <p>The project is aware of SMS tracking systems being piloted in Tanzania and Kenya and seeks future opportunities to upgrade to fully electronic monitoring systems. These electronic systems, however, are costly and have not been used widely by stove projects. We maintain that these systems are not yet feasible for the project at this early stage and would pose a significant upfront cost to tailor design. Besides, the methodology does not mandate use of electronic systems to monitor parameters ex-post.</p>
	DNV	The PP has revised the PoA DD and CPA DD to reflect the detailed monitoring, inspection and data transfer and recording plan. DNV confirms that the monitoring and operation plan is complete and satisfactory. There is no mandate to use an electronics tracking system.
6	SH	We would like to note that Proyecto Mirador, the largest distributor of improved cook stoves in Honduras, was not included in the stakeholder consultations. Perhaps there could be clarification about how stakeholders were selected.
	CME	In order achieve a diverse representation of stakeholders, public and individual



		<p>invitations were disseminated to announce the stakeholder consultation. Invitations were sent via email, post, and phone. An advertisement was also published in a newspaper with national coverage well before the event. Invitees from varying backgrounds, including government officials, local leaders, and area councilors, served as intermediaries to spread the word about the event. Other project developers and organizations involved in the implementation of improved cook stoves, such as FORCUENCA, Vision Mundial, and GIZ, also attended the event.</p>
	DNV	<p>DNV has reviewed the participation list in the stakeholder consultation report that provides evidence of the newspaper publication, the participant list, the completed questionnaires distributed/58/. Additionally, the stakeholder consultation report has been approved by the DNA of Honduras/58/</p>
7	SH	<p>Page 20, E.5.1, Paragraph 2</p> <p>Assessment and demonstration of additionality for a typical SSC---CPA</p> <p>Given questions with the regard to the barriers as stated in this PoA, we suggest that the CDM issue of additionality should be examined more closely.</p>
	CME	<p>The demonstration of additionality has been revised as per the latest “Guidelines on the demonstration of additionality of small-scale project activities”</p>
	DNV	<p>The additionality demonstration was revised. The initial PoA-DD used investment barrier to demonstrate additionality. This was revised to demonstrate additionality using <i>Guidelines on the demonstration of additionality of small-scale project activities/19/</i>.</p>
8	SH	<p>8. Page 21, E6</p> <p>Estimation of Emission Reductions of a CPA and page 37, Annex 3:</p> <p>As described above in Overview Comments, #1, the methodology used for the “Kitchen Performance Test” of the PoA4 appears to differ from the globally accepted methodology for the Kitchen Performance Test for improved cookstoves as established by the United States Environmental Protection Agency (EPA) sponsored Partnership for Clean Indoor Air (PCIA) in conjunction with other research organizations.</p> <p>In fact, the PoA acknowledges the existence of the globally accepted KPT methodology on page 22, when using AMS-II G version 3, Option 1.</p>
	CME	<p>Please note that PP can select any options out of option 1, 2 and 3 provided by methodology for determination of biomass savings and need not only rely on KPTs to determine the same. The CPA001 shall use option 3 (water boiling tests to determine operational efficiency of project stoves) for the same.</p> <p>Further, the Consuma de Leña en Honduras report, 2011 is no longer used as a source for baseline biomass consumption value.</p>
	DNV	<p>The Consuma de Leña en Honduras report is no longer used as a source for baseline biomass consumption.</p>
9	SH	<p>When using AMS-II G version 3 Option 2, hold:</p> <p>A default value of .10 is used since the replaced system is a three stone</p>



		<p>fire or a conventional system with no improved combustion air supply or flue gas ventilation system, i.e. without a grate or chimney.</p> <p>In our 8 years of field experience, a conventional stove in Honduras is not a 3 stone fire, but a u---shaped adobe mud stove with a plancha top. While not all of these types of stoves have chimneys, many do; thus there is some removal of smoke and soot from the environment among baseline stoves. Therefore, the default value may be at issue in this case.</p>
	CME	Comment has been addressed through response to “Overview Comment 1 and comment 3 which details the value of fuel consumption in the baseline and the value of project stove efficiency respectively compared to the baseline.
	DNV	In 2008, Approvecho Research group evaluated the wood use of a range of stoves, including several “improved” plancha stoves. The study found that three stone fires consumed approximately 1250g /23/ to complete the Water Boil Test (WBT), while all of the plancha/griddle stoves used 1400 to 2100 g for the same task /24/. The results demonstrate that in all cases the plancha stove have higher wood consumption compared to a three stone fire. This demonstrates that the plancha stoves are more inefficient than three stone and hence 10% is an acceptable value for the traditional stoves, including the plancha stove in Honduras
10	SH	<p>Generalities:</p> <p>The PoA makes reference to modification of the baseline as follows: B_{old} may be revised if credible new regional or national data becomes available.</p> <p>We would like to inquire how “credible new data” will be accounted for and made available for public comment.</p>
	CME	The PoA design has been revised such that the baseline fuel consumption for CPAs shall be determined at CPA level depending upon the target consumer group in that CPA. Thus, the PoA-DD does not specify any baseline fuel consumption value for any target consumer groups defined. Thus, subsequently, if new credible data is available, it will be considered at the time of CPA inclusion as deemed appropriate.
	DNV	There are many parameters in the PoA that will be monitored ex-post. Additionally, for institutional stoves and commercial stoves, the $B_{old,i}$ value will be determined at the CPA inclusion stage. DNV confirms that this is in lines with the methodology and other requirement of the PoA standard.
11	SH	<p>Due to Age: Each year the “cut off age” is decided at the discretion of the CME and stoves older than this age will not be included in the sample....</p> <p>We would like to understand the testing parameters for determination of the cut-off age. Although at discretion of the CME, a numerical quantity for this entity should be stated.</p>
	CME	The revised version of methodology requires monitoring of stove efficiency for different ages. Thus, any ageing impact on efficiency will be automatically covered during ex-post monitoring and hence there is no requirement to specify any cut off age. The PoA-DD has been revised accordingly to remove any reference to cut off age.
	DNV	The methodology does not require the PP to determine a cut-off age for the



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		stove since the commencement of the activity. The PP will determine this based on the efficiency of the ICS as the stove ages. The PP will monitor the efficiency of the stove at least biennially for different ages.
12	SH	We would submit that the baseline methodology was not performed according to standard methodology as mentioned above in Overview Comments, #1 and with regard to page 21, E6, <i>Estimation of emission reductions</i> .
	CME	Answered in overview comment 1.
	DNV	Answered in overview comment 1.
13	SH	N_{old} and SC_{old} Comments as made above for pages 23 and 24 apply.
	CME	Answered in specific comments 10-12.
	DNV	The procedure to determine η_{old} and SC_{old} have been described in lines with the methodology AMS-II.G, version 06.
14	SH	Leakage Factor Comments as made in Overview Comments, #5.
	CME	Answered in overview comment 5.
	DNV	Answered in overview comment 5.
15	SH	<i>NRB</i> We believe that the NRB data for each department in Honduras should be Established before the issuance of the first CPA. From experience, we believe that if each CPA becomes area specific, NRB can vary dramatically Depending on The location of the stove being disseminated and cannot be Applied as a blanket quantity.
	CME	The project proponent establishes an average NRB value at the national level based available data from national experts and published country information. Additionally, implementation of the different projects (CPAs) within the program are not planned to be area-specific. Even if a CPA is area-specific, the program pursues the fair distribution of the technology at the national boundary, which will balance the variability of the NRB amongst the different regions of the country.
	DNV	The CPA boundary for the CPA No 001 is the country of Honduras. The NRB has been correctly determined for the geographic boundary of Honduras.
16	SH	$B_{y,new}$ A standard test (KPT) by a dedicated expert team every year on each Technology type that measures aging stove performance...once applied to a Single CPA, all applicable CPA's within the same PoA can use such data to Define the value. We inquire whether this statement is true for all stoves under the PoA or only For those stoves of the same type. It would seem that only stoves of the same Type should apply the same aging data.
	CME	Section B.7.1 of the PoA-DD, Part II has been updated to clarify that the monitoring plan will measure ageing stove performance for each type of stove implemented.
	DNV	Part II, Section B.7.1 of the PoA-DD has been updated to clarify that the monitoring plan will measure aging stove performance for each type of stove implemented.
17	SH	<i>3. Technology Usage Survey:</i> a. It may be that a simple qualitative questionnaire as to continued stove



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		usage must be accompanied by a visual inspection of the stove to insure it is functioning as intended. b. In the Monitoring Plan, we note there is no test for dropoff in efficiency of each CPA over time. In other words, a new stove may be more efficient than a one---year--- old stove, a one year old stove is more efficient than a two year old stove, etc. This would have an effect on emission reduction claims and should be measured.
	CME	The version of the methodology applied in the revised version of PoA / CPA001 requires monitoring of efficiency on age basis.
	DNV	Response provided in the first sub-comment
18	SH	<p>Average fuelwood consumption in homes was $19.6 \pm 8.6 \text{ kg HH}^{-1} \text{ day}^{-1}$, and $5.2 \pm 3.8 \text{ kg capita}^{-1} \text{ day}^{-1}$.</p> <p>Baseline fuelwood consumption was reported in Table 10 (page 20) of the study Consumo de Leña en Honduras. Baseline fuelwood consumption was estimated using figures published by the Honduran National Institute of Statistics in 2004 under the Encuesta De Condiciones De Vida, or ENCOVI. Footnote 5 on page 20 states that the ENCOVI (2004) estimated that 9,821,907 kg/day of fuelwood per day is consumed overall at the national level, and that an estimated 501,117.7 households use fuelwood to cook their food. 19.6 kg/day is a simple result of dividing the fuelwood consumption by the estimated number of households using fuelwood to cook.</p> <p>We question the accuracy of this estimate as it measurably conflicts with our own, real-world test data, rigorously obtained in paired---sample Kitchen Performance Tests using the globally accepted standard KPT methodology. The results of our baseline studies, which have been verified by two DOEs and approved by the Gold Standard Foundation, show baseline fuelwood consumption of nearly half what is reported here. While some variation is to be expected, we believe that the estimated 19.6 kg/day runs the risk of overvaluing emission reductions.</p>
	CME	Answered in overview comment 1 & 3.
	DNV	Answered in overview comment 1 & 3.
19	SH	<p>Table 1, Baseline Fuelwood consumption per household and per capita Total sample (n=485 households) Please see Overview Comments, #1</p> <p>Does this table refer to adjusted mean fuelwood consumption or simply mean fuelwood consumption. Fuelwood consumption should be adjusted for humidity as well as the number, age and gender of household members.</p>
	CME	The Consumo de Leña en Honduras 2011 report is no longer used for determination of baseline fuelwood consumption of CPA001
	DNV	The Consuma de Leña en Honduras report is no used as a source for Baseline Fuelwood consumption per household and per Capita.



4.2 Approval, authorization and contribution to sustainable development

The coordinating/managing entity of the PoA is Name of CME, which is the entity that communicates with the Board.

The project participants are Envirofit International, Ltd of host Party of Honduras. The host Party (Honduras) meet all relevant participation requirements.

A letter of approval (LoA) /11/ was issued by DNA of Honduras on 17 May 2012, authorizing Envirofit International, LLC of host Party as project participant and confirming that the PoA assists in achieving sustainable development.

The coordinating/managing entity has obtained a letter of authorization of its coordination of the proposed CDM PoA from the host Party.

The letters of approval were received from the project participants. DNV does not doubt the authenticity of the letters of approval. DNV considers the letters are in accordance with paragraphs 39-42 of the VVS/12/.

4.3 Modalities of communications

DNV has verified the corporate identity of Envirofit International Ltd through the Certificate issued by the Secretary of State of the State of Colorado certifying it as a Non-profit Corporation/65/. DNV has been able to verify the corporate identity of the focal point of contact Nathan Lorenz through the employment agreement/66/. DNV further received the MoC directly from the focal point of contact Nathan Lorenz, Vice President of Engineering for the CME (Envirofit International, Ltd) /67/.

DNV has performed due diligence on the Modalities of Communications (MoC) statement submitted by the project participants in accordance with applicable requirements in the VVS as documented in section A.4 of Table 2 in the validation protocol in Appendix A to this report. DNV was able to confirm the information contained in the MoC and that the MoC complies with all relevant forms and requirements.

4.4 PoA design and description of each generic CPA

DNV considers the 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 CDM-SSC-PoA-DD.

The PoA “Improved Cookstoves Program in Honduras “Vida Mejor con Ecofogones de Alto Rendimiento” managed by Envirofit International Ltd involves the promotion, distribution and sale of fuel-efficient improved cooking stoves (ICS) in Honduras. The ICS disseminated through this programme will replace the prevailing inefficient plancha stoves, which combust wood more efficiently, and improve thermal transfer to pots or tortillas, hence saving fuel (non-renewable biomass) and lowering greenhouse gas emissions.

The PoA is planned to be implemented within the boundary of Honduras. The physical boundary has been described in the PoA-DD/1/. The PoA will be coordinated by Envirofit International Ltd.

The CPA No. 001 proposes to distribute ICS that will achieve energy saving of 0.007709 GWh per stove per year. The first CPA will have a cap of 23 350 ICS in project year one that can be distributed for the entire crediting period. This will ensure that the project will have a total energy saving of less than 180 GWh_{th}/year (23 350*0.007709=180) (small scale limit). The cap on the number of stoves to be distributed annually will be calculation based on the



efficiency and number of operational stoves in the project activity. The first SSC-CPA will replace only conventional firewood stoves of the types “fogon suelo” and “fogon tradicional” with higher efficiency ICS models of the HM-5000 type to residential users by leveraging resources provided by the PoA. The PP plans to introduce more types of improved cook stoves in the future CPAs. Improved wood fuel cook stoves will be considered for the future CPA with a minimum thermal efficiency of 20% at the time of inclusion. The ICS that will be introduced in future CPAs will at a minimum have characteristics that improve the efficiency of combustion and thermal transfer to the pot or tortilla compared with a traditional stove. The cap will be fixed for each CPA at the inclusion stage to ensure that the small scale limit of 180 GWh_{th}/year is not crossed.

The length of the PoA is defined as 28 years in accordance with para 160, in accordance with Clean development mechanism project standard/13//16/. The starting date of the PoA is the date that the PoA-DD was published on the UNFCCC website, i.e. 28 January 2012. The start date of any CPA is on or after the start date of the PoA.

4.5 Demonstration of additionality for PoA

The additionality demonstration for the PoA has been done according as per “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities”, version 3.0/18/.

The PP has demonstrated additionality for the POA in lines with the requirements of “Guidelines on the demonstration of additionality of small-scale project activities”, version 9.0/19/

As per the guideline /19/, documentation of barriers is not required for the positive list of technologies and project activity types that are defined as automatically additional for project sizes up to and including the small-scale CDM thresholds (e.g. installed capacity up to 15 MW). The positive list includes “c) project activities solely composed of isolated units where the users of the technology/measure are households or communities or Small and Medium Enterprises (SMEs) and where the size of each unit is no larger than 5% of the small-scale CDM thresholds”/19/

Additionality has been done at PoA level and criterion has been established to determine additionality at each CPA level. This approach has been verified to be in line with EB 65 guidance, Annex 3 /18/ and has been found to be appropriate by DNV.

4.6 Demonstration of additionality of each generic CPA

The additionality has been demonstrated at the PoA level and an eligibility criteria for inclusion of a CPA in the PoA has been established.

The eligibility criteria for CPAs include a criterion for checking whether the project meets the small scale threshold (#14) and whether the size of each unit distributed in the CPA is no larger than 5% of the small-scale CDM thresholds (#15).

This PoA proposes to distribute improved cook stove to residential, commercial and institutional consumers. The CPA No. 001 includes the distribution of the stoves that have an



energy saving of 0.007709 GWh_{th}/stove/year to residential households, which is significantly lower than the cap of 5% of the small-scale threshold (9 GWh_{th}/stove/year).

“Guidelines on the demonstration of additionality of small-scale project activities”/19/has been correctly applied to demonstrate the project will not be implemented in the absence of CDM revenue. All the assumption and data used by the project participants are listed in the PoA-SSC-DD and/or supporting documents. All documentation relevant for demonstrating additionality have been correctly quoted and interpreted in the PoA-SSC-DD.

The demonstration of additionality has been conducted at the PoA level and for a typical CPA. A confirmation of additionality for CPAs is conducted by means of eligibility criteria included in the eligibility criteria #15 listed in section 4.7 of this report.

4.6.1 Additionality - Conclusion

The demonstration of additionality of typical CPAs to be included to the PoA is in accordance with section A of the “Standard for demonstration of additionality, development of eligibility criteria, and application of multiple methodologies for programme of activities” /18//19/, and it is demonstrated that in the absence of CDM, none of the CPAs would occur.

The following eligibility criteria (refer to section 4.7 for the complete list of eligibility criteria) ensure that a CPA meets the conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as described above.

4.7 Eligibility criteria for including CPAs to the PoA

The eligibility criteria for including CPAs are in accordance with section B of the “Standard for demonstration of additionality, development of eligibility criteria, and application of multiple methodologies for programme of activities”/18/.

SSC-CPAs to be included under this SSC-PoA must fulfill the following eligibility criteria:

Eligibility Criteria			Accepted Mean of Proof / Evidence Document (to be checked at CPA inclusion)	Compliance of eligibility criteria
#	Category	Description		
1	Geographical Boundary and location of the CPA	All distributed ICS in each CPA shall be located within geographical boundary of Honduras. Please note that all ICS installations may not have been deployed at the CPA inclusion stage, however the location of the ICS can be checked during verification. In the	Location and boundary is specified in the specific CPA-DD stating that the ICS location is limited to Honduras and is supported by Sales records. FAR 1	Yes/no and Justification



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		event that any deployed ICS is found to be outside of the PoA boundary / location, those ICS will not be counted in the emission reduction calculation.		
2	No Double counting of ICS and CPAs within this PoA and across other PoAs	<p>A unique numbering or identification system for the ICS installed is applied. This shall ensure no double counting of stoves within the PoA and ensure that stoves can be identified as belonging to this PoA and not to a PoA managed by any other CME.</p> <p>Please note that all ICS installations may not have been deployed at the CPA inclusion stage, however the ICS' unique numbering can also be checked during verification. In the event that any deployed ICS is found not to be in line with CPA double counting criteria, those ICS will not be counted in the emission reduction calculation.</p>	<p>The ICS installed in the PoA shall be uniquely identifiable by unique numbering and will be supported by the distribution records</p> <p>Document: ICS Sales information in the Total Sales Records will include CPA assignment and end user details (i.e. name, address, if available). Additionally, unique id shall be displayed on the stove itself. The unique numbering or identification regime is included in the specific CPA-DD and will be verifiable by the DOE.</p>	Yes/no and Justification
3	No Double counting of CPA	The CPA is exclusively bound to the PoA. Confirmation that the programme activity has not been and will not be registered either as a single CDM project activity or as a CPA under another PoA.	Contractual agreement for CPA operators (DO) as part of their contract with the CME, stating that they are aware and have agreed that their activity is being subscribed to the PoA	Yes/no and Justification
4	Awareness and agreement of	Contractual provisions to ensure that those operating	Contractual agreement for CPA operators as part of	Yes/no and



	those operating a CPA on PoA subscription	<p>the CPA are aware and have agreed that their activity is being subscribed to the PoA.</p> <p>In the case that the CME is not responsible for implementing the CPA, the organization responsible for CPA implementation, known as the Distributing Organisation (DO), has signed a contractual agreement with the CME to participate in the PoA. This agreement:</p> <ul style="list-style-type: none"> - Defines the ownership of the carbon emission reduction rights - Covers the DO's distribution and monitoring related responsibilities - Confirms that the ICS to be distributed under the CPA have not and will not be distributed under any other carbon project (CDM project, PoA or voluntary carbon market project) - Cedes the DO's rights to the carbon credits generated from CPAs under the PoA to the CME 	their contract with the CME, stating that they are aware and have agreed that their activity is being subscribed to the PoA	Justification
5	Non-diversion of ODA in case of Public funding	The CME and the CPA operator (in case of being different from the CME) shall confirm that funding from Annex 1 party, if any shall not be diversion of Official Development Assistance.	<p>A statement is included in the CPA-DD informing whether the specific CPA is funded with Annex I country funding.</p> <p>If Annex I country funding is used, then the following documents will be provided by each funding party (the</p>	Yes/no and Justification



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			<p>donor/s):</p> <p>Signed statement by the Annex I country donor party confirming that funding from Annex I country is not a diversion of ODA funding.</p>	
6	CPA Start Date	CPA start date shall not be before PoA validation start date (i.e. 28 January 2012, date of webhosting of PoA-DD for global stakeholder consultation).	<p>Starting date as stated in the CPA-DD.</p> <p>Each CPA shall provide verifiable evidence of the CPA start date as demonstrated. Evidence may include but are not limited to:</p> <ul style="list-style-type: none"> - First ICS Sale Receipt, and/or - Shipping orders of ICS. 	Yes/no and Justification
7	CPA Life Time	<p>CPA crediting period shall be within the life time of the PoA. The start date of the crediting period of a CPA shall be on or after:</p> <p>(i) The date of registration of the PoA, if the corresponding CPA-DD is submitted together with the request for registration;</p> <p>(iii) The date when the CPA was included in accordance with the Project cycle procedure;</p>	A statement is included in the CPA-DD specifying the crediting period starting date and the duration of the crediting period substantiating that the CPA crediting period will not exceed the PoA life time (this is 28 years after the date of registration of the PoA).	Yes/no and Justification
8	Approval of CPA by CME	CME approved each CPA to be included into its registered PoA.	<p>Statement of CME in each CPA-DD giving approval for the CPA to be included into its registered PoA</p> <p>Document: CPA-DD</p>	Yes/no and Justification



9	Requirement of Methodology AMS-II.G – introduction of high efficiency biomass fired cook-stoves to replace existing devices or Efficiency improvements on existing biomass fired cook stoves	<p>The CPA consists of replacement of conventional firewood cook-stoves for biomass fired ICS as defined in the PoA-DD. Conventional stoves replaced will be any of the types identified by each baseline scenario and as applied by the specific CPA. Stove types replaced and implemented will be defined in the CPA-DD, and hence appliances involving the efficiency improvements in the thermal applications of non-renewable biomass as per AMS II. G.</p> <p>Please note that not all ICS may have been deployed at CPA inclusion stage, the ‘type and number of ICS deployed’ will however also be checked during verification, and in case any deployed ICS type will be found not in line with the methodology requirement, those ICS will not be counted for emission reduction calculation.</p>	<p>Type of conventional cook-stoves replaced and ICS type/s implemented and compliance with the technological requirements of AMS II G will be described in the specific CPA-DD.</p> <p>Document: Project product data sheets or specification or product information sheets from manufacturer / Stoves sales records</p>	Yes/no and Justification
10	Requirement of Methodology AMS-II.G – single pot or multi pot portable or in-situ cook stoves with rated efficiency of at	The ICS disseminated under the CPA will be single pot, multi pot or in-situ cook-stoves that have a specified efficiency of at least 20% at the time of CPA inclusion.	<p>Document:</p> <p>Efficiency specification from manufacturer or certificate from a national standards body or alternatively, manufacturer specifications on</p>	Yes/no and Justification



	least 20 per cent.		efficiency based on water boiling test (WBT) may be used.	
11	Technical requirement	<p>Only ICS of the types below will be disseminated:</p> <ul style="list-style-type: none"> - Biomass fuelled ICS - Newly operational ICS - Either fix/portable operation <p>Other requirements (i.e. efficiency, maximum capacity, level of service, distribution mechanisms...) are defined in the relevant eligibility criteria within this table.</p> <p>Please note that all ICS may not have been deployed at CPA inclusion stage, the technical requirement will however also be checked during verification, and in case any deployed ICS type will be found not to be in line with the technical requirement, those ICS will not be counted for emission reduction calculation.</p>	<p>Specification of stove type and compliance with the technological requirements of AMS II G will be described in the specific CPA-DD.</p> <p>Document:</p> <ol style="list-style-type: none"> 1. Statement from CME that only new stoves will be disseminated under the CPA. 2. First ICS Sales Receipt (first CPA of PoA), including specific language confirming the stove received by the end-user is new. 	Yes/no and Justification
12	Requirement of Methodology AMS-II.G - Non-renewability of biomass	<p>In accordance with methodology AMS IIG:</p> <p>Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods</p>	<p>Survey results or referring to published literature, official reports or statistics</p> <p>This requirement has been demonstrated at the PoA level</p> <p>Document: PoA-DD</p>	Yes/no and Justification
13	De-bundling	In accordance with "Guidance for determining the occurrence of de-bundling under a	<p>Document:</p> <ol style="list-style-type: none"> 1. Manufacturer specification. 2. CPA-DD to show 	Yes/no and Justification



		Programme of Activities (PoA) ^{*,†} , if each independent subsystem/measures included in the CPA of a PoA is no greater than 1% of the small scale threshold defined by the methodology applied [†] , than that CPA of PoA is exempted from performing de-bundling check, i.e. considered as being not a de-bundled component of a large scale activity.	energy saved by the ICS is less than 1.8 GWh _{th} /year using excel sheet or similar tool.	
14	Requirement of Methodology AMS-II.G SSC Limit for CPAs	<p>The CPA will remain under the threshold of 180 GWh_{th}/annum thermal energy savings throughout the crediting period of the CPA. If a CPA exceeds the applicable limit in any year, the claimable emission reduction shall be capped based on the estimated GHG reductions in the CPA-DD[‡].</p> <p>Please note that all ICS may not have been deployed at CPA inclusion stage, the SSC limit for CPAs can however also be checked during verification.</p>	<p>The maximum number of ICS estimated is to be defined in the specific CPA-DD.</p> <p>The number of ICs in operation per year will not exceed the “ICS installation cap” established in the specific CPA-DD. This cap in essence will be the maximum number of ICS installed up to the threshold of 180 GWh_{th}/annum thermal energy savings.</p> <p>Each CPA-DD will establish the “ICS installation cap” through the ER calculation tool developed based on the relation between the “energy cap established</p>	Yes/no and Justification

* According to the “Guidelines on assessment of debundling for SSC project activities, v03 (EB 54, Annex 13, par. 10) for determining the occurrence of debundling under a Programme of Activities (PoA)”, if each of the independent subsystem/measures included in the CPA of a PoA is not larger than 1% of the small scale threshold defined by the methodology applied, then that CPA of the PoA is exempted from performing de-bundling check, i.e. considered as being not a de-bundled component of a large scale activity.

[†] 180 GWh_{th} energy savings per annum

[‡] As per EB 65, Annex 5, paragraph 83.



			for this type of activity” and the “energy savings per ICS”. This relation will vary according to the parameters monitored along the CPA life cycle, for instance η_{new} and $\mu_{y,i}$. Therefore an updated “ICS installation cap” will be provided at the time of verification according to the monitoring results.	
15	Additionality	Additionality is demonstrated using EB68 Annex 27 “Guidelines on the demonstration of additionality of small-scale project activities”, 2(c) as described in the PoA DD.	<p>Each of the requirements listed below are proven to define the CPA as automatically additional. The specific CPA is eligible when all evidences are documented:</p> <ol style="list-style-type: none"> 1) Project size does not exceed small-scale CDM thresholds: This requirement is also checked through eligibility criteria #14 2) The project activities are solely composed of isolated units where the users of the technology/measure are households or communities or Small and Medium Enterprises (SMEs): CPA-DD to show description of the technology and specifies target population, and; 3) Where the size of each unit is no larger than 5% of the small-scale CDM thresholds: CPA-DD to show energy saved by the ICS is less 	Yes/no and Justification



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			than (180 GWh _{th} /year * 0.05 ⇒) 9 GWh _{th} /year. This requirement is also checked through de-bundling check (eligibility criteria #13)	
16	Requirement of methodology- Generalities	Each CPA will ensure compliance with the applicability of the methodology and its requirements. Conditions of the applicability of the methodology and its requirements are specified at the PoA level in section E.2 through the assessment of “justification of the choice of the methodology and why it is applicable to the CPAs”.	The applicability requirements of the methodology are established in the PoA-DD. The CPA needs to meet all inclusion eligibility criteria named “Requirement of methodology” to meet the applicability criteria of the methodology.	Yes/no and Justification
17	Target groups	<p>Target groups may be any of the following:</p> <ol style="list-style-type: none"> 1. Residential biomass users 2. Commercial biomass users 3. Institutional biomass users <p>Assumptions made at the PoA level for any scope regarding these target groups are deemed valid through all CPAs (i.e. extent of baseline studies, ER calculation approach and monitoring systems and plan).</p>	The selected target groups that shall be included in each CPA are distinguished in each CPA.	Yes/no and Justification
18	Distribution Mechanisms	Distribution mechanisms have been specified in the PoA-DD by means of the “General operating and implementing framework of PoA” at the PoA level.	The selected distribution mechanisms included in each CPA are distinguished in each CPA.	Yes/no and Justification



19	Local Stakeholder Consultation	The Local Stakeholder Consultation is established at the PoA level* as described in section D of the PoA-DD. No further actions needed at the CPA level to satisfy the eligibility criteria.	Document: The conditions to meet the requirements on undertaking the local stakeholder consultation have been proven in section D of the PoA-DD.	Yes/no and Justification
20	Environmental Impact Assessment	The EIA is established at the PoA level as described in section C of the PoA-DD†. No further actions needed at the CPA level to satisfy the eligibility criteria.	Document: The conditions to meet the requirements on undertaking the environmental impact assessment have been proven in the PoA-DD.	Yes/no and Justification
21	Sampling Requirements	<p>Sampling of appliances within the CPA must meet the requirements of AMS-II.G and the “Standard on Sampling and Surveys for CDM Projects and Programmes of Activities” (the Sampling Standard).</p> <p>Each CPA will ensure compliance with the framework established for sampling requirements for quantification of parameters not established at the ex-ante and monitoring tasks during the crediting period. Conditions and its requirements are outlined for baselines and monitoring tasks at the PoA-DD.</p>	<p>Specification of the sampling methods applied and compliance with the sampling requirements are established at the PoA-DD.</p> <p>The CPA-DD either specifies that:</p> <ul style="list-style-type: none"> a) Sampling will be undertaken as part of the PoA Sampling Plan, and in the CPA-DD describes how the PoA Sampling Plan is to be applied; or b) If CPA-specific sampling is to be undertaken, a CPA-specific Sampling Plan must be provided and meet the 	Yes/no and Justification

*EB55 Annex 38, paragraph 6 (g).

†EB55 Annex 38, paragraph 6 (f).



			requirements of AMS-II.G and the Sampling Standard. The sampling approach shall follow the approach outlined in the PoA Sampling Plan except where specifically indicated otherwise in the CPA Sampling Plan.	
22	Baseline parameters to be established at CPA level	<p>Each CPA shall demonstrate the baseline parameters that are to be established at the CPA level have been determined, and shall do so applying the following approaches:</p> <p>a) $B_{old,i}$: as per the approach outlined in PoA-DD applying Option (a) of (paragraph 19) of AMS-II.G;</p> <p>And,</p> <p>b) η_{old} and /or SC_{old}:</p> <p>η_{old} : When Option 2 of (paragraph 17) of AMS-II.G is applied</p> <p>SC_{old} : When Option 3 of (paragraph 18) of AMS-II.G is applied</p>	CPA-DD shall outline the approach and provide supporting documents including copies of any official government reports, statistics or literature sources used for determining these parameters. If local surveys or representative sampling are used then copies of questionnaires, sampling design etc shall be provided.	Yes/no and Justification



DNV confirms that the minimum eligibility criteria requirements from “Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities”/18/have been included in the eligibility criteria for the PoA.

4.8 Application of methodologies

The PoA and consequently each CPA applies the simplified baseline methodology for selected small-scale CDM project activity; AMS-II.G, “Energy efficiency measures in thermal editions of non-renewable biomass”, version 06./14/

The criteria # 14 has been included to meet the applicability criteria for the methodology and to ensure that CPA is within the SSC threshold. This is demonstrated at the CPA level using the applicability criteria #14.

Criteria #14: “The CPA will remain under the threshold of 180 GWh_{th}/annum thermal energy savings throughout the crediting period of the CPA. If a CPA exceeds the applicable limit in any year, the claimable emission reduction shall be capped based on the estimated GHG reductions in the CPA-DD*.

Please note that all ICS may not have been deployed at CPA inclusion stage, the SSC limit for CPAs can however also be checked during verification.”

The maximum number of ICS estimated is to be defined in the specific CPA-DD. The number of ICs in operation per year will not exceed the “ICS installation cap” established in the specific CPA-DD.

Each CPA-DD will establish the “ICS installation cap” through the ER calculation tool developed based on the relation between the “energy cap established for this type of activity” (180 GWh_{th} /year) and the “energy savings per ICS”. This relation will vary according to the parameters monitored along the CPA life cycle, for instance $U_{y,i}$ and η_{new} . Therefore an updated “ICS installation cap” will be provided at the time of verification according to the monitoring results.

The CPA No. 001 proposes to distribute ICS that will achieve energy saving of 0.007709 GWh per stove per year. The first CPA will have a cap of 23 350 ICS that can be distributed for the entire crediting period. This will ensure that the project will have a total energy saving of less than 180 GWh_{th}/year ($23\,350 \times 0.007709 = 180$) (small scale limit). The first SSC-CPA will replace only conventional firewood stoves of the types “fogon suelo” and “fogon tradicional” with higher efficiency ICS models of the HM-5000 type to residential users by leveraging resources provided by the PoA. The PP plans to introduce more types of improved cook stoves in the future CPAs. Improved wood fuel cook stoves will be considered for the future CPA with a minimum thermal efficiency of 20% at the time of inclusion. The ICS that will be introduced in future CPAs will at a minimum have characteristics that improve the efficiency of combustion and thermal transfer to the pot or tortilla compared with a traditional

* As per EB 65, Annex 5, paragraph 83.



stove. The cap will be fixed for each CPA at the inclusion stage to ensure that the small scale limit of 180 GWh_{th}/year is not crossed.

Other requirements under the methodology AMS-II.G, version 06 are:

- This category comprises appliances involving the efficiency improvements in the thermal applications of non-renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency biomass fired cook stoves or ovens or dryers to replace the existing devices and/or energy efficiency improvements in existing biomass fired cook stoves or ovens or dryers.
 - All project technology models implemented will provide efficiency improvement in the thermal application of the non-renewable biomass. Examples of these technologies and measures are the introduction of high efficiency biomass fuelled ICS.
 - This will be ensured by recording the baseline stove (charcoal stove / firewood stove) used prior to ICS installation for ICS purchasers. This is in accordance with the approved methodology which is applicable only to users which were previously using biomass fuels. See section A.2 for more details.
- The efficiency of the project systems shall be at a minimum 20% as certified by a national standards body or an appropriate certifying agent recognized by it. Alternatively manufacturers' specifications on efficiency based on water boiling test (WBT) may be used.
 - The project involves the efficiency improvements in the thermal applications of non-renewable biomass/1/. The programme proposes to distribute improved cook stoves that will improve the efficiency of cook stoves that use non-renewable biomass as fuel (including residential, commercial and institutional). The efficiency of Improved cook stoves will be demonstrated at the CPA level through the eligibility # 10 – “The ICS disseminated under the CPA will be single pot, multi pot or in-situ cook-stoves that have a specified efficiency of at least 20% at the time of CPA inclusion” – Document required: Efficiency specification from manufacturer or certificate from a national standards body or a certifying agent recognized by it.
 - In CPA No.001 will distribute improved cook stove to residential users in Honduras. The improved cook stove for the stove used in CPA No. 001 has an efficiency of 24.9%, which is higher than the traditional cook stoves/60/. The efficiency of the ICS is greater than 20% required by the methodology AMS-II.G, version 06 /14/.
- The project participants are able to show that non-renewable biomass has been used since 31 Dec 1989, using survey methods or referring to published literature, official reports or statistics.
 - The PP has demonstrated using literature from National Institute of Forest Conservation and Development, Protected Areas and Wildlife (ICF) and Food and Agriculture Organization of the United Nations (FAO) that non-renewable biomass has been used in Honduras since 31 December 1989. This is demonstrated at the PoA level. The PP has evidenced that during the years 1990 and 2010, there is a significant decrease (36%) of forested area in Honduras/31/. Additionally, and the annual change of carbon stocks between



2005 and 2010 was 8 million tonnes per year/32/. The exact rate of deforestation in Honduras is not clear, however, it is clear that there was a significant amount of deforestation and it ranged from 54 000 hectares/year /33/ to 80 000 hectares/ year/34//35/

Therefore, the applicability conditions of AMS-II.G, version 06 /14/, are satisfied and met completely. The applicability criterion is included in the PoA eligibility criteria (Part 1, Section B.2) and all CPAs that propose to be included to this PoA, shall meet these eligibility criteria.

4.9 Management system of the PoA

The management system of the proposed PoA is in accordance with the “Standard for demonstration of additionality, development of eligibility criteria, and application of multiple methodologies for programme of activities”/18/.

The CME has demonstrated that it has the competency to check the features of potential CPAs and ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered POA. The CME has developed a management system that includes the following made available to the DOE at the time of the validation of the PoA:

	Requirement	Procedure put in place to meet the requirement
a)	A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies;	<p>The CME has provided a clear definition of roles and responsibilities in the process of inclusion of CPAs of the PoA DD, Part II, Section B.7.2</p> <p>The database administrator is responsible for updating and maintaining all electronic databases and inclusions. Required competencies include experience with data management systems (e.g. Excel, STATA, or SPSS).</p> <p>The monitoring team will be assigned by the CME to conduct the user interviews and appliance tests during the periodic sampling and reports the results to the database administrator.</p>
b)	Records of arrangements for training and capacity development for personnel	<p>The CME will ensure that the CPA operators will be adequately trained. A description of the modes of training and the types of documentation that will be submitted to demonstrate that the trainings have been conducted is described in Part I, Section C of the PoA DD/1/ and in the section 4.4 of this report.</p> <p>The skills and experience required for the monitoring team for the data collection activities include:</p> <ol style="list-style-type: none"> Experience conducting WBTs Experience conducting door-to-door surveys of biomass consumption



		<ul style="list-style-type: none"> c. Local language skills (especially important for input to questionnaire design and interviewing of end users) d. English language skills e. Cultural awareness f. Numerical proficiency g. Data entry skills
c)	Procedures for technical review of inclusion of CPAs	The technical review of the of the CPA inclusion is conducted by the CME through the eligibility criteria. The CME has provided a detailed description of eligibility criteria, accepted mean of proof and the document that needs to be submitted as evidence. The eligibility criteria have been described in Part 1, Section B.2 of the PoA DD/1/ and in section 4.3 of this report.
d)	A procedure to avoid double counting (e.g. to avoid the case of including a new CPA that has already been registered either as a CDM project activity or as a CPA of another PoA);	Double counting of individual ICS and of CPAs (in other PoAs) has been addressed by including this as one the eligibility criteria's in the PoA DD. The procedure to avoid double counting has been described in section Part 1, Section C of the PoA DD/1/, the mean of proof that the DO of the CPA needs to provide at the CPA inclusion stage to demonstrate no double counting is given in Part 1, Section B.2 of PoA DD/1/. Further details provided in section 4.16.2 of this report.
e)	Records and documentation control process for each CPA under the PoA	The CME has provided a detailed description of the records and document control process for each CPA under the PoA. This has been described in section Part 1, Section C of the PoA DD /1/ and section 4.9 of this report.
f)	Measures for continuous improvements of the PoA management system;	The CME has included measures for continuous improvement. Continuous improvement will be through training of monitoring staff, ensuring appropriate skills and experience, CME reviewing information gathering technique and information flow and partner feedback
d)	Monitoring procedure	DNV has been able to confirm that all indicators of importance for controlling and reporting of project performance are incorporated in the monitoring plan. The procedures for surveys and maintenance, performance reviews, internal auditing, corrective actions etc. has also been defined in the monitoring plan.



4.10 Environmental impacts

This is a small scale project that promotes the distribution of improved cool stoves in Honduras. The project has many health and environmental benefits as described in the PoA DD/1/. The government of the Federal Republic of Honduras does not require an environmental impact assessment to be conducted for a typical CPA under this SSC-PoA. This has been evidenced through a letter from the Department of Natural Resources and Environment, Republic of Honduras /61/. The letter confirms that the project does not generate negative environmental impacts, on the contrary contributes to reduce pollution levels and hence no environmental license is required for the implementation of this project activity.

4.11 Local stakeholder consultation

DNV considers the local stakeholder consultation carried out adequately.

The Stakeholder consultation has been conducted at the PoA level. Stakeholder comments have been invited with respect to this SSC-PoA through a formal Stakeholder Consultation held on 7 December 2011 in Valle de Angeles, Francisco Morazan, Honduras. The stakeholders were invited using newspaper advertisement in a national newspaper. Invitations were sent via email, post, and phone. Invitees from varying backgrounds, including government officials, local leaders, and area councilors, served as intermediaries to spread the word about the event. Other project developers and organizations involved in the implementation of improved cookstoves, such as FORCUENCA, Vision Mundial, and GIZ, also attended the event. In addition to the stakeholder consultation meeting, the stakeholder consultation process included the following:

- Interviews with NGOs, public authorities and private relevant parties.
- Pilot ICS delivered to gather feedback through focal groups and field surveys.
- Hosting a feedback round after the consultation meeting to allow for further comments from attendees and non-attendees. A summary of the meeting was disseminated among invitees and made publicly available for review and feedback.

A summary of the comments received during the stakeholder consultation period is provided in the PoA DD./1/

DNV considers that:

- the PP has used appropriate methods to invite stakeholders.
- Relevant stakeholders including NGO's, government bodies, and local users have been invited.
- Stakeholder comments received during the meeting have been appropriately addressed.

The stakeholder comments received have been documented in the PoA DD /1/and have been taken into account. No negative comments were received during the stakeholder consultation meeting. A detailed stakeholder consultation report including the list of participants, the completed survey questionnaire, a comments submitted by the participants and other



information have been compiled in the stakeholder consultation report and submitted to DNV/58/. DNV considers the local stakeholder consultation has been carried out adequately.

4.12 Application of selected baseline and monitoring methodology(ies) by each generic CPA

The assessment of the generic CPA's compliance with the applicability criteria of AMS-II.G (version 06) are documented in detail in section B.2 of Table 2 in the validation protocol in Appendix A to this report.

The following eligibility criteria (refer to section 4.7 for the complete list of eligibility criteria) ensure that a CPA meets the conditions that ensure that CPAs meet the requirements pertaining to the applicability of the methodology.

Eligibility Criteria			Accepted Mean of Proof / Evidence Document (to be checked at CPA inclusion)	Compliance of eligibility criteria
#	Category	Description		
14	Requirement of Methodology AMS-II.G SSC Limit for CPAs	<p>The CPA will remain under the threshold of 180 GWh_{th}/annum thermal energy savings throughout the crediting period of the CPA. If a CPA exceeds the applicable limit in any year, the claimable emission reduction shall be capped based on the estimated GHG reductions in the CPA-DD*.</p> <p>Please note that all ICS may not have been deployed at CPA inclusion stage, the SSC limit for CPAs can however also be checked during verification.</p>	<p>The maximum number of operational ICS estimated is to be defined in the specific CPA-DD.</p> <p>The number of ICS in operation per year will not exceed the "ICS installation cap" established in the specific CPA-DD. This cap in essence will be the maximum number of ICS installed up to the threshold of 180 GWh_{th}/annum thermal energy savings.</p> <p>Each CPA-DD will establish the "ICS installation cap" through the ER calculation tool developed based on the relation between the "energy cap established for this type of activity" and the "energy savings per ICS". This relation will vary according to the parameters monitored along the CPA life cycle, for instance η_{new} and $\mu_{y,i}$. Therefore an updated</p>	Yes/no and Justification

* As per EB 65, Annex 5, paragraph 83.



			"ICS installation cap" will be provided at the time of verification according to the monitoring results.	
Other requirement of the Methodology AMS-II.G, version 06				
9	Requirement of Methodology AMS-II.G – introduction of high efficiency biomass fired cook-stoves to replace existing devices or Efficiency improvements on existing biomass fired cook stoves	The CPA consists of replacement of conventional firewood cook-stoves for biomass fired ICS as defined in the PoA-DD. Conventional stoves replaced will be any of the types identified by each baseline scenario and as applied by the specific CPA. Stove types replaced and implemented will be defined in the CPA-DD, and hence appliances involving the efficiency improvements in the thermal applications of non-renewable biomass as per AMS II. G.	Type of conventional cook-stoves replaced and ICS type/s implemented and compliance with the technological requirements of AMS II G will be described in the specific CPA-DD. Document: - Project product data sheets or specification or product information sheets from manufacturer / Stoves sales records	Yes/no and Justification
10	Requirement of Methodology AMS-II.G – single pot or multi pot portable or in-situ cook stoves with rated efficiency of at least 20 per cent.	The ICS disseminated under the CPA will be single pot, multi pot or in-situ cook-stoves that have a specified efficiency of at least 20% at the time of CPA inclusion.	Document: Efficiency specification from manufacturer or certificate from a national standards body or alternatively, manufacturer specifications on efficiency based on water boiling test (WBT) may be used.	Yes/no and Justification
12	Requirement of Methodology AMS-II.G - Non-renewability of biomass	In accordance with methodology AMS IIG: Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using	Survey results or referring to published literature, official reports or statistics This requirement has been demonstrated at the PoA level Document: PoA-DD	Yes/no and Justification



		survey methods		
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4.13 Project boundary of each generic CPA

The identified boundary and selected sources and gases are justified for the generic CPA. The validation of the generic CPA did not reveal other greenhouse gas emissions occurring within the proposed CPA boundary as a result of the implementation of the proposed CPA which are expected to contribute more than 1% of the overall expected average annual emission reduction, which are not addressed by AMS-II.G (version 06).

The programme system boundary includes physical, geographical site of the efficient systems using biomass included in the PoA in accordance with AMS-II.G, version 06/14/. Thus, the programme system boundary is the country of Honduras where the efficient systems using biomass will be distributed as part of this PoA.

The selected sources and gases are justified for the project activity. Emission sources and gases included in the project boundary are:

Table 1: GHG emissions included in SSC-CPAs and SSC PoA

	<i>GHGs involved</i>	<i>Description</i>
Baseline emissions	CO ₂	Emissions from the use of fossil fuels for meeting similar thermal energy needs.
Project Emissions	CO ₂	Emissions from the combustion of non-renewable biomass for cooking
Leakage	CO ₂	Potential sources – Increase in the use of non-renewable biomass outside the project boundary to create NRB baselines or Use of NRB saved under the project activity to justify the baseline of other CDM project activities

The identified boundary and selected sources and gases are justified for the project activity. The validation of the project activity did not reveal other greenhouse gas emissions occurring within the proposed CDM project activity boundary as a result of the implementation of the proposed project activity which is expected to contribute more than 1% of the overall expected average annual emission reduction, which is not addressed by the methodology AMS-II.G, version 06/14/.

4.14 Baseline scenario identification and description for each generic CPA

The PoA and consequently each CPA applies the simplified baseline methodology for selected small-scale CDM project activity; AMS-II.G, “Energy efficiency measures in thermal editions of non-renewable biomass”, 06/14/. The programme meets the applicability criteria of AMS-II.G, version 06 /14/ as described in Section 4.8.

As per the AMS.II.G, version 06 /14/ it is assumed that in the absence of the project activity, the baseline scenario would be the use of fossil fuels for meeting similar thermal energy needs.

The baseline scenario has been identified in accordance with AMS-II.G, version 06 /14/. In absence of the PoA, the local HHs in Honduras would continue to use traditional inefficient



cook stoves with non-renewable biomass as fuel. Thus, in line with the methodology it is assumed that in the absence of the project activity, the baseline scenario would be the use of fossil fuels for meeting similar thermal energy needs.

4.15 Algorithms and/or formulae used to determine emission reductions of each generic CPA

4.15.1 Explanation of methodological choices

The program proposes to distribute stoves to three separate target groups, the non-institutional stoves for residential purposes, stoves for commercial purposes and stoves for institutions. The SSC-CPAs will calculate emission reductions from each of the target groups separately through application of the following equations:

$$ER_y = \sum_i ER_{y,i} \quad \text{Equation (1)}$$

Where:

- i = Indices for the situation where more than one type of project device is introduced to replace the pre-project devices
- ER_y = Emission reductions during year y in tCO₂e
- $ER_{y,i}$ = Emission reductions by project device of type i during year y in t CO₂e

(a) For household cook stoves:

$$ER_{y,i} = \sum_{a=1}^{a=y} B_{y,savings,i,a} \times N_{y,i,a} \times \frac{\mu_{y,i}}{365} \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossilfuel} - LE_y \quad \text{Equation (2)}$$

(b) For ovens or dryers*:

$$ER_{y,i} = B_{y,savings,i} \times N_{y,i} \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossilfuel} - LE_y \quad \text{Equation (3)}$$

where:

a	‘a’ is the indices for the age (in years) of the cook stoves that are operating in the year ‘y’ of the crediting period. At any year y of the crediting period (e.g. $y = 1, 2, 3 \dots 7$ or 10) there will be a population of $N_{y,i,a}$ operational devices of the type i with age varying from $a=1$ (the cook stoves installed during the current year y) up to the age $a=y$ (the
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* If the project activity is for industrial/institutional cook-stoves (e.g. schools, hospitals, etc.), this approach may be used, provided that project participants are able to demonstrate that the maintenance program is in place.



	cook stoves installed during the first year of the crediting period). Since the lifetime of cook stoves is often shorter than the length of the crediting period and cook stoves are likely to show significant efficiency losses over time, this aspect needs to be captured through the monitoring plan
ER_y	Emission reductions during the year y in tCO ₂ e
$B_{y,savings,a}$	Quantity of woody biomass that is saved in tonnes per cook stove device of type i and age a in year y (tonnes). This parameter is determined at the time of each CPA inclusion using one of the three below mentioned options.
$F_{NRB,y}$	Fraction of woody biomass saved by the project activity in year y that has been established as non-renewable biomass using survey methods—0.8382
$NCV_{biomass}$	Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.015 TJ/tonne, based on the gross weight of the wood that is 'air-dried') (TJ/tonnes)
$EF_{projected_fossilfuel}$	Emission factor for the substitution of non-renewable biomass by similar consumers. The substitution fuel likely to be used by similar consumers is 81.6 tCO ₂ /TJ for Kerosene.
$\mu_{y,i}$	Number of days of utilization of the project device during the year 'y'. Its value may be considered as 365 where it can be demonstrated that the pre-project device has been decommissioned and is no longer used.
$N_{y,i,a}$	Number of project devices of type i and age a operating in year y
LE_y	Leakage emissions in the year y, to be taken as 0 as leakage correction factor of 0.95 shall be directly applied to $B_{y,savings,i,a}$

The program proposes to distribute non-institutional stoves for residential purposes, stoves for commercial purposes and stoves for institutions. AMS-II.G, version 06 provides three options to calculate $B_{y,savings,a}$. Any of the three options can be used to estimate $B_{y,savings,a}$ for the future CPA inclusions. $B_{y,savings,a}$ will be estimated separately using the below options:

When using AMS-II.G version 06, Option 1:

Equation (4)

$$B_{y,savings,i,a} = B_{old,i} - B_{a=1,i,KPT} \times \Delta B_{y,i,a}$$

Where:

$B_{old,i}$ Quantity of woody biomass used in the absence of the project activity in tonnes per appliance.

$B_{a=1,i,KPT}$ Annual quantity of woody biomass used per appliance during the project activity in tonnes, measured as per the Kitchen Performance Test (KPT) protocol. The KPT should be carried out in accordance with national standards (if available) or international standards or guidelines (e.g. the KPT procedures specified by the Partnership for Clean Indoor Air (PCIA)



<<http://www.pciaonline.org/node/1049>>

$\Delta B_{y,i,a}$

Factor to consider the efficiency loss of the project device type i due to its aging at the year y , expressed as follows:

$$\Delta B_{y,i,a} = \frac{B_{a,i,KPT}}{B_{a=1,i,KPT}}$$

Where $B_{a,i,KPT}$ is the biomass consumption of the device ' i ' with age ' a ' determined using the KPT (in tonnes per year per device) and $B_{a=1,i,KPT}$ is the biomass consumption of the device at its first year of operation. $\Delta B_{y,i,a}$ may be determined through sample surveys of project device type i for batches of stoves with the same age at each year of the crediting period. Alternatively, the monitoring may determine annually the biomass consumption of the devices installed at the first year of the crediting period, through the crediting period and the efficiency loss of this population may be used to correct the initial efficiency of the population of stoves installed later on. For example, the loss rate of year 2016 for the project device of type i installed in 2015 can be considered the same as that of year 2014 for the project device of the same type installed in 2013. In this way, the monitoring at any year y during the crediting period will consist of the determination of the biomass consumption for the devices installed during the current year (the initial value $B_{a=1,i,KPT}$ for the population commissioned during this year), and the values of $B_{a=1,i,KPT}$ and of $\Delta B_{y,i,a}$ for oldest population (i.e. the devices from the first year that have now reached the age $a=y$)

When using AMS-II.G version 06, Option 2:

$$B_{y,savings,i,a} = B_{old,i} \times \left(1 - \frac{\eta_{old}}{\eta_{new,i,a=1} \times \Delta \eta_{y,i,a}}\right) \quad \text{Equation (5)}$$

$$B_{y,savings,i,a} = B_{y=1,new,i,survey} \times \left(\frac{\eta_{new,i,a=1} \times \Delta \eta_{y,i,a}}{\eta_{old}} - 1\right) \quad \text{Equation (6)}$$

Where:

$B_{y=1,new,i,survey}$	Annual quantity of woody biomass used by project devices in tonnes per device of type i , determined in the first year of the introduction of the devices (e.g. during the first year of the crediting period, $y=1$) through a sample survey. Sample surveys to estimate this parameter, that are solely based on questionnaires or interviews (i.e. that do not implement measurement campaigns) may only be used if the following conditions are satisfied: (a) Pre-project devices have been completely decommissioned and only
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	<p>efficient project devices are exclusively used in the project households;</p> <p>(b) If multiple devices are used in the project, it is possible from the results of the survey questions to clearly differentiate the quantity of woody biomass being used by each device. In other words, if more than one device, or another device that consumes woody biomass, are in use in project households, then the sample survey needs to distinguish the quantity of biomass used by the project device and the other devices that use biomass.</p>
η_{old}	<p>Efficiency of the pre-project device (fraction), determined using one of the following options:</p> <p>(a) Measured using representative sampling methods or based on literature reporting results of measurements relevant for the type of pre-project devices. Use weighted average values (taking the amount of woody biomass consumed by each device as the weighting factor) if more than one type of device is being replaced;</p> <p>(b) A default value of 0.10 may be optionally used if the pre-project device is a three stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney; for other types of devices, a default value of 0.2 may be optionally used. Use weighted average values (taking the amount of woody biomass consumed by each device as the weighting factor) if more than one type of device is being replaced.</p>
$\eta_{new,i,a=1}$	<p>Thermal efficiency of the device of type i being deployed as part of the project activity (fraction), using the WBT protocol carried out in accordance with national standards (if available) or international standards or guidelines, for the initial efficiency determined in the year of its installation ($a=1$)</p>
$\Delta\eta_{y,i,a}$	<p>Factor to consider the efficiency loss of the project device type i due to its aging at the year y, as expressed as follows:</p> $\Delta\eta_{y,i,a} = \frac{\eta_{new,i,a}}{\eta_{new,i,a=1}}$ <p>where $\eta_{new,i,a}$ is the thermal efficiency of the device 'i' with age 'a' determined using the WBT and $\eta_{new,i,a=1}$ is the thermal efficiency of the device at its first year of operation. $\Delta\eta_{y,i,a}$ may be determined through sample surveys of project device type i for batches of stoves with the same age at each year of the crediting period. Alternatively, the monitoring may determine annually the thermal efficiency of the devices installed at the first year of the crediting period, and the efficiency loss of this population may be used to correct the initial efficiency of the population of devices installed later on. For example, the loss rate of year 2016 for the project device of type i installed in 2015 can be considered the same as that of year 2014 for the project device of the same type installed in 2013. In this way, the monitoring at any year y during the crediting period will consist of the determination of the thermal efficiency for the devices installed during the current year (the initial value $\eta_{new,i,a=1}$ for the population commissioned during this year), and the values of $\eta_{new,i,a}$ and of $\Delta\eta_{y,i,a}$ for oldest population (i.e. the devices from the first year that have now reached the age $a=y$)</p>



When using AMS-II.G version 06, Option 3:

$$B_{y,savings,i,a} = B_{old,i} \times \left(1 - \frac{SC_{new,i,a=1} \times \Delta SC_{y,i,a}}{SC_{old}}\right)$$

SC_{old}	Specific fuel consumption or fuel consumption rate of the pre-project devices, that is fuel consumption per quantity of item/s processed (e.g. food cooked) or fuel consumption per hour, respectively. Specific fuel consumption or fuel consumption rate are to be determined using the CCT protocol carried out in accordance with national standards (if available) or international standards or guidelines. Use weighted average values if more than one type of device is being replaced (taking the amount of woody biomass consumed by each device as the weighting factor)
$SC_{new,i,a=1}$	Specific fuel consumption or the fuel consumption rate of the devices of type i deployed as part of the project, that is fuel consumption per quantity of item/s processed (e.g. food cooked) or fuel consumption per hour respectively, for the initial efficiency determined in the year of its installation ($a=1$). Specific fuel consumption or fuel consumption rate shall be determined using the same CCT protocol used to test the pre-project devices. If more than one project devices are necessary to replace the pre-project device, woody biomass consumption should be calculated per device (taking the amount of woody biomass consumed by each device as the weighting factor)
$\Delta SC_{y,i,a}$	Factor to consider the efficiency loss of the project device type i due to its aging at the year y , as expressed as follows: $\Delta SC_{y,i,a} = \frac{SC_{new,i,a=1}}{SC_{new,i,a}}$ <p>where $SC_{new,i,a}$ is the specific fuel consumption of the device 'i' with age 'a' determined using the CCT and $SC_{new,i,a=1}$ is the specific fuel consumption of the device at its first year of operation. $\Delta SC_{y,i,a}$ may be determined through sample surveys of project device type i for batches of stoves with the same age at each year of the crediting period. Alternatively, the monitoring may determine annually the specific fuel consumption of the devices installed at the first year of the crediting period, and the efficiency loss of this population may be used to correct the initial efficiency of the population of devices installed later on. As an example, the loss rate of year 2016 for the project device of type i installed in 2015 can be considered the same as that of year 2014 for the project device of the same type installed in 2013. In this way, the monitoring at any year y during the crediting period will consist of the determination of the specific fuel consumption for the devices installed during the current year (the initial value $SC_{new,i,a=1}$ for the population commissioned during this year), and the values of $SC_{new,i,a}$ and of $\Delta SC_{y,i,a}$ for oldest population (i.e. the devices from the first year that have now reached the age $a=y$)</p>

Generalities

$B_{old,i}$ is calculated as (option a from paragraph 19 of the methodology) the estimate of average annual consumption of biomass per appliance (tonnes/year) as derived from historical data or survey of local usage.



PoA VALIDATION REPORT

$B_{y,savings,i,a}$ may be determined by any of the 3 options listed above which lead to the involvement of specific field and/or lab test. The parameters to be considered for each option are assessed according to the program requirements established in Part II section B.6.2 and B.7 of the PoA-DD and the specific requirements established in section D.7.2 and D.6.2 of the specific CPA

4.15.2 Parameters determined ex-ante

The below ex-ante values are determined for the first CPA Improved Cookstoves Project Activity in Honduras “Vida Mejor con Ecofogones de Alto Rendimiento” – CPA No 001.

Standard for Option 1, 2 and 3						
B _{old,i} – Non-institutional residential stoves	Determined at the CPA level - Baseline wood fuel consumption per appliance (i.e. in the absence of the project activity) (y) Historical data or survey of local usage will be conducted for each target consumer group included in a given CPA as per para 19(b) of AMS II.G.					
B _{old,i} – Commercial	At the CPA-level it is assumed ex-ante that there is only one project stove being used per household for calculating B _{old,i} , then, ex-post sampling based monitoring shall also include assessment of presence of multiple operational project stoves in a sampled household. The number of project stoves in the CPA shall be adjusted accordingly to claim emissions reduction only for one project stove per household to ensure equivalence with the baseline established.					
B _{old,i} – Institutional						
f _{NRB,y}	Fraction of biomass saved by the project activity in year y that has been established as non-renewable biomass – 83.82% /5/ (Determination method described after the table)					
NCV _{biomass}	Net calorific value of the non-renewable biomass that is substituted (IPCC default for wood fuel, 0.015 TJ/tonne)					
EF _{projected_fossilfuel}	Emission factor for the substitution of non-renewable biomass by similar consumers. The substitution fuel likely to be used by similar consumers is 81.6 tCO2/TJ –AMS-II.G, version 06					
LE _y	Leakage factor in year ‘y’ – 0.95 default factor – AMS-II.G, version 06. This value has already been applied to adjust the B _{old,i} during period y instead of separate calculation of LE _y					
Option 2						
η _{old} – Non-institutional residential	Determined at the CPA level. The efficiency of the baseline stoves/stoves being replaced. The CPAs have the following options: 1) <i>The use of default values</i> <table><tr><td>0.10</td><td>Three stone fire, conventional system with no improved combustion air supply or flue gas ventilation system i.e. no grate or chimney</td></tr><tr><td>0.20</td><td>For other baseline stoves</td></tr></table> 2) Referenced literature (fraction) 3) Representative Sampling Methods Weighted average can be used multiple systems are used.		0.10	Three stone fire, conventional system with no improved combustion air supply or flue gas ventilation system i.e. no grate or chimney	0.20	For other baseline stoves
0.10			Three stone fire, conventional system with no improved combustion air supply or flue gas ventilation system i.e. no grate or chimney			
0.20			For other baseline stoves			
η _{old} – Commercial						
η _{old} – Institutional						



$\eta_{\text{new},i,a}$ – Non-Institutional residential	<p>Determined at the CPA level –</p> <p>Efficiency of the device of type i and age a being deployed as part of the project activity. At the ex-ante phase the value of efficiency of the improved cook stove being distributed is estimated to determine whether the stove meets the minimum efficiency of 20% to meet the eligibility criteria. This parameter will be monitored ex-post as η_{new}.</p> <p>The efficiency of the stove being introduced as part of the project activity can be estimated using the below options:</p> <p>1) Manufacturers specification</p>
$\eta_{\text{new},i,a}$ – Commercial	
$\eta_{\text{new},i,a}$ – Institutional	
Option 3	
SC_{old} – Non-institutional residential stoves	<p><i>Determined at the CPA Level</i></p> <p><i>Description:</i> Specific fuel consumption or fuel consumption rate are to be determined using the controlled cooking test (CCT) protocol carried out in accordance with national standards (if available) or international standards or guidelines. This value will be used for ex-post emission reduction calculations. Weighted averages applied if more than one appliance is being replaced.</p>
SC_{old} – Commercial	
SC_{old} – Institutional	

All data will be kept for 2 years following the crediting period or the last issuance of the CERs of the project activity.

Baseline Studies:

The baseline will be determined at the CPA level. The baseline study for CPA No. 001 is described below.

Baseline wood fuel consumption per appliance – Non-institutional residential stoves ($B_{\text{old},i}$) in the host country Honduras for residential stoves used for residential purposes was determined from the report “Energy Efficiency in Central America: Progress and Action towards the fulfilment of Goals of the Central American Sustainable Energy Strategy” by Victor Hugo Ventura and Ryan Carvalho, published by UN-CEPAL, 2014.

AMS-II.G, version 06 allows the use of historical data or a survey of local usage. DNV considers this study to fall into categories, “historical data” and “survey of local usage”. Since the study is an official data provided by the Honduran government and the data has been collated through a local usage survey.

As per the report, page 18, firewood is a key component of the primary energy mix in Central America and is used primarily for cooking in rural areas. Over the period 2007-2011 per capita firewood consumption in the region has remained steady and no real reduction can be observed. The reduction in firewood consumption through deployment of efficient firewood stoves is one of the goals of energy Strategy 2020.



TABLE 3
CENTRAL AMERICA: FIREWOOD CONSUMPTION PER CAPITA, 2007-2011
(In barrel of oil equivalent (boe)/inhabitant)

Country	2007	2008	2009	2010	2011
Costa Rica	0.76	0.96	0.60	0.66	0.62
El Salvador	0.89	0.90	0.59	0.59	0.59
Guatemala	1.97	1.95	2.02	2.65	2.64
Honduras	1.53	1.57	1.57	1.58	1.58
Nicaragua	1.26	1.25	1.23	1.21	1.23
Panama	1.01	0.93	0.86	0.78	0.71
Central America	0.97	0.97	0.96	0.97	0.97

Source: SIEE, OLADE.

Thus, 1.58 barrels of oil equivalent/capita/year has been used as baseline firewood consumption in project households.

Parameter	Value	Units	Reference / Source
B _{old,i}	1.580	barrel of oil equivalent/year /capita	http://www.cepal.org/en/publications/energy-efficiency-central-america-progress-and-action-towards-fulfillment-goals-central
	0.010	TJ/year/capita	conversion of BOE to TJ
	0.645	tonnes/year/capita	conversion of TJ to tonnes of wood using NCV _{biomass}
Household size	4.810	number	http://ww2.unhabitat.org/habrdd/conditions/centralamerica/honduras.htm
B _{old,i}	3.100	tonnes/year (per stove)	Assuming one stove per household. Ex-post only one project stove will be eligible for claiming credits

The B_{old,i} value has been determined as 3.100 tonnes/year/HH (Assuming one stove per household. Ex-post only one project stove will be eligible for claiming credits.

Fraction of non-renewable biomass (f_{NRB})

The NRB fraction is defined for the host country Honduras. The renewability status of wood fuels was identified in line with the CDM NRB calculation contained in the CDM methodology AMS-II.G, version 06/14/

Demonstrably Renewable Biomass (DRB) Analysis –

Woody biomass is renewable if one the following two conditions are satisfied:

- a) The woody biomass is originating from land areas that are forests where

I. *The land area remains as forest:*

1. The total forest are in Honduras range from 5 791 602 ha/43/ to 6 598 289 ha /44/, this is based on literature published by FAO and Honduras forestry



department. The deforestation rate in Honduras ranges from 54 000 ha/year to 156 000 ha/year/45/. This demonstrates that the land area does not remain a forest.

2. 1 421 024 ha of forested land that is classified as protected areas, along with 961 592 ha of un-surveyed forests within protected areas/47/. The un-surveyed forest area is further classified as inaccessible. Out of this protected are 818 759 ha, 7% of the total area of the country is strictly protected. This area is classified as “zona nucleo”, and the exploitation of forest resources is prohibited, thus this area is considered inaccessible to wood fuel users, and it is excluded the DRB/49//50/.
3. The PP has classified 27% of the country as land area that remains forest. DNV considers that this is a conservative approach, as there is evidence of deforestation in protected areas/47/.

II. Sustainable management practices are undertaken on these land areas to ensure in particular that the level of carbon stocks on these land areas does not systematically decrease over time (carbon stocks may temporarily decrease due to harvesting):

1. Studies published by The Inventory of Forests and Trees, and FAO Forest Resource Report indicate that 1 026 000 ha of Honduran forests are under sustainable management/47//51/. The sustainable management areas are part of the protected areas. The PP has conservatively classified all the protected areas (1 421 024 ha) minus the inaccessible area “zona nucleo” (818 759 ha) as demonstrably renewable biomass (DRB). DNV considers this to be conservative, as the PP has demonstrated that there is evidence that there that large scale deforestation occurs within Protected Areas and 38% of fuel wood users collect firewood from restricted areas/52/.

III. Any national or regional forestry, agriculture and nature conservation regulations are complied with.

1. The PP has demonstrated using literature that the national or regional for agriculture and nature conservation regulations are not complied with in the protected areas/22/. However, to be conservative, the PP has assumed all that in protected areas all national or regional forestry, agriculture and nature conservation regulations are complied with.

b) The biomass is woody biomass and originates from non-forest areas (e.g., croplands, grasslands) where:

- I. *The Land are remains as non-forest or is reverted to forest:*
- II. *Sustainable management practices are undertaken on these land areas to ensure in particular that the level of carbon stocks on these land areas does not systematically decrease over time (carbon stocks may temporarily decrease due to harvesting):*
 - The PP has demonstrated that 186 029 ha (non-forest areas with trees and agroforestry systems) of non-forested land is sustainably managed/53/.



III. any national or regional forestry, agriculture and nature conservation regulations are complied with:

- Though there is evidence that the regulations are not complied with. The PP has conservatively assumed that in the protected areas the national or regional forestry, agriculture and nature conservation regulations are complied with.

Non-Renewable Biomass (NRB) Analysis-

Wood biomass is considered non-renewable if at least two of the following indicators exist:

- a. A trend showing an increase in time spent or distance travelled for gathering fuelwood, by users (or fuel-wood suppliers) or alternatively, a trend showing an increase in the distance the fuel-wood is transported to the project area;
- b. Survey results, national or local statistics, studies, maps or other sources of information, such as remote-sensing data, that show that carbon stocks are depleting in the project area;
- c. Increasing trends in fuel wood prices indicating a scarcity of fuel-wood;
- d. Trends in the types of cooking fuel collected by users that indicate a scarcity of woody biomass.

The PP has demonstrated point a) and b)/72//70//73/

- a. A trend showing an increase in time spent or distance travelled for gathering fuelwood, by users (or fuel-wood suppliers) or alternatively, a trend showing an increase in the distance the fuel-wood is transported to the project area;
 - a. The PP has demonstrated using a survey conducted by CEPAL and other independent entities that wood has become harder to find and the 58% of households' surveyed report that local forest resources have become degraded over time. When fuel wood becomes harder to find and forests get depleted, locals have to travel a greater distance to gather fuel wood. DNV was able to confirm the same through the interviews conducted during household surveys/76/. This demonstrates that the locals spend increased time to gather fuel wood/54/.
- b. Survey results, national or local statistics, studies, maps or other sources of information, such as remote-sensing data, that show that carbon stocks are depleting in the project area;
 - a. The PP has demonstrated using ICF satellite imagery that carbon stocks are depleting. The data shows that deforestation rate to be 54 000 ha/yr/52/. The PP has further demonstrated using Global Forest Resources Assessment 2010 reports that the carbon stock in living forest biomass in Honduras decreased 36% between 1990 and 2010, and the annual change of carbon stocks between 2005 and 2010 was 8 million tonnes per year/55/.

DNV confirms that the PP's assessment is reasonable and supported adequately by credible and sufficient evidence from literature.

The f_{NRB} calculation methodology has been described below:



$$\begin{aligned}
 B_y \text{ (Biomass of fuelwood consumed nationally, (tons/household-year))} &= \text{Number of HHs} \\
 \text{Cooking with wood} * \text{HH wood fuel consumption} \\
 &= 1\,169\,908 \text{ HHs} * 3.10 \text{ tonnes/HH-year} \\
 &= 3\,267\,15 \text{ tonnes}
 \end{aligned}$$

$$\text{DRB} = (B_y \text{ fuelwood consumed nationally}) * (\text{Forest Protected Areas (tonnes)} + \text{all other non-forest protected areas (tonnes)} - \text{“zona nucleo” (tonnes)}) / \text{Total Biomass of Accessible Areas (Non-forest + forest)}$$

Parameter	Value (tonnes)	Source
Forest protected Area	164 838 784	/56//43//5//6/
all other non-forest protected areas	12 541 590	/56//43//5//6/
Strictly Protected Areas (including Zona nuclea and unsurveyed areas)	94 976 044	/56//43//5//6/
Total biomass of accessible area	509 228 579	/56//43//5//6/

$$\begin{aligned}
 \text{DRB} &= 3\,267\,15 * ((164838784 + 12541590 - 94976044) / 509228579) \\
 &= 586\,881.88 \text{ tonnes}
 \end{aligned}$$

$$\begin{aligned}
 \text{NRB} &= B_y - \text{DRB} \\
 &= 3\,267\,15 - 586\,881.88 \\
 &= 3\,039\,833
 \end{aligned}$$

$$\begin{aligned}
 f_{\text{NRB}} &= \text{NRB} / (\text{NRB} + \text{DRB}) \\
 &= 3\,039\,833 / (3\,039\,833 + 586\,881.88) \\
 &= 83.82\%
 \end{aligned}$$

DNV confirms that the PP's estimate is reasonable and supported adequately by credible and sufficient evidence from literature.

4.16 Monitoring plan

The monitoring plan is in compliance with the monitoring methodology AMS-II.G (version 06).

It is DNV's opinion, that the project participants are able to implement the monitoring plan.

4.16.1 Parameters monitored ex-post by each generic CPA



Most of the parameters monitored will be monitored through the use of a survey. The survey design for all the parameters has been described in the table below:

The PP has designed a sample size calculation tool to describe step by step the method in place and to estimate the minimum sampled needed to satisfy statistical requirements for each monitoring parameter according to its sampling approach. Thus, the sample size calculation tool to be used has been developed for each monitored parameter.

The Parameters monitored ex-post as listed below:

Parameter	Monitoring methodology	Frequency
$N_{y,i,a}$	<p>Description: Number of project devices of type i and age a that are operating in year y – Stove sales database and Survey records.</p> <p>The number of stoves still operating will be determined based on representative sampling. The total number of operational stoves shall be calculated as the fraction of stoves of type i and age a found operational in the sampling survey multiplied by total number of stoves of type i and age a in the project database.</p> <p>In the case the desired precision is not met, lower bound values shall be used against repeating the survey to determine the operational fraction of stoves of type i and age a.</p>	Biennial
Option 1		
$B_{a=1,i,KPT}$ - Non Institutional residential stoves	<p>Description: Annual Quantity of woody biomass used during the project activity in tonnes per device of type i with the age a</p> <p>The quantity of biomass used during the project activity will be determined through surveys using field tests – KPT</p>	Annual
$B_{a=1,i,KPT}$ - Commercial	<p>Subsequent KPTs on aging stoves will measure changes in stove efficiency and will be used for emission reduction calculations for associated stove vintages.</p> <p>Once applied to a single CPA, all applicable future CPAs within the same POA can use such data to define the value.</p>	
$B_{a=1,i,KPT}$ - Institutional		



Option 2		
$B_{y=1, \text{new}, i, \text{survey}}$ - Non Institutional residential stoves	<p><i>Description:</i> Quantity of woody biomass used during the project activity in tonnes per device of type i, determined through a sample survey.</p> <p>Sampling will be conducted for representative appliance types</p>	Once in the first year
$B_{y=1, \text{new}, i, \text{survey}}$ - Commerical	A weighted average of stove sales for each vintage will be applied. This value will be used for ex-post emission reduction calculations.	
$B_{y=1, \text{new}, i, \text{survey}}$ - Institutional	In accordance to AMS-II.G methodological requirements, subsequent surveys on aging stoves will measure changes in project fuel consumption and will be used for emission reduction calculations for associated stove vintages	
$\eta_{\text{new}, i, a}$ - Non institutional residential stoves	<p><i>Description:</i> Efficiency of the device of type i and age a being deployed as part of the project activity.</p> <p>The efficiency of the appliance will be determined using WBT for a representative sample.</p>	Annual
$\eta_{\text{new}, i, a}$ - Commerical	In accordance to AMS-II.G methodological requirements, subsequent WBTs on aging stoves ($\Delta \eta_{y, i, a}$) will measure changes in project stove efficiency and will be used for emission reduction calculations for associated stove vintages.	
$\eta_{\text{new}, i, a}$ - Institutional	Once applied to a single CPA, all applicable future CPAs within the same PoA may use such data to define the value.	
Option 3		



SC _{new,i,a} - Non-institutional residential stoves	Description: Specific fuel consumption or fuel consumption rate in year y of the device(s) of type i deployed as part of the project that is fuel consumption per quantity of item/s processed (e.g. food cooked) or fuel consumption per hour respectively with the age a The fuel consumption rate of the systems deployed will be determined using CCT of a representative sample, weighted average if multiple systems as deployed. A standard test (Controlled Cooking Test) by a dedicated expert team on each technology type that measures aging stove performance ($\Delta SC_{y,i,a}$) per stove type.	Annual
SC _{new,i,a} - Commercial		
SC _{new,i,a} - Institutional		
Option 2 and 3		
$\mu_{y,i}$ - Non institutional residential stoves	Description: number of days of utilization of the project device during the year ‘y’ Monitoring Methodology: Primary data collection as measured through ex-post surveys/ user feedback.	
$\mu_{y,i}$ - Commercial		
$\mu_{y,i}$ - Institutional		

The data will be kept for 2 years following the end of the each crediting period. The method that shall be used to monitor the above mentioned parameters and the monitoring frequency have been given in the PoA-DD/1/

Many of the above parameters are estimated using survey. The sample size and desired precision is standard across all parameters and is in line with the requirements of AMS-II.G, version 06/14/.

The sampling methodology and the sampling size calculation for the parameters has been described below:

Sampling Methodology

Sampling Objective – The sampling objective for each parameter is to determine via survey a statistically significant value for the emission reduction calculations. These parameters are defined in the tables presented in PoA-DD, Part II, Section B.7.1 under “Data / Parameter”.

Field Measurement Objective and data to be collected – This is defined in the tables in PoA-DD, Part II, Section B.7.1 under “Description”.

Target population and sampling frame – The target population is the total population served under the PoA, and the sampling frame consists of end-users of the ICS as recorded in the



Project database / Sale Record. The sampling frame will be kept for 2 years following the crediting period or the last issuance of the CERs of the project activity. In developing sampling frames the implementer of the survey effort shall compile a clear description of the target population, including those characteristics of the population which define membership. From the description and characteristic the implementer can then select a sampling frame appropriate for the study.

Sample method –Sampling will be conducted using stratified random sampling techniques, and detailed calculations are provided within the monitoring plan as per CDM guidelines “Sampling and surveys for CDM project activities and programmes of activities”. the ICS shall be stratified by region, target user group, stove category (fuel) and ICS model combination (model and age) .

Implementation - The sampling for surveyed or monitored data will be implemented consistent with the approach described above unless survey results necessitate additional or alternative statistical analysis techniques. Monitoring shall be carried out by the operating entity of the CPA according to the procedures and monitoring framework as follows and will be submitted to the managing entity. The managing entity will store the data in an electronic database or other appropriate data archive. Primary data will be stored by the implementing entities/operators.

Desired precision / expected variance and sample size – unless otherwise noted in the description of the monitored parameter in PoA-DD, Part II, Section B.7.1, and as allowed by the methodology, the sample size will be chosen for annual monitoring with 90/10 precision (90% confidence interval and 10% margin of error) if the sampling plan is developed for each CPA. When a single sampling plan covering a group of CPAs is undertaken, 95/10 confidence/precision is applied for the sample size calculation. On the other hand when a single CPA is sampled and the project proponent chooses to inspect biennially, then a 95% confidence interval and a 5% margin of error shall be achieved for the sampled parameters. For all cases where survey results indicate that desired precision is not achieved, the lower bound of the confidence interval of the parameter value may be chosen as an alternative to repeating the survey efforts to achieve the desired precision.

Stratified Random Sampling will be used to select samples from the Project Database for monitored parameters. Optionally, other sampling approaches may be used in accordance with “Sampling and surveys for CDM project activities and programmes of activities” and Guideline for Sampling and Surveys for CDM Project Activities and Programme of Activities, when sampling techniques or statistical analysis necessitates it.

The sample size shall be determined using the following formula:

$$n \geq \frac{z^2 * N * V}{(N-1) * precision^2 + z^2 * V}$$

Where,

n = number of stoves to be sampled

N = Total number of ICS in the population

Z = Constant referring to level of confidence (e.g. 1.645 for 90 %; 1.96 for 95 % confidence)



Precision = Required precision (e.g. 10% = 0.1)

For Proportion based parameters

$$V = \frac{SD^2}{p^2} \text{ Where:}$$

$$SD^2 = \frac{\sum_{i=1}^k g_i * p_i * (1 - p_i)}{N}$$

$$p = \frac{\sum_{i=1}^k g_i * p_i}{N}$$

Where,

g_i = weight of strata i in the population

p_i = expected proportion of strata i in the population

k = total number of strata in the population

For Mean based parameters

$$V = \left(\frac{SD}{Mean} \right)^2$$

Where

$$SD^2 = \frac{\sum_{i=1}^k g_i * SD_i^2}{N}$$

$$Mean = \frac{\sum_{i=1}^k g_i * m_i}{N}$$

Where

SD_i = expected standard deviation of strata i in the population

m_i = expected mean of strata i in the population

Sample Size Calculation

Sample sizes will be sufficient to ensure that the precision of the sample means/proportions are in accordance to the Sampling Frame established for the CPA within the PoA to estimate emissions reductions. In cases where survey results indicate that desired precision is not achieved, the lower bound of corresponding confidence interval of the parameter value may



be used as an alternative to repeating the survey. Alternatively, the survey may be expanded to reach the required confidence/precision. Technology types from a given project scenario are selected using representative sampling techniques to ensure adequate representation of technologies types of different ages.

The sampling methodology will be accordance with the representative sampling methods provided by the methodology AMS–II.G and other CDM sampling guidelines and standards as indicated along this section, with the applicable methodology having precedence. Thus, the sampling plan will be provided to the DOE with a description of the objectives and reliability requirements, target population, sampling approach, sample size, sample frame, field measurements and implementation, quality assurance and control, data analysis, important assumptions, and justification for the selection of the chosen approach.

Actual survey results will inform whether fewer or greater surveys will be needed to meet the required confidence/precision. Although the monitoring team will undertake monitoring of various parameters simultaneously and on the same sample, the CME may decide to stop monitoring of a particular parameter during the campaign once the required precision for this parameter is achieved. The monitoring team will continue to monitor appliances in the sample with respect to the remaining parameter(s) until the required precision for these parameters is achieved again.

In the case of parameters monitored for the first time the expected variation for that measure in the sample may be based on results from similar studies, pilot studies, or from the project planner's own knowledge of the data.

To ensure a random stratified sample selection, random number generators shall be applied. Each ICS in the target population is uniquely identifiable by its Serial ID number. Each ICS can thus be allocated a Sample Selection Number in each monitoring period, starting at 1 and increasing up to the total number of ICS in the Database for that pre-defined stratified sampling frame. Applying the random number generators, the ICS can then be randomly chosen from the defined population up to the required sample size as calculated by the CME.

During sampling there may be non-response from the target population. Over-sampling by 20% may be used to avoid non-response; however, sampling may be ceased once required confidence/precision is met.

Monitored Systems

Total Sales Record: The total sales record documents the information listed below of stove sales to retailers for the technologies implemented under the CPA. The total sales record will be kept electronically and/or in paper records and provided to the DOE at verification. The Total Sales Record contains:

- Distributing Organization name, address and telephone
- Date of sale and model/type of project technology sold
- Quantity of project technology sold as evidenced by invoices

Frequency: Ongoing



Project Database: Each CPA will have a specific Project Database that records each ICS crediting in that CPA. Every ICS listed in the Total Sales Record will be transferred into the Project Database of one CPA as needed to grow the number of ICS until the maximum threshold for that CPA is reached. In addition to the information provided in the Total Sales Record, the CPA-specific Project Database will record user details (enough for end-user identification and household follow-up) for all, or a subset of all, appliances deployed. An individual sales record will be collected from each stove user at the point of sale. The CME makes every effort to retrieve this information (paper form or electronically (e.g. SMS)) but cannot guarantee the collection of information with every stove due to challenges such as high rates of illiteracy and logistical challenges. ICS with end-user details recorded will serve as the sampling frame for monitored parameters.

Stove user details recorded are:

- Name
- Government department, village, telephone, or address (as available)
- Stove model and Unique Serial Number
- Type of pre-project stove
- Name of Organization name, address and telephone

4.16.2 Management system and quality assurance

The programme consists of the distribution of improved cook stoves across Honduras. Envirofit International Ltd will coordinate the small-scale programme of activities (SSC-PoA) and will support the project operators in implementing the CDM programme activities (CPAs) in Honduras while acting as the focal point for all CDM related activities.

The list of operational and management activities and the organization responsible for fulfilling these responsibilities have been listed below:

Operational and management activities	Record Name	Record Handling	Responsible
Training – rules and requirements, data transfer, distribution and data collection	Training material (photos, emails, participation sheets, etc)	Hard copy	CME
Cross check of CPA monitoring report	PoA Distribution and Monitoring database	Electronic	CME
Cross check of CPA distribution reports	PoA Distribution and Monitoring database	Electronic	CME
Data processing and calculation	PoA Distribution and Monitoring database	Electronic	CME



Monitoring plan	CPA Monitoring record	Paper copy, transferred to electronic database	CME – collection and storing
Information from the DO	CPA Distribution Record	Paper copy, transferred to electronic database	CME – collection and storing
Information from the end user	CPA Distribution Record	Paper copy and transferred to electronic database	DO – collection CME – storing

DNV confirms that PP has identified all the operational and management activities, including data transfer, record handling, storage and internal audit. The PP has identified the responsible parties for each activity.

- 1) The PP has a system in place to avoid double counting:
 - a) To ensure that a CPA is not part of another existing PoA or is not a registered CDM project activity –
 - b) Confirmation that the specific CPA within this program is not part of another registered PoA.

Points a) and b) will be enforced through the CME and unique identification number clearly embedded on each ICS distributed. This will match with the information displayed on each CPA Distribution Record, with a copy retained by the customer, thus identifying that each stove with its unique serial ID number has been distributed under a PoA managed by the CME of this PoA.

- c) Confirmation that every ICS within a specific CPA is not double counted across the PoA – All the ICS are marked by a unique alpha numeric system imprinted (indicates name of the manufacturer, product model, type of product (i.e. main product vs accessories), manufacturing factory location and unique serial number). Additionally, carbon waivers will be delivered to end users with each individual ICS clearly stating that all carbon credits generated from the purchase and use of the ICS will be owned by the managing entity (CME) of the PoA. The sales database will be able to match each carbon waiver to the corresponding serial number. The PP will conduct internal audits to confirm that the carbon credits are claimed only once. The audits will be conducted using clustered random sampling (a subset of communities or regions chosen randomly from the sample population) to ensure representativeness.
- 2) The SSC-CPA included in the PoA is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity – EB54, Annex 13 ‘Guidelines on assessment of de bundling for SSC project activities’/17/ states that ‘If each of the independent subsystems/measures (e.g., biogas digester, solar home system) included in the CPA of a PoA is no larger than 1% of the small-scale thresholds defined by the methodology applied, then that CPA of PoA is exempted from performing de-bundling check i.e., considering as not being a de-bundled component of a large scale activity.’ The ICS distributed under this PoA has energy savings < 1.8 GWh_{th}/year. Additionally, the PP has included an eligibility criteria (#14) in Part 1, section B.2 that only ICS with energy savings < 1.8 GWh_{th}/year can be included in this PoA.



- 3) The provisions to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA – The CME is responsible for identifying, developing, registering and managing all SSC-CPAs. Legal binding contractual agreements signed by the DO and the CME will evidence the activities that the specific entities are responsible for and that they are aware of and have agreed that their activity is being subscribed to the PoA. Any parties the DO contracts in its role as the CPA developer will also be required to enter into a contractual agreement with the DO, similarly ascribing their activities to the PoA. Additionally, the PP has included an eligibility criteria (#4) in Part 1, Section B.2 for this requirement.

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APPENDIX A

POA AND GENERIC CPA VALIDATION PROTOCOL

Table 1 Mandatory requirements for CDM programme of activities (PoA)

Requirement	Reference	Conclusion
About Parties		
1. The programme shall assist Parties included in Annex I in achieving compliance with part of their emission reduction commitment under Art. 3.	Kyoto Protocol Art.12.2	OK
2. The programme shall assist non-Annex I Parties in contributing to the ultimate objective of the UNFCCC.	Kyoto Protocol Art.12.2.	OK
3. The programme shall have the written approval of voluntary participation from the designated national authority of each Party involved.	Kyoto Protocol Art. 12.5a, CDM Modalities and Procedures §40a	CAR-1 OK
4. The programme shall assist non-Annex I Parties in achieving sustainable development and shall have obtained confirmation by the host country thereof.	Kyoto Protocol Art. 12.2, CDM Modalities and Procedures §40a	CAR-1 OK
5. In case public funding from Parties included in Annex I is used for the programme, these Parties shall provide 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.	Decision 17/CP.7, CDM Modalities and Procedures Appendix B, § 2	OK
6. Parties participating in the CDM shall designate a national authority for the CDM.	CDM Modalities and Procedures §29	OK
7. The host Party and the participating Annex I Party shall be a Party to the Kyoto Protocol.	CDM Modalities §30/31a	OK
8. The participating Annex I Party's assigned amount shall have been calculated and recorded.	CDM Modalities and Procedures §31b	OK
9. The participating Annex I Party shall have in place a national system for estimating GHG emissions and a national registry in accordance with Kyoto Protocol Article 5 and 7.	CDM Modalities and Procedures §31b	OK
About Design of Programme		

Requirement	Reference	Conclusion
10. The CDM-POA-DD sets a framework for the implementation of the PoA and defines unambiguously a CPA under the PoA.	PoA Procedures § 6	OK
11. The coordinating/managing entity shall be identified.	PoA Procedures § 6 (a)	OK
12. The boundary for the PoA in terms of a geographical area (e.g., municipality, region within a country, country or several countries) within which all CPAs included in the PoA will be implemented is defined.	PoA Procedures § 6 (b)	OK
13. Eligibility criteria are defined for inclusion of a project activity as a CPA under the PoA, which shall include criteria for demonstration of additionality, and the type and/or extent of information (e.g. criteria, indicators, variables, parameters or measurements) that shall be provided by each CPA in order to ensure its eligibility.	PoA Procedures § 6 (g)	OK
14. The length of the PoA is not exceeding 28 years.	PoA Procedures § 6 (h)	OK
15. The operational and management arrangements established by the coordinating/managing entity for the implementation of the PoA is described, including a description of a record keeping system for each CPA under the PoA, a system/procedure to avoid double accounting e.g. to avoid the case of including a new CPA that has been already registered either as CDM project activity or as a CPA of another PoA, the provisions to ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA.	PoA Procedures § 6 (i)	OK
16. The proposed statistically sound sampling method/procedure to be used by DOEs for verification of the amount of emission reductions achieved by CPAs under the PoA is described. In case the coordinating/managing entity opts for a verification method that does not use sampling but verifies each CPA there is a transparent system defined and described that ensures that no double accounting occurs and that the status of verification can be determined anytime for each CPA.	PoA Procedures § 6 (k)	OK
About small-scale project activities (if applicable)		
17. The proposed project activity shall meet the eligibility criteria for small scale	Simplified Modalities and Procedures	OK

Requirement	Reference	Conclusion
CDM project activities set out in § 6 (c) of the Marrakech Accords and shall not be a debundled component of a larger project activity.	for Small Scale CDM Project Activities §12a,c	
18. The proposed project activity shall confirm to one of the project categories defined for small scale CDM project activities and use the simplified baseline and monitoring methodology for that project category.	Simplified Modalities and Procedures for Small Scale CDM Project Activities §22e	OK
19. If required by the host country, an analysis of the environmental impacts of the project activity is carried out and documented.	Simplified Modalities and Procedures for Small Scale CDM Project Activities §22c	OK
About additionality		
20. Additionality of the programme as a whole is demonstrated because in the absence of the CDM (i) the proposed voluntary measure would not be implemented, or (ii) the mandatory policy/regulation would be systematically not enforced and that non-compliance with those requirements is widespread in the country/region, or (iii) that the PoA will lead to a greater level of enforcement of the existing mandatory policy /regulation.	Kyoto Protocol Art. 12.5c, CDM Modalities and Procedures §43 PoA Procedures § 6 (e)	OK
21. It is demonstrated for the PoA and generic CPA that in the absence of CDM, none of the implemented CPAs would occur	PoA Standard § 7	OK
22. Additionality of a typical CPA is demonstrated through eligibility criteria for inclusion in the PoA.	PoA Procedures § 7 (g)	OK
About application of baseline and monitoring methodology		
23. The baseline and monitoring methodology shall be previously approved by the CDM Executive Board.	CDM Modalities and Procedures §37e	OK
24. A baseline shall be established on a project-specific basis, in a transparent manner and taking into account relevant national and/or sectoral policies and circumstances.	CDM Modalities and Procedures §45c,d	OK
25. The baseline methodology shall exclude to earn CERs for decreases in activity	CDM Modalities and Procedures §47	OK

Requirement	Reference	Conclusion
levels outside the project activity or due to force majeure.		
26. The monitoring plan for a typical CPA is developed in accordance with the approved monitoring methodology, and identification of the monitoring provisions and data parameters a CPA has is to apply/monitor	PoA Procedures § 6 (j)	OK
27. Provisions for monitoring, verification and reporting shall be in accordance with the modalities described in the Marrakech Accords and relevant decisions of the COP/MOP.	CDM Modalities and Procedures §37f	OK
About forecast emission reductions		
28. The emission reductions shall be real, measurable and give long-term benefits related to the mitigation of climate change.	Kyoto Protocol Art. 12.5b	OK
About environmental impacts		
29. Documentation on the analysis of the environmental impacts of the programme activity, including transboundary impacts, shall be submitted, and, if those impacts are considered significant by the programme participants or the Host Party, an environmental impact assessment in accordance with procedures as required by the Host Party shall be carried out.	CDM Modalities and Procedures §37c	<input checked="" type="checkbox"/> Analysis at PoA level <input type="checkbox"/> Analysis at CPA level
About stakeholder comments		
30. Comments by local stakeholders shall be invited, a summary of these provided and how due account was taken of any comments received.	CDM Modalities and Procedures §37b	<input checked="" type="checkbox"/> Analysis at PoA level <input type="checkbox"/> Analysis at CPA level
31. Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for minimum 30 days, and the project design document and comments have been made publicly available.	CDM Modalities and Procedures §40	OK
Other		

Requirement	Reference	Conclusion
32. The project design document shall be in conformance with the CDM-PoA-DD format.	CDM Modalities and Procedures Appendix B, EB Decision	OK

Table 2 Requirements checklist

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
<i>PART I. Programme of activities (PoA)</i>					
A General description of project activity					
A.1 Title of the PoA (PS§ 31, VVS§ 62-63)					
A.1.1 Does section A.1 of the PoA-DD include a clearly identifiable project title, version number of the PoA-DD and date of the PoA-DD?	/1/	DR	<input checked="" type="checkbox"/> Clearly identifiable title of the project activity <input checked="" type="checkbox"/> Version number of the PDD is included <input checked="" type="checkbox"/> Date of the PDD is included.		OK
A.1.2 Is the PoA-DD is in accordance with the applicable requirements for completing PoA-DD?	/1/	DR	<input checked="" type="checkbox"/> Yes <i>If no, list where the PDD is not in accordance:</i>		OK
A.2 Description of the PoA (VVS§ 64-69, (PS § 138, VVS § 189 and VVS§ 150-157 for small-scale project activities, as applicable)					
A.2.1 How was the design of the PoA assessed?	/1/	DR	<i>What type is the generic CPA?</i> <input type="checkbox"/> Generic CPA in existing facility or utilizing existing equipment(s) <input type="checkbox"/> Generic CPA is either a large scale project or a small scale project with emission reductions exceeding 15 000 tCO ₂ e per year. In this case, a site visit must be performed. <input type="checkbox"/> Generic CPA is a bundled small scale project, with each project in the bundle with emission reductions not exceeding 15,000 tCO ₂ e per year. In such case the number of physical site visits may be		OK

MoV = Means of Verification, DR= Document Review, I= Interview, CC= Cross-Checking

PoA and generic CPA validation protocol (Part I PoA)– Report No. 2012-9153, rev. 04

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			<p>based on sampling, if the sampling size is appropriately justified through statistical analysis.</p> <p><input type="checkbox"/> The generic CPA is an individual small scale project activity with emission reductions not exceeding 15 000 tCO₂e per year. In this case, DOE may not conduct a physical site visit as appropriate.</p> <p><input checked="" type="checkbox"/> Greenfield project</p> <p><i>How was the design of the first CPA submitted with the PoA assessed?</i></p> <p><input checked="" type="checkbox"/> Physical site inspection</p> <p><input type="checkbox"/> Reviewing available designs and feasibility studies</p> <p><i>If a physical site inspection is not undertaken, justify why no site visit was undertaken:</i></p>		
A.2.2 If a greenfield project, describe the physical implementation of the project when the validation was commenced.		DR	At the time of validation the CME had not yet started the distribution of the improved cook stoves. The validation included a site visit to assess the baseline scenario i.e. the current use of inefficient cook stoves.		
A.2.3 If physical site visits were performed based on sampling (only applicable for bundled small scale projects, each with emission reductions not exceeding 15 000 tCO ₂ e per year), justify the sampling through a statistical analysis:	/1/	DR	NA		
A.2.4 Does the PoA-DD and generic CPA-DD describe the framework for the implementation of the proposed CDM PoA and inclusion of CPAs under the PoA?	/1/	DR	The PoA DD and the generic CPA-DD describes the framework for the implementation of the proposed CDM PoA and inclusion of CPAs under the PoA		OK

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Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
A.2.5	Does the PoA involve alteration of existing installations? If so, have the differences between pre-project and post-project activity been clearly described in the PoA-DD?	/1/	DR	The PoA does not involve alteration of existing installations.		OK
A.2.6	Does the PoA design engineering reflect current good practices?	/1/	DR	<p>The PoA proposes to replace inefficient conventional firewood stoves of the types “fogon suelo”, “fogon tradicional”, “Justa tradicional”, “Justa 2x3” and “other inefficient” stoves with improved cook stoves.</p> <p>The first CPA will use the higher efficiency ICS model of the HM-5000 type to residential users.</p> <p>The HM-5000 cookstove model incorporates not only user feedback but also improves both heat intensity and distribution (both major customer complaints) and replaces the fragile ceramic chamber with a new metal one based on Envirofit International Ltd’s proven cookstove chamber alloy. The HM-5000 incorporates 4 major design advances not seen in Honduras stoves before.</p> <ul style="list-style-type: none"> • High quality metal combustion chamber; • Cast iron plancha; • Hot gas path; and • Insulation. <p>DNV considers this ICS reflects current good practices.</p>		OK
A.2.7	Would the technology result in a significantly better performance than any commonly used technologies in the host country? Is any transfer of technology from any Annex-I Party involved?	/1/	DR	The technology being implemented in the first CPA is significantly better than the current cook stove technologies being used in Honduras.		OK
A.2.8	Does the PoA qualify as a small scale CDM project activity as defined in paragraph 6(c) of decision 17/CP.7 on the	/1/	DR	The PoA falls under the project Type (ii) energy efficiency improvement project activities which		OK

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Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
modalities and procedures for the CDM?				<p>reduce energy consumption, on the supply and/or demand side, by up to the equivalent of 60 gigawatt hours per year (which translates to thermal energy savings of 180 GWh_{th} per year)(F-CDM-SSCwg ver 01 SSC_233).</p> <p>The PoA has an inclusion criteria for CPAs (No. 14) to ensure that all CPAs are only small scale project activities.</p>		
A.2.9	Is the small scale project activity a debundled component of a larger project activity in accordance with the rules defined in appendix C of the simplified modalities and procedures for small-scale CDM project activities?	/1/	DR	The PoA is not debundled component of a larger project activity as the project participant has not registered any CDM project or PoA in Honduras.		OK
A.3 Programme Boundaries (VVS § 191-192) <i>Programme Boundaries are the limits and borders defining the GHG emission reduction project.</i>						
A.3.1	Are the programme's spatial boundaries (geographical) clearly defined?	/1/	DR	The geographical boundary of the PoA has not been defined in Section A.4.1.2 of the PoA DD.	CAR-2	OK
A.3.2	Are the programme's system boundaries (components and facilities used to mitigate GHGs) clearly defined?	/1/	DR	<p>The CME proposes to disseminate improved cooking stoves (ICS) in Honduras. These improved cook stoves will replace the prevailing inefficient traditional stoves or equivalent with stoves which combust wood more efficiently. The project aims to reduce the emissions from the combustion of non-renewable biomass.</p> <p>The programme's system boundary included the improved cook stoves and the non-renewable biomass used as fuel.</p>		OK
A.3.3	Do the programme boundaries take into consideration all applicable national and/or sectoral policies and regulations within the chosen boundary?	/1/	DR	The project boundary and the CPA boundary is the country of the Honduras. The CME has taken into consideration all the sectoral policies and		OK

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Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
				regulations within the chosen boundary		
A.3.4	Can each CPA under the PoA be clearly identified individually including spatial boundaries (geographical) clearly defined?	/1/	DR	The project proponent proposes the geographical project boundary for each CPA will be identified by cook stoves distributed under each CPA. The cook stoves distributed under this programme have unique identification serial number. The PP will have required documentation to track each serial number its CPA.		OK
A.4 Participation and authorization (VVS § 38-52) <i>Referring to Part A.3 and A.4, Appendix 1 and 2 of the PoA-DD as well as the CDM glossary with respect to the terms Party, Letter of Approval, Authorization and Project Participant.</i>						
A.4.1	Do all participating Parties fulfil the participation requirements as follows:	/1/	DR	The LoA from United Kingdom and Honduras shall be submitted to DNV	CAR-1	OK
A.4.2	Do the letters of approval meet the following requirements?	/1/	DR	The LoA from United Kingdom and Honduras shall be submitted to DNV	CAR-1	OK
A.4.3	Have all private/public project participants been authorized by an involved Party?	/1/	DR	The LoA from United Kingdom and Honduras shall be submitted to DNV	CAR-1	OK
A.4.4	Has the coordinating/managing entity of the programme been identified?	/1/	DR	The co-ordinating entity is Envirofit International Ltd		OK
A.4.5	Has the coordinating/managing entity provided letters of authorization of its coordination of the PoA from each host Party?	/1/	DR	The LoA from United Kingdom and Honduras shall be submitted to DNV	CAR-1	OK
A.5 Modalities of communications (VVS § 53-61)						
A.5.1	How has the corporate identity of all project participants and focal points included in the MoC, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories, been validated?	/1/	DR	<input type="checkbox"/> Directly checking evidence for corporate, personal identity and other relevant documentation; <input type="checkbox"/> Notarized documentation;		OK

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			<input checked="" type="checkbox"/> Written confirmation from the project participant or the coordinating/managing entity that submits to it the MoC statement that all corporate and personal details, including specimen signatures, are valid and accurate. If this case was selected, DNV has confirmed that: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> the MoC statement was received from a project participant with whom DNV has a contractual relationship. <input type="checkbox"/> the official who submits the MoC statement to the DOE and the official who signed the written confirmation (if a different person) is/are duly authorized to do so on behalf of the respective project participant 		
A.5.2 Has the MoC statement been correctly completed and duly authorized? Check that all three requirements listed in the next column are complied with.	/10/	DR	<input checked="" type="checkbox"/> The latest version of the form F-CDM-MOC has been used; <input checked="" type="checkbox"/> The information required as per the F-CDM-MOC, including its annex 1, is correctly completed; <input checked="" type="checkbox"/> The project participant is authorized signatories signing the F-CDM-MOC correspond to the project participant is authorized signatories included in F-CDM-MOC, annex 1.		OK

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
A.6 Public funding of the project activity (CDM Modalities and Procedures Appendix B § 2)					
A.6.1 In case public funding from Parties included in Annex I is used for the project activity, 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/ /64/ 8/	DR	No public funding is involved, and the validation did not reveal any information that indicates that the programme can be seen as a diversion of ODA funding towards Honduras.		OK
A.7 Verification of CPAs (PoA procedure § 6 k)					
A.7.1 If case the coordinating /managing entity does not wish to have all CPAs verified, is there a description of the proposed statistically sound sampling method/procedure to be used by DOEs for verification of the amount of reductions of anthropogenic emissions by sources or removals by sinks of greenhouse gases achieved by CPAs under the PoA?	/1/	DR	The CME will have all CPAs verified.		OK
B Demonstration of additionality and development of eligibility criteria					
B.1 Additionality of the Programme of Activities (VVS § 195) <i>Assessment of the additionality of the PoA as a whole in accordance with the PoA standard</i>					
B.1.1 Has it been demonstrated that the programme is a voluntary coordinated action that would not be implemented in the absence of CDM?	/1/	DR	The additionality demonstration for the PoA is not satisfactory. The CME shall provide more detailed and referenced explanation on the assessment and demonstration of additionality for the PoA.	CAR 11	OK
B.1.2 If the programme is implementing a mandatory policy/regulation, has it been demonstrated whether the policy/regulation is being enforced? If it is enforced, has it	/1/	DR	The CME has not provided information on whether there are any mandatory policy/regulation requiring the implementation of	CAR 11	OK

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
been demonstrated that the programme will lead to a higher level of enforcement?			improved cook stoves.		
B.2 Additionality determination of each generic CPA (VVS § 101-129 and VVS § 158-161 for small-scale project activities, as applicable)					
B.3 What approach/tool does the PoA use to demonstrate additionality of each generic CPA? Is this in line with the methodology? In case of small-scale CDM project activities, are the Guidelines on the demonstration of additionality of small-scale project activities applied considering also the “Non-binding best practice examples to demonstrate additionality for SSC project activities”.	/1/	DR	The CME has not described the approach for demonstrating additionality of a CPA	CAR +2 CAR +3 CAR +4 CAR +5	OK
B.3.1 Have the regulatory requirements correctly been taken into account to evaluate the project activity and the alternatives?	/1/	DR	The CME has not provided information on whether there are any mandatory policy/regulation requiring the implementation of improved cook stoves.	CAR +1	OK
B.3.2 Is sufficient evidence provided to support the relevance of the arguments made?		DR	Yes		OK
B.3.3 What is the additionality of each generic CPA mainly based on (Investment analysis or barrier analysis)?		DR	<p>The project developer uses Barrier Analysis:</p> <p>The technological and institutional barriers described are very general and can be applied for an identical project in any country across the globe. These barriers are not specific to this project.</p> <p>The project participant has not described the barriers specific to this project activity.</p> <p>The prevailing practice barrier is considered to be</p>	CAR +4	OK

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			<p>weak and not representative of the actual situation in Host Country</p> <p>DNV during the household visits observed that the locals are aware of improved cook stoves and are willing to buy or own an improved cook stove. The general public is also aware of the benefits of the improved cook stove.</p> <p>DNV also observed that the penetration rate of the improved cook stoves from other programs is not as limited as the project participant claims. DNV observed a number semi-improved cook stove in use in the communities, and high awareness of the existence of improved cook stoves.</p> <p>The additionality demonstration was revised. The initial PoA-DD used investment barrier to demonstrate additionality. This was revised to demonstrate additionality using EB68 Annex 27 “Additionality Guidelines of Small-Scale Projects” paragraph 2(c) as described in the PoA DD.</p> <p>As per the guideline from EB 68, Annex 27/19/, documentation of barriers is not required for the positive list of technologies and project activity types that are defined as automatically additional for project sizes up to and including the small-scale CDM thresholds (e.g. installed capacity up to 15 MW). The positive list includes “c) project activities solely composed of isolated units where the users of the technology/measure are households or communities or Small and Medium</p>	CAR 15	

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			Enterprises (SMEs) and where the size of each unit is no larger than 5% of the small-scale CDM thresholds”/19/. This PoA proposes to distribute improved cook stove to households, commercial and institutional stoves. The first CPA included the distribution of the stoves to households that have an energy saving of 0.007709 GWh/stove/year, which is significantly lower than the cap of 5% of the small-scale threshold (9 GWh _{th} /stove/year). The eligibility criteria for CPAs include a criterion for checking whether the project meets the small scale threshold (#14) and whether the size of each unit distributed in the CPA is no larger than 5% of the small-scale CDM thresholds (#13).		
Investment analysis (VVS § 117-123) <i>The list of questions below must be adjusted to the parameters in the investment analysis relevant to the project under validation. <u>All</u> input parameters need to be assessed.</i>					NA
Barrier analysis (VVS § 124-127)					NA
Common practice analysis (VVS § 128-130)					NA
Conclusion					
B.3.4 What is the conclusion with regard to the additionality of the project activity?		DR	EB 68, Annex 27 “Guidelines on the demonstration of additionality of small-scale		OK

Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
				project activities” has been correctly applied to demonstrate the project will not be implemented in the absence of CDM revenue. All the assumption and data used by the project participants are listed in the PoA-SSC-DD and/or supporting documents. All documentation relevant for demonstrating additionality have been correctly quoted and interpreted in the PoA-SSC-DD.		
B.4 Eligibility Criteria (VVS § 196) <i>Eligibility criteria to assess eligibility of CPAs to be included to PoA.</i>						
B.4.1	Are the geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA?	/1/	DR	The geographical boundary of the PoA has not been defined in Section A.4.1.2 of the PoA DD.	CC-2	OK
B.4.2	Are there conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo)?	/1/ /68/	DR	The CME has implemented a method to avoid double counting of emission reductions. Each cook stove will have a unique serial number. The CME shall describe in the PoA-DD, what the serial numbering system will be and how this will avoid double counting of CERs from other PoAs. The unique serial number and CPAs. The PP has received approval from the Regional Collaboration Centre, Lomé CDM accepting the approach proposed by them and allowing them to not use PoA Logo.	CC-1	OK
B.4.3	Are there specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications?	/1/	DR	The CME shall include a condition to specify the technology/measure including the level and type of service, performance specifications including compliance with testing/certifications	CC-4	OK

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Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
B.4.4	Are there conditions to check the start date of the CPA through documentary evidence?	/1/	DR	The CME shall include a condition to check the start date of the CPA through documentary evidence.	CAR-5	OK
B.4.5	Are there conditions that ensure compliance with applicability and other requirements of single or multiple methodology/ies applied by CPAs?	/1/	DR	The CME shall specify the applicability criteria of the methodology AMS II.G, in the eligibility criteria.	CAR-6	OK
B.4.6	Are there conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality, and are these in accordance with the requirements of the PoA Standard?	/1/	DR	The eligibility criteria may be revised with the revision of the additionality	CL-2	OK
B.4.7	Are there PoA-specific requirements stipulated by the CMEs including any conditions related to undertaking local stakeholder consultations and environmental impact analysis?	/1/	DR	The PoA DD, Section A.4.2.2 does not include a condition to meet this requirement.	CAR-7	OK
B.4.8	Where applicable, are the target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation) specified?	/1/	DR	The CME does not describe the target group for this project activity and the distribution mechanism.	CAR-8	OK
B.4.9	Where applicable, are there conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys?	/1/	DR	The conditions related to sampling requirements shall be included in Section A 4.2.2	CL-2	OK
B.4.10	Where applicable, are there conditions that ensure that CPA in aggregate meets the small-scale or micro-scale threshold criteria and remain within those thresholds throughout the crediting period of the CPA?	/1/	DR	The PoA DD includes the condition to ensure that the CPA in aggregate meets the small scale eligibility criteria for small scale threshold.		OK
B.4.11	Where applicable, are there requirements for the debundling check, in case CPAs belong to small-scale (SSC) or microscale project categories?	/1/	DR	All CPAs included under the present PoA will be exempt from the de-bundling check when all types of ICS considered under the PoA show energy savings of less than 1% of the small scale threshold defined by the methodology AMS-II.G,	CL-3	OK

MoV = Means of Verification, DR= Document Review, I= Interview, CC= Cross-Checking

Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
				<p>The threshold to prove the activity is not a debundled action is deducted from the small scale threshold for each SSC-CPA, which corresponds to 180GWh thermal energy per year as follows:</p> <p>1% of 180 GWh = 1.8 GWh = 1,800,000 KWh</p> <p>Therefore, a debundling check will occur for any CPA that includes a technology type with a proven thermal energy savings of 1.8 GWh/y.</p> <p>The de-bundling check shall be included in the eligibility criteria</p>		
B.4.12	Are there conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance?	/1/	DR	The CME shall include an eligibility condition for affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance	CAR-9	OK
B.4.13	Are all eligibility criteria verifiable, and sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA?	/1/	DR	The above corrective action requests need to be addressed first.	CAR 2CAR 3CAR 4CAR 5CAR 6CAR 7CAR 8CAR 9	OK
B.5 Application of methodologies by the PoA (VVS §190)						
B.5.1	Does the PoA apply approved methodologies and the correct and valid version thereof? If during the course of validation the originally applied	/1/	DR	The methodology used for this project activity is AMS II.G, "Energy efficiency measures in thermal applications of non-renewable biomass".		OK

MoV = Means of Verification, DR= Document Review, I= Interview, CC= Cross-Checking

Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
version of the methodology expires, a CAR shall be raised in Table 3 of the validation protocol. Any new requirements of the revised version of the methodology not yet validated in Table 2 of the validation protocol shall be validated in Table 3 as part of the assessment of the CAR raised.						
B.5.2	If the programme applies multiple methodologies, is their application in accordance with the PoA Standard?	/1/	DR	The PoA applies one methodology.		OK
B.5.3	If the PoA applies small-scale methodologies, does the PoA also comply with the general guidelines to SSC CDM methodologies, which provides guidelines on equipment capacity, equipment performance/lifetime, baseline identification for type-II/III Greenfield project activities, sampling and other monitoring-related issues?	/1/	DR	The PoA complies with the general guidelines to SSC CDM methodologies, which provides guidelines on equipment capacity, equipment performance/lifetime, baseline identification for type-II/III Greenfield project activities, sampling and other monitoring-related issues.		OK
B.6 Management system of the PoA (VVS § 186) <i>Assessment of the PoA management systems in accordance with the PoA standard</i>						
B.6.1	Is there a clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies?	/1/	DR	The CME will be responsible for the overall programme management and the operations and management has been clearly described in the PoA DD.		OK
B.6.2	Are there records of arrangements for training and capacity development for personnel?	/1/	DR	Suitable training will be conducted for partners taking part in the project activity to make them aware of the rules of the CDM and the PoA and their requirements in terms of distribution and data collection. The project activity will provide to end-users after-distribution servicing and support of the technology by means of the Dos.		OK
B.6.3	Are there procedures for technical review of inclusion of CPAs?	/1/	DR	The technical review is conducted by the CME through the eligibility criteria. The CME has provided a detailed description of eligibility criteria, accepted mean of proof and the document that needs to be submitted as evidence.		OK

MoV = Means of Verification, DR= Document Review, I= Interview, CC= Cross-Checking

Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
				The eligibility criteria have been described in section A.4.2.2. of the PoA DD/1/		
B.6.4	Is there a procedure to avoid double counting (e.g. to avoid the case of including a new CPA that has already been registered either as a CDM project activity or as a CPA of another PoA)?	/1/	DR	Double counting of individual ICS and of CPAs (in other PoAs) has been addressed by including this as one the eligibility criteria's in the PoA DD. The procedure to avoid double counting has been described in section A.4.4.1 (ii) of the PoA DD/1/, the mean of proof that the DO of the CPA needs to provide at the CPA inclusion stage to demonstrate no double counting is given in section A.4.2.2 of PoA DD/1/. Further details provided in section 4.16.2 of this report.		OK
B.6.5	Is there a records and documentation control process for each CPA under the PoA?	/1/	DR	The CME has provided a detailed description of the records and document control process for each CPA under the PoA. This has been described in section A.4.4.1 (i) of the PoA DD/1/.		OK
B.6.6	Are there measures for continuous improvements of the PoA management system?	/1/	DR	The CME has included measures for continuous improvement. Continuous improvement will be through training of monitoring staff, ensuring appropriate skills and experience, CME reviewing information gathering technique and information flow and partner feedback		OK
B.6.7	Do the operational and management arrangements established by the coordinating entity include provisions to ensure that CPA implementers are aware and have agreed that their activity is being subscribed to the PoA?	/1/	DR	The CME has included an eligibility criteria (Section B.2 (4)) to ensure that ensure that CPA implementers are aware and have agreed that their activity is being subscribed to the PoA. Criteria 4: Contractual provisions to ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA. In the case that the CME is not responsible for		OK

MoV = Means of Verification, DR= Document Review, I= Interview, CC= Cross-Checking

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			<p>implementing the CPA, the organization responsible for CPA implementation, known as the Distributing Organisation (DO), has signed a contractual agreement with the CME to participate in the PoA. This agreement:</p> <ul style="list-style-type: none"> - Defines the ownership of the carbon emission reduction rights - Covers the DO's distribution and monitoring related responsibilities - Confirms that the ICS to be distributed under the CPA have not and will not be distributed under any other carbon project (CDM project, PoA or voluntary carbon market project) <p>Cedes the DO's rights to the carbon credits generated from CPAs under the PoA to the CME</p>		
C Duration of the PoA, Crediting Period (VVS § 197)					
C.1.1 Is the PoA starting date and length of the PoA clearly defined and evidenced? Is the start date of a PoA either (a) the date of notification of the intention to seek the CDM status by the coordinating/managing entity to the secretariat and the DNA; or (b) the date of publication of the PoA-DD for global stakeholder consultation?	/1/	DR	The PoA starting date is the date of publication of the PoA-DD for global stakeholder consultation i.e. 28 January 2012.		OK
C.1.2 Does the PoA design documentation confirm that the length of the PoA does not exceed 28 years (60 years for A/R)?	/1/	DR	The PoA DD confirms that the length of the PoA will not be greater than 28 years.		OK

Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
D Environmental Impacts (VVS § 134-137, VVS § 199-200)				<input checked="" type="checkbox"/> Analysis at PoA level <input type="checkbox"/> Analysis at CPA level This section must only be completed if the analysis of environmental impacts is at PoA level.		
D.1.1	Are there any host country requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved? Does the approval contain any conditions that need monitoring? For small-scale project activities, is an assessment of the environmental impacts of the proposed CDM project activity is required by the host Party?	/1/	DR	The PoA DD states that the proposed project is not required to undertake an environmental impact assessment according to the Honduran regulation. The reference document is in Spanish, the PP is requested to highlight the relevant part and provide a translation of the same.	CL 7	OK
D.1.2	Does the PoA comply with environmental legislation in the host country?	/1/	DR	The PoA DD states that the proposed project is not required to undertake an environmental impact assessment according to the Honduran regulation. The reference document is in Spanish, the PP is requested to highlight the relevant part and provide a translation of the same.	CL 7	OK
D.1.3	Will the PoA create any adverse environmental effects?	/1/	DR	The programme will not create any negative environmental effects.		OK
D.1.4	Have identified environmental impacts been addressed in the PoA design?	/1/	DR	EIA has not been conducted for this project activity, as it is not a requirement from the Host country for this type of project activity.		OK
E Local stakeholder consultation (VVS § 138-140, VVS § 201-202)				<input checked="" type="checkbox"/> Consultation at PoA level <input type="checkbox"/> Consultation at CPA level This section must only be completed if the analysis of environmental impacts is at PoA level.		
E.1.1	Have relevant stakeholders been consulted?	/1/	DR	The local stakeholder consultation meeting took place on the 7 Dec 2011 in Valle de Angeles,		OK

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Checklist Question		Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
				<p>Francisco Morazan, Honduras.</p> <p>In addition to the local stakeholder consultation meeting, the stakeholder process included:</p> <ul style="list-style-type: none"> Interviews with NGOs, public authorities and private relevant parties. Pilot ICS delivered to gather feedback through focal groups and field surveys. <p>DNV confirms that relevant stakeholders were consulted during the stakeholder consultation process</p>		
E.1.2	Have appropriate media been used to invite comments by local stakeholders?	/1/	DR	The CME needs to describe the relevant media been used to invite comments by local stakeholders	CAR 19	OK
E.1.3	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	The CME needs to describe whether a stakeholder consultation process is required by regulations/laws in the Honduras. If yes, has the stakeholder consultation process been conducted in lines with the Host Country requirements?	CL 8	OK
E.1.4	Is a summary of the stakeholder comments received provided?	/1/	DR	A summary of the stakeholder comments need to be submitted to DNV.	CL 9	OK
E.1.5	Has due account been taken of any stakeholder comments received?	/1/	DR	The CME needs to address the stakeholder comments received during the public stakeholder consultation period.	CAR 21	OK

PART II. Generic component project activity (CPA)					
A Description of each generic CPA (VVS § 189)					
A.1.1	Does the description of each generic CPA sufficiently cover all relevant elements, is accurate and does it provides the reader with a clear understanding of the nature of the proposed CPAs?	/1/	DR	The generic CPA sufficiently covers all the relevant elements of the CPA.	OK
A.1.2	If applicable, are all different types of generic CPAs clearly described?	/1/	DR	There is only one type of Generic CPA for this PoA	OK
B Application of a baseline and monitoring methodology(ies)					
B.1 Title and reference of the approved baseline and monitoring methodology(ies) selected					
B.1.1	Are the exact reference and title of approved methodology(ies) and tools listed?	/1/	DR	This POA applies the methodology: AMS-II.G. Energy Efficiency Measures in Thermal Applications of Non-Renewable Biomass Version 06, Sectoral Scope 03.	OK
B.1.2	Are valid version of approved methodology(ies) and tools applied?	/1/	DR	This POA applies the methodology: AMS-II.G. Energy Efficiency Measures in Thermal Applications of Non-Renewable Biomass Version 06, Sectoral Scope 03.	OK
B.2 Applicability of methodology (and tools) (VVS § 73-77)					
<i>Insert a row for each applicability criteria of the applied methodology (and tools)</i>					
B.2.1	How was it validated that each specific CPA complies with	/1/	DR	The CME shall include an eligibility criteria to	CAR-6 OK

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the applicability criteria:				ensure compliance with applicability and other requirements of single or multiple methodology/ies applied by CPAs		
B.3 Project boundary of each generic CPA (VVS § 82-87)						
B.3.1	What are each generic CPA's system boundaries (components and facilities used to mitigate GHGs)? Are they clearly defined and in accordance with the methodology?	/1/	DR	The geographical boundary of the CPAs system boundaries has not been defined in Section A.4.1.2 of the PoA DD.	CAR-2	OK
B.3.2	Which GHG sources are identified for the CPA? Does the identified boundary cover all possible sources linked to the project activity? Give reference to documents considered to arrive at this conclusion.	/1/	DR	CO ₂ emissions from the combustion of non-renewable biomass for cooking have been identified as the source for baseline and project emissions.		OK
B.3.3	Do the system boundaries for the CPA as described in the CPA-DD fully comply with the system boundaries stipulated by the applied baseline methodology?	/1/	DR	The programme system boundary is the country of Honduras where the efficient systems using biomass will be distributed as part of this PoA.		OK
B.3.4	Does the project 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 project?	/14/ /1/	DR	The identified boundary and selected sources and gases are justified for the project activity. The validation of the project activity did not reveal other greenhouse gas emissions occurring within the proposed CDM project activity boundary as a result of the implementation of the proposed project activity which is expected to contribute more than 1% of the overall expected average annual emission reduction, which is not addressed by the methodology AMS-II.G, version 06		OK

B.4 Baseline scenario determination and description (VVS § 88-95 / Identification of alternatives to the project activity (VVS § 113-116)) <i>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.</i>					
B.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 project activity is undertaken without being registered as a proposed project activity? 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 project activity?	/14/ /1/	DR	The baseline scenario has been identified in accordance with AMS-II.G. In accordance with the methodology AMS-II.G, the baseline scenario is the use of fossil fuels for meeting similar thermal energy needs.	OK
B.4.2	Could the project activity in absence of the CDM or other baseline alternatives also be implemented by other entities than the CDM project participants? If so, has this also been included in the list of baseline scenarios?	/1/	DR	NA The baseline scenario has been chosen in accordance with AMS-II.G. As per the methodology it is assumed that in the absence of the project activity, the baseline scenario is the use of fossil fuels for meeting similar thermal energy needs.	OK
B.4.3	How have the other baseline scenarios been eliminated in order to determine the baseline?	/1/	DR	NA The baseline scenario has been chosen in accordance with AMS-II.G. As per the methodology it is assumed that in the absence of the project activity, the baseline scenario is the use of fossil fuels for meeting similar thermal energy needs.	OK
B.4.4	What is the baseline scenario?	/1/	DR	The baseline scenario has been chosen in accordance with AMS-II.G. As per the methodology it is assumed that in the absence of the project activity, the baseline scenario is the	OK

			use of fossil fuels for meeting similar thermal energy needs.		
B.4.5	Is the determination of the baseline scenario in accordance with the guidance in the methodology?	/1/	DR	The baseline scenario has been chosen in accordance with AMS-II.G. As per the methodology it is assumed that in the absence of the project activity, the baseline scenario is the use of fossil fuels for meeting similar thermal energy needs.	OK
B.4.6	Has the baseline scenario been determined using conservative assumptions where possible?	/1/	DR	The baseline scenario has been chosen in accordance with AMS-II.G. As per the methodology it is assumed that in the absence of the project activity, the baseline scenario is the use of fossil fuels for meeting similar thermal energy needs.	OK
B.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	NA The baseline scenario has been chosen in accordance with AMS-II.G. As per the methodology it is assumed that in the absence of the project activity, the baseline scenario is the use of fossil fuels for meeting similar thermal energy needs.	OK
B.4.8	Is the baseline scenario determination compatible with the available data and are all literature and sources clearly referenced?	/1/	DR	NA The baseline scenario has been chosen in accordance with AMS-II.G. As per the methodology it is assumed that in the absence of the project activity, the baseline scenario is the use of fossil fuels for meeting similar thermal energy needs.	OK
B.4.9	Is the baseline determination adequately documented in the PoA-DD? <ul style="list-style-type: none"> All assumptions and data used by the project participants are listed in the PoA-DD and related document to be submitted for registration. The data are properly referenced. 	/1/	DR	NA The baseline scenario has been chosen in accordance with AMS-II.G. As per the methodology it is assumed that in the absence of the project activity, the baseline scenario is the use of fossil fuels for meeting similar thermal	OK

<ul style="list-style-type: none"> • 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 PoA-DD. • The methodology has been correctly applied to identify what would occurred in the absence of the proposed CDM project activity 			energy needs.		
B.5 Demonstration of eligibility for each generic CPA					
<p>B.5.1 Has it been sufficiently justified that the CPA complies with Eligibility criteria 1 - All distributed ICS in each CPA shall be located within geographical boundary of Honduras. Please note that not all ICS installations may have been deployed at the CPA inclusion stage, however the location of the ICS can also be checked during verification. In the event that any deployed ICS is found to be outside of the project boundary/location, those ICS will not be counted in the emission reduction calculation.</p>	/2/	DR	<p>The physical boundary of the SSC-CPA is determined by the location of installed ICS. This SSC-CPA's geographic boundary is the national borders of Honduras, which is within the boundary of the POA.</p> <p>The country is located in the Central American region with coordinates 14°6'N 87°13'W.</p> <p>Technologies distributed throughout the SSC-CPA are identified through unique serialization recorded in the project sales database. The CME cross-checks and verifies the sales database against sales records.</p> <p>CPA-DD section A.4.1.2 FAR 1</p>		OK
<p>B.5.2 Has it been sufficiently justified that the CPA complies with Eligibility criteria 2 - A unique numbering or identification system for the ICS installed is applied. This shall ensure no double counting of stoves within the PoA and ensure that stoves can be identified as belonging to this PoA and not to a PoA managed by any other CME. Please note that not all ICS installations may have been deployed at the CPA inclusion stage, however the ICS' unique numbering can also be checked during verification. In the event that any</p>	/2/	DR	<p>The PoA DD and CPA DD has described a unique number and identification system for the ICS.</p> <p>An example of the stove ID serial number to be used is shown in the CPA-DD, section A.5. The actual serial numbers displayed on the stove itself will be available at the CPA verification.</p> <p>ICS Sales Receipts in Total Sales Record</p>		OK

	deployed ICS is found not to be in line with CPA double counting criteria, those ICS will not be counted in the emission reduction calculation.			including CPA assignment and end user details (i.e. name, address) will also be provided. The ICS and sales receipt will be verified at the verification stage FAR 2		
B.5.3	Has it been sufficiently justified that the CPA complies with Eligibility criteria 3 - The CPA is exclusively bound to the PoA. Confirmation that the programme activity has not been and will not be registered either as a single CDM project activity or as a CPA under another PoA.	/2/	DR	Currently there are no other CDM cook stove projects in Honduras, thus confirming that this CPA has not been and will not be registered either as a single CDM project activity or as a CPA under another PoA.		OK
B.5.4	Has it been sufficiently justified that the CPA complies with Eligibility criteria 4 - Contractual provisions to ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA. In the case that the CME is not responsible for implementing the CPA, the organization responsible for CPA implementation, known as the Distributing Organisation (DO), has signed a contractual agreement with the CME to participate in the PoA. This agreement: 1) Defines the ownership of the carbon emission reduction rights 2) Covers the DO's distribution and monitoring related responsibilities 3) Confirms that the ICS to be distributed under the CPA have not and will not be distributed under any other carbon project (CDM project, PoA or voluntary carbon market project Cedes the DO's rights to the carbon credits generated from CPAs under the PoA to the CME	/2/	DR	The CME is the CPA implementer for CPA-001. DNV has received a declaration provided by FUNDEIH as supporting document/63/. The declaration states that stating that they are aware and have agreed that their activity is being subscribed to the PoA		OK
B.5.5	Has it been sufficiently justified that the CPA complies with Eligibility criteria 5 - The CME and the CPA operator (in case of being different from the CME) shall confirm that funding from Annex 1 party, if any shall not be diversion of Official Development Assistance.	/2/	DR	During the Validation DNV did not find any evidence that there is any public funding obtained for this project. The PP has submitted a letter from the investor Shell Foundation stating that the investment is private and not a diversion of ODA./64/		OK
B.5.6	Has it been sufficiently justified that the CPA complies with Eligibility criteria 6 - CPA start date shall not be before PoA	/2/	DR	The CPA start date is 7 July 2013. The sales receipt has been submitted to DNV. Starting date		OK

	validation start date (i.e 28/01/2012 date of webhosting of PoA-DD) for global stakeholder consultation. Please note that not all ICS installations may have been deployed at the CPA inclusion stage, however the ICS start date can also be checked during verification. In the event that any deployed ICS are found not to be in line with CPA start date, those ICS will not be counted in the emission reduction calculation			as stated in the CPA-DD is after 28/01/2012 (PoA start date).		
	B.5.7 Has it been sufficiently justified that the CPA complies with Eligibility criteria 7 - CPA crediting period shall be within the life time of the PoA. The start date of the crediting period of a CPA shall be on or after: (i) The date of registration of the PoA, if the corresponding CPA-DD is submitted together with the request for registration;	/2/	DR	The CPA starting date is (7 July 2013) and the crediting period is seven years (7 July 2013 – 6 July 2019), which does not exceed the 28 year PoA crediting period (28 January 2012 – 27 January 2040).		OK
B.5.8	Has it been sufficiently justified that the CPA complies with Eligibility criteria 8 - CME approved each CPA to be included into its registered PoA.	/2/	DR	The CME Envirofit is also the CME implementer for this CPA. CME confirms this CPA to be included into its registered PoA.		OK
B.5.9	Has it been sufficiently justified that the CPA complies with Eligibility criteria 9 - The CPA consists of replacement of conventional firewood cookstoves for biomass fired ICS as defined in section A.4.2.1 of the PoA-DD. Conventional stoves replaced will be any of the types identified by each baseline scenario and as applied by the specific CPA. Stove types replaced and implemented will be defined in the CPA-DD, and hence appliances involving the efficiency improvements in the thermal applications of non-renewable biomass as per AMS II. G, ver. 5. Please note that not all ICS may have been deployed at CPA inclusion stage, the 'type and number of ICS deployed' will however also be checked during verification, and in case any deployed ICS type will be found not in line with the methodology requirement, those ICS will not be counted for emission reduction calculation.	/2/	DR	The CME has provided the manufacturing specifications for Envirofit HM-5000 model. The HM-5000 is a biomass fired ICS for residential use. The HM-5000 will replace the conventional firewood stoves of the types "fogon suelo", "fogon tradicional", "Justa tradicional", "Justa 2x3" and "other inefficient" stoves.		OK
B.5.10	Has it been sufficiently justified that the CPA complies with Eligibility criteria 10 - The ICS disseminated under the CPA	/2/	DR	The efficiency of the HM-5000 is 24.9%		OK

	will be single pot, multi pot or in-situ cookstoves that have a specified efficiency of at least 20% at the time of CPA inclusion.				
B.5.11	<p>Has it been sufficiently justified that the CPA complies with Eligibility criteria 11 - Only ICS of the types below will be disseminated:</p> <ul style="list-style-type: none"> ○ Biomass fuelled ICS ○ Newly operational ICS ○ Either fix/portable operation <p>Other requirements (i.e. efficiency, maximum capacity, level of service, distribution mechanisms...) are defined in the relevant eligibility criteria within this table.</p> <p>Please note that not all ICS may have been deployed at CPA inclusion stage, the technical requirement will however also be checked during verification, and in case any deployed ICS type will be found not to be in line with the technical requirement, those ICS will not be counted for emission reduction calculation.</p>		DR	The sales receipt will be submitted at the time of verification to demonstrate that only new ICS were deployed as part of this CPA.	OK
B.5.12	Has it been sufficiently justified that the CPA complies with Eligibility criteria 12 - In accordance with methodology AMS IIG: Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods	/2/	DR	This has been demonstrated in the PoA DD.	OK
B.5.13	Has it been sufficiently justified that the CPA complies with Eligibility criteria 13 - In accordance with “Guidance for determining the occurrence of de-bundling under a Programme of Activities (PoA)”, if each independent subsystem/ measures included in the CPA of a PoA is no greater than 1% of the small scale threshold defined by the methodology applied, then that CPA of PoA is exempted from performing de-bundling check, i.e. considered as being not a de-bundled component of a large scale activity.	/2/	DR	This has been demonstrated in Section A.12 of the CPA DD. The energy saved from the HM-5000 model cook stove distributed in this CPA is 0.007709 GWh/year which is 0.004 % of the small scale limit 180 GWh _{th} /year.	OK

<p>B.5.14 Has it been sufficiently justified that the CPA complies with Eligibility criteria 14 - The CPA will remain under the thermal threshold of 180 GWh_{th}/a thermal energy savings (threshold as per clarification request SSC_233) throughout the crediting period of the CPA. If a CPA exceeds the applicable limit in any year, the claimable emission reduction shall be capped based on the estimated GHG reductions in the CPA-DD. Please note that not all ICS may have been deployed at CPA inclusion stage, the SSC limit for CPAs can however also be checked during verification, and in case any deployed ICS will be found not in line with CPA SSC Limit for CPAs requirement, those ICS will not be counted for emission reduction calculation.</p>	/2/	<p>The CPA proposes to distribute Envirofit HM-5000 model ICS. The energy savings using this model is 0.007709 GWh/year. The PP proposes to distribute less than 23,350 stoves in the first year of the crediting period and hence the energy savings per year will be less than 180 GWh_{th}/year.</p> <p>The energy savings from 23,350 stoves with energy saving of 0.007709 GWh/year/stove is 180 GWh/year.</p> <p>The total number of stoves distributed applies to the total number of operational stove numbers. Additionally, there are other variables that might change ex-post during the crediting period. As long as the CPA does not exceed the 180GWhth energy savings/year threshold, any number of operational stoves can be added in the CPA. Also, the number of operational stove may be different from stoves sold/distributed depending upon drop off rate of project stoves.</p>	OK
<p>B.5.15 Has it been sufficiently justified that the CPA complies with Eligibility criteria 15 - Additionality is demonstrated using EB68 Annex 27 “Guidelines on the demonstration of additionality of small-scale project activities”,” paragraph 2(c) as described in the PoA DD.”</p>	/2/	<p>The CPA-001 meets the additionality guidelines of the small-scale projects, paragraph 2(c) as described in the PoA DD.</p> <ol style="list-style-type: none"> 1) CPA-001 does not exceed the small scale CDM threshold of annual energy savings of 180 GWh_{thermal}. This has been demonstrated in eligibility criteria #14. The number of stoves in the CPA have been fixed at 23,350 operational stoves per year thereby ensuring compliance with small scale limit at all times for the CPA 2) CPA -001 proposes to distribute ICS (which isolated units) to households, and 	OK

			3) the energy saving by each ICS is less than 5% of 180 GWh _{thermal} per year (9 GWh/year). This has been demonstrated in eligibility criteria #13.		
B.5.16	Has it been sufficiently justified that the CPA complies with Eligibility criteria 16 - Each CPA will ensure compliance with the applicability of the methodology and its requirements. Conditions of the applicability of the methodology and its requirements are demonstrated at the PoA level in section E.2 through the assessment of “justification of the choice of the methodology and why it is applicable to the CPAs”.	/2/	Applicability of the methodology AMS-II.G, version 06: “The aggregate energy saving of a single project activity shall not exceed the equivalent of 60 GWh per year or 180 GWh thermal per year in fuel input” The CPA-001 has met this condition as described in criteria 14 (D.5.14)		OK
B.5.17	Has it been sufficiently justified that the CPA complies with Eligibility criteria 17 - Target groups have been established by means of the baseline at the PoA level, as described in section E.4 and Annex 3 of this PoA-DD. In summary, eligible target groups are any of the following: <ul style="list-style-type: none"> ○ Residential biomass users ○ Commercial biomass users ○ Institutional biomass users Assumptions made at the PoA level for any scope regarding these target groups are deemed valid through all CPAs (i.e. baseline studies, ER calculation, monitoring plan).	/2/	The target group for CPA-001 is residential biomass users.		OK
B.5.18	Has it been sufficiently justified that the CPA complies with Eligibility criteria 18 - Distribution mechanisms have been established in section A.2 of the PoA-DD by means of the “General operating and implementing framework of PoA” at the PoA level.	/2/	The CME is the CPA implementer for CPA- 001. The distribution mechanism has been described in Section A.2 of the CPA-001 and is in lines with the general operating and implementing framework of PoA.		OK
B.5.19	Has it been sufficiently justified that the CPA complies with Eligibility criteria 19 - The Local Stakeholder Consultation is established at the PoA level as described in section D of the PoA-DD. No further actions needed at the CPA level to satisfy the eligibility criteria.	/2/	The conditions to meet the requirements on undertaking the local stakeholder consultation have been proven the PoA-DD.		OK

B.5.20	Has it been sufficiently justified that the CPA complies with Eligibility criteria 20 - The EIA is established at the PoA level as described in section C of the PoA-DD ⁹ . No further actions needed at the CPA level to satisfy the eligibility criteria.	/2/		The conditions to meet the requirements on undertaking the environmental impact assessment have been proven in the PoA-DD.		OK
B.5.21	Has it been sufficiently justified that the CPA complies with Eligibility criteria 21- Sampling of appliances within the CPA must meet the requirements of AMS-II.G and the “Standard on Sampling and Surveys for CDM Projects and Programmes of Activities” (the Sampling Standard). Each CPA will ensure compliance with the framework established for sampling requirements for quantification of parameters not established at the ex-ante and monitoring tasks during the crediting period. Conditions and its requirements are outlined for baselines at Annex 3 of the PoA-DD and for monitoring tasks at section E.7.2.	/2/		<p>The sampling plan for the CPA is provided in Appendix 3 of the CPA-DD. The sampling plan is in lines with the sampling plan proposed in the PoA-DD.</p> <p>The sampling plan meets the requirements of the “Standard on Sampling and Surveys for CDM Projects and Programmes of Activities” (the Sampling Standard).</p>		OK
B.5.22	Has it been sufficiently justified that the CPA complies with Eligibility criteria 22: Each CPA shall demonstrate how the baseline parameters for baselines not established at the PoA level (that applies for commercial and institutional baselines not applicable at the first CPA at the time of PoA registration) that are to be calculated at the CPA level have been determined, and shall do so applying the following approaches: $B_{old,i}$: as per the approach outlined in PoA-DD Section E.6.2, applying Option (a) of paragraph 19) of AMS-II.G; And, SC_{old} and/or n_{old} : When Option 2 of paragraph 17 of AMS-II.G applies n_{old} : as per the approach outlined in E.6.2. When Option 3 of paragraph 18 of AMS-II.G applies SC_{old} : as per the approach outlined in E.6.2.	/2/		<p>a) The $B_{old,i}$ for the target population residential households has been fixed ex-ante in the PoA DD – 3.10 tonnes wood/HH-year.</p> <p>b) η_{old} – 10% default value has been chosen in lines with the AMS-II.G, version 06 and the PoA DD.</p> <p>The CPA-DD Section D.6.2 and Appendix 3 outline the approach.</p>		OK

⁹EB55 Annex 38, paragraph 6 (f).

MoV = Means of Verification, DR= Document Review, I= Interview, CC= Cross-Checking

B.6 Algorithms and/or formulae used to determine emission reductions of each CPA (VVS § 96-100)						
Data and parameters that are available at validation and that are not monitored						
B.6.1	How was the insert parameter available at validation verified?	/1/	DR	$B_{old,i}$ – 3.10 tonnes wood/ HH-y - Quantity of wood used in the absence of the project activity in tonnes by household making residential use as determined in the POA.		OK
B.6.2	How was the insert parameter available at validation verified?	/1/	DR	$f_{nrb,y}$ - 0.8382 - Fraction of woody biomass saved by the project activity in period y that can be established as non-renewable biomass.		OK
B.6.3	How was the insert parameter available at validation verified?	/1/	DR	$NCV_{biomass}$ - 0.015 TJ/tonne - Net calorific value for biomass Fixed at the PoA level, default value from AMS-II.G, version 06		OK
B.6.4	How was the insert parameter available at validation verified?	/1/	DR	$EF_{projected_fossil_fuel}$ - 81.6 tCO ₂ /TJ - Emission factor for the substitution of non-renewable woody biomass by similar consumers Fixed at the PoA level, default value from AMS-II.G, version 06		OK
B.6.5	How was the insert parameter available at validation verified?	/1/	DR	η_{old} -10 % - Efficiency of the system being replaced as part of the SSC-CPA.		OK
B.6.6	How was the insert parameter available at validation verified?	/1/	DR	L – 0.95 – Leakage factor Fixed at PoA level		OK
B.6.7	How was the insert parameter available at validation verified?	/1/	DR	$\eta_{specified}$ - 24.9% - Efficiency of the system being deployed at the time of CPA inclusion The efficiency of the ICS model HM-5000 was verified using the Engines and Energy Conversion Lab, Colorado State University: Emissions and Performance report (HM-5000), 24 September 2013. This value will not be used for ex-post emission		OK

MoV = Means of Verification, DR= Document Review, I= Interview, CC= Cross-Checking

			reduction calculation. For ex-post calculation the efficiency for the ICS distributed under this CPA will be monitored as $\eta_{new,i,a=1}$.		
B.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	None of the above parameters were determined by sampling.	OK
Baseline emissions					
B.6.9	Are the calculations documented according to the approved methodology and tool and in a complete and transparent manner?	/1/	DR	The emission reductions are based on the biomass fuel savings achieved by the project activity. The calculations of the baseline emissions are according to the PoA DD dated 16 January 2015	OK
B.6.10	Have conservative assumptions been used when calculating the baseline emissions?	/1/	DR	η_{old} - Efficiency of the system being replaced as part of the SSC-CPA is assumed to be 10%. As per the methodology AMS II.G. A default value of 0.10 may be optionally used if the replaced system is a three stone fire, or a conventional system with no improved combustion air supply or flue gas ventilation system, i.e. without a grate or a chimney; for other types of systems a default value of 0.2 may be optionally used. The CME has not described why the default value of 10% is applicable to this CPA. Additionally, the CME has not provided supporting documentation for the same.	CAR-4 OK
B.6.11	Are uncertainties in the baseline emission estimates properly addressed?	/1/	DR	The uncertainties in the baseline emission estimated have been properly addressed	OK
B.6.12	If the calculations of baseline emissions are based on sampling, does this comply with the Standard for sampling	/1/	DR	The parameter $B_{old,i}$ is based on historical data. The baseline emissions are not based on	OK

and surveys?				sampling.		
Project emissions						
B.6.13	Are the calculations documented according to the approved methodology and tool and in a complete and transparent manner?	/1/	DR	<p>The emission reductions are based on the biomass fuel savings achieved by the project activity.</p> <p>The calculations of the emission reduction are according to the PoA DD dated 16 January 2015. Twhe CPA uses option 2 for the estimation of the $B_{y,saving,i,a}$.</p> <p>Option 2:</p> $B_{y,savings,i,a} = B_{old,i} \times (1 - \frac{\eta_{old}}{\eta_{new,i,a=1} \times \Delta \eta_{y,i,a}})$ <p>Equation (3)</p> <p>Where:</p> <p>$B_{old,i,a}$ Quantity of biomass used in the absence of the project activity in tonnes/ year</p> <p>η_{old} default value of 0.10</p> <p>$\eta_{new,i,a=1}$ 24.9% - Efficiency of the system being deployed as part of the project activity (fraction), as determined using the Water Boiling Test (WBT) protocol.</p>		OK
B.6.14	Are uncertainties in the project emission estimates properly addressed?	/1/	DR	The uncertainties in the baseline emission estimated have been properly addressed		OK
B.6.15	If the calculations of project emissions are based on sampling, does this comply with the Standard for sampling and surveys?	/1/	DR	The sampling plan is in lines with the Standard for sampling and surveys. There are no parameters in the ex-ante estimation that is based on sampling.		OK

Leakage					
B.6.16	Are the leakage calculations documented according to the approved methodology and in a complete and transparent manner?	/1/	DR	In accordance with the PoA DD dated 16 January 2015 and AMS-II.G, this CPA will choose the option of multiplying $B_{old,i}$ by a net to gross adjustment factor of 0.95 to account for leakages, in which case surveys and additional monitoring are not required.	OK
B.6.17	Have conservative assumptions been used when calculating the leakage emissions?	/1/	DR	The default value has been used when calculating the leakage emissions.	OK
B.6.18	Are uncertainties in the leakage emission estimates properly addressed?	/1/	DR	No CPA specific uncertainties have been identified - the leakage uncertainty has been addressed at the PoA level and is applicable to all CPAs	OK
B.6.19	If the calculations of leakage emissions are based on sampling, does this comply with the Standard for sampling and surveys	/1/	DR	The calculations of leakage emissions are not based on sampling.	OK
Emission Reductions					
B.6.20	Algorithms and/or formulae used to determine emission reductions: <ul style="list-style-type: none"> All assumptions and data used by the project participants are listed in the PoA-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 project activity 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	<p>DNV has been able to verify and confirm that</p> <ul style="list-style-type: none"> All assumptions and data used by the project participants are listed in the CPA-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 CPA <p>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.</p>	OK

B.7 Monitoring plan (VVS § 131-133)					
Data and parameters monitored					
B.7.1	Do the means of monitoring described in the plan comply with the requirements of the methodology?	/1/	DR	The monitoring plan has been documented as per the methodology AMS-II.G, in a complete and transparent manner. The monitoring plan for the CPA is as described in Section 4.8.3 of the PoA DD.	OK
B.7.2	Does the monitoring plan contains all necessary parameters, and are they clearly described?	/1/	DR	The CPA-DD contains all the monitoring parameters and they are clearly described. $\eta_{\text{new},i,a}$ - Efficiency of the device of type i and age a being deployed as part of the project activity $N_{y,i,a}$ - Number of project devices of type i and age a that are operating in year y $\mu_{y,i}$ - number of days of utilization of the project device during the year 'y'	OK
B.7.3	In case parameters are measured, is the measurement equipment described? Describe each relevant parameter.	/1/	DR	$\eta_{\text{new},i,a}$ - Efficiency of the appliance being deployed as part of the SSC-CPA, weighted average if multiple systems – WBT tests $N_{y,i,a}$ - Number of project devices of type i and age a that are operating in year y – Sales record and survey records $\mu_{y,i}$ - number of days of utilization of the project device during the year 'y' - Survey	OK
B.7.4	In case parameters are measured, is the measurement accuracy addressed and deemed appropriate? Describe each relevant parameter.	/1/	DR	There are no meters used for monitoring. 90/10 confidence/Precision in case of annual CPA level sampling, 95/10 in case of annual PoA level sampling and 95/5 in case of biennial sampling (applicable to CPA level or PoA level)	OK
B.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	There are no meters used for monitoring.	OK

B.7.6	Is the monitoring frequency adequate for all monitoring parameters? Describe each parameter.	/1/	DR	$\eta_{new,i,a}$ - Efficiency of the device of type i and age a being deployed as part of the project activity – Biennial $N_{y,i,a}$ - $N_{y,i,a}$ - Number of project devices of type i and age a that are operating in year y – Biennially $\mu_{y,i}$ - number of days of utilization of the project device during the year 'y' – Survey - Biennial		OK
B.7.7	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	The sampling plan for $N_{y,i,a}$, $\eta_{new,i,a}$, and $\mu_{y,i}$ has been described in the CPA DD and comply with the specific guidance in the applicable methodology.		OK
Ability of project participants to implement monitoring plan						
B.7.8	How has it been assessed that the monitoring arrangements described in the monitoring plan are feasible within the project design?	/1/	DR	The monitoring arrangements described in the monitoring plan are feasible		OK
B.7.9	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	The PP should identify day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)	CL4	OK
B.7.10	Are the data management and quality assurance and quality control procedures sufficient to ensure that the emission reductions achieved by/resulting from the project can be reported ex post and verified?	/1/	DR	The data management and quality assurance and quality control procedures sufficient to ensure that the emission reductions achieved by/resulting from the CPA can be reported ex post and verified		OK
B.7.11	Will all monitored data required for verification and issuance be kept for two years after the end of the crediting period or the last issuance of CERs, for this project activity, whichever occurs later?	/1/	DR	The CME has not described the number of years the monitored data will be archived for.	CL4	OK

Monitoring of sustainable development indicators/ environmental impacts						
B.7.12	Is the monitoring of sustainable development indicators/ environmental impacts warranted by legislation in the host country?	/1/	DR	The monitoring of sustainable development indicators/ environmental impacts is not warranted by legislation in the host country. This has been determined at the PoA level		OK
B.7.13	Does the monitoring plan provide for the collection and archiving of relevant data concerning environmental, social and economic impacts?	/1/	DR	The monitoring plan provides for the collection and archiving of relevant data concerning environmental, social and economic impacts		OK
B.7.14	Are the sustainable development indicators in line with stated national priorities in the host country?	/1/	DR	The sustainable development indicators are in line with stated national priorities in the host country		OK

Table 3 Resolution of corrective action requests and clarification requests

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
CAR 1 The Letter of Approval from the DNA of the Honduras and the Letter of Approval from the DNA of United Kingdom shall to be submitted to DNV.	A.4.3 A.4.4	The LoA for Honduras has been submitted.	DNV has received the LoA from the DNA of Honduras/11/. The Title of the PoA is not correct in the LoA from the DNA of UK. CAR 1 Continued
CAR 1 (continued) The Title of the PoA is not correct in the LoA from the DNA of UK.	A.4.3 A.4.4	The Annex I country has been deleted from PoA DD	The Annex I country from PoA DD has been removed. CAR 1 closed
CAR 2 The programme's spatial boundaries (geographical) have to be clearly defined The geographical boundary of the PoA has not been defined in Section A.4.1.2 of the PoA DD.	A.2.1 A.3.1	PoA-DD, section A.5 has been updated to define the geographical boundary of the PoA as Honduras.	The programme's spatial boundary has been defined as the geographic boundary of Honduras. CAR 2 is closed
CAR 3 The eligibility criteria has to follow the guideline of EB 65, Annex 3, Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for Programme of Activities The PoA DD Section B.2 does not follow the standard for development of eligibility criteria	A.2.4	PoA-DD section B.2 has been updated to follow the guideline of EB65 Annex3 "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for Program of Activities".	The following eligibility criteria's have not been included in Section B.2. <ul style="list-style-type: none"> i) Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid connected/off-grid) and distribution mechanism (e.g. direct installation) ii) Where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys.

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			CAR 3 continued
<p>CAR 3 (continued) The following eligibility criteria's have not been included in Section B.2.</p> <p>i) Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid connected/off-grid) and distribution mechanism (e.g. direct installation)</p> <p>ii) Where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys.</p>	A.2.4	<p>PoA-DD section B.2 has been updated to include target groups and distribution mechanisms (i), and sampling requirements (ii).</p> <p>Kindly refer eligibility criteria #17 and #21 respectively.</p>	<p>The target group have been included. However, the supporting procedures for the Commercial and Institutional stoves have not been provided.</p> <p>CAR 3 continued</p>
<p>CAR 3 (a) The Target group has been included in the PoA DD section B.2. However, the supporting procedure for the distribution of improved cook stoves for commercial and institutional stoves has not been described. A list of procedures not provided for the target groups is listed below. However, it is not limited to this list.</p> <ol style="list-style-type: none"> 1. The CME does not describe the sampling design the baseline survey for each target group. 2. The CME has not describe the project activity for the commercial and institutional groups 3. The CME has not described the type of 	A.2.4	<p>The PoA DD has been revised to address CAR 3.</p> <p>Please note that the procedure and sampling requirements for commercial and institutional stoves will be similar to that of residential consumer target group. The PoA design has been revised to determine the baseline at the CPA level depending upon the target consumer group included in that CPA. CPA001 only includes residential consumers and hence the for type of stove, associated emission reduction calculations have been described in the</p>	<p>The CME has revised the PoA DD to include a sampling design for each parameter. The sampling design is detailed and satisfactory.</p> <p>CAR 3 is closed</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>stove that will be disseminated to the commercial and institutional target groups.</p> <p>4. The CME has not estimated the emission reduction estimated from the use of improved cook stoves in commercial and institutional scenario.</p>		CPA001-DD	
<p>CAR 4</p> <p>The guideline of EB 65, Annex 3, requires that the eligibility criteria includes a condition to specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications. The PoA DD Section B.2 does not include this criteria.</p>	A.3.3	PoA-DD section B.2. has been updated to include in the eligibility criteria the technological specifications of the product/s to implement.	<p>The PoA DD Section B.2 has included the following eligibility criteria's for technology/measure including the level and type of service, performance specifications including compliance with testing/certifications.</p> <ol style="list-style-type: none"> 1. Point 11: Efficiency of the ICS- The ICS disseminated under the CPA has a specified efficiency of at least 20% 2. Point 12: Only new ICS will be disseminated – the supporting document (1. Statement from CME that only new stoves will be disseminated under the CPA and First ICS Sales Receipt (first CPA of PoA) does not demonstrate that the ICS is new <p>CAR 4 continued</p>
<p>CAR 4 (continued)</p> <p>The PoA DD Section B.2 has included the following eligibility criteria's for technology/measure including the level and</p>	A.3.3	PoA-DD section B.2. has been updated to include in the eligibility criteria the technological specifications of the product/s to implement including	The PP has included a statement that the sales receipt will include specific language confirming the stove received by the end-user is new.

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>type of service, performance specifications including compliance with testing/certifications.</p> <p>1. Point 12: Only new ICS will be disseminated – the supporting document (1. Statement from CME that only new stoves will be disseminated under the CPA and First ICS Sales Receipt (first CPA of PoA) does not demonstrate that the ICS is new</p>		<p>specific language in the sales receipts confirming the stove distributed in new.</p>	<p>CAR 4 is closed</p>
<p>CAR 5</p> <p>The guideline of EB 65, Annex 3, requires that the eligibility criteria includes a condition to check the start date of the CPA through documentary evidence.</p> <p>The PoA DD Section B.2 does not include a condition to check the start date of the CPA through documentary evidence.</p>	<p>A.3.4</p>	<p>PoA-DD section B.2 has been updated to include in the eligibility criteria the condition to check the start date of each CPA through documentary evidence.</p>	<p>The PoA Section B.2 includes an eligibility criteria to check for the CPA start date using the receipt of the first ICS sold in that CPA or date of invoice for the first shipment of stove and confirm that it is not prior to the start date of the PoA 28 January 2012.</p> <p>CAR 5 is closed</p>
<p>CAR 6</p> <p>The guideline of EB 65, Annex 3, requires that the eligibility criteria includes a condition to ensure compliance with applicability and other requirements of single or multiple methodology/ies applied by CPAs.</p> <p>The PoA DD Section B.2 does not include the applicability criteria and other requirements of the methodology AMS II.G, version 3 in the eligibility criteria.</p>	<p>A.3.5</p>	<p>PoA-DD section B.2. has been updated to include in the eligibility criteria the condition to ensure compliance with applicability of the methodology applied to the CPAs. Refer eligibility criteria #9, 10, 12, 14, 16 & 22</p>	<p>The PoA Section B.2.includes an eligibility criteria to check for the following:</p> <ol style="list-style-type: none"> 1. The CPA consists of distribution of ICS, and hence appliances involving the efficiency improvements in the thermal applications of non-renewable biomass as per AMS II. G. 2. Project participants are able to show that non-renewable biomass has been used since 31

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			December 1989, using survey methods CAR 6 is closed.
CAR 7 The guideline of EB 65, Annex 3, requires that the eligibility criteria includes a condition to the check the PoA-specific requirements stipulated by the CMEs including any conditions related to undertaking local stakeholder consultations and environmental impact analysis. The PoA DD, Section B.2 does not include a condition to meet this requirement.	A.3.7	PoA-DD section B.2. has been updated to include in the eligibility criteria the condition to check the PoA-specific requirements stipulated by the CME as indicated in EB 65.	Section B.2 does not include any eligibility criteria related to the stakeholder consultation and environmental impact assessment. CAR 7 continued
CAR 7 (continued) The guideline of EB 65, Annex 3, requires that the eligibility criteria includes a condition to the check the PoA-specific requirements stipulated by the CMEs including any conditions related to undertaking local stakeholder consultations and environmental impact analysis. The PoA DD, Section B.2 does not include a condition to meet this requirement.	A.3.7	PoA-DD section B.2. has been updated to include in the eligibility criteria the condition to meet the requirement to undertaking the local stakeholder consultation and environmental impact analysis. Refer Eligibility criteria #19 & #20	The environmental and stakeholder consultation has been conducted at for the whole programme and does not have to be addressed at the CPA level. CAR 7 is closed
CAR 8 The guideline of EB 65, Annex 3 requires that	A.3.8	PoA-DD section B.2. has been updated to include in the eligibility criteria and	The PoA DD Section B.2 does not include any eligibility criteria

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>where applicable, the target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation) are specified.</p> <p>The PoA DD Section B.2 does not describe the target group for this project activity and the distribution mechanism.</p>		<p>the specifications regarding target groups and distribution mechanism.</p>	<p>specifying the target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation) are specified.</p> <p>CAR 8 continued</p>
<p>CAR 8 (continued)</p> <p>The guideline of EB 65, Annex 3 requires that where applicable, the target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation) are specified.</p> <p>The PoA DD Section B.2 does not describe the target group for this project activity and the distribution mechanism.</p>		<p>PoA-DD section B.2. includes in the eligibility criteria the specifications regarding target groups (criteria number 18) and distribution mechanism (criteria number 19).</p>	<p>The PP has revised the Section B.2 to include the target groups as domestic, commercial and institutional.</p> <p>CAR 8 is closed.</p>
<p>CAR 9</p> <p>The guideline from EB 65, Annex 3 requires that there conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance.</p> <p>The PoA DD Section B.2 does not include an eligibility condition for meeting this requirement.</p>	A.3.12	<p>PoA-DD section B.2. has been updated to include in the eligibility criteria the conditions to provide an affirmation that funding from Annex I parties does not result in a diversion of official development assistance. Refer eligibility criteria #5</p>	<p>The PoA DD Section B.2 includes an eligibility criteria for checking that there is no ODA. However, there is no specific evidence requested by CME at the CPA inclusion stage if there is funding from an Annex I country.</p> <p>CAR 9 continued</p>
<p>CAR 9 (continued)</p> <p>The PoA DD Section B.2 includes an</p>	A.3.12	<p>The CME confirms there is no ODA by means of the following evidences:</p>	<p>The statement from CME provided at the PoA level or statement of the CPA</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
eligibility criterion for checking that there is no ODA. However, there is no specific evidence requested by CME at the CPA inclusion stage if there is funding from an Annex I country.		<ol style="list-style-type: none"> 1. Statement of CME provided at the PoA level 2. Statement of the CPA operator (in case of being different from the CME) 	operator does not demonstrate that funding is not part of ODA. CAR 9 continued
CAR 9 (continued) The guideline from EB 65, Annex 3 requires that there conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance. The statement from CME provided at the PoA level does not demonstrate that funding is not part of ODA.	A.3.12	The eligibility criteria has been revised. Refer eligibility criteria #5	The PP has revised the eligibility criteria to state that if funding from Annex I Party is received, a letter from the funding organization will be submitted stating that the funding is not part of ODA. CAR 9 is closed
CAR 10 The PoA DD template requires that the project participants and Parties participating in the programme are clearly identified. The PP has not included the Host country (Party) in Section A.4 of the PoA DD. Additionally, there is language in the PoA DD (e.g. section A.4.1.2 “The geographical area within which all CPAs included in this PoA will be implemented in the territorial boundary of the Host Countries included in the PoA boundary”). The PP needs to describe what country or countries are part of this PoA clearly.	A.4.1	PoA-DD section A.4 has been updated to include the Host country (Party) of Honduras. PoA-DD, section A.5 has been updated to define the geographical boundary of the PoA as Honduras.	The project participant is Envirofit International Ltd. The Host Country is Honduras CAR 10 is closed

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>CAR 11</p> <p>The EB requires that the PoA demonstrate that</p> <ul style="list-style-type: none"> (i) The proposed PoA is a voluntary coordinated action; (ii) If the PoA is implementing a voluntary coordinated action, it would not be implemented in the absence of the PoA; (iii) If the PoA is implementing a mandatory policy/regulation, this would/is not enforced; and If mandatory a policy/regulation is enforced, the PoA will lead to a greater level of enforcement of the existing mandatory policy/regulation. <p>The additionality demonstration for the PoA is not satisfactory. The CME shall provide supporting evidence to support the arguments. The assumptions made should be transparent and conservative.</p>	<p>E.3.1 E.3.2 E.3.3 E.3.4</p>	<p>PoA-DD section A.4.3 has been updated to demonstrate with supporting evidence that points (i) and (ii). Points (iii) and (iv) are not applicable to this PoA.</p> <p>Due to incompleteness message received, a resubmission for request for registration with revised document is required. Therefore, the PoA-DD has been revised to be in compliance with latest applicable standards, guidelines and forms. The PoA-DD section B.1 and B.2 have been updated in line with EB55 Annex 38. Each SSC-CPA included in this SSC-PoA shall be deemed additional as long as it satisfies the requirements established by the eligibility criteria. The assessment and demonstration of additionality for a typical SSC-CPA is done at the PoA level as shown in the PoA-DD.</p> <p>As per the Guidelines on the demonstration of additionality of small scale project activities version 09.0, additionality requirement has been developed as eligibility criteria #13, 14 and 15 for inclusion of a CPA in the PoA, thus ensuring that each CPA included in the PoA is additional and</p>	<p>In the PoA DD, Section A.4.3, the CME has demonstrated the following:</p> <ul style="list-style-type: none"> (i) The proposed PoA is a voluntary coordinated action; <ul style="list-style-type: none"> a. The LoA from the DNA will demonstrate that there is voluntary participation from the Party. <i>However, the PP has not provided supporting documentation to demonstrate that there are no mandatory laws, policies or requirements mandating the use of ICS</i> (ii) If the PoA is implementing a voluntary coordinated action, it would not be implemented in the absence of the PoA; <ul style="list-style-type: none"> a. There has not been a previous announcement that any of the project activities would go ahead without expected carbon finance. The assessment and demonstration of additionality for a typical SSC-CPA is done at the PoA level as shown in the PoA-DD. b. The plan to develop a CDM

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
		would not occur in absence of CDM.	<p>Programme of Activities for efficient cook stove dates back to 2004. A prior consideration statement by the parties involved is provided to the DOE confirming the voluntary coordinated action would not be implemented in the absence of the PoA – <i>The PP has not given the name of the supporting document submitted that is relevant to this statement.</i></p> <p>(iii) If the PoA is implementing a mandatory policy/regulation, this would/is not enforced; and If mandatory a policy/regulation is enforced, the PoA will lead to a greater level of enforcement of the existing mandatory policy/regulation.</p> <p>NA</p> <p>CAR 11 continued CAR 11 is no longer valid. The PoA-DD has been revised to meet the requirements Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			activities, version 3.0. This standard no longer has the requirements listed in CAR 11.
<p>CAR 11 (Continued) In the PoA DD, Section A.4.3, the CME has demonstrated the following:</p> <p>(i) The proposed PoA is a voluntary coordinated action; a. The LoA from the DNA will demonstrate that there is voluntary participation from the Party. <i>However, the PP has not provided supporting documentation to demonstrate that there are no mandatory laws, policies or requirements mandating the use of ICS</i></p> <p>(ii) If the PoA is implementing a voluntary coordinated action, it would not be implemented in the absence of the PoA; a. There has not been a previous announcement that any of the project activities would go ahead without expected carbon finance. The assessment and demonstration of additionality for a typical SSC-CPA is done at the PoA level as</p>	<p>E.3.1 E.3.2 E.3.3 E.3.4</p>	<p>Response to (iv).a: The PoA-DD has been updated to provide the supporting documentation to demonstrate that there are no mandatory laws, policies or requirements mandating the use of ICS.</p> <p>Response to (v).b: The PoA-DD has been updated to point at the Annex 2 of the PoA-DD as the proof of evidence.</p> <p>Due to incompleteness message received, a resubmission for request for registration with revised document is required. The PoA-DD has been revised to be in compliance with latest applicable standards, guidelines and forms. As per the Guidelines on the demonstration of additionality of small scale project activities version 09.0, additionality requirement has been developed as eligibility criteria #13, 14 and 15 for inclusion of a CPA in the PoA, thus ensuring that each CPA included in the PoA is additional and</p>	<p>The PoA has been revised to address the following:</p> <p>(iv) The proposed PoA is a voluntary coordinated action; A review of the national policies related to energy list increasing energy efficiency and improving technologies as goals, but there is no reference to improved cookstoves¹⁰. There is no national energy policy available in Honduras. The government has been promoting the use of improved cookstoves, though they have not mandated their use.¹¹</p> <p>(v) If the PoA is implementing a voluntary coordinated action, it would not be implemented in the absence of the PoA; The PP has submitted a letter from Shell Foundation dated 12 March 2012. Shell Foundation is the organization that it providing</p>

¹⁰ <http://cne.gob.hn/transparencia/phocadownload/informe%20seplan.pdf>

¹¹ <http://www.fao.org/docrep/T2363s/t2363s0x.htm>.

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>shown in the PoA-DD.</p> <p>b. The plan to develop a CDM Programme of Activities for efficient cook stove dates back to 2004. A prior consideration statement by the parties involved is provided to the DOE confirming the voluntary coordinated action would not be implemented in the absence of the PoA – <i>The PP has not given the name of the supporting document submitted relevant to this statement.</i></p> <p>(iii) If the PoA is implementing a mandatory policy/regulation, this would/is not enforced; and If mandatory a policy/regulation is enforced, the PoA will lead to a greater level of enforcement of the existing mandatory policy/regulation. NA</p> <p>CAR 11 is open</p>		<p>would not occur in absence of CDM.</p>	<p>funding to this programme. The letter states “ In 2007 Shell Foundation chose Envirofit International Ltd as its strategic partner in their breathing space programme to work together to achieve the desired global health, environment, social and economic impact of tackling IAP. Carbon finance is a core aspect of our programme.” The PoA DD does not state that there is any company. This demonstrates that this programme is voluntary.</p> <p>CAR 11 is closed</p> <p>CAR 11 is no longer relevant The PoA-DD has been revised to meet the requirements Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, version 3.0. This standard no longer has the requirements listed in CAR 11.</p>
CAR 12	A.3.2	PoA-DD section A.4.2.2. has been updated to state that “” has been used to	The PoA DD Section E.1 has been updated to state that “attachment A of

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>Additionality</p> <p>The guideline from EB 65, Annex 3, III.A. requires “PoAs that consist of one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities”</p> <p>The PoA DD does not state which tool is being used to demonstrated additionality and does not eligibility criteria from “attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities”</p>		<p>demonstrate additionality, and that additionality is now included in the eligibility criteria.</p> <p>Due to incompleteness message received, a resubmission for request for registration with revised document is required. The PoA-DD has been revised to be in compliance with latest applicable standards, guidelines and forms. As per the Guidelines on the demonstration of additionality of small scale project activities version 09.0, additionality requirement has been developed as eligibility criteria #13, 14 and 15 for inclusion of a CPA in the PoA, thus ensuring that each CPA included in the PoA is additional and would not occur in absence of CDM</p>	<p>Appendix B of the Simplified modalities and procedures for small-scale CDM project activities”</p> <p>Attachment A of Appendix B of EB 63, Annex 24, version 08</p> <p>CAR 12 is closed.</p> <p>CAR 12 is no longer relevant</p> <p>The PoA-DD has been revised to use “Guidelines on the demonstration of additionality of small scale project activities version 09.0” for demonstration of additionality.</p>
<p>CAR 13</p> <p>Additionality</p> <p>The financial barrier is general and applicable to any cook stove project.</p> <p>The CME has not demonstrated the financial barrier specific to this project activity.</p>		<p>PoA-DD section E.5.1 has been to demonstrate financial barriers as the main barrier to the dissemination of the technology being promoted by this program in the country of Honduras.</p>	<p>The PoA Section E.5.1 demonstrates additionality as described below:</p> <p>Investment Barrier:</p> <p>The PP proposes to demonstrate Investment Barrier by showing that “a financially more viable alternative to the project activity would have led to higher emissions” (EB 35 Annex 34 Non-binding practice examples to demonstrate additionality for SSC</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			<p>project activities) DNV has reviewed the documents the survey conducted by CEPAL. The survey was conducted across the whole country of Honduras and included a sample size of 710 domestic households across 69 municipalities located in 16 of the 18 departments of Honduras. This survey documented the types of stoves used in households that show that 87%ⁱ of the households use the traditional cook stove with biomass as fuel. The traditional cook stoves in Honduras are less efficient than the stoves that will be distributed as part of this programme and hence will result in higher GHG emissions.</p> <p><i>During the review of the Miscellaneous calculation DNV observed that the survey shows that 53% of the households use traditional stoves and not 87%. Please clarify.</i></p> <p>The PP has stated that the traditional wood fuel stoves in Honduras consume more wood than the open fire stoves or three stone cook stoves.</p> <p><i>DNV has not been able to review the documents submitted that support this argument.</i></p> <p><i>Cannot access this document – Is there</i></p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			<p><i>really a Table X?</i></p> <p><i>Longwell, T. Zamorano Improved Stove Certification Center: Evaluation of seven improved efficiency stoves in the laboratory and local communities, page 2, table X.</i></p> <p>http://www.docstoc.com/docs/109669632/Zamorano-Improved-Stove-Certification-Center-Evaluation-of-seven</p> <p>Additionally, there have been studies conducted in neighbouring countries that use plancha stoves that demonstrate that the average wood fuel usage for plancha stove is higher than open fire stovesⁱⁱ. During the site visit, DNV observed the type of plancha stoves used in Honduras households and reviewed the survey conducted by CEPALⁱⁱⁱ and confirm the stoves are hand made by the women in the house and use no specific technology.</p> <p>The ICS that have been proposed to be distributed as part of this programme are more fuel efficient as demonstrated in the WBT test. In the absence of the project activity, the local population will continue to use the traditional cook stoves resulting in higher emissions.</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			<p><i>EB 35 Annex 34 Guidelines have provided best practice examples including but are not limited to, the application of investment comparison analysis using a relevant financial indicator, application of a benchmark analysis or a simple cost analysis (where CDM is the only revenue stream such as end-use energy efficiency). It is recommended to use national or global accounting practices and standards for such an analysis.</i></p> <p><i>The PP has not demonstrated investment barrier. The PP has only demonstrated that the alternative to the project activity would lead to higher emissions. They have not demonstrated that the alternative is more financially viable.</i></p> <p><i>The PP proposed to demonstrate that “similar activities have only been implemented with grants or other non-commercial finance terms” (EB 39, Annex 10)</i></p> <p><i>The literature from CEPAL^{iv} supports the argument that similar activities of distributing improved cook stoves using</i></p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			<p>wood fuel have been implemented by government organisations and NGO's with the aim of protecting the environment and health of local.</p> <p><i>DNV was unable to find language in the CEPAL^v document stating that these programs were implemented through the use of grants and DNV was unable to find the other literature document submitted to support the argument</i></p> <p><i>Jimenez, Rodolfo D. Informe: Proyecto apoyo de la matriz de acciones para la integración y desarrollo energético de entroamerica. Organization Latinoamericana de Energía (OLADE). 2010. Pg. 61.</i></p> <p>The PP has provided a list of programs that have distributed improved cook stoves at subsidized rates or for free.</p> <ol style="list-style-type: none"> 1. AHDESA is one of the most experienced organizations in Honduras, has distributed thousands of stoves, the majority of which have been purchased for end users by outside organizations, such as Rotary Clubs and the European Union and distributed at subsidized prices to the end-users. The supporting document submitted by PP lists the funded programs where ADHESA has distributed stoves^{vi}

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			<ul style="list-style-type: none"> a. Energy Conservation and Environmental Protection Program of the Organization of American States Tri-Group – El Salvador, Guatemala, Honduras b. Use and Productivity of the Land Improvement Project (LUPE), Secretary of Agriculture and Livestock (SAG) with financial support from USAID c. Partnership between World Food Program (PMA) and the Honduras Commission of Forest Development (COHDEFOR) d. Management of Renewable Natural Resources of the El Cajon Reservoir Basin Program (PROCUENCA). Loans 918/SF-HO and 787/OC-HO e. Better Life Project, Department of Lempira f. World Vision of Honduras g. Lempira Sur Project h. Rural Technologies Program (PTR), Center for

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			<p>Industrial Development (CDI)</p> <ul style="list-style-type: none"> i. Peace Corps, USAID j. Save the Children k. Local Management Strengthening Project of Natural Resources in the Basins of the Patuca, Choluteca and Negro Rivers <p>Including the improved cook stoves that have been distributed as part of the above programs and other Gold Standard approved projects in Honduras. As of 2011, the penetration rate for improved cook stoves in Honduras is 11.3% and 4.3%, in rural and urban households respectively. <i>DNV was unable to cross verify the percentage 11.3% and 4.3% in the CEPAL document. The Table 6 and 7 on page 17 and 18 don't seem consistent with these numbers.</i></p> <p>The PP states that as demonstrated above, there has been no incentive to invest in a cookstove program of this type without a second revenue stream, such as grant funding or a carbon crediting structure, to help supplement revenues gained from stove sales.</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			<p><i>The PP has not demonstrated that the no incentive to invest in a cookstove program of this type without a second revenue stream, such as grant funding or a carbon crediting structure, to help supplement revenues gained from stove sales</i></p> <p><i>EB 50, Annex 13 states, “The evidence of presence of the barrier for other project(s) under similar circumstances, using reputed sources, makes them much more objective and therefore makes a strong argument that a project is additional”.</i></p> <p><i>The PP has not described for each of the barrier/any barrier that in similar circumstances (in similar industries/sectors, in companies of similar size and ownership structure, in similar projects) the barriers actually prevented the implementation of other project(s).</i></p> <p><i>The PP has described that “the only carbon activity found within the same geographical boundary is Proyecto Mirador (Project ID# GS690), which continues to be supported by carbon finance under the Gold Standard</i></p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			<p><i>carbon crediting mechanism and private foundation grants. According to the latest Monitoring Report publicly available, the project was able to distribute and credit over 6,000 La Justa stoves between May 2009 and November 2010 using carbon finance and donor funds.”</i></p> <p><i>However, this does not demonstrate that GS project had the same barriers as this PoA in Honduras nor does it mean that other similar projects have the same barrier and this prevented the project from being implemented.</i></p> <p>CAR 13 continued CAR 13 is no longer relevant The PoA-DD has been revised to use “Guidelines on the demonstration of additionality of small scale project activities version 09.0” for demonstration of additionality.</p>
<p>CAR 13 (Continued) The PoA Section E.5.1 demonstrates additionality as described below:</p> <p>Investment Barrier: The PP proposes to demonstrate Investment Barrier by showing that “a financially more</p>		<p><i>During the review of the Miscellaneous calculation DNV observed that the survey shows that 53% of the households use traditional stoves and not 87%. Please clarify.</i></p> <p>Response: Please see supporting document, “Miscellaneous</p>	<p>The PP has provided the supporting calculation for the estimation of the number 87% of households use traditional stoves. DNV confirms that this calculation has been conducted correctly.</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>viable alternative to the project activity would have led to higher emissions” (EB 35 Annex 34 Non-binding practice examples to demonstrate additionality for SSC project activities)</p> <p>DNV has reviewed the documents the survey conducted by CEPAL. The survey was conducted across the whole country of Honduras and included a sample size of 710 domestic households across 69 municipalities located in 16 of the 18 departments of Honduras. This survey documented the types of stoves used in households that show that 87%^{vii} of the households use the traditional cook stove with biomass as fuel. The traditional cook stoves in Honduras are less efficient than the stoves that will be distributed as part of this programme and hence will result in higher GHG emissions.</p> <p><i>During the review of the Miscellaneous calculation DNV observed that the survey shows that 53% of the households use traditional stoves and not 87%. Please clarify.</i></p> <p>The PP has stated that the traditional wood fuel stoves in Honduras consume more wood than the open fire stoves or three stone cook stoves.</p> <p><i>DNV has not been able to review the documents submitted that support this</i></p>		<p>Calculations” tab 1. 53.3 percent of all households use traditional stove models. However, out of the households that use firewood as fuel to cook (61.1 percent of all households), 87.2 percent use traditional stove models. 53.3 percent divided by 61.1 percent equals 87.2 percent.</p> <p><i>DNV has not been able to review the documents submitted that support this argument.</i></p> <p><i>Cannot access this document – Is there really a Table X?</i></p> <p><i>Longwell, T. Zamorano Improved Stove Certification Center: Evaluation of seven improved efficiency stoves in the laboratory and local communities, page 2, table X.</i></p> <p>http://www.docstoc.com/docs/109669632/Zamorano-Improved-Stove-Certification-Center-Evaluation-of-seven</p> <p>Response: PDF version of the document has been provided as a supporting document. Table X (its actually label) is located on pg. 2 of this document.</p> <p><i>EB 35 Annex 34 Guidelines have provided best practice examples</i></p>	<p>DNV has reviewed highlighted part of Table X. The different types of stoves have traditional name.</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>argument. Cannot access this document – Is there really a Table X? Longwell, T. Zamorano Improved Stove Certification Center: Evaluation of seven improved efficiency stoves in the laboratory and local communities, page 2, table X. http://www.docstoc.com/docs/109669632/Zamorano-Improved-Stove-Certification-Center-Evaluation-of-seven Additionally, there have been studies conducted in neighbouring countries that use plancha stoves that demonstrate that the average wood fuel usage for plancha stove is higher than open fire stoves^{viii}. During the site visit, DNV observed the type of plancha stoves used in Honduras households and reviewed the survey conducted by CEPAL^{ix} and confirm the stoves are hand made by the women in the house and use no specific technology.</p> <p>The ICS that have been proposed to be distributed as part of this programme are more fuel efficient as demonstrated in the WBT test. In the absence of the project activity, the local population will continue to use the traditional cook stoves resulting in higher emissions.</p>		<p>including but are not limited to, the application of investment comparison analysis using a relevant financial indicator, application of a benchmark analysis or a simple cost analysis (where CDM is the only revenue stream such as end-use energy efficiency). It is recommended to use national or global accounting practices and standards for such an analysis. Response below.</p> <p>The PP has not demonstrated investment barrier. The PP has only demonstrated that the alternative to the project activity would lead to higher emissions. They have not demonstrated that the alternative is more financially viable.</p> <p>DNV was unable to find language in the CEPAL^{xiii} document stating that these programs were implemented through the use of grants....</p> <p>Response: The CEPAL document (supporting document titled, “Consumo_de_Lena Honduras 2011-translated”, refers to similar cookstove projects sponsored by “NGOs, private institutions, and governments” (translated), i.e. “implemented with</p>	<p>The PP has not demonstrated investment barrier. The PP has only demonstrated that the alternative to the project activity would lead to higher emissions. They have not demonstrated that the alternative is more financially viable.</p> <p>DNV was able find the language in the document ““Consumo_de_Lena Honduras 2011-translated”, stating that there have been similar cook stove distribution projects sponsored by NGOs, private institutions and governments.</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p><i>EB 35 Annex 34 Guidelines have provided best practice examples including but are not limited to, the application of investment comparison analysis using a relevant financial indicator, application of a benchmark analysis or a simple cost analysis (where CDM is the only revenue stream such as end-use energy efficiency). It is recommended to use national or global accounting practices and standards for such an analysis.</i></p> <p><i>The PP has not demonstrated investment barrier. The PP has only demonstrated that the alternative to the project activity would lead to higher emissions. They have not demonstrated that the alternative is more financially viable.</i></p> <p>The PP proposed to demonstrate that “<i>similar activities have only been implemented with grants or other non-commercial finance terms</i>”(EB 39, Annex 10)</p> <p>The literature from CEPAL^x supports the argument that similar activities of distributing improved cook stoves using wood fuel have been implemented by government organisations and NGO’s with the aim of protecting the environment and health of local.</p>		<p>grants or other non-commercial finance terms,” page 18.</p> <p><i>...and DNV was unable to find the other literature document submitted to support the argument</i></p> <p><i>Jimenez, Rodolfo D. Informe: Proyecto apoyo de la matriz de acciones para la integración y desarrollo energético de entroamerica. Organization Latinoamericana de Energía (OLADE). 2010. Pg. 61.</i></p> <p>Response: The OLADE document was submitted with the supporting documents, titled “Informe-Estufas-OLADE 2011”. Page 61 of this document states, “Most of the efficient stoves in Honduras were installed using national and international donations” (translated). This information is right before the list of projects referred to below.</p> <p>As of 2011, the penetration rate for improved cook stoves in Honduras is 11.3% and 4.3%, in rural and urban households respectively. <i>DNV was unable to cross verify the percentage 11.3% anf 4.3% in the CEPAL document. The Table 6 and 7 on page</i></p>	<p>DNV was able to review the document, “Jimenez, Rodolfo D. Informe: Proyecto apoyo de la matriz de acciones para la integración y desarrollo energético de entroamerica. Organization Latinoamericana de Energía (OLADE). 2010. Pg. 61.” This document states that ““Most of the efficient stoves in Honduras were installed using national and international donations”</p> <p>DNV has reviewed the Table 6 and has been able to verify that the penetration rate of the ICS (Justa tradicional, Justa 2*3, and Otra Mejorada (Lorena) in rural is 11.3% and Urban is 4.3%.</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p><i>DNV was unable to find language in the CEPAL^{xi} document stating that these programs were implemented through the use of grants and DNV was unable to find the other literature document submitted to support the argument</i></p> <p><i>Jimenez, Rodolfo D. Informe: Proyecto apoyo de la matriz de acciones para la integración y desarrollo energético de entroamerica. Organization Latinoamericana de Energía (OLADE). 2010. Pg. 61.</i></p> <p>The PP has provided a list of programs that have distributed improved cook stoves at subsidized rates or for free.</p> <ol style="list-style-type: none"> 2. AHDESA is one of the most experienced organizations in Honduras, has distributed thousands of stoves, the majority of which have been purchased for end users by outside organizations, such as Rotary Clubs and the European Union and distributed at subsidized prices to the end-users. The supporting document submitted by PP lists the funded programs where ADHESA has distributed stoves^{xii} <ol style="list-style-type: none"> a. Energy Conservation and Environmental Protection Program of the Organization of American States Tri-Group – El Salvador, Guatemala, Honduras b. Use and Productivity of the Land Improvement Project (LUPE), Secretary of Agriculture and 		<p><i>17 and 18 don't seem consistent with these numbers.</i></p> <p>Response: The wood fuel ICS stove models in Table 6 include, Justa tradicional, Justa 2*3, and Otra Mejorada (Lorena). The “Urban” (translated) column of this table lists the proportion of households that use these stove in urban areas as 2.3, 0.6, and 1.4 respectively. This adds up to 4.3 %. The “Rural” column of this table lists the proportion of households that use these stoves as 6.9, 3.0, and 1.4 respectively. This adds up to 11.3 %. Table 7 is not directly relevant to Table 6. Table 7 represents survey responses to a series of questions from traditional and ICS stove users.</p> <p><i>The PP has not demonstrated that the no incentive to invest in a cookstove program of this type without a second revenue stream, such as grant funding or a carbon crediting structure, to help supplement revenues gained from stove sales</i></p> <p>Response: Revised sentence to state, “As demonstrated above, the majority of cookstove programs in Honduras have been either self-made or</p>	<p>The PP has revised the PoA DD to state that “As demonstrated above, the majority of cookstove programs in Honduras have been either self-made or implemented with the main revenue stream in the form of grant funding or a carbon crediting structure, to sustain stove implementation”.</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>Livestock (SAG) with financial support from USAID</p> <p>c. Partnership between World Food Program (PMA) and the Honduras Commission of Forest Development (COHDEFOR)</p> <p>d. Management of Renewable Natural Resources of the El Cajon Reservoir Basin Program (PROCUENCA). Loans 918/SF-HO and 787/OC-HO</p> <p>e. Better Life Project, Department of Lempira</p> <p>f. World Vision of Honduras</p> <p>g. Lempira Sur Project</p> <p>h. Rural Technologies Program (PTR), Center for Industrial Development (CDI)</p> <p>i. Peace Corps, USAID</p> <p>j. Save the Children</p> <p>k. Local Management Strengthening Project of Natural Resources in the Basins of the Patuca, Choluteca and Negro Rivers</p> <p>Including the improved cook stoves that have been distributed as part of the above programs and other Gold Standard approved projects in Honduras. As of 2011, the penetration rate for improved cook stoves in Honduras is 11.3% and 4.3%, in rural and urban households respectively.</p>		<p>implemented with the main revenue stream in the form of grant funding or a carbon crediting structure, to sustain stove implementation”.</p> <p>EB 50, Annex 13 states, “<i>The evidence of presence of the barrier for other project(s) under similar circumstances, using reputed sources, makes them much more objective and therefore makes a strong argument that a project is additional</i>”.</p> <p><i>The PP has not described for each of the barrier/any barrier that in similar circumstances (in similar industries/sectors, in companies of similar size and ownership structure, in similar projects) the barriers actually prevented the implementation of other project(s).</i></p> <p>Responded below.</p> <p><i>The PP has described that “the only carbon activity found within the same geographical boundary is Proyecto Mirador (Project ID# GS690), which continues to be supported by carbon finance under the Gold Standard carbon crediting mechanism and private foundation grants. However,</i></p>	<p>DNV has reviewed the validation report of the registered Improved cook stove GS project and confirms that the project claims similar barriers as stated by this PoA.</p> <p>CAR 13 continued</p> <p>CAR 13 is no longer relevant</p> <p>The PoA-DD has been revised to use “Guidelines on the demonstration of additionality of small scale project activities version 09.0” for</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p><i>DNV was unable to cross verify the percentage 11.3% and 4.3% in the CEPAL document. The Table 6 and 7 on page 17 and 18 don't seem consistent with these numbers.</i></p> <p>The PP states that as demonstrated above, there has been no incentive to invest in a cookstove program of this type without a second revenue stream, such as grant funding or a carbon crediting structure, to help supplement revenues gained from stove sales. <i>The PP has not demonstrated that the no incentive to invest in a cookstove program of this type without a second revenue stream, such as grant funding or a carbon crediting structure, to help supplement revenues gained from stove sales</i></p> <p>EB 50, Annex 13 states, <i>"The evidence of presence of the barrier for other project(s) under similar circumstances, using reputed sources, makes them much more objective and therefore makes a strong argument that a project is additional"</i>.</p> <p><i>The PP has not described for each of the barrier/any barrier that in similar circumstances (in similar industries/sectors, in companies of similar size and ownership structure, in similar projects) the barriers actually prevented the implementation of</i></p>		<p><i>this does not demonstrate that GS project had the same barriers as this PoA in Honduras nor does it mean that other similar projects have the same barrier and this prevented the project from being implemented.</i></p> <p>Response: The Gold Standard VER Validation Report for GS690, available here: https://gs2.apx.com/mymodule/ProjectDoc/EditProjectDoc.asp?id1=690 pgs. 12-14 explains why the investment barriers presented in the PDD were validated, including for such reasons as:</p> <ul style="list-style-type: none"> • "Implementation of the project without GS VER revenues) would not represent an economically attractive course of action and therefore the continuation of the current practice (use of traditional fogon) would be the baseline scenario in the absence of the [project]"; and • « . . . distribution or selling of firewood stoves is not an attractive business model. Therefore, banks would not be willing to provide loans under such conditions of risks.» <p>The PDD for this PoA presents similar</p>	<p>demonstration of additionality.</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p><i>other project(s).</i></p> <p><i>The PP has described that “the only carbon activity found within the same geographical boundary is Proyecto Mirador (Project ID# GS690), which continues to be supported by carbon finance under the Gold Standard carbon crediting mechanism and private foundation grants. According to the latest Monitoring Report publicly available, the project was able to distribute and credit over 6,000 La Justa stoves between May 2009 and November 2010 using carbon finance and donor funds.”</i></p> <p><i>However, this does not demonstrate that GS project had the same barriers as this PoA in Honduras nor does it mean that other similar projects have the same barrier and this prevented the project from being implemented.</i></p>		<p>arguments to demonstrate an investment barrier. Further, it provides literary evidence that there is no precedent for the dissemination of ICS at scale (i.e. similar projects) without non-commercial financial support or carbon finance within the Host Country.</p>	
<p>CAR 13 (Continued)</p> <p><i>The PP has not demonstrated investment barrier. The PP has only demonstrated that the alternative to the project activity would lead to higher emissions. They have not demonstrated that the alternative is more financially viable.</i></p>		<p>The additionality assessment has been revised</p>	<p>The PP has revised the additionality assessment. The PP has chosen simple cost analysis to demonstrate investment analysis. The PP has demonstrated that the revenue from the project is lesser than the investment into this project activity. Hence, since there is no income from the project activity, a simple cost analysis has been chosen to demonstrate</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			<p>additionality. CAR 13 is closed CAR 13 is no longer relevant The PoA-DD has been revised to use “Guidelines on the demonstration of additionality of small scale project activities version 09.0” for demonstration of additionality.</p>
<p>CAR 14 Additionality The technological and institutional barriers described are very general and can be applied for an identical project in any country across the globe. These barriers are not specific to this project. The project participant has not described the barriers specific to this project activity.</p>		<p>PoA-DD section B.1 and B.2 have been updated to demonstrate additionality in line with EB55 Annex 38 and Guidelines on the demonstration of additionality of small scale project activities version 09.0. Technological and institutional barriers have been removed from the PoA-DD</p>	<p>The technological and institutional barriers have been removed from the PoA DD CAR 14 is closed</p>
<p>CAR 15 Additionality The prevailing practice barrier is considered to be weak and not representative of the actual situation in Host Country DNV during the household visits observed that the locals are aware of improved cook stoves and are willing to buy or own an improved cook stove. The general public is also aware of the benefits of the improved cook stove. DNV also observed that the penetration rate</p>		<p>PoA-DD section E.5.1 has been updated to demonstrate financial barriers as the main barrier to the dissemination of the technology promoted by this program in the country of Honduras.</p>	<p>Including the improved cook stoves that have been distributed as part of the above programs and other Gold Standard approved projects in Honduras. As of 2011, the penetration rate for improved cook stoves in Honduras is 11.3% and 4.3%, in rural and urban households respectively. <i>DNV was unable to cross verify the percentage 11.3% and 4.3% in the CEPAL document. The Table 6 and 7 on page 17 and 18 don't seem consistent</i></p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>of the improved cook stoves from other programs is not as limited as the project participant claims. DNV observed a number semi-improved cook stove in use in the communities, and high awareness of the existence of improved cook stoves.</p>			<p><i>with these numbers.</i> The financial barrier has not been demonstrated. CAR 15 continued</p> <p>CAR 15 is no longer relevant The PoA-DD has been revised to use “Guidelines on the demonstration of additionality of small scale project activities version 09.0” for demonstration of additionality.</p> <p>Additionally, CPA-DD, Appendix 3, provide a revised penetration rate of ICS of 9.9 and 2.9 in rural and urban areas respectively.</p>
<p>CAR 15 (continued) Including the improved cook stoves that have been distributed as part of the above programs and other Gold Standard approved projects in Honduras. As of 2011, the penetration rate for improved cook stoves in Honduras is 11.3% and 4.3%, in rural and urban households respectively. <i>DNV was unable to cross verify the percentage 11.3% and 4.3% in the CEPAL document. The Table 6 and 7 on page 17 and 18 don't seem consistent with these numbers.</i></p>		<p>Please refer appendix 3 of CPA-DD where the penetration rates of improved cookstoves has been mentioned based on publically available information.</p>	<p>DNV has reviewed the Table 6 and has been able to verify that the penetration rate of the ICS (Justa tradicional, Justa 2*3, and Otra Mejorada (Lorena) in rural is 11.3% and Urban is 4.3%. CAR 15 is closed.</p> <p>CAR 15 is no longer relevant The PoA-DD has been revised to use “Guidelines on the demonstration of additionality of small scale project activities version 09.0” for demonstration of additionality.</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			Additionally, CPA-DD, Appendix 3, provide a revised penetration rate of ICS of 9.9 and 2.9 in rural and urban areas respectively.
CAR 16 The PP needs to make provisions for meeting training and maintenance needs for future CPAs.	A.4.7	PoA-DD section A.4.1 (ii) has included the commitments by the CME to meeting training and maintenance needs for future CPAs.	The CME needs to provide additional information on the frequency of the virtual meetings and trainings and the type of documentation that will be provided to the DOE to demonstrate that this training was conducted. The section referenced in the response (POA-DD, Section A.4.1 (ii) is incorrect. Please provide the correct reference section. CAR 16 continued
CAR 16 (Continued) The CME needs to provide additional information on the frequency of the virtual meetings and trainings and the type of documentation that will be provided to the DOE to demonstrate that this training was conducted.	A.4.7	PoA-DD section Part II Section B.7.2 has been updated to reflect the frequency of meetings and trainings and the type of documentation that will be provided to the DOE to demonstrate that this training was conducted.	The CME has provided additional information on frequency of the virtual meetings and trainings. CAR 16 is closed
CAR 17 Double Counting The PoA Standard EB 65, Annex 3 requires that <i>A system/procedure to avoid double accounting e.g. to avoid the case of including a new CPA that has been already registered either as a CDM project activity or</i>	A.4.4	PoA-DD section C: Management System has been updated to demonstrate how CPAs will be checked against other CDM project activities to confirm they are not part of another registered PoA. Likewise, the same	<ol style="list-style-type: none"> 1. Confirmation that the specific CPA within this program is not registered as an individual CDM project activity 2. <i>The CME has not described how this will be checked in Section</i>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p><i>as a CPA of another PoA</i> is implemented by the PP.</p> <p>The PoA DD states that “Prior to registering a new SSC-CPA within the proposed PoA, the coordinating entity will check the CDM registry to verify whether a CDM project activity or CPA of another PoA has already included the same ICS.” However,</p> <ul style="list-style-type: none"> • How are entries in this database checked against entries of databases of other CDM projects distributing cook stoves • How will this eventually be verified by a DOE? 		<p>section now describes how entries in the PoA database will be checked to avoid double counting and how the DOE may carry the verification of the methods/data. Besides, these have been developed as eligibility criteria for inclusion of CPA in the PoA (refer criteria #2 and #3)</p>	<p>C: Management System</p> <p>Confirmation that the specific CPA within this program is not part of another registered PoA: The SSC-CPA is uniquely defined by specific inclusion criteria, the exact start/end date of the crediting period and other detailed information relevant at the SSC_CPA level to ensure that the SSC-CPAs under the PoA are registered as an individual CDM project activity and not included in another registered PoA. This will be proved through the confirmation provided at section D.5 of the CPA-DD in question.</p> <p><i>The CME has not described how this will be checked in Section</i></p> <p>C: Management System</p> <p>Confirmation that every ICS within a specific CPA is not double counted across the PoA: Each stove will have an alpha numeric number that will indicate the name of the manufacturer, product model, type of product (i.e. main product vs accessories), manufacturing factory location and unique serial</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			number. CAR 17 continued
CAR 17 (continued) 1. Confirmation that the specific CPA within this program is not registered as an individual CDM project activity <i>The CME has not described how this will be checked in C: Management System</i> 2. Confirmation that the specific CPA within this program is not part of another registered PoA: The SSC-CPA is uniquely defined by specific inclusion criteria, the exact start/end date of the crediting period and other detailed information relevant at the SSC_CPA level to ensure that the SSC-CPAs under the PoA are registered as an individual CDM project activity and not included in another registered PoA. This will be proved through the confirmation provided at section D.5 of the CPA-DD in question. <i>The CME has not described how this will be checked in C: Management System</i>	A.4.4	PoA-DD section C: Management System has been updated to describe how each method will be checked.	The PP has revised the PoA DD Section C: Management System to address the following <ol style="list-style-type: none"> 1. The PP has included a detailed verification and documentation system to verify that a particular CPA is not registered with as another CDM project. 2. The PP has included a detailed verification and documentation system to verify that a particular CPA is not part of another PoA. CAR 17 is closed
CAR 18 The programme does not use verification	A.7.4	The system to avoid double counting has been integrated and expanded to	The PoA DD has been revised to provide all the information related to

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>method that applies a statistical method for sampling for DOE.</p> <p>The CME has defined a system to avoid double counting of CERs. This is through carbon waivers described in Section C: Management System and unique serial number under C: Management System</p> <p>There are two different methods described under the two sections to avoid double counting. The information needs to be consistent and complete.</p>		<p>account for all levels of consistency.</p> <p>PoA-DD section C: Management System describes the system/procedure to avoid double counting at all potential levels. These are featured in three scopes for which the last one “Confirmation that every ICS within a specific CPA is not double counted across the PoA” includes the statistical sampling method for the DOE at the time of verification.</p>	<p>double counting in Section C: Management System</p> <p>CAR 18 is closed</p>
<p>CAR 19</p> <p>Stakeholder Consultation</p> <p>The CME needs to describe the relevant media been used to invite comments by local stakeholders</p>	D.1.6	<p>The public announcement published through a newspaper announcement is provided to the DOE as supporting evidence. See Annex 3 of the LSC report.</p>	<p>The PP has provide the newspaper article where the stakeholder consultation announcement was made.</p> <p>CAR 19 is closed.</p>
<p>CAR 20</p> <p>The project involves the testing of the stoves using various options, such as WBT, CCT and KPT annually or biennially. However, it is not clear how the sample size for the stoves will be selected and how the values from these test results will be extrapolated.</p>	E.1.1	<p>The results from the tests will be extrapolated for all stoves in that age group.</p>	<p>The PP proposes to extrapolate the test results for all stoves in that age group.</p> <p>CAR 20 is closed</p>
<p>CAR 21</p> <p>Stakeholder Consultation</p> <p>The CME needs to address the stakeholder comments received during the public stakeholder consultation period. The</p>	D.1.5	<p>Responses and supporting evidence are provided to the DOE in a separate document for review.</p>	<p>DNV has reviewed the comments received by the stakeholders. All comments are positive or neutral. There are no negative comments or concerns from the people that need to be</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
comments are listed in Table 5 below.			addressed by the PP. CAR 21 is closed
<p>CAR 22</p> <p>Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods or referring to published literature, official reports or statistics.</p> <p>The CME has not used information from sources that are acceptable as per the methodology AMS II.G.</p> <p>CME has used information available online e.g. (1)Rainforests, a book for kids, Rhett A. Butler http://rainforests.mongabay.com/20honduras.htm (2)http://www1.american.edu/TED/honduras.htm#r3</p>	E.1.2	PoA-DD Section B.3 provides a description of the depletion of carbon stocks in the project area since 1962 using FAO forestry surveys published in 2010.	The project participant has revised the NRB study and provided references from scientific journals to support the NRB study. CAR 22 is closed
<p>CAR 23</p> <p>Project emission calculation</p> <p>The CME needs to properly address the uncertainties in the project emission calculation procedure.</p> <p>The project involves the testing of the stoves using various options, such as WBT, CCT and KPT annually or biennially. However, the CME has not described how the sample size for the stoves will be selected and how the</p>	E.5.3	PoA-DD section B.6.3 “Generalities” clarifies that the parameters to be considered for each option are assessed according to the PoA requirements established in section B.6.3 and B.7 of the PoA-DD and the specific requirements established in section D.6.3 and D.7 of the specific CPA. The specific emission reduction calculation tool designed for the chosen option will be used by inputting results from the	The PP has considered for each option are assessed according to the PoA requirements established in section B.6.3 and B.7 of the PoA-DD. CAR 23 is closed.

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
values from these test results will be extrapolated.		field/lab tests (along with the rest of parameters necessary for that option) to obtain the resulting $B_{y,savings}$ value.	
<p>CAR 24 Baseline emission calculation As per the methodology AMS II.G. A default value of 0.10 may be optionally used if the replaced system is a three stone fire, or a conventional system with no improved combustion air supply or flue gas ventilation system, i.e. without a grate or a chimney; for other types of systems a default value of 0.2 may be optionally used.</p> <p>In the PoA DD the efficiency of the system being replaced as part of the SSC-CPA (η_{old}) is assumed to be 10%.</p> <p>The CME has not described why the default value of 10% is applicable to this PoA. Additionally, the CME has not provided supporting documentation for the same.</p> <p>This CAR is applicable only to the CPA level</p>	E.6.2	Annex 3 of the PoA-DD has been updated to describe the thermal efficiency values applied to the baseline technologies identified across the country and describes the reasoning behind this criteria.	<p>The above information is no longer used in the revised PoA-DD. The United Nations Comisión Económica para América Latina y el Caribe (UN-CEPAL), report titled Consumo de Leña en Honduras (April 2011) report is not used for determination of the baseline fuel consumption.</p> <p>Baseline for residential stoves used for residential purposes was determined from the report “Energy Efficiency in Central America: Progress and Action towards the fulfilment of Goals of the Central American Sustainable Energy Strategy” by Victor Hugo Ventura and Ryan Carvalho, published by UN-CEPAL, 2014.</p> <p>CAR 24 is closed.</p> <p>CAR 24 is no longer relevant The baseline efficiency is determined at the CPA level.</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>CAR 25</p> <p>The growth rate value used for the calculation of biomass is the growth rate values from similar biomass types in Mexico.</p> <p>During the site visit, DNV interviewed the International Conservation Forest department and confirmed that these values are available for Honduras. The host country specific values shall be used for the NRB calculation.</p>		<p>An updated NRB analysis has been conducted that incorporates sources provided by the government forestry expert interviewed during the site visit.</p>	<p>The DNV forestry sector expert's response is awaited.</p> <p>CAR 25 continued.</p>
<p>CAR 25 (continued)</p> <p>On page 3 of the document "Honduras National NRB Study" the 'inaccessibility' value (45%) has been used in the Table to calculate <i>DRB</i>. This value is the % of the total forest that is inaccessible to fuel wood users.</p> <p>The PP has incorrectly used the inaccessibility value (45%) instead of the accessibility value (55%) to calculate <i>DRB</i>. This needs to be corrected</p>		<p>The value has not been used as part of the new NRB analysis.</p>	<p>The NRB calculation has been completely revised. The revised NRB assessment is in lines with the methodology requirements.</p> <p>CAR 25 is closed.</p>
<p>CL 1</p> <p>The guideline of EB 65, Annex 3, Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for Programme of Activities requires that the eligibility criteria includes a condition to</p>	A.3.2	<p>PoA-DD section B.2 and section C:Management System describes the information included in the distinguishable mechanisms imprinted in the stove.</p>	<p>The PP has address the double counting issue in section B.2 and section C:Management System is addressed.</p> <p>The PP has received an email from Regional Collaboration Centre, Lomé CDM accepting the method to avoid</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
<p>avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo)</p> <p>The PP has implemented a method to avoid double counting of emission reductions. Each cook stove will have a logo and a unique serial number.</p> <p>The PP shall describe in the PDD, what the logo on the stove and serial numbering system will be and how this will avoid double counting of CERs from other PoAs. The unique serial number and CPAs.</p>			<p>double counting without the use of PoA logo. /68/</p> <p>CL 1 is closed</p>
<p>CL 2</p> <p>The guidelines from EB 65, Annex 3 requires there are conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys. The conditions related to sampling requirements shall be included in Section B.2</p>		<p>PoA-DD section B.2 updated to include the conditions related to sampling requirements.</p>	<p>The PoA DD section B.2 has not addressed the sampling requirements</p> <p>CL 2 continued</p>
<p>CL 2 continued</p> <p>The PoA DD section B.2 has not addressed the sampling requirements</p>		<p>PoA-DD section B.2 updated to include the conditions related to sampling requirements.</p>	<p>The survey design has not been described for commercial and institutional stoves. The following has not been address for the surveys at the PoA level.</p> <ul style="list-style-type: none"> • Sampling Objective. • Field Measurement Objectives

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			<p>and Data to be collected.</p> <ul style="list-style-type: none"> • Target Population and Sampling Frame. • Sample Method. • Desired Precision/Expected Variance and Sample Size. The plan should present • Procedures for Administering Data Collection and Minimizing Non-Sampling Errors. <p>CL 2 continued</p>
<p>CL 2 (continued) The survey design has not been described for commercial and institutional stoves. The following has not been address for the surveys at the PoA level.</p> <ul style="list-style-type: none"> • Sampling Objective. • Field Measurement Objectives and Data to be collected. • Target Population and Sampling Frame. • Sample Method. • Desired Precision/Expected Variance and Sample Size. The plan should present • Procedures for Administering Data Collection and Minimizing Non-Sampling Errors. 		<p>The PoA DD has been revised to include the survey design for each monitoring parameter as this shall remain similar in each target group.</p>	<p>The PP has revised the PoA DD to include a survey design for each parameter. The survey design is detailed and satisfactory.</p> <p>CL 2 is closed.</p>

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
CL 3 The guidelines from EB 65, Annex 3 require that there are requirements for the debundling check, in case CPAs belong to small-scale (SSC) or microscale project categories. The condition for de-bundling shall be included in Section A 4.2.2		PoA-DD section B.2 updated to include the conditions for de-blinding.	PoA DD section B.2 has been updated to include the de-bundling check. CL 3 is closed
CL 4 During the interview with ICF, DNV got the feedback that there are large areas of the forest that are sustainably managed by the government. Additionally, there are many Agro-forestry practices in the country. This was further confirmed during the household interview. The PP should submit the ICF research document for a comparison of the percentage of forest area under protection and inaccessible to wood fuel users.		ICF research document named “Borrador evaluacion causas Deforestacion” is provided to the DOE for review.	Could not find this document in dropbox. CL 4 continued
CL 4 (continued) Could not find this document in dropbox		ICF research document named “23. Larios Mario Vallejo Evaluacion de Deforestacion-translated” is provided to the DOE for review. The document has been used for the new NRB analysis accordingly.	The PP has submitted this document for DNVs review. CL 4 is closed
CL 5 The PP shall provide a thermal efficiency certificate for the Envirofit Stove		The thermal efficiency certificate is provided to the DOE for review	The average thermal efficiency is 24.9% for the Envirofit International HM-5000

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
CL 6 The starting date of the PoA is given as 15 January 2012. Please provide the supporting documentation for this date.		Date when the documentation was publicly available for the Global Stakeholder period.	The starting date of the PoA is the day the PoA –DD was made publicly available for stakeholder consultation (28 January 2012) CL 6 is closed
CL 7 The PoA DD states that the proposed project is not required to undertake an environmental impact assessment according to the Honduran regulation. The reference document is in Spanish, the PP is requested to highlight the relevant part and provide a translation of the same.		See EIA resolution provided as supporting documentation by the Environmental Authorities of the Host Country.	EIA resolution is still in Spanish CL 7 continued
CL 7 continued The PoA DD states that the proposed project is not required to undertake an environmental impact assessment according to the Honduran regulation. The reference document is in Spanish, the PP is requested to highlight the relevant part and provide a translation of the same.		The EIA resolution has been translated to English.	The EIA document has been reviewed and is accepted. CL 7 is closed
CL 8 The CME needs to describe whether a stakeholder consultation process is required by regulations/laws in the Honduras. If yes, has the stakeholder consultation process been	D.1.2	See supporting document provided to the DOE: Host Country “Requirement for CDM PoAs”.	The DNA of Honduras requires “Socialisation of Project” report. Will need to include detailed information about the acceptability of the project by the communities of the

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
conducted in lines with the Host Country requirements.			project boundary (attach photos). Has this report been submitted to the DNA of Honduras? Has this been accepted by the DNA of Honduras? CL 8 continued
CL 8 (Continued) The DNA of Honduras requires “Socialisation of Project” report. Will need to include detailed information about the acceptability of the project by the communities of the project boundary (attach photos). Has this report been submitted to the DNA of Honduras? Has this been accepted by the DNA of Honduras?		The socialization of the project was submitted and approved by the DNA by means of the local stakeholder consultation report. The report is provided as supporting document to the DOE.	The DNA has approved the socialization of the project report. CL8 is closed
CL 9 A summary of the stakeholder comments need to be submitted to DNV.	D.1.3	Stakeholder comments provided as supporting documentation.	The stakeholder consultation comments have been submitted to DNV. CL 9 is closed
CL 10 The baseline scenario as per the methodology AMS II.G, it is assumed that in the absence of the project activity, the baseline scenario would be the use of fossil fuels for meeting similar thermal energy needs. The CME needs to identify the major risks to the baseline.		As per the “Energy Efficiency in Central America: Progress and Action towards the fulfilment of Goals of the Central American Sustainable Energy Strategy” by Victor Hugo Ventura and Ryan Carvalho, published by UN-CEPAL, 2014, the per capita fuelwood consumption has more or less remained	The consumption of firewood has been constantly increasing since 2004. This establishes that there are no major risks to the baseline. CL 10 is closed

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
		<p>constant (in-fact slightly increased) from 2007 – 2011.</p> <p>There is no evidence to show that during the intervening period the consumption of firewood has decreased or fluctuated leading to substantial changes in the baseline scenario or the switch to alternative fuels.</p>	

Table 4 Forward action requests

Forward action request	Reference to Table 2
FAR 1 At the time of verification the DOE needs to verify that the improved cook stoves that are part of this PoA emission reduction calculation were only disseminated within the country of Honduras.	A.1
FAR 2 The unique id will be imprinted on the ICS that is distributed as part of this PoA. The stoves be distributed after the CPA inclusion and hence the unique id will have to be verified at the time of CPA verification.	A.2
FAR 3 The PP will cross-check the CPA with other CPAs in this PoA and with CPAs in any other PoA or in a CDM project activity operating in the country using the UNFCCC, the Gold Standard, and other relevant voluntary schemes to ensure that the CPA is not included in any other PoA, CDM project activity or voluntary project activity. All of this information will be summarized in a report and provided to the DOE upon verification. To ensure that the CME and CPA implementer are not double counting the CERs across PoAs or CPAs, the DOE needs to verify that the CME has conducted a cross check with other PoAs or CPAs.	B.3

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APPENDIX B

PROTOCOL FOR ASSESSING COMPLIANCE OF SPECIFIC CPA WITH POA REQUIREMENTS

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

Checklist Question						
A.2.1	Is the CPA starting date clearly defined and evidenced? Is the start date of the CPA the earliest date at which either the implementation or construction or real action of the CPA begins? Is the start date on or after the start date of the PoA?					
A.2.2	Is the CPA operational lifetime clearly defined and evidenced?					
A.2.3	Has the crediting period been clearly defined and is the start of the crediting period deemed to be reasonable?					
A.2.4	Has it been confirmed that the length of the CPA crediting period does not exceed the end of PoA?					
A.3. Estimated amount of emission reductions from the CPA						
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?					
A.4. Public funding						
A.4.1	In case public funding from Parties included in Annex I is used for the CPA, 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?					
A.5. Confirmation for CPA						
A.5.1	Has a confirmation been provided that the CPA is neither registered as an individual CDM project activity nor is part of another registered PoA?					

Checklist Question					
B Environmental impacts (PS § 63-64, VVS § 134-135) <i>It is assessed whether environmental impacts of the CPA have been properly addressed.</i>					
D.1.2.	Has an analysis of the environmental impacts of the CPA been sufficiently described?				
D.1.3.	Are there any Host Party requirements for an Environmental Impact Assessment (EIA)?				
D.1.4.	Will the programme create any adverse environmental effects?				
D.1.5.	Are transboundary environmental impacts considered in the analysis?				
D.1.6.	Have identified environmental impacts been addressed in the programme design?				
D.1.7.	Does the programme comply with environmental legislation in the host country?				
C Stakeholders' comments (PS § 65-69, VVS § 138-140) <i>It is assessed whether stakeholders have been properly consulted in the development of the CPA.</i>					
C.1.1.	Have relevant stakeholders been consulted?				
C.1.2.	Have appropriate media been used to invite comments by local stakeholders?				
C.1.3.	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?				
C.1.4.	Is a summary of the stakeholder comments received provided?				

Checklist Question					
C.1.5.	Has due account been taken of any stakeholder comments received?				
D Application of a baseline and monitoring methodology(ies)					
D.1. Title and reference of the approved baseline and monitoring methodology(ies) selected					
D.1.2.	Are the exact title and version of approved methodology(ies) and tools listed?				
D.2. Applicability of methodology (and tools) (VVS § 73-77) <i>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 CPAs</i>					
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 CPA, sufficiently demonstrate that the CPA complies with the applicability criteria of the applied methodology (and tools)? If not, provide below and assessment of the CPAs compliance with the applicability criteria.				
D.3. Project boundary of CPA (VVS § 82-87)					
D.3.1.	What is the CPA's system boundaries (components and facilities used to mitigate GHGs)? Are they clearly defined and in accordance with the methodology?				

Checklist Question					
D.3.2.	Is the CPA located within the geographical boundary of the proposed or registered PoA?				
D.3.3.	Which GHG sources are identified for the CPA? Does the identified boundary cover all possible sources linked to the CPA? Give reference to documents considered to arrive at this conclusion.				
D.3.4.	Does the CPA 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 CPA?				
D.4. Baseline scenario determination and description (VVS § 88-95 / Identification of alternatives to the project activity (VVS § 113-116)) <i>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</i>					
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 CPA is undertaken without being registered as a proposed CPA? 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 CPA?				
D.4.2.	Could the project activity in absence of the CDM or other baseline alternatives also be implemented by other entities than the CDM project participants? If so, has this also been				

Checklist Question					
	included in the list of baseline scenarios?				
D.4.3.	How have the other baseline scenarios been eliminated in order to determine the baseline?				
D.4.4.	What is the baseline scenario?				
D.4.5.	Is the determination of the baseline scenario in accordance with the guidance in the methodology?				
D.4.6.	Has the baseline scenario been determined using conservative assumptions where possible?				
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?				
D.4.8.	Is the baseline scenario determination compatible with the available data and are all literature and sources clearly referenced?				
D.4.9.	Is the baseline determination adequately documented in the CPA-DD? <ul style="list-style-type: none"> • All assumptions and data used by the project participants are listed in the CPA-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 CPA-DD. • The methodology has been correctly applied to identify what would occurred in the absence of the proposed CPA 				
D.5. Demonstration of eligibility for the CPA					
D.5.1.	Has it been sufficiently justified that the CPA complies with				

Checklist Question					
	Eligibility criteria 1 - The CPA shall be located within Honduras. Please note that all ICS installations may not have been deployed at the CPA inclusion stage, however the location of the ICS can be checked during verification. In the event that any deployed ICS is found to be outside of the PoA boundary/location, those ICS will not be counted in the emission reduction calculation.				
D.5.2.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 2 - A unique numbering or identification system for the ICS installed is applied. This shall ensure no double counting of stoves within the PoA and ensure that stoves can be identified as belonging to this PoA and not to a PoA managed by any other CME. Please note that not all ICS installations may have been deployed at the CPA inclusion stage, however the ICS' unique numbering can also be checked during verification. In the event that any deployed ICS is found not to be in line with CPA double counting criteria, those ICS will not be counted in the emission reduction calculation.				
D.5.3.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 3 - The CPA is exclusively bound to the PoA. Confirmation that the programme activity has not been and will not be registered either as a single CDM project activity or as a CPA under another PoA.				
D.5.4.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 4 - Contractual provisions to ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA. In the case that the CME is not responsible for implementing the CPA, the organization responsible for CPA implementation, known as the Distributing Organization (DO), has signed a contractual agreement with the CME to participate in the PoA. This agreement: 1) Defines the ownership of the carbon emission				

Checklist Question					
	reduction rights 2) Covers the DO's distribution and monitoring related responsibilities 3) Confirms that the ICS to be distributed under the CPA have not and will not be distributed under any other carbon project (CDM project, PoA or voluntary carbon market project Cedes the DO's rights to the carbon credits generated from CPAs under the PoA to the CME				
D.5.5.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 5 - The CME and the CPA operator (in case of being different from the CME) shall confirm that in case of public funding there shall not be diversion of Official Development Assistance.				
D.5.6.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 6 - CPA start date shall not be before PoA validation start date (i.e. not prior to webhosting for global stakeholder consultation which was on 28/01/2012). Please note that not all ICS installations may have been deployed at the CPA inclusion stage, however the ICS start date can also be checked during verification. In the event that any deployed ICS are found not to be in line with CPA start date, those ICS will not be counted in the emission reduction calculation				
D.5.7.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 7 - CPA crediting period not to exceed the PoA end date and the start date of the crediting period of a CPA shall be on or after:(i) The date of registration of the PoA, if the corresponding CPA-DD is submitted together with the request for registration;				
D.5.8.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 8 - CME approved each CPA to be included into its registered PoA.				
D.5.9.	Has it been sufficiently justified that the CPA complies with				

Checklist Question					
	Eligibility criteria 9 - The CPA consists of replacement of conventional firewood cook stoves for biomass fired ICS as defined in section A.4.2.1 of the PoA-DD. Conventional stoves replaced will be any of the types identified by each baseline scenario and as applied by the specific CPA. Stove types replaced and implemented will be defined in the CPA-DD, and hence appliances involving the efficiency improvements in the thermal applications of non-renewable biomass as per AMS II. G, ver. 5. Please note that not all ICS may have been deployed at CPA inclusion stage, the 'type and number of ICS deployed' will however also be checked during verification, and in case any deployed ICS type will be found not in line with the methodology requirement, those ICS will not be counted for emission reduction calculation.				
D.5.10.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 10 - The ICS disseminated under the CPA will be single pot, multi pot or in-situ cook stoves that have a specified efficiency of at least 20% at the time of CPA inclusion.				
D.5.11.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 11 - Only ICS of the types below will be disseminated: 1) Biomass Fuelled ICS, 2) Newly operational ICS and 3) either fix/portable operation. Other requirements (i.e. efficiency, maximum capacity, level of service, distribution mechanisms...) are defined in the relevant eligibility criteria within this table. Please note that not all ICS may have been deployed at CPA inclusion stage, the technical requirement will however also be checked during verification, and in case any deployed ICS type will be found not to be in line with the technical requirement, those ICS will not be counted for emission reduction calculation.				
D.5.12.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 12 - In accordance with methodology				

Checklist Question					
AMS IIG: Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods					
D.5.13.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 13 - In accordance with “Guidance for determining the occurrence of de-bundling under a Programme of Activities (PoA)”, if each independent subsystem/ measures included in the CPA of a PoA is no greater than 1% of the small scale threshold defined by the methodology applied, than that CPA of PoA is exempted from performing de-bundling check, i.e. considered as being not a de-bundled component of a large scale activity.				
D.5.14.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 14 - The CPA will remain under the thermal threshold of 180 GWh _{th} /annum thermal energy savings (threshold as per clarification request SSC_233) throughout the crediting period of the CPA. If a CPA exceeds the applicable limit in any year, the claimable emission reduction shall be capped based on the estimated GHG reductions in the CPA-DD. Please note that not all ICS may have been deployed at CPA inclusion stage, the SSC limit for CPAs can however also be checked during verification, and in case any deployed ICS will be found not in line with CPA SSC Limit for CPAs requirement, those ICS will not be counted for emission reduction calculation.				
D.5.15.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 15 - Additionality is demonstrated using EB68 Annex 27 “Additionality Guidelines of Small-Scale Projects” paragraph 2(c) as described in the PoA DD. Each of the requirements listed below are proven to define the CPA as automatically additional: The specific CPA is eligible when all evidences are documented:			4)	

Checklist Question					
<p>1) Project size does not exceed small-scale CDM thresholds: CPA-DD establishes the “ICS installation cap” using an excel sheet or similar tool. This requirement is also checked through eligibility criteria named “SSC Limit for CPA”.</p> <p>And,</p> <p>2) The project activities are solely composed of isolated units where the users of the technology/measure are households or communities or Small and Medium Enterprises (SMEs): CPA-DD to show description of the technology and to specify target population.</p> <p>And,</p> <p>3) Where the size of each unit is no larger than 5% of the small-scale CDM thresholds: CPA-DD to show energy saved by the ICS is less than $(180\text{GWh}_{\text{th}}/\text{year} * 0.05 =) 9\text{GWh}/\text{year}$.</p>					
<p>D.5.16. Has it been sufficiently justified that the CPA complies with Eligibility criteria 16 - Each CPA will ensure compliance with the applicability of the methodology and its requirements. Conditions of the applicability of the methodology and its requirements are specified in the PoA DD in section E.2 through the assessment of “justification of the choice of the methodology and why it is applicable to the CPAs”.</p>					
<p>D.5.17. Has it been sufficiently justified that the CPA complies with Eligibility criteria 17 - Target groups may be any of the following: 1) Residential biomass users, 2) Commercial Users and 3) Institutional biomass users. Assumptions made at the PoA level for any scope regarding these target groups are deemed valid through all CPAs (i.e. extent of baseline studies, ER calculation approach and monitoring systems and plan).</p>					
<p>D.5.18. Has it been sufficiently justified that the CPA complies with</p>					

Checklist Question					
	Eligibility criteria 18 - Distribution mechanisms have been specified in PoA-DD by means of the “General operating and implementing framework of PoA” at the PoA level.				
D.5.19.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 19 - The Local Stakeholder Consultation is established at the PoA level as described in section D of the PoA-DD. No further actions needed at the CPA level to satisfy the eligibility criteria.				
D.5.20.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 20 - The EIA is established at the PoA level as described in section C of the PoA-DD. No further actions needed at the CPA level to satisfy the eligibility criteria.				
D.5.21.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 21- Sampling of appliances within the CPA must meet the requirements of AMS-II.G v.5 and the “Standard on Sampling and Surveys for CDM Projects and Programmes of Activities” (the Sampling Standard). Each CPA will ensure compliance with the framework established for sampling requirements for quantification of parameters not established at the ex-ante and monitoring tasks during the crediting period. Conditions and its requirements are outlined for baselines at Annex 3 of the PoA-DD and for monitoring tasks at section E.7.2.				
D.5.22.	Has it been sufficiently justified that the CPA complies with Eligibility criteria 22: Each CPA shall demonstrate the baseline parameters that are to be established at the CPA level have been determined, and shall do so applying the following approaches: a) B_{old} : as per the approach outlined in PoA-DD Section E.6.2, applying Option (a) of paragraph 13 of AMS-II.G; And, b) SC_{old} and/or η_{old} : When Option 2 of paragraph 12 of AMS-II.G is applied SC_{old} : When Option 3 of paragraph 12 of AMS-II.G is applied.				

Checklist Question					
D.6. Algorithms and/or formulae used to determine emission reductions of the CPA (VVS § 96-100)					
Data and parameters that are available at validation and that are not monitored					
D.6.1.	How was the insert parameter available at validation verified?				
D.6.2.	How was the insert parameter available at validation verified?				
D.6.3.	How was the insert parameter available at validation verified?				
D.6.4.	How was the insert parameter available at validation verified?				
D.6.5.	How was the insert parameter available at validation verified?				
D.6.6.	How was the insert parameter available at validation verified?				
D.6.7.	How was the insert parameter available at validation verified?				
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?				
Baseline emissions					
D.6.9.	Are the calculations documented according to the approved methodology and tool and in a complete and transparent manner?				
D.6.10.	Have conservative assumptions been used when calculating				

Checklist Question					
	the baseline emissions?				
D.6.11.	Are uncertainties in the baseline emission estimates properly addressed?				
D.6.12.	If the calculations of baseline emissions are based on sampling, does this comply with the Standard for sampling and surveys?				
Project emissions					
D.6.13.	Are the calculations documented according to the approved methodology and tool and in a complete and transparent manner?				
D.6.14.	Have conservative assumptions been used when calculating the project emissions?				
D.6.15.	Are uncertainties in the project emission estimates properly addressed?				
D.6.16.	If the calculations of project emissions are based on sampling, does this comply with the Standard for sampling and surveys?				
Leakage					
D.6.17.	Are the leakage calculations documented according to the approved methodology and in a complete and transparent manner?				
D.6.18.	Have conservative assumptions been used when calculating the leakage emissions?				
D.6.19.	Are uncertainties in the leakage emission estimates properly addressed?				
D.6.20.	If the calculations of leakage emissions are based on sampling, does this comply with the Standard for sampling and surveys				
Emission Reductions					
D.6.21.	Algorithms and/or formulae used to determine emission			•	

Checklist Question					
reductions: <ul style="list-style-type: none"> All assumptions and data used by the project participants are listed in the CPA-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 CPA 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. 					
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?				
D.7.2.	Does the monitoring plan contains all necessary parameters, and are they clearly described?				
D.7.3.	In case parameters are measured, is the measurement equipment described? Describe each relevant parameter.				
D.7.4.	In case parameters are measured, is the measurement accuracy addressed and deemed appropriate? Describe each relevant parameter.				
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.				
D.7.6.	Is the monitoring frequency adequate for all monitoring parameters? Describe each parameter.				
D.7.7.	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,				

Checklist Question					
	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?				
Ability of project participants to implement monitoring plan					
D.7.8.	How has it been assessed that the monitoring arrangements described in the monitoring plan are feasible within the CPA design?				
D.7.9.	Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)?				
D.7.10.	Are the data management and quality assurance and quality control procedures sufficient to ensure that the emission reductions achieved by/resulting from the CPA can be reported ex post and verified?				
D.7.11.	Will all monitored data required for verification and issuance be kept for two years after the end of the crediting period or the last issuance of CERs, for this CPA, whichever occurs later?				
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?				
D.7.13.	Does the monitoring plan provide for the collection and archiving of relevant data concerning environmental, social and economic impacts?				
D.7.14.	Are the sustainable development indicators in line with stated national priorities in the host country?				

APPENDIX C

CURRICULA VITAE OF THE VALIDATION TEAM MEMBERS

Misheck Chomba Kapambwe

Dr Kapambwe holds a PhD in Carbon Accounting (forest products) and has done a Masters Degree in Wood Science, Graduate Diploma in Forest Industries, Diploma in Forestry and Diploma in Sawmilling Technology and has done short term courses in Carbon Accounting and Management. Having an overall experience of around twenty years in forestry and forest products industry. Prior to joining DNV having around five years experience in research in the areas of greenhouse accounting (including ecological footprinting) and climate change policy. His experience also covers the fields of AFOLU project and methodology validation, forest products processing, environmental management and resource conservation in developing countries (including Africa) and Australia.

His qualification, industrial experience and experience in forestry and forest industry demonstrate his sufficient sectoral competence in forestry.

Shruthi Poonacha Bachamanda

Shruthi holds a bachelor in Environmental Engineering and Masters in Environmental Resource Management. She has 6 years of experience in validation and verification of numerous GHG emission projects and inventory in DNV, both in USA and other countries. The GHG emission projects and inventory include various types, such as, CDM, VCS, CAR, CARB and CCAR.

Weidong Yang

Mr. 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.

Gonzalo Sandoval

Gonzalo holds a degree in electrical engineering with a major in electrical power systems, having an overall experience of around 16 years. Prior to joining DNV having 12.5 years of experience in electricity distribution, electrical energy demand and electrical equipment, assessing electricity billing, covering installation and power requirements of electrical equipment, sensitive electronic equipment and industrial power systems in a nationwide media broadcaster and performing electrical studies like electrical power demand, power factor correction, power quality, grounding techniques, power systems harmonic filtering and mitigation in low and medium voltage grids for several industrial facilities.

When joined DNV, he performed several audits, validations and verifications of CDM projects, including the Gold Standard Validation of the first CDM PoA in Mexico, for 2.5 years in Mexico, India, Honduras, Panama, Guatemala and El Salvador.

Since September 2011 he is working as an independent electrical engineering consultant, providing advisory services and training for the Federal Commission of Electricity, lecturing power quality courses as a part-time teacher of the National University of Mexico and supporting DNV by participating in the validation and verification of CDM and Gold Standard projects in Asia, Central America and Africa.

His qualification, industrial experience and experience in CDM demonstrate his sufficient sector competence in Electrical Equipment, Electricity Distribution and Electrical Energy Demand.

Grant Stuart Little

Holds a Bachelor Degree in Pure and Applied Chemistry; with a Secondary Degree in Forest Products Manufacture and a Masters Degree in Business Administration. He has over 20 years of industrial experience. Prior to joining DNV, Grant gained 16 years' experience in the forest products industry covering Process Engineering, energy projects, Sustainable Development, Forest eco-labelling and Environmental Management Systems. He also has over 5 years' experience in the carbon project development and carbon markets in Africa and the Middle East where he worked for a carbon aggregator and a government owned carbon management and environmental project development company. He is passionate about Africa and sees his work as a contribution to the development of the continent.

Scott Burns is an experienced investment analyst and policy consultant with 10 years relevant work experience including with major utility, materials technology groups and several development banks. He received his Master's Degree from the Harvard Kennedy School of Government majoring in International Development. Scott holds his BA from Whitman College in Economics and Math and received a Chartered Financial Analyst Certificate from the CFA Institute. Scott is currently part of a team launching a new DNV business line providing climate change and energy management advisory services for international development institutions. When employed with Alfa Capital Partners he managed \$160m Great Circle Fund, an OPIC-sponsored leveraged PE fund with transport infrastructure and logistics focus. Scott was active in a merger of two portfolio companies, creating the largest (sales at merger – \$300m+ p.a.) CIS integrated logistics provider. He developed materials (model, memoranda, analyses) used in assessing opportunity to invest in one of the largest Russian railcar operators; managed advisory teams performing due diligence on the company and promoted deal for investment committee members, earning IC majority approval. Scott has experience evaluating mergers and directing due diligence processes. He worked for the Institute for Financial Management and Research to investigate factors contributing to high default rates in ICICI Bank's tractor loan product. With the US Peace Corps Scott taught Economics and English at North Kazakhstan State University and Zhumabayev College.

Ms. Thamizharasi Kaliaperumal holds a Bachelor of Technology Degree in Chemical Engineering. She has an overall experience of around five years in Chemical /Petrochemical processing industries (Technical Services & Energy Management) and CDM Consultancy altogether. Her main areas of work in Energy Management include Pinch analysis, Thermography survey, Analysis of Specific consumption of energy, Additive addition in fuel oil, Steam Traps audit for condensate return, Performance of energy & mass balance and Energy Audits in Chemical /Petrochemical industries. Her scope of work in Technical Services include Production support, Process Trouble shooting of Ammonia plant operation, especially for Primary & Secondary Reformers, Shift converter, CO2 Absorption section and Synthesis Loop sections, Assessment of catalyst performance, Project feasibility studies (Carbon di-oxide recovery plant) and Management Information System.

She has completed ISO 14001:2004 - Environmental Management System Auditor / Lead Auditor Program, certified by IRCA and DNV Training Programme on Corporate GHG Inventory.

She has experience of more than 2 years in validation and verification of numerous CDM projects. Her qualification and industrial experience demonstrate her sufficient sectoral competence in areas of TA 1.2 Energy Generation from Renewable Energy Sources, TA 3.1 Energy Demand, TA 3.2 Household end use energy efficiency and TA 5.1/11.1/12.1 Chemical Processes Industries.

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ⁱSanders, A. and Morzan, L. Consumo de Leña en Honduras. Comisión Económica para América Latina y el Caribe (CEPAL). April 2011. Table 6, pg. 17

ⁱⁱGranderson, J *Fuel Use and Design Analysis of Improved Woodburning Cookstoves in the Guatemalan Highlands*, Page 2 & 3

ⁱⁱⁱSanders, A. and Morzan, L. Consumo de Leña en Honduras. Comisión Económica para América Latina y el Caribe (CEPAL). April 2011

^{iv}Sanders, A. and Morzan, L. Consumo de Leña en Honduras. Comisión Económica para América Latina y el Caribe (CEPAL). April 2011.

^vSanders, A. and Morzan, L. Consumo de Leña en Honduras. Comisión Económica para América Latina y el Caribe (CEPAL). April 2011.

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^{vii}Sanders, A. and Morzan, L. Consumo de Leña en Honduras. Comisión Económica para América Latina y el Caribe (CEPAL). April 2011. Table 6, pg. 17

^{viii}Granderson, J *Fuel Use and Design Analysis of Improved Woodburning Cookstoves in the Guatemalan Highlands*, Page 2 & 3

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^{xiii} Sanders, A. and Morzan, L. Consumo de Leña en Honduras. Comisión Económica para América Latina y el Caribe (CEPAL). April 2011.