PoA Validation Report

UpEnergy Open Access Improved Cookstoves Program in Latin America

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POA VALIDATION REPORT

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Title of PoA: UpEnergy Open Access Improved Cookstoves Program in Latin America
Host country/ies: Mexico, El Salvador and Nicaragua
Methodology: AMS-II.G **Version:** 03
GHG reducing Measure/Technology: End use household energy efficiency
ER estimate: 23 466 177 tCO_2e/year
Size
☐ Large Scale ☒ Small Scale
Validation Phases:
☒ Desk Review ☒ Follow up interviews
☒ Resolution of outstanding issues
Validation Status
☐ Corrective Actions Requested ☐ Clarifications Requested
☒ Full Approval and submission for registration ☐ Negative validation opinion

In summary, it is DNV's opinion that the proposed CDM programme of activities (PoA) "UpEnergy Open Access Improved Cookstoves Program in Latin America", as described in the PoA-DD of 12 December 2012 meets all relevant UNFCCC requirements for the CDM and correctly applies the baseline and monitoring methodology AMS-II.G, version 03. DNV thus requests the registration of the PoA as a CDM programme of activities.

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Report title: UpEnergy Open Access Improved Cookstoves Program in Latin America

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Key words:
Programme of Activities (PoA)
Clean Development Mechanism (CDM)
Climate Change

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Abbreviations

CCT	Controlled cooking test
CDM-CPA-DD	CDM programme activity design document
CDM-POA-DD	CDM programme of activities design document
CER	Certified Emission Reduction
CL	Clarification Request
CO_2e	Carbon dioxide equivalent
CPA	Component project activity
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
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

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1 EXECUTIVE SUMMARY – VALIDATION OPINION

DNV Climate Change Services AS (DNV) has performed a validation of the small-scale programme of activity (PoA) titled "UpEnergy Open Access Improved Cookstoves Program in Latin America" and the PoA specific CDM-SSC-CPA-DD with 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 programme of activities under the Clean Development Mechanism (CDM) criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

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

The host Parties are Mexico, El Salvador and Nicaragua. All Parties fulfil the participation criteria and have approved the project and authorized the project participants. The DNAs from Mexico, El Salvador, and Nicaragua confirmed that the project assists in achieving sustainable development.

The project correctly applies AMS-II.G "Energy-efficiency measures in thermal applications of non-renewable biomass", version 03.

By replacing traditional inefficient cook stoves with improved cook stoves, the programme aims to reduce CO_2 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 project activity.

The total emission reductions from the PoA are estimated to be on the average 23 466 177 tCO_2e per year over the selected 7 year crediting period.

Adequate training and monitoring procedures have been described.

In summary, it is DNV's opinion that the PoA titled "UpEnergy Open Access Improved Cookstoves Program in Latin America", as described in the CDM-SSC-PoA-DD of 12 December 2012, meets all relevant UNFCCC requirements for a PoA under the CDM and correctly applies the baseline and monitoring methodology AMS-II.G, version 03. DNV thus requests the registration of the PoA titled "UpEnergy Open Access Improved Cookstoves Program in Latin America" as a PoA under the CDM.

San Francisco and Oslo, 2012-12-21

Shruthi Bachamanda	Michael Lehmann
Validator	*Director of Services and Technologies,*
DNV San Francisco, USA	DNV Climate Change Services AS

2 INTRODUCTION

Impact Carbon has commissioned DNV Climate Change Services AS DNV to perform a validation of the small-scale CDM Programme of Activities (PoA) with the title "UpEnergy Open Access Improved Cookstoves Program in Latin America" (hereafter called "the PoA"). UpEnergy is the coordinating/managing entity (CME) for the PoA, and commissioned Impact Carbon to develop the carbon asset for the PoA. UpEnergy further authorized Impact carbon to contract with DNV to perform this validation.

This report summarises the findings of the validation of the PoA and the PoA specific small-scale CDM programme activities Design Document (CDM-SSC-CPA-DD) with generic information relevant to all CDM programme activities (CPAs) to be included in this PoA. The validation was performed on the basis of UNFCCC criteria for the PoAs under the CDM, 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, the procedures for registration of a programme of 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 (CDM-SSC-PoA-DD) and the PoA specific CDM-SSC-CPA-DD with generic information relevant to all CPAs to be included in this PoA. In particular, the eligibility criteria for inclusion 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 CDM-SSC-PoA-DD and the PoA specific CDM-SSC-CPA-DD with generic information relevant to all CPAs to be included in this PoA. The CDM-SSC-PoA-DD and CDM-SSC-CPA-DD were 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, the procedures for procedures for registration of a programme of activities as a single CDM project activity and the relevant decisions by the CDM Executive Board, including the approved baseline and monitoring methodology AMS-II.G version 03.

The validation of the programme has also considered the completed CDM-SSC-CPA-DD for the CPA with the title "UpEnergy Open Access Improved Coosktoves Program in Latin America – CPA No 001" submitted together with the CDM-SSC-PoA-DD.

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

3 METHODOLOGY

The validation consisted of the following three phases:

I a desk review of the CDM-SSC-PoA-DD and the PoA specific CDM-SSC-CPA-DD with generic information relevant to all CPAs to be included in this PoA

II follow-up interviews with programme stakeholders

III the resolution of outstanding issues and the issuance of the final validation report and opinion.

The following sections outline each step in more detail.

3.1 Desk review of the programme design documentation

The following table lists the documentation that was reviewed during the validation:

3.1.1 Documentation provided by the project participants

/1/ Up Energy Group Inc: *CDM-SSC-PoA-DD for PoA titled "UpEnergy Open* Access Improved Cookstoves Program in Latin America*"*, Version 2 dated 12 December 2012

/2/ Up Energy Group Inc: *Generic CDM-SSC-CPA-DD for PoA titled "UpEnergy Open* Access Improved Cookstoves Program in Latin America- *CPA No XXX"*, Version 2 dated 12 December 2012

/3/ Up Energy Group Inc: *CDM-SSC-CPA-DD for CPA titled "UpEnergy Open Access Improved Cookstoves Program in Latin America – No 001"*, Version 2 dated 12 December 2012

/4/ Up Energy Group Inc: *CDM-SSC-PoA-DD for PoA titled* "UpEnergy Open Access Improved Cookstoves Program in Latin America*"*, Version 1 dated 7 February 2012

/5/ Up Energy Group Inc: *Generic CDM-SSC-CPA-DD for PoA titled "UpEnergy Open Access Improved Cookstoves Program* in Latin America-*CPA No XXX"*, Version 1 dated 7 February 2012

/6/ Up Energy Group Inc: *CDM-SSC-CPA-DD for CPA titled* "UpEnergy Open Access Improved Cookstoves Program in Latin America-*CPA 001"*, Version 1 dated 7 February 2012

/7/ Up Energy Group Inc: 4. *SSC-POA Annex 3 Ex-Ante ER Calculation – Baseline Option 2 & 3*, dated 12 December 2012

/8/ Up Energy Group Inc: 6. *SSC-CPA Annex 5 Ex-Ante ER Calculation Option 2*, dated 12 December 2012

/9/ Up Energy Group Inc: 7.1 *SSC-CPA Annex 6 El Salvador fNRB Report*, dated 12 December 2012

/10/ Up Energy Group Inc: 7.2 *SSC-CPA Annex 6 El Salvador fNRB Calculations*, dated 12 December 2012

/11/ Up Energy Group Inc: 8 *Generic-SSC-CPA Annex 5 Ex-Ante ER Calculations Option 1* , dated 12 December 2012

/12/ Up Energy Group Inc: 9 *Generic-SSC-CPA Annex 5 Ex-Ante ER Calculations Option 2*, dated 12 December 2012

/13/ Up Energy Group Inc: 10 *Generic-SSC-CPA Annex 5 Ex-Ante ER Calculations Option 3*, dated 12 December 2012

/14/ Up Energy Group Inc: Sampling Size calculation tool-ICS-Ex-ante theoretical, dated 12 December 2012

/15/ Up Energy Group Inc: Miscellaneous Calculations, dated 12 December 2012

/16/ Up Energy Group Inc: Sampling size calculation tool – El Salvador baseline fuel consumption, dated 12 December 2012

3.1.2 Letters of approval

/17/ DNA of Mexico: *Letter of Approval*; 02 March 2012

/18/ DNA of El Salvador: *Letter of Approval;* 19 March 2012

/19/ DNA of Nicaragua: *Letter of Approval*; 06 March 2012

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

/20/ CDM Executive Board: *Validation and Verification Manual*, version 1.2

/21/ CDM Executive Board: *Baseline and monitoring methodology AMS-II.G "Energy efficiency measures in thermal editions of non-renewable biomass*", version 3

/22/ CDM Executive Board: *General Guidelines to SSC CDM methodologies*, version 17

/23/ CDM Executive Board: *Information on Additionality (Attachment A to Appendix B of 4/CMP.1 Annex II*), version 8

/24/ CDM Executive Board: *Attachment C to Appendix B Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories, General guidance on leakage in biomass project activities*, version 3

/25/ CDM Executive Board*: Procedures for registration of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities*, version 04.1

/26/ CDM Executive Board: *Guidelines on assessment of debundling for SSC project activities*, version 03

/27/ CDM Executive Board: *Non – binding practice examples to demonstrate Additionality for SSC project activity*, version 01

/28/ CDM Executive Board: *Standard for sampling and surveys for CDM project activities and programme of activities*, version 2.

/29/ CDM Executive Board: *Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities*, version 1.0

/30/ CDM Executive Board: *Guidelines for objective demonstration and assessment of barriers*, version 1.

/31/ CDM Executive Board: *Guidelines on the demonstration of additionality of small-scale project activities*, version 09.0

/32/ CDM Executive Board: *Standard for sampling and surveys for CDM project activities and programme of activities*", Version 03.0

/33/ CDM Executive Board: *Guidelines for sampling and surveys for CDM Project activities and programme of activities*, version 2.0

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

/34/ IPCC: 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

/35/ National Energy Board - CNE, Republic of El Salvador: National Energy Policy

/36/ Congress of the Republic of Guatemala: Decree Number 52-2003

/37/ Legal Standards of Nicaragua: Establishing national energy policy Decree No. 13-2004, 02 March, 2004

/38/ The National Assembly of the Republic of Nicaragua: Law for the Promotion of Renewable Electricity Generation with Biomass, Chapter I, Act No. 532, 13 April, 2005

/39/ The Congress of the United States Mexican Decree Law Of Energy Regulatory Commission, 28 November 2008

/40/ World Health Organization and United Nations Development Program: The Energy Access Situation in Developing Countries – A Review Focusing on the Least Developed Countries and Sub-Saharan Africa, November 2009

/41/ The World Bank: Household Cookstoves, Environment, Health and Climate Change – A New Look at an Old Problem, 2011

/42/ The World Bank: Doing Business – Measuring Business Regulations, Economy Ranking, Web 12 April, 2012

/43/ Stephanie Weinber: Trade and Environmental Database- ICE Case Studies, Case Number 22, Case name: El Salvador Civil War, May 1997

/44/ Theodore Panayotou, ReVista: Harvard Review of Latin America, The Environment in Latin America: An Interdisciplinary Approach, El Salvador Challenge: From Peace to Sustainable Development, Fall 1998,

/45/ Rodolfo Jimenez: Latin American Energy Organization (OLADE): Proyection support matrix for intergración actions and development of Central energE'tico, 2010 p.79

/46/ Up Energy Group, Inc: Declaration of ODA for Up Energy's Improved Cookstove Carbon Project, El Salvador

/47/ Inversiones Falcon: Declaration of ODA for Up Energy's Improved Cookstove Carbon Project, El Salvador, 14 March 2012/56/

/48/ Herbert Schneider: Department of Energy Sciences and the Central University Fluidic, "Characterization Firewood Consumption Resdiencial Sector in El Salvador", 2006

/49/ Anne Jeanette Clauber: The World Bank: Project Information Document Concept Stage, Report No. AB1233, Project Name: Land Administration II, 18 November 2004

/50/ Forestry Department, Food and Agriculture Organization of the United Nations: Evaluation of non-timber forest products, El Salvador, Web, April 2012, http://www.fao.org/docrep/007/ae159s/AE159S04.htm

/51/ Forestry Department, Food and Agriculture Organization of the United Nations: Global forest resources assessment 2010 country report, El Salvador, Rome, 2010 (FRA2010/061)

/52/ Food and Agriculture Organization of the United Nations: "El Salvador Forest Area, 1990-2009" FAOSTAT, Web. Jan 2012. http://faostat.fao.org/site/377/default.aspx#ancor

/53/ Gabriel Roberto Robles Valle, et al.: Forestry Department, Evaluation Food and Agriculture Organization of the United nations: Forest Resources Assessment munidales 2000: Evaluation of non-timber forest products in Central America, Rome 2000

/54/ Rufus Edwards and Omar Masera: Quantification of CO_2e savings from improved cookstoves in El Salvador

/55/ Certification Center of improved stoves, Zamorano: Technical evaluation model Ecocina, dated November 2011

/56/ Ministry of Environment and Natural Resources (MARN). Current Status of Protected Areas in El Salvador. I Mesoamerican Congress on Protected Areas, March, 2003.

/57/ Aprovecho Research Center: Advanced Studies in Appropriate Technology Laboratory MacCarty: Testing Results of the Ecocina Cooking Stove from El Salvador dated 5 March 2008

/58/ Forestry Department, Food and Agriculture organization of the United Nations: State of Biodiversity, Guatemala, Web, April 2012

/59/ David Kaimowitz: Center for International Forestry Research: Livestock and Deforestation Central America in the 1980s and 1990s: A Policy Perspective, 1996

/60/ Henk Alberts, Celia Moreira and Rosa Maria Perez: "Firewood substitution by kerosene stoves in rural and urban areas of Nicaragua, social acceptance, energy policies, greenhouse effect and financial implications" *Energy for Sustainable Development*, Vol 3, No 5, January 1997 .

/61/ Camille Antinori and David Barton Bray: "Community Forest Enterprises as Entrepreneurial Firms: Economic and Institutional Perspectives from Mexico," *World Development*, Vol 33, No 9, 2005

/62/ Jorge Higinio Maldonado: The Ohio State University: Relationships among Poverty Financial Services, Human Capital, Risk Coping, and Natural resources: Evidence from El Salvador and Bolivia, 2004

/63/ Ministry of Environment and Natural Resources (MARN), El Salvador, Legislation and Regulation, April 2012.

/64/ Ministry of Environment and Natural Resources (MARN): The Clean Development Mechanism in Guatemala, September 2011

/65/ The United Nations Program for Development Mexico: Climate Canio in Mexico: The Private Sector and Climate Change, April 2012

/66/ Ben Dana: Appropriate Infrastructure Development Group: Design Manual Rocket Box Cook Stove, November 2009

/67/ National Institute of Information Development: Survey Nicaraguan Demographic and Health 2006/07, Final Report

/68/ Kulsum Ahmed et al.: The World Bank: Direction Development, Environmental health and Traditional Fuel use in Guatemala, 2005

/69/ Victor M. Berrueta, Rufus D. Edwards, Omar R. Masera, "Energy performance of wood-burning cookstoves in Michoacan, Mexico" *Renewable Energy* Vol 33, 2008

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/71/ Food and Agriculture Organization of the United Nations, Forests and Climate Change Working Paper 6, Woodfuels and climate change mitigation, Case Studies from Brazil,

India and Mexico, Rome 2010

/72/ Todd M. Johnson, et al: The World Bank: Low Carbon Development for Mexico, Conference Edition, 2009

/73/ Karin Troncoso et al.: "Social Perceptions about a technological innovation for fuelwood cooking: Case study in rural Mexico" *Energy Policy*, Vol 35, 2007

/74/ Alberto Fabian, Ministry of Environment and Natural Resources, EIA Requirement, El Salvador, 29 September, 2011

/75/ Massiel Eunice Castillo Pichardo, Ministry of Environment and Natural Resources, EIA Requirement Nicaragua, 30 November 2011

/76/ Lucrecia Martin Chavez: Directorate General of climate change policies, EIA Requirement Mexico, 31 January 2012

/77/ Food and Agriculture Organization of the United Nations: "Mexico Forest Area, 1990-2009" FAOSTAT, Web. Feb 2012. http://faostat.fao.org/site/377/default.aspx#ancor

/78/ Food and Agriculture Organization of the United Nations: "Guatemala - Document Repository FAO" Web. April 2012. http://www.fao.org/docrep/007/j0605s/j0605s03.htm

/79/ Food and Agriculture Organization of the United Nations: "Guatemala Forest Area 2009" FAOSTAT, Web. Jan 2012. http://faostat.fao.org/site/377/default.aspx#ancor

/80/ Food and Agriculture Organization of the United Nations: "Guatemala Land Area 2009" FAOSTAT, Web. Jan 2012. http://faostat.fao.org/site/377/DesktopDefault.aspx?PageID=377#ancor

/81/ Food and Agriculture Organization of the United Nations: "Nicaragua Forest Area, 1990-2009" FAOSTAT, Web. Feb 2012. http://faostat.fao.org/site/377/DesktopDefault.aspx?PageID=377#ancor

/82/ A.1 Westoff, B. and D. Germann, 1995. A Documentation of Improved and Traditional Stoves in Africa, Asia and Latin America. http://www.gtz.de/de/dokumente/en-stove-images2-1995.pdf.

/83/ Energy Commission of El Salvador: National Policies related to energy including electricity, energy efficiency and improving technologies, 4 April 2011

/84/ Secretariat of Energy, Mexico: National Policies related to energy including electricity, energy efficiency and improving technologies, 12 December 2011

/85/ Nicaraguan Ministry of Energy and Mines: National Policies related to energy, 12 December 2011

/86/ Guatemala's Ministry of Energy: Country's Energy Information and Policies, September 2010 http://www.energyrecipes.org/reports/genericData/Latin%20America/061129%20RECIPES%20country%20info%20Guatemala.pdf

/90/ Jimenez, Rodolfo D. Report: Project supported by the array of actions to integrate and develop America's energy delivery. Latin American Energy Organization (OLADE). 2010. Pg 79

/87/ Troncoso, Karin et al. Social perceptions about a technological innovation for fuelwood cooking: Case study in rural Mexico. Energy Policy 35 (2007), pg. 2799 and 2805

/88/ The GNI per capita for Latin America is $7,735, and for individual countries as

follows: El Salvador $3,380, Guatemala $2,740, Nicaragua $1,110, and Mexico $8,890. Source: http://data.worldbank.org/region/LAC/

/89/ Jimenez, Rodolfo D. Report: Project support matrix for integration actions and entro america energy development. Latin American Energy Organization (OLADE). 2010. Pg 79.

The main changes between the version of the CDM-SSC-PoA-DD published for the 30 days stakeholder commenting period and the final version submitted for registration are:

- The eligibility criteria for the inclusion of the CPAs were revised compared to the PoA-DD, Generic CPA-DD and CPA-DD for the first CPA that was published, to include revised additionality criteria, avoid double counting and meet all the requirements of the *Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities* /29/,
- The procedure for determination of the baseline for future CPAs, including the sampling design plan and the required monitored parameters,
- The additionality demonstration was revised. The initial PoA-DD used investment barrier to demonstrate additionality, this was revised to include investment analysis, investment barrier using access to funds and prevailing practice barrier. This was then further revised to demonstrate additionality using the "Guidelines on the demonstration of additionality of small-scale project activities" (version 09) /31/,
- 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 across the host countries,
- The start date of the crediting period has been postponed to the date of registration of the project activity,
- Guatemala and Honduras were removed from the PoA, since the LoA was not received from the DNA of Guatemala and DNA of Honduras, respectively.

3.2 Follow-up Interviews with Programme Stakeholders

DNV conducted a site visit to El Salvador from 05 March 2012 to 09 March 2012. DNV conducted stakeholder interviews in San Salvador on 5 March 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.

Household (HH) visits were conducted on 6 March 2012 to 9 March 2012. DNV visited the following regions as part of the household visits. Francisco M departamento (Rural: Valle Angeles, Urban: Sabana Grande), Choluteca district (Rural and Urban: Marcovia community), Urban: Paraiso departamento (Urban: Danli, Rural: Jacaleapa). DNV visited a total of 50 households. The study used by the PP to obtain the baseline values is a study sponsored by El Salvadoran government and led by Professor Herbert Schneider at the Salvadorean Central University. The study has been conducted by the government independent of the PoA implementation. The total sample size used by the study that was used as the baseline study for this PoA is 637 HHs (HHs that use firewood for cooking)/48/.

DNV has further conducted a survey to cross verify the data results and has obtained consistent values and information.

	Date	Name	Organization	Topic
/90/	2012-03-05	Matt Evans (Managing Director) Louis Huttinger (Program Associate) Emily Smith (Program Manager) Kai Carter (Program Associate)	Impact Carbon	Opening Meeting – Description of Validation process, site visit and review of agenda
/91/	2012-03-06	Dr Herbert Schneider	Department of Energy Sciences and the Central University El Salvador	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 Survey The sampling methodology used to identify the Households Representativeness of the sample Size
/92/	2012-03-06	Gustavo Pena	Inversiones Falcon factory	Investment Technology transfer Distribution barriers Demonstration of stove Survey of manufacturing facility Operation, training, distribution, replacement, record keeping, tracking, coordination with PP.
/93/	2012-03-06	José Francisco Rodríguez García & Frank Sullyan Cardoza	Ministry of Environment and Natural Resource	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
/94/	2012-03-07	Manuel Cerrato, Juan José García, Raúl González and Óscar Flores.	Ministry of Energy	a) Similar projects: Whether there are no similar projects implemented or promoted by Energy Ministry in El Salvador. b) Regulation: Whether there are regulations for cookstove projects and whether there are plans for developing regulations. c) NRB information available: Studies/data sources relevant for estimating NRB. d) Subsidy to LPG: Availability/implementation of energy subsidies e) Use of fuel: Common energy sources in different regions of the country. f) Studies of energy sources: Available studies/data sources documenting energy sources.
/95/	2012-03-07 to 2012-03-09	Household Visits	San Salvador (Urban), Cantón Aleman (Urban and Rural), Sonsonate (Urban and Rural)	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 fuel? % of income spent on fuel? Does fuel source vary by income/location? How frequently do you go to gather/buy wood fuel?

How much wood fuel do you gather each time? Do you dry the wood fuel?

Would you dispose your old stove, once you get a new one? How would you dispose it?

Note that these questions are the similar to the questions that were raised by the surveyor/48/.

3.3 Resolution of outstanding issues

The objective of this phase of the validation was to resolve any outstanding issues which needed be clarified prior to DNV's positive conclusion on the PoA. In order to ensure transparency a validation protocol was customised for the project. 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 CDM 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 programme of activity "UpEnergy Open Access Improved Cookstoves Program in Latin America" is enclosed in Appendix A to this report.

Table 2 of the validation protocol documents the findings of the desk review of the project design documentation and follow-up interviews with project stakeholders. Any findings raised in Table 2 are listed in Table 3 of the protocol, and changes to the description of the project design as a result of these findings will be addressed in Table 3. Table 2 thus may not reflect all aspects of the project as described in the final PDD 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 project activity to achieve real, measurable additional emission reductions;

(b) The 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 project implementation that require review during the first verification of the PoA. FARs shall not relate to the CDM requirements for registration.

Validation Protocol Table 1: Mandatory Requirements for CDM Programme of Activities		
Requirement	***Reference***	***Conclusion***
The requirements the project must meet.	*Gives reference to the legislation or agreement where the requirement is found.*	*This is either acceptable based on evidence provided (**OK**), a Corrective Action Request (**CAR**) due to non-compliance with stated requirements or a request for Clarification (**CL**) where further clarifications are needed.*

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 CDM-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 c**orrective 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 project 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

				Type of involvement							
Role	***Last Name***	***First Name***	***Country***	Desk review	Site visit / Interviews	Reporting	Supervision of work	Technical review	TA 3.2 competence	TA 14.1 competence	Financial expertise
Team leader (Validator) from 9 June 2012	Bachamanda	Shruthi	USA	✓	✓	✓	✓				
Team Leader (Validator) until 8 June 2012	Sandoval	Gonzalo	USA	✓	✓	✓			✓		
Expert	Kapambwe	Misheck	Australia	✓						✓	
Expert	Burns	Scott	USA	✓							✓
Technical reviewer	Yang	Weidong	USA					✓			
Technical reviewer	Ramachandran	Ramesh	India					✓			
Person assisting technical review with TA	Alexander	Osadchiev	Russia					✓	✓		

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

4 VALIDATION FINDINGS

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

The final validation findings relate to the programme design as documented and described in the PoA design documentation dated 12 December 2012.

4.1 Participation requirements

The project participant and CME is Up Energy Group Inc. The host Parties of the PoA are Mexico, El Salvador and Nicaragua, and these host Parties meet all relevant participation requirements.

The host Party Mexico meets the requirements to participate in the CDM and has provided written approval of voluntary participation in the program. Mexico fulfils the participation requirements by having ratified the Kyoto Protocol on 7 September 2000 and having established Interministerial Commission on Climate Change (ICCC) as its DNA.

A letter of approval (LoA) /17/ was issued by DNA of Mexico on 02 March 2012, authorizing Up Energy Group Inc. as project participant and confirming that the program assists in achieving sustainable development.

The host Party El Salvador meets the requirements to participate in the CDM and has provided written approval of voluntary participation in the program. El Salvador fulfils the participation requirements by having ratified the Kyoto Protocol on 17 September 1998 and having established the Ministry of Environment and Natural Resources (MARN) as its DNA.

A letter of approval (LoA) /18/ was issued by DNA of El Salvador on 19 March 2012, authorizing Up Energy Group Inc. as project participant and confirming that the program assists in achieving sustainable development.

The host Party Nicaragua meets the requirements to participate in the CDM and has provided written approval of voluntary participation in the program. Nicaragua fulfils the participation requirements by having ratified the Kyoto Protocol on 18 November 1999 and having established the Ministry of Environmental and Natural Resources of Nicaragua (MARENA) as its DNA.

A letter of approval (LoA) /19/ was issued by DNA of Nicaragua on 06 March 2012, authorizing Up Energy Group Inc. as project participant and confirming that the project assists in achieving sustainable development

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 45- 48 of the VVM /20/.

No Annex I Party has yet been identified.

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 the host countries El Salvador, Nicaragua and Mexico/46//47/.

4.2 Programme design

The PoA "UpEnergy Open Access Improved Cookstoves Program in Latin America" managed by Up Energy Group involves the promotion, distribution and sale of fuel-efficient improved cooking stoves (ICS) in Mexico, El Salvador and Nicaragua. The ICS disseminated through this programme will replace the prevailing inefficient traditional firewood cookstoves with higher efficiency models of domestic and institutional (e.g. schools and restaurants). ICS which reduce heat loss and improve heat transfer and/or combustion efficiency. The ICS models to be implemented are fuel efficient, resulting in a decrease in fuel use while reducing air pollution and lowering greenhouse gas emissions.

The PoA is planned to be implemented within the national boundaries of Mexico, El Salvador and Nicaragua. The physical boundary has been described in the PoA-DD/1/. The SSC-PoA will be coordinated by UpEnergy Group Inc.

The CME will collect, store and maintain master records for each CPA and to avoid double counting. Alphanumeric serial numbers allocated to each ICS under the PoA and imprinted on the stove allow unique identification and tracking of the ICS. The serial number is noted in the Sales Database. Based on serial numbers, an ICS can only count in one CPA. End-user information collected on paper or in electronic form by partner organizations (PO) is transferred to an electronic database which is updated regularly. The sales record carries all the sale information including the traditional stove type and fuel used prior to ICS installation. The electronic files of installation records are duplicated by paper documents received from the end-users. The CME will screen and cross-check each PO's records in order to confirm that the installation record's authenticity.

In El Salvador, the geographical boundary of the first CPA, the most typically used conventional stove is an open fire. The first CPA proposes to distribute 40,000 improved cook stoves that will have a total energy saving of less than 180 GWh/year (small scale limit) /8/. The first SSC-CPA will replace only conventional firewood stoves of the types "traditional" with higher efficiency ICS models of the type "Ecocina" at 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%. The ICS that will be introduced in future CPAs will at a minimum have characteristics that improve the efficiency of combustion and thermal transfer compared with a traditional stove.

The length of PoA is 28 years as per the para 6(h), EB guidance on PoA/25/. The start date of crediting period for the PoA is the same date as that of the start date of crediting period for the first CPA/3/.

4.3 Criteria for inclusion of CDM Programme Activities

The eligibility criteria for the CPA inclusion are listed below. The eligibility criteria have been defined in line with the requirement of the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities" /29/.

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

	Eligibility Criteria		Accepted Mean of Proof / Evidence Document (to be checked at CPA inclusion)
#	Category	Description	
1	Boundary and location of the CPA	The CPA is located within one of the Host Countries. Please note that not all ICS installations may have been deployed at 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.	Location and boundary is described in the specific CPA-DD (section A.4.1.2)/3/.
2	No Double counting of ICS	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.	The unique numbering or identification regime is included in the specific CPA-DD and consistent with the PoA-DD. Document: First Sales Receipt in Total Sales Record (first CPA of PoA) and the logo and the unique id on the stove itself.
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.	A statement is included in the CPA-DD that the specific CPA will not be part of another single CDM project activity or CPA under another PoA Evidence: Check UNFCCC website with date of access. In the case that other ICS activities are implementing the same ICS model as per the current CPA, the CME will provide the database for all ICS of that model implemented in any CDM activity. The CME will also facilitate as much information as possible on the distribution of those ICS to the extent possible.
4	Awareness and agreement of those operating a	Contractual provisions to ensure that those operating the CPA are aware and have agreed that their	Declaration from CPA operators as part of their contract with the CME, stating that they are aware

	CPA on PoA subscription	activity is being subscribed to the PoA.	and have agreed that their activity is being subscribed to the PoA
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 whether or not there is public funding..	A statement is included in the CPA-DD section A.4.5 informing whether the specific CPA is funded with public funding. If Annex I country funding is used, then the following documents will be provided by each funding party (the donor/s): Signed statement by the Annex I country donor party confirming that funding from Annex I country is not a deviation of ODA funding.
6	CPA Start Date	CPA start date shall not be before PoA validation start date (i.e. not prior to webhosting for global stakeholder consultation which was on 14/02/2012).	Starting date as stated in the CPA-DD. Document: Each CPA shall provide verifiable evidence of the CPA start date as demonstrated by: First ICS Sale Receipt (first CPA of PoA)
7	CPA Crediting Period	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; (ii) The date when the CPA was included in accordance with the Project cycle procedure;	A statement is included in the CPA-DD that the crediting period starting date is the date of CPA inclusion into registered PoA or any date thereafter and that the crediting period will not exceed the PoA end date.
8	Approval of CPA by CME	CME approves each CPA to be included into its registered PoA.	Statement of CME giving approval for the CPA to be included into its registered PoA.

			A.2 Document: CPA-DD section A.3.
9	Technological requirements	The CPA consists of replacement of conventional firewood cookstoves for 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. 3.	Specification of conventional cookstoves 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: Product data sheets or specification or product information sheets from manufacturer.
10	Efficiency of the ICS	The ICS disseminated under the CPA 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.	Document: Efficiency specification from manufacturer, certificate from a national standards body, or independent lab testing facility.
11	Technical requirement	Only new ICS will be disseminated.	Specification of stove type and compliance with the technological requirements of AMS II G will be described in the specific CPA-DD. Document: 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.
12	Non-renewability of biomass	In accordance with methodology AMS-II.G: Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods.	A.3 Document: PoA-DD section E.2.
13	De-bundling	In accordance with paragraph 9 of Annex 32 to the EB47 Report, "Guidance for determining the occurrence of de-bundling under a	Document: 1. Manufacturer specification. 2. CPA-DD section A.4.6 to

		Programme of Activities (PoA)", if each independent subsystem or 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.	show energy saved by the ICS is less than 1.8GWh/year.
14	SSC Limit for CPAs	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.	The estimated maximum number of ICSs is to be defined in the specific CPA-DD Annex 5. The number of ICS in operation per year will not exceed the "stove installation cap" established in the specific CPA-DD Annex 5.
15	Additionality	Additionality is demonstrated using EB68 Annex 27 "Additionality Guidelines of Small-Scale Projects" 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: 1) Project size does not exceed small-scale CDM thresholds: CPA-DD Annex 5 establishes the stove installation cap. This requirement is also checked through eligibility criteria 14 named "SSC Limit for CPA". And, 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 section A.4 to show description of the technology and section A.2 to specify target 3) Where the size of each unit is no larger than 5% of the small-

			scale CDM thresholds: CPA-DD section A.4.6 to show energy saved by the ICS is less than (180GWh/year * 0.05 =) 9GWh/year.
16	Applicability of methodology	Each CPA will ensure compliance with the applicability of the methodology and its requirements. Conditions of the applicability of the methodology and its requirements is demonstrated at the PoA level at section E.2 through the assessment of "justification of the choice of the methodology and why it is applicable to the CPAs".	Document: The applicability of the methodology is established in section E.2 of the PoA-DD. The CPA needs to meet the eligibility criteria (9) and (12) to meet the applicability criteria of the methodology.
17	Target groups	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: 1. Residential biomass users 2. Commercial biomass users 3. Institutional biomass users Assumptions made at the PoA level for any scope regarding these target groups are applicable to subsequent CPAs (i.e. baseline studies, ER calculation, monitoring plan).	The selected target groups included in each CPA are distinguished in each CPA.
18	Distribution Mechanisms	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.	The selected distribution mechanisms included in each CPA are distinguished in each CPA.
19	Local Stakeholder Consultation	The Local Stakeholder Consultation is established at the CPA level[1] as described in section D of the PoA-DD.	The first CPA in a given country shall establish the local stakeholder consultation for the entire country or target regions.

			Results of stakeholder consultations will be discussed in SSC-CPA-DD section D. When a stakeholder consultation is to be undertaken the following requirements will be satisfied: The stakeholder consultation meets the requirements of the DNA of the Host country within the CPA boundary established in SSC-PoA-DD section D1. The stakeholder consultation meets the requirements of the CDM listed in SSC-POA-DD section D1. The stakeholder consultation meets the requirements of the Gold Standard listed in SSC-PoA-DD section D1.
20	Environmental Impact Assessment	The EIA is established at the PoA level for each host country as described in section C of the PoA-DD[2]. No further actions are needed at the CPA level to satisfy the eligibility criteria.	Document: The requirements for evaluating an environmental impact assessment are provided in section C of the PoA-DD.
21	Sampling Requirements	Sampling of appliances within the CPA must meet the requirements of AMS-II.G v.3 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	Specification of the sampling methods applied and compliance with the sampling requirements will be described in the specific CPA-DD for the rest of the CPAs.

		baselines in Annex 3 of the PoA-DD and for monitoring tasks in section E.7.2.	
22	Baseline parameters to be established at CPA level	A.4 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: a) B_{old}: as per the approach outlined in PoA-DD Section E.6.2, applying Option (a) of paragraph 7 of AMS-II.G v.3; b) SC_{old} and/or n_{old} : a. When Option 2 of paragraph 6 of AMS-II.G v.3 applies n_{old}: as per the approach outlined in E.6.2. b. When Option 3 of paragraph 6 of AMS-II.G v.3 applies SC_{old}: as per the approach outlined in E.6.2. c) NRB for Nicaragua and Mexico.	CPA-DD section B.5.1 and Annex 3 shall outline the approach and provide supporting documents including copies of any official government reports, statistics or literature sources used for determining parameters. If local surveys or representative sampling are used then copies of questionnaires, sampling design etc shall be provided.

DNV confirms that the minimum eligibility criteria requirements from EB 63, Annex 3, have been included in the eligibility criteria for the PoA.

4.4 Operational, management and verification plan

The programme consists of the distribution of improved cook stoves across Mexico, El Salvador and Nicaragua. Up Energy Group will coordinate the SSC-PoA and will support the project operators in implementing the CDM Programme of Activities (CPAs) in the Host Countries while acting as the focal point for all CDM related activities.

Operational and management activities	Record Name	Record Handling	Responsible
Training – rules and	Training material	Hard copy	CME

requirements, data transfer, distribution and data collection	(photos, emails, participation sheets, etc)		
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 the CME has identified all the operational and management activities, including data transfer, record handling, storage and internal audit. The CME has identified the responsible parties for each activity.

1) The CME 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 every ICS within a specific CPA is not double counted across the PoA

Points 1 and 2 will be enforced through the CME and PoA logo and unique serial 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.

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 the de-bundling for SSC Project Activities" /42/ 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 checks i.e. considered as not being a de-bundled component of a large scale activity.' The ICS distributed under this PoA has energy savings < 1.8 Gwh/year.
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 agreements will evidence the

activities that the specific entities are responsible that they are aware of and have agreed that their activity is being subscribed to the PoA.

4.5 Baseline identification

The approved baseline methodology has been correctly applied to identify a complete list of realistic and credible baseline scenarios, and the identified baseline scenario most reasonably represents what would occur in the absence of the proposed CDM project activity.

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 establishing the baseline scenario and correctly quoted and interpreted in the PoA-SSC-DD. Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable. Relevant national and/or sectoral policies and circumstances are considered and listed in the PoA-SSC-DD.

The PoA and consequently each CPA applies the simplified baseline methodology for selected small-scale CDM project activities, AMS-II.G, "Energy efficiency measures in thermal editions of non-renewable biomass," version 3.0 /21/.

The PoA meets the applicability criteria of AMS-II.G, version 3.0 /21/,

The project involves the efficiency improvements in the thermal applications of non-renewable biomass in the Host Countries of Mexico, El Salvador, and Nicaragua/1/. All project technology models implemented will provide efficiency improvement in the thermal application of the non-renewable biomass. This will be ensured by recording the baseline stove type and fuel used prior to the installation of ICS by all ICS purchases. All ICS distributed to households that solely use fossil-fuel based baseline stoves (such as kerosene and LPG) shall be excluded from the emission reduction calculations. However, ICS distributed to households that utilized both a biomass based stove and a fossil fuel based stove will be considered in the baseline emission reduction calculations. The households will be considered if the buyer plans to replace only the wood fuel stove with the biomass ICS. At the time of the sale of the ICS, the PP will request the buyer to record the stove and fuel he will replace with the new ICS. The PP will record the fuel used prior to ICS installation and baseline stove type of all ICS purchasers. Each ICS recorded showing the fuel replaced to be anything other than biomass will be discounted from the records and not to count toward the Total Sales Record. This sales record will be made available to the DOE at the time of verification. This is in accordance with the approved methodology which is applicable only to users which were previously using biomass fuels/1/.

1. In first CPA in El Salvador, traditional firewood stoves will be replaced with the ICS "Ecocina" model type. The report "Caracterización del Consumo de Leña en El Sector Residencial en El Salvador /48/" provides an overview of the baseline scenario. The study shows that wood continues to dominate household cooking practices in El Salvador with 60% of rural households and 38% of urban household using wood to cook /3/. The project activity through the distribution of improved cook stoves will increase the efficiency of the thermal applications of non-renewable biomass/1/.

2. The CME has demonstrated using literature from the Food and Agriculture Organization of the United Nations (FAO), the World Bank, as well as other region and country specific studies released by other institutions, as referenced below, that

non-renewable biomass has been used in the host countries, Mexico, El Salvador, and Nicaragua since 31 December 1989.

El Salvador

With regards to the first CPA, based on literature from FAO, the CME has provided evidence that between the years 1990 and 2010, El Salvador has lost an average of 4,500 ha (1.19%) of forested land and 85,600 ha (23%) of its forest cover /51//52/. El Salvador has lost approximately 85% of its forest cover since the 1960s which results in part from fuelwood consumption which remains high /56/. According to the report, "Caracterización del Consumo de Leña en El Sector Residencial en El Salvador," households are responsible for approximately 90% of the consumption of fuelwood /48/. There are multiple types of traditional, wood-burning stoves used in El Salvadoran households. The most typically used is a simple open fire stove made from clay, mud or dirt. Traditional closed stoves are made from mud, bricks or clay and designed in a shape of a U /48//82/ .

Mexico

Deforestation rates in Mexico are cited at 354,000 ha per year between 1990 and 2009 /77/. A similar rate of deforestation, 365,000 ha per year, was observed between 1980 and 1990 based on literature from the Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT) of Mexico./70/. A study released in 2008 found that 27 million people use wood stoves in rural areas, accounting for 80% of fuel consumption in rural households /69/. Among the common traditional stoves are the three-stone fire and U-type stove /82/.

Nicaragua

Deforestation has occurred at a rate of 1.55% per year between 1990 and 2009 which has resulted in a loss of 29.5% of forest cover /81/. In 1997, the rate of deforestation was estimated between 1.5% and 2% per year /60/. In rural regions, 91.4% of the population uses wood as source of fuel and 30.9% of the urban population uses fire wood /67/. The traditional stove used by wood fuel users in Nicaragua is the traditional 3-stone fire, there is also the U-Stove built with clay or cement and the Lorena stove /82/.

Therefore, the applicability conditions of AMS-II.G, version 3 /21/, are satisfied and met completely.

The baseline scenario has been identified in accordance with AMS-II.G, version 3 /21/. In the absence of the PoA, the local households in the host countries, El Salvador, Mexico, and Nicaragua would continue to use traditional inefficient cook stoves with non-renewable biomass as fuel. Thus, 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. A value of 81.6 tCO_2/TJ is used as the emission factor for the substitution of non-renewable woody biomass by similar consumers as is specified in the methodology /21/.

DNV has confirmed that the baseline determination has been conducted in line with the methodology.

4.6 Project boundary

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 3 /21/. Thus, the programme system boundary is the country of El Salvador, Nicaragua and Mexico 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 the project boundary are:

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

	GHGs involved	*Description*
Baseline emissions	CO_2	Emissions from the use of fossil fuels for meeting similar thermal energy needs.
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 3/21/.

4.7 Additionality

4.7.1 Additionality of the programme

As per the guidance from EB 47, Annex 29, the additionality demonstration for the PoA includes demonstrating the following points 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.

DNV has reviewed the national policies related to energy, focus primarily on electricity and list increasing energy efficiency and improving technologies as goals listed by the departments responsible for energy in El Salvador /83/, Mexico /84/ and Nicaragua/85/. There is no reference of ICS and there is no mandatory legal requirement in El Salvador, Nicaragua, and Mexico to replace traditional inefficient three stone cook stoves with improved cook stoves. Up Energy is a private entity and has no legal requirement to promote and sell improved cook stoves in El Salvador, Nicaragua and Mexico. In accordance with EB 68

Annex 27, paragraph 2, CPAs do not require the demonstration of barriers 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. CPAs within the PoA shall demonstrate that 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) and where the size of each unit is no larger than 5% of the small-scale CDM Thresholds.

Thus DNV can confirm that the proposed project is a voluntary measure and would not be implemented without CDM revenue.

The points (ii) and (iii) are not applicable since there are no mandatory policy/regulations in place in the host countries.

- 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 68, Annex 27 /31/ and has been found to be appropriate by DNV.

4.7.2 Additionality of typical CPA

The PP has demonstrated additionality for a typical CPA in lines with the requirements of EB 68, Annex 27 "Guidelines on the demonstration of additionality of small-scale project activities"/31/.

As per the guideline from EB 68, Annex 27/31/, 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.

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 0.02 GWh/stove/year, which is significantly lower than the cap of 5% of the small-scale threshold (9 GWh/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 (#15).

The Guidelines on the demonstration of additionality of small-scale project activities /31/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.

4.7.3 Approach for demonstrating additionality of CPAs

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 4.3.

4.8 Monitoring plan

The programme applies the approved monitoring methodology AMS-II.G, version 3 "Energy efficiency measures in thermal editions of non-renewable biomass" /21/. Details of the data collection and frequency of data recording and associated formats are described and observed to be adequate.

The responsibilities and authorities for project management, procedures for monitoring and reporting, and QA/QC procedures have been systematically established and formalized. Data will be saved both electronically and on paper and archived until 2 years after the end of the crediting period of each CPA or the last issuance of CERs of the project activity /1/.

The project monitoring plan is in compliance with the monitoring methodology AMS-II.G, version 3 "Energy efficiency measures in thermal editions of non-renewable biomass" /21/.

The monitoring is complete and suitable for the project activity and DNV considers the project participants able to implement the monitoring plan.

4.8.1 Methodological choices and equations to be used for calculation of emission reductions of a CPA

There are three baseline scenarios identified at the PoA level as described below. End-users will be categorized into one of the following scenarios based on the characteristic of their fuel consumption patterns: /1/

- Baseline scenario 1: "Residential biomass users" which consists of people using biomass for household for residential purposes.
- Baseline scenario 2: "Commercial biomass users" which consists of people using biomass for commercial purposes.
- Baseline scenario 3: "Institutional biomass users" which consists of people using biomass for institutional purposes, excluding industrial use.

B_{old} for commercial and institutional users will be independently determined at the time of first inclusion of a CPA. At the time that the first CPA including commercial or institutional stoves, a series of surveys and/or field/lab studies will be undertaken to determine values for the baseline scenario. B_{old} will be determined using AMS-II.G options. Details of actual methods and procedures applied to determine B_{old} and assumptions used to calculate baseline fuel consumption along with results associate with surveys and testing, will be provided with the first CPA using this baseline and will be valid for the subsequent CPAs using the same baseline unless new national or regional data is established /21/ /1/. The SSC-CPAs will calculate emission reductions from each of the target groups through application of the following equations:

$$ERy = \Sigma (B_{y,savings} * N_y * U_y) * (f_{NRB,y} * NCV_{biomass} * EF_{projected_fossilfuel})$$ **Equation (1)**

Where:

ERy	Emission reduction during the period y in tCO_2e
$B_{y,savings}$	Quantity of woody biomass that is saved in tonnes per appliance. 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 period y that can be established as non-renewable biomass
$NCV_{biomass}$	Net calorific value of the fuel that is substituted or reduced (IPCC default for wood fuel, 0.0156 TJ/tonne)
$EF_{projected_fossilfuel}$	Emission factor for the substitution of non-renewable woody biomass by similar consumers. Use a value of $81.6tCO_2/TJ$
N_y	Number of appliances of the type being deployed during period y as part of the SSC-CPA
U_y	Average usage rate (as opposite to drop-off) of appliances of type being deployed during period y as part of the SSC-CPA

The programme proposes to distribute stoves for residential purposes, stoves for commercial purposes and stoves for institutions. AMS-II.G version 3 provides three options to calculate $B_{y,savings}$ for future CPA inclusions. $B_{y,savings}$ will be estimated separately through:

When using AMS-II.G, version 03, Option 1:

$$B_{y,savings} = (B_{old} * L) - B_{y,new}$$ **Equation (2)**

Where:

B_{old}	*Quantity of woody biomass used in the absence of the project activity in tonnes per appliance*
$B_{y,new}$	*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)>*
L	*Leakage adjustment factor*

When using AMS-II.G, version 03, Option 2:

$$B_{y,savings} = [(B_{old} - \mu_{old}) * L * [1-\eta_{old}/\eta_{new}]$$ **Equation (3)**

B_{old}	Quantity of biomass used in the absence of the project activity in tonnes per year
μ_{old}	Quantity of woody biomass for the continued use of old stoves per household
η_{old}	1. Efficiency of the system being replaced, measure using representative sampling methods or based on referenced literature values (fraction), use weighted average values if more than one type of system is being replaced 2. 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 chimney; for other types of systems a default value of 0.2 may be optionally used
η_{new}	Efficiency of the system being deployed as part of the project activity (fraction), as determined using the Water Boiling Test (WBT) protocol. Use weighted average values if more than one type of system is being introduced by the project activity.
L	Leak adjustment factor (fraction)

When using AMS-II.G, version 03, Option 3:

$$B_{y,savings} = (B_{old} - \mu_{old}) * L * (1-SC_{new}/SC_{old})$$ **Equation (4)**

Where:

B_{old}	Quantity of biomass used in the absence of the project activity in tonnes per year
μ_{old}	Quantity of woody biomass for the continued use of old stoves per household
SC_{old}	Specific fuel consumption or fuel consumption rate of the baseline system/s i.e. fuel consumption per quantity of item/s processed (e.g. food cooked) or fuel consumption per hour, respectively. Use weighted average values if more than one type of system is being replaced

SC_{new}	Specific fuel consumption or the fuel consumption rate of the system/s deployed as part of the project i.e. fuel consumption per quantity of item/s processed (e.g. food cooked) or fuel consumption per hour respectively. Use weighted average values if more than one type of system is being introduced by the project activity.
L	Leak adjustment factor (fraction)

Generalities

B_{old} is calculated as (option A per AMS-II.G, version 03) the product of the number of systems multiplied by the estimated average annual consumption of biomass per appliance (tonnes/year). This can be derived from historical data or a survey of local usage.

To account for leakages (L) as per AMS-II.G, version 03, B_{old} is multiplied by a net to gross adjustment factor of 0.95, in which case surveys are not required.

$B_{y,savings}$ may be determined by any of the 3 options listed above which lead to the involvement of specific field and/or lab test.

Monitoring and discounts

- Continued use of the baseline technology – the use of the traditional stoves in parallel with the ICC will be monitored through surveys. The fuel consumed in the traditional stoves will be discounted from B_{old}.
  - Option 1- subtracting B_{new} from B_{old}
  - Option 2 and 3 – subtracting μ_{old} from B_{old}
- Replacement of fuels other than biomass fuel: The PP will record the type of fuel used in the households prior to the sale of the ICS. Only, stoves using biomass will be included in this project activity.

4.8.2 Parameters determined ex-ante

The following parameters are determined ex-ante. The below ex-ante values are determined for the first CPA "UpEnergy Open Access Improved Cookstove Program in Latin America – CPA No 001" and the procedure for determining the ex-ante values for the future PoAs have been described below.

The parameters that have been established for the "UpEnergy Open Access Improved Cookstove Program in Latin America – CPA No 001" cover the geographic boundary of the CPA 001, which includes the Host Country El Salvador. This includes the baseline survey that was conducted for El Salvador to establish the baseline wood consumption per appliance B_{old} and demonstration of the fraction of NRB.

Many of the parameters will be 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 3/21/.

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

Sampling methodology: Multi-stage sampling will be used to select samples from the target population. Optionally, other sampling approaches may be used in accordance with EB 69 Annex 05 Guideline for Sampling and Surveys for CDM Project Activities and Programme of Activities, when sampling techniques or statistical analysis necessitates it. Such as, simple random, stratified random, systematic and cluster as defined in this CPA for each parameter.

Sample size calculation: The sample size will be chosen in accordance with the precision requirement of the methodology AMS-II.G, version 3. The precision requirement is 90/10 (for annual inspection) or 95/5 (for biennial inspection). 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.

The sampling size will vary depending upon the sampling methodology used in the CPA. Using the multistage sampling methodology, the sample size will be calculated as given below:

$$c \geq \frac{\left(\frac{SD_3}{Clustermean}\right)^2 \times \left(\frac{M}{M-1}\right) + \left(\frac{1}{u}\right) \times \left(\frac{SD_w}{Overallmean}\right)^2 \left(\frac{\bar{N}-u}{\bar{N}-1}\right)}{\left(\frac{0.1}{1.645}\right)^2 + \frac{1}{M-1}\left(\frac{SD_B}{Clustermean}\right)^2}$$

Where:

Where:

- (c) Minimum required number of clusters to be sampled.
- Confidence:
  - 90% = 1.645 (as indicated in the formula above)
  - 95% = 1.96 (1.645 in formula will be replaced)
- Precision:
  - 10% = 0.1 (as indicated in the formula above)
  - 5% = 0.05 (0.1 in formula will be replaced)
- (M) Total number of clusters (i.e. villages) = TBD from project database
- (N) Average number of units (HH) per a cluster = TBD from project database
- (u) Number of units that have been pre-specified per a cluster = TBD according to M and N.
- (Overallmean) Mean per unit from all clusters in the sample =

$$\frac{(\Sigma\ Mean\ per\ unit\ in\ a\ cluster)}{Total\ number\ of\ units\ in\ sample}$$

- (Clustermean) Mean for all units (in other words, per cluster) from all clusters in the sample =

$$\frac{(\Sigma\ Mean\ per\ cluster\ in\ the\ sample)}{Total\ number\ of\ clusters\ in\ sample}$$

- (SD_B) Standard deviation between clusters =

$$SD_B^{\ 2} = \frac{\sum_{i=1}^{n}(y_i - \bar{y})^2}{n-1}$$

Therefore: $SD_B = \sqrt{(SD_B)^2}$

Where:

  - y = Total for the units sampled per cluster (TBD from the field, and according to N)
  - n = Number of clusters (TBD from the field, and according to M)

- (SD_w) Average within clusters standard deviation =

$$\sqrt{\frac{\Sigma\ (Number\ of\ units\ in\ cluster * (St\ Dev\ between\ units\ in\ cluster)^2)}{Total\ number\ of\ units\ accross\ all\ clusters}}$$

Sample size is determined for Proportional Values using:

$$c \geq \frac{\frac{SD_B^2}{\bar{p}^2} \times \frac{M}{M-1} + \frac{1}{\bar{u}} \times \frac{SD_w^2}{\bar{p}^2} \times \frac{(\bar{N} - \bar{u})}{(\bar{N} - 1)}}{\frac{0.1^2}{1.96^2} + \frac{1}{M-1}\frac{SD_B^2}{\bar{p}^2}}$$

Where:

- (c) Minimum required number of clusters to be sampled.
- Confidence:
  - 90% = 1.645 (as indicated in the formula above)
  - 95% = 1.96 (1.645 in formula will be replaced)
- Precision:
  - 10% = 0.1 (as indicated in the formula above)
  - 5% = 0.05 (0.1 in formula will be replaced)

  Precision of 10 percent i.e. ±10% in this standard shall be interpreted as a proportion can describe either of the two possible scenarios of the success rate or the failure rate – for example (i) cook stove still operational or (ii) cook stove no longer operational. Project proponents may use the larger of the two proportions in the sample size calculation, that is p or (1-p), in any of the monitoring periods during the crediting period without having to revise the monitoring plan. The check on meeting the reliability requirement should be based on the larger of the two proportions.

- (M) Total number of clusters (i.e. villages) = TBD from the project database
- (N) Average number of units (HH) per a cluster = TBD from the project database

- (u) Number of units that have been pre-specified per a cluster = TBD according to M and N.
- (p) Mean for all units (in other words, per cluster) from all clusters in the sample =

$$\frac{(\Sigma\ Mean\ per\ cluster\ in\ the\ sample)}{Total\ number\ of\ clusters\ in\ sample}$$

- (SD_B) Standard deviation between clusters =

$$SD_B{}^2 = \frac{\sum_{i-1}^{n}(p_i - \bar{p})^2}{n-1}$$

Therefore: $SD_B = \sqrt{(SD_B)^2}$

Where:

- p = Mean for each unit sampled per cluster (calculated above)
- n = Number of clusters (TBD from the field, and according to M)

- (SD_w) Average within clusters standard deviation =

$$\sqrt{\frac{\sum\ (Variance\ within\ each\ clsuter)}{Number\ clusters}}$$

Standard for Option 1, 2 and 3	
B_{old} – Non-institutional residential stoves	Description: The baseline fuel consumption per appliance for commercial and institutional stoves will be determined using survey. The sampling design for this parameter has been described as follows:
B_{old}- Commercial	*The data can be sourced from historic data or surveys. In case of surveys, the survey design is as given below:*
B_{old} – Institutional	*Target population:* Commercial biomass users and/or institutional biomass users in El Salvador *Objective:* To establish the quantity of woody biomass used in the absence of the project activity in tonnes for each target population. *Sampling Method and sample size calculation as described above.* B_{old} has been established for Residential stoves in El Salvador. This has been used in CPA-001 and can be used for future CPAs distributing ICS in residential households in El Salvador. B_{old} (El Salvador) – 3.58 tonnes/HH/year - Residential stoves (Determination method described after the table)
$f_{NRB,y}$	Fraction of non-renewable biomass saved by the project activity in year y

	that has been established as non-renewable biomass El Salvador – 0.96 (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 3
L_y	Leakage factor in year '*y*' – 0.95 default factor – AMS-II.G, version 3
Option 2	
η_{old} – Non-institutional residential η_{old} – Commerical η_{old} – Institutional	The efficiency of the baseline stoves/stoves being replaced. The CPAs have the following options: 1) The use of default values 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 2) Referenced literature (fraction) 3) Representative Sampling Methods Weighted average can be used multiple systems are used. *The sampling design is provided below:* *Target population:* Systems replaced by stove type. *Objective:* Establish the thermal efficiency of the system/s replaced per stove type. *Sampling Frame:* Representative sample of baseline stove technologies identified/tested, weighted average if more than one type. *Sampling Method and sample size calculation as described above.* Data collection: Lab or field sampling will be conducted for representative baseline appliance types as described in the baseline scenario. Weighted averages applied if more than one appliance.
$\eta_{specified}$ –Non-institutional residential stoves $\eta_{specified}$ – Commercial $\eta_{specified}$ – Institutional	Efficiency of the system being deployed (percentage %). 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}. The efficiency of the stove being introduced as part of the project activity can be estimated using Manufacturers specification

Option 3	
SC_{old} –Non-institutional residential stoves	*Description:* Specific fuel consumption or fuel consumption rate (CCT test) of the baseline system/s i.e. fuel consumption per quantity of item/s processed (e.g. food cooked) or fuel consumption per hour, respectively. The sampling design for this parameter has been described below: *Target population:* Residential biomass users, commercial biomass users and/or institutional biomass users. *Objective:* Establish the specific fuel consumption of the fuel consumption rate of the system/s replaced for each target population. *Sampling Frame:* Representative sample of baseline stove technologies tested, weighted average if more than one type. *Sampling Method and sample size calculation as described above.* *Data collection:* Lab or field sampling will be conducted for relevant baseline appliance types as described in the baseline scenario. Weighted averages applied if more than one appliance.
SC_{old} – Commercial	
A.5 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.

At the time of PoA validation, the following parameters have been established for El Salvador:

1. B_{old} for residential stoves, and
2. f_{NRB}

All CPAs targeting only residential households in El Salvador can therefore use these values as appropriate. Parameter values for CPAs targeting also other users or CPAs implemented in other Host countries shall be established prior to inclusion of CPAs according to the procedures followed for residential households in El Salvador. These procedures are summarized in the table above.

The parameters for B_{old} and f_{NRB} will be determined ex-ante at the level of first CPA inclusion and will be applicable to all CPAs within the project boundary of the designated host country.

In the first SSC-CPA in El Salvador, the CPA applies the following options per AMS-II.G, version 3 for the determination of:

Baseline Studies:

The baseline information has been determined through a review of publicly available historical data and surveys./48//54/

The baseline information is established for:

a) η_{old} – Efficiency of the system being replace. Per AMS-II.G, version 03, this project will use a default value of .10

b) B_{old} – Quantity of woody biomass per appliance used in the absence of this project activity in tonnes

c) f_{NRBy} – Fraction of woody biomass saved by this project activity in year *y* that can be established as non-renewable biomass

Baseline wood fuel consumption per appliance – Non-institutional residential stoves

The project activity in the SSC-CPA No 001 in El Salvador consists of the following parts:

Distribution of higher efficiency ICS domestic models of the "Ecocina" stove type to residential users to replace conventional firewood or biomass fuel stoves or 3-stone fires.

The baseline scenario determined for this project activity is baseline scenario 1: "Residential biomass users"

The target population for the project activity is identified as all residential users of firewood fuelled cookstoves in El Salvador. The baseline information was established from the study "Characterization of firewood consumption in the residential sector in El Salvador" sponsored by the El Salvadoran government and led by Professor Herbert Schneider at the El Salvadorean Universidad Centroamericana./48/

The authors of this study determined baseline fuel consumption using a combination of household surveys and field measures to assess typical daily fuel consumption. Stratified sampling was used to select the households from each of El Salvador's agro-ecological zones and municipalities. Baseline fuelwood patterns were established using data from a total of 2,295 households. 637 households (265 urban and 372 rural) from this subset were used to establish baseline consumption through self-reported consumption and in-home weighing to translate traditional units reported to mass units on a typical day /48/. The sampling size used in the study and by the CME meets the 90/10 confidence/precision as the criteria for reliability of sampling efforts as per the, Annex 5 EB 69 "Guidelines for sampling and surveys for CDM project activities and programme of activities"/33/.

Table 2: Total Sample size per agro-ecological zones to establish consumption patterns

Agro-ecological Zone	Pob. 2006 (hab)	HHs 2006	Pilot Sample			Total Sample		
	Total	Total	Total	Urban	Rural	Total	Urban	Rural
MS	2 049 413	513 459	192	192	0	384	384	0
CA	1 054 681	250 680	193	95	98	384	188	196
CL	3 190 136	750 790	190	69	123	384	138	246
CO	263 409	61 810	96	23	73	382	92	290
AO	125 970	29 483	96	23	73	379	91	288
BN	307 352	68 368	96	21	75	382	82	300

Total	6 990 961	1 674 590	863	423	442	**2295**	975	1320

The baseline study determined that among both rural and urban categories, there are two subgroups of biomass users, households using only firewood as their unique fuel ("Only Wood") and households using firewood in combination with other fuels ("Wood with Propane Gas"). The study found that 24% of rural wood users use only wood, while 76% use a combination of gas and wood. 9.8% of urban households are "only wood" and 90.2 are combination wood and gas users. ./48/

Table 3: Baseline fuelwood consumption per household

	Avg HH size	Per Capita Daily Weighted Avg Wood Use (kg/p-d)	Per HH Annual Weighted Avg Wood Use (tonnes/hh-y)	% total population
Urban	3.94	1.855	2.67	60%
Rural	4.52	2.992	4.94	40%
Total/ Pop. Weighted Avg	4.16	2.299	3.58	100%

Baseline Non-Renewable Biomass Assessment

In the SSC-CPA No 001 in El Salvador, the renewability status of wood fuels was identified in line with the CDM NRB calculation contained in the CDM methodology AMS II.G – Version 03.

1. The quantity of household woody biomass used in the project activity is estimated to be 3 302 020 tonnes per year for the country of El Salvador. The total demand is calculated using a combination of government statistics on population and domestic fuelwood consumption data. The domestic fuel consumption data i.e. amount of biomass consumed in the absence of the project activity (B_{old}) for El Salvador (CPA-001) is determined to be 3.58 tonnes/residential stove/year /48/. As described in Section 3.3.1, the report meets the CDM methodology requirements. DNV considers this report to be credible and reliable.

2. Calculating Demonstrably Renewable Biomass (DRB) –

   Woody biomass is renewable if the following conditions are satisfied for biomass originating from land areas that are a) forests or b) non-forest areas:

   a. the land area remains as forested for option (a)- forests, and remains non-forest or is reverted to forest for option (b) – non-forest; and,

   b. 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); and,

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

El Salvador is experiencing continued significant deforestation altogether. Proof of this is recent official FAO data published showing that the country is suffering a net loss of forest area, estimated at 1.35 % a year/52/. According to MARN's 2003 National Forest Report on the State of Protected Natural Areas, only three legally protected areas which consist of 6,531 hectares, or 2% of the total forest area/56/. The World Bank also validates that El Salvador's system of protected areas has not been implemented in stating that "Of the approximately 3.3% of the country subject to MARN management, only about 7 000 ha, or 0.3 % are legally declared and demarcated. Thus, the vast majority of the protected area systems constitute "parks on paper", with inadequate legal framework, and virtually no physical protection"/49/. The PP has further demonstrated using literature that national or regional forestry and nature conservation regulations are not being complied with in El Salvador/48//49/.

The project proponent has demonstrated using recent literature that in applying the criteria for AMS II-G, the woody biomass used by households in the absence of the project activity from land areas that are forests did not meet all three CDM conditions of renewability /56/. Since in the majority of El Salvador neither sustainable management practices are in place, nor regional forestry or nature guidelines exist, all native vegetation represents non-renewable fuelwood sources with the exception of trees outside forests /53//49/55.

In order to be conservative, the PP has included the fuelwood from coffee plantations that is collected within the regions where coffee is the dominant land use. Approximately, 15% of the population in El Salvadory live in the agroforestry Areas of Coffee (CA)/48/. Using the daily average fuelwood consumption of the households in the CA area, the fuelwood demand that comes from coffee areas is 588 987 tonnes or 18% of the total household fuelwood demand./48/ Given that this region only uses coffee for 35.3% of their fuelwood then the total fuelwood demand coming from sustainably managed coffee prunings is 207 913 tonnes per year/48/. The percentage of people who either collected or collected and bought fuelwood was then applied to the total demand to estimate the total consumption of coffee wood fuel wood.

DRB = Total consumption of Coffee Wood fuel

Total consumption of Coffee Wood Fuel = Urban + Rural

Urban = (161 100 tonnes wood/ year total annual consumption) * (35.3 % of fuel wood consumed that is coffee) * (42.55% collected & collected and bought)

Urban = 24 199 tonnes wood/year of household use of coffee as fuel wood

Rural = (427 887 tonnes wood/ year of total annual consumption) * (35.3 % of fuelwood consumed that is coffee) * (75.29% collected & collected and bought)

Rural = 113 727 tonnes wood/year of household use of coffee as fuel wood

DRB = 24 199 tonnes/year + 113 727 tonnes/year
DRB = 137 927 tonnes/year

All the above values and equations were obtained from the Schneider Study /48/. The PP has provided the the fNRB calculation in Annex 6 of the CPA DD-001/9/

3. Calculating Non-Renewable Biomass (NRB).

   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 fuel-wood -
   b. Survey results, statistics, studies, maps, or sources of information 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 project proponent has demonstrated using literature that all the above indicators exist in El Salvador/50//49//51//52//10/. Therefore, DNV can confirm that the necessary conditions are present to calculate NRB using the CDM AMS-II.G methodology.

According to AMS II.G, NRB is the quantity of woody biomass used in the absence of the project activity (B_y) minus the quantity of demonstrably renewable biomass (DRB), or:

NRB = B_y – DRB

NRB = 3 302 020 tonnes/year /48//10/ – 137 927 /10/tons/year

NRB = 3 164 093 tonnes/year

f_{yNRB} – Fraction of renewable biomass

f_{yNRB}= NRB/(NRB+DRB)

f_{yNRB} **=** (3 164 093 tonnes/year) / (3 164 093 tonnes/year + 137 927 tonnes/year)

f_{yNRB} **= 95.82%**

DNV considers that the fNRB fraction of 0.96 for this project reasonable and supported adequately by credible and sufficient evidence from the literature.

For the SSC-CPA No 001 in El Salvador, the following baseline information has been established:

a) η_{old} – Efficiency of the system being replace. Per AMS-II.G, version 03, this project will use a default value of .10 since the systems being replaced are either three-stone fire or a conventional system with no improved combustion air supply or flue gas ventilation system.

b) B_{old} – 3.58 tonnes per household per year weighted average wood use (total population) ./48/

c) f_{NRBy} – 0.96 in El Salvador /49//50//51//52//56/

DNV considers the studies to be reliable, representative and complete and the baseline information to be accurate.

4.8.3 Parameters monitored ex-post

Parameter	Monitoring methodology	Frequency
N_y	Description: Number of appliances – Sales Record *No survey required for this parameter.*	Ongoing
U_y	Description: Average usage rate of each appliance type being deployed during period y as part of the SSC-CPA. *Target population:* Systems deployed by type and vintage (i.e. residential, age 0). *Objective:* To establish the average usage rate of appliances deployed as part of the SSC-CPA per stove type and vintage, to determine only stoves that are still operating, measured ex-post through survey/user feedback. *Sampling Frame:* Project Database of each CPA as defined by sales date, appliance type, serial number, and end-user information. *The sampling size and sampling method will be conducted as described in Section 4.8.2.* *Monitoring Methodology*: Primary data collection as measured through ex-post field surveys/ user feedback, weighted average if multiple systems.	Biennial
Option 1		
$B_{y,new}$ - Non Institutional residential stoves	Description: Quantity of woody biomass used during the project activity by the *improved stove technologies* in tonnes The quantity of biomass used during the project activity will be determined through surveys using field tests – KPT Survey design is provided below:	Biennial
$B_{y,new}$ - Commercial		

$B_{y,new}$ - Institutional	*Target population:* Residential biomass users, commercial biomass users and/or institutional biomass users. *Objective:* To establish the quantity of woody biomass used during the project activity in tonnes for each target population. *Sampling Frame:* Project Database of each CPA as defined by sales date, appliance type, serial number, and end-user information. *The sampling size and sampling method will be conducted as described in Section 4.8.2.* *Monitoring methodology:* Baseline fuel consumption will be determined using surveys and/or historical data at the time of first inclusion into a CPA. A standard Kitchen Performance Test (KPT) by a dedicated expert team every year on each technology type that measures aging stove performance per stove type. Lab or field sampling will be conducted for representative appliance types as described in the baseline scenario. Weighted averages will be applied if more than one model is distributed. Subsequent KPTs on aging stoves will measure changes in stove efficiency and will be used for emission reduction calculations for associated stove vintages. Once applied to a single CPA, all applicable future CPAs within the same POA can use such data to define the value.	
Option 2		
η_{new}- Non institutional residential stoves η_{new}- Commerical η_{new}- Institutional	*Description:* Efficiency of the appliance being deployed as part of the SSC-CPA, weighted average if multiple systems. The efficiency of the appliance will be determined using WBT for a representative sample *Target population:* Systems deployed by model. *Objective:* Establish the thermal efficiency of the system/s deployed per stove model. *Monitoring methodology:* Primary data collection (by means of the WBT), weighted average if multiple systems. *Sampling Frame:* Project Database of each CPA as defined by sales date, appliance type, serial number, and end-user	Biennial

	information. *The sampling size and sampling method will be conducted as described in Section 4.8.2.* *Montioring Methodology:* AMS-II.G step-6 option-2 is applied for each CPA, by means of a standard test (water boiling test) by a dedicated expert team at minimum every two years that measures aging stove efficiency per stove type. A weighted average of stove sales for each vintage will be applied. This value will be used for ex-post emission reduction calculations. If η_{new} is found to be lower than 20%, then the stove will be removed from crediting, or replaced with an equivalent performing appliance.	
Option 3		
SC_{new}- Non-institutional residential stoves SC_{new}- Commercial SC_{new}- Institutional	Description: Specific fuel consumption of the fuel consumption rate of the system/s deployed The fuel consumption rate of the systems deployed will be determined using CCT of a representative sample, weighted average if multiple systems as deployed. *Target population:* Residential biomass users, commercial biomass users and/or institutional biomass users. *Objective:* Establish the specific fuel consumption of the fuel consumption rate of the system/s deployed for each target population. *The sampling size and sampling method will be conducted as described in Section 4.8.2.* Monitoring methodology: Primary data collection (by means of the CCT), weighted average if multiple systems. A standard test (Controlled Cooking Test) by a dedicated expert team at least every two years on each technology type that measures aging stove performance per stove type.	Biennial
Option 2 and 3		
µold- Non institutional residential	According to AMS II.G, version 3, 20 (b), If baseline stoves continue to be used, monitoring shall ensure that the fuel-wood consumption of those stoves is excluded from B_{old}.	

stoves	Description: Quantity of woody biomass used in the project activity by traditional stoves per household Target population: Residential biomass users, commercial biomass users and/or institutional biomass users. Objective: Establish the quantity of woody biomass used in the project activity by traditional stoves per household for each target population. The sampling size and sampling method will be conducted as described in Section 4.8.2. Monitoring Methodology: When AMS-II.G step-6 option-2 or -3 is chosen for a given CPA, the CPA shall measure changes in B_{old} displaced by the project activity. A survey or field test will be conducted to determine the amount of fuel-wood still used in the project activity by traditional stoves. Survey questionnaires administered to a random sample of end users will elicit self-reported estimates of the amount of non-renewable biomass used per day in traditional stoves in parallel to the improved stove during various seasons. The quantity of woody biomass still used by traditional stoves (μ_{old}) will be excluded from B_{old}.	
μ_{old}-Commercial		
μ_{old}-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/

4.8.4 Management system and quality assurance for monitoring and reporting

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;	The CME has provided a clear definition of roles and responsibilities in the process of inclusion of CPAs
b)	Records of arrangements for training and capacity development for personnel	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 section A.4.4.1, (iv) of the PoA DD/1/ and in the section 4.4 of this report.
c)	Procedures for technical review of inclusion of CPAs	The technical review 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 has been described in section A.4.2.2. of the PoA DD/1/ and in section 4.4 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 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 4.3 and 4.4of 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 A.4.4.1 (i) of the PoA DD /1/ and section 4.4of this report.
f)	Measures for continuous improvements of the PoA management system;	The CME has included measures for continuous improvement.
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.

4.9 Environmental impacts

No Environmental Impact Assessment (EIA) has been performed, because there is no legal obligation according to the DNAs of the Host Countries. The governments of El Salvador, Mexico, and Nicaragua do not require an environmental impact assessment to be conducted for a typical CPA under this SSC-PoA. This is evidenced by the letters from the DNAs which confirm that the programme activity does not generate negative environmental

impacts/74//75//76/. The programme contributes to reduced pollution levels in the host countries; therefore, no environmental license is required for the implementation.

No significant environmental impacts are expected from the project activity. The local authorities could confirm this issue during stakeholder consultations, the outcomes of the First Round Consultation did also not result in any negative comments of significant impacts of the proposed project on the environment.

4.10 Comments by local stakeholders

The local stakeholder consultation is done at the SSC-CPA level. A national stakeholder consultation has been conducted and documented for the first SSC-CPA in El Salvador. The initial local stakeholder consultation was held on 27 October, 2011 in San Salvador. A follow-up process took place as part of the feedback round by conducting focus group interviews in villages and follow-up meetings with local stakeholders. As a CDM PoA, relevant stakeholders were consulted at the following two stages:

- Consultation of local stakeholders in the design phase (Initial Stakeholder Consultation);
- Consultation of (local) stakeholders in the PoA DD developing phase (Main Stakeholder Consultation).

As part of the stakeholder consultation, the following activities were completed:

- Interviews with NGOs, public authorities and private relevant parties.
- Pilot cook stoves delivered to gather feedback through focus groups and field surveys.
- Performance tests among selected improved cook stoves.
- 1 public meeting, in the urban context
- Follow-up focus groups with villages
- Follow-up meetings with local stakeholders

There were no adverse comments on the proposed project received during the stakeholder consultation. A variety of comments and suggestions were received from attendees, mainly focused on the need for raising awareness and training. These were all were taken into account by the PP.

DNV visited the community where the stakeholder consultation was conducted in San Salvador. DNV interviewed the stakeholder who participated in the stakeholder consultation meeting held in San Salvador/95/. DNV was able to confirm that the project participants were successful in reaching out to the community, creating awareness of the project and ensuring all comments were addressed. DNV also interviewed the households that are currently using the improved stoves. All comments received during the interview process were positive.

4.11 Comments by Parties, stakeholders and NGOs

The CDM-SSC-PoA-DD dated 7 February 2012, the PoA specific CDM-SSC-CPA-DD with generic information relevant to all CPAs to be included in this PoA and the CDM-SSC-CPA-DD for the CPA with the title UpEnergy Open Access Improved Cookstoves Program in Latin America- CPA 001 was made publicly available on the UNFCCC's website (http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/Y7Z6QD9N3MTM65OI7QZIFDWGINQT8P/view.html) and Parties, stakeholders and NGOs were through the CDM

website invited to provide comments during a 30 days period from 14 February 2012 to 14 March 2012.

No comments were received.

APPENDIX A

CDM VALIDATION PROTOCOL

Table 1 Mandatory Requirements for Clean Development Mechanism (CDM) Programmes of Activities

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~~
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~~
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 § 2	OK
11. The coordinating/managing entity shall be identified.	PoA Procedures § 2 (a)	~~CL 1~~
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 § 2 (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 § 2 (g)	OK
14. The length of the PoA is not exceeding 28 years.	PoA Procedures § 2 (h)	OK
15. The operational and management arrangements established by the coordinating/managing entity for the implementation of the PoA is decribed, 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 § 2 (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 § 2 (k)	OK
About small-scale programmes of activities (if applicable)		

Requirement	Reference	Conclusion
17. The CPAs shall meet the eligibility criteria for small scale CDM project activities set out in § 6 (c) of the Marrakech Accords.	Simplified Modalities and Procedures for Small Scale CDM Project Activities §12a,c	OK
About additionality		
18. 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 § 2 (e)	OK
19. Additionality of a typical CPA is demonstrated by using the procedure provided in the baseline and monitoring methodology applied.	PoA Procedures § 2 (f)	OK
About application of baseline and monitoring methodology		
20. The baseline and monitoring methodology shall be previously approved by the CDM Executive Board.	CDM Modalities and Procedures §37e	OK
21. 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
22. The baseline methodology shall exclude to earn CERs for decreases in activity levels outside the project activity or due to force majeure.	CDM Modalities and Procedures §47	OK
23. 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 § 2 (j)	OK
24. 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

Requirement	Reference	Conclusion
About forecast emission reductions		
25. 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		
26. 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	☒ Analysis at PoA level ☐ Analysis at CPA level
About stakeholder comments		
27. 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	☐ Analysis at PoA level ☒ Analysis at CPA level
28. 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		
29. 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.
A. General Description of the Programme of Activities *The project design is assessed.*					
A.1. Title of the PoA					
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	☒ Clearly identifiable title of the project activity ☒ Version number of the PDD is included ☒ Date of the PDD is included.		OK
A.1.2. Is the PoA-DD is in accordance with the applicable requirements for completing PoA-DDs?	/1/	DR	☒ Yes *If no, list where the PDD is not in accordance:*		OK
A.2. Programme Boundaries *Programme Boundaries are the limits and borders defining the GHG emission reduction project.*					
A.2.1. 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.2.2. Are the programme's system boundaries (components and facilities used to mitigate GHGs) clearly defined?	/1/	DR	The CME proposes to disseminate improved cooking stoves (ICS) in El Salvador, Honduras, Nicaragua, Mexico, and Guatemala. 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. The programme's system boundary included the improved cook stoves and the non-renewable biomass used as fuel.		OK

* MoV = Means of Verification, DR= Document Review, I= Interview

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
A.2.3. 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.2.4. Does the programme establish eligibility criteria for inclusion of a project as a CPA under the PoA?	/1/	DR	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 A.4.2.2 does not follow the standard for development of eligibility criteria	~~CAR 3~~	OK
A.3. Eligibility Criteria *Eligibility criteria to assess eligibility of CPAs to be included to PoA.*					
A.2.1. 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.	~~CAR 2~~	OK
A.2.2. Are there conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo)?	/1/	DR	The CME shall describe in the PoA-DD, 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	~~CAR 4~~	OK

* MoV = Means of Verification, DR= Document Review, I= Interview

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			unique serial number and CPAs.		
A.2.3. 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	~~CAR 5~~	OK
A.2.4. 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 6~~	OK
A.2.5. 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, version 3 in the eligibility criteria.	~~CAR 7~~	OK
A.2.6. Are there conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality of the PoA and typical CPA?	/1/	DR	Additionality 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" The PP shall state that they are using "attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities" to demonstrate additionality. Additionally, the CPA eligibility criteria shall include requirement from "attachment A of Appendix B of the Simplified modalities and	~~CAR 13~~	OK

* MoV = Means of Verification, DR= Document Review, I= Interview

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			procedures for small-scale CDM project activities"		
A.2.7. 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 8~~	OK
A.2.8. 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 9~~	OK
A.2.9. 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 11~~	OK
A.2.10. 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
A.2.11. Where applicable, are there requirements for the debundling check, in case CPAs belong to small-scale (SSC) or microscale project categories?	/1/	DR	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 in included in Section A 4.2.2 All CPAs included under the present PoA will be exempt from the de-bundling check when all types of ICS considered under the PoA	~~CL 2~~	OK

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			show energy savings of less than 1% of the small scale threshold defined by the methodology AMS-II.G, version 3. 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: 1% of 180GWh = 1.8GWh = 1,800,000KWh Therefore, a debundling check will occur for any CPA that includes a technology type with a proven thermal energy savings of 1.8GWh/y. The de-bundling check shall be included in the eligibility criteria		
A.2.12. 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 10~~	OK
A.4. Participation Requirements *Referring to Part A, Annex 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.*					

* MoV = Means of Verification, DR= Document Review, I= Interview

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
A.4.1. Which Parties and programme participants are participating in the programme?	/1/	DR	The CME has not included the Host countries (Party) in Section A.3 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 CME needs to describe what country or countries are part of this PoA clearly.	~~CAR 11~~	OK
A.4.2. Has the coordinating/managing entity of the programme been identified?	/1/	DR	The co-ordinating entity is UpEnergy		OK
A.4.3. Have all involved Parties provided a valid and complete letter of approval and have all private/public programme participants been authorized by an involved Party?	/1/	DR	The LoA from United Kingdom and Honduras. Mexico and Guatemala shall be submitted to DNV	~~CAR 1~~	OK
A.4.4. Do all participating Parties fulfil the participation requirements as follows: - Ratification of the Kyoto Protocol - Voluntary participation - Designated a National Authority?	/1/	DR	The LoA from United Kingdom and Honduras, Mexico and Guatemala shall be submitted to DNV	~~CAR 1~~	OK
A.4.5. Do all participating Parties fulfil the participation requirements as follows:	/1/	DR	El Salvador, Honduras, Nicaragua, Mexico, Guatemala and United Kingdom meet all the participation requirements as follows:		OK

	El Salvador	Nicaragua	Mexico	Country Y	
a) Party has ratified the Kyoto Protocol	☒ Yes ☐ No	☒ Yes ☐ No	☒ Yes ☐ No	☐ Yes	☐ No
b) Party has designated a Designated National	☒ Yes	☒ Yes	☒ Yes	☐ Yes	☐ No

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
Authority c) The assigned amount has been determined	☐ No ☒ Yes ☐ No	☐ No ☒ Yes ☐ No	☐ No ☒ Yes ☐ Yes ☐ No ☐ No		
A.4.6. Do the letters of approval meet the following requirements?	/1/ /17/ /13/	DR	LOA have not been submitted for host countries (Honduras, Mexico, and Guatemala) and Annex I country (United Kingdom)	~~CAR 1~~	
	Mexico, El Salvador and Nicaragua (host)		County (UK)	Country Y	
a) LoA confirms that Party has ratified the Kyoto Protocol	☐ Yes ☐ No		☐ Yes ☐ No	☐ Yes ☐ No	
b) LoA confirms that participation is voluntary	☐ Yes ☐ No		☐ Yes ☐ No	☐ Yes ☐ No	
c) The LoA confirms that the project contributes to the sustainable development of the host country?	☐ Yes ☐ No		NA	NA	
d) The LoA refers to the precise project activity title in the PDD	☐ Yes ☐ No		☐ Yes ☐ No	☐ Yes ☐ No	
e) The LoA is unconditional with respect to (a) to (d) above	☐ Yes ☐ No		☐ Yes ☐ No	☐ Yes ☐ No	
f) The LoA is issued by the respective Party's DNA	☐ Yes ☐ No		☐ Yes ☐ No	☐ Yes ☐ No	
g) The LoA was received directly by the DNA or the PP	☐ DNA ☐ PP		☐ DNA ☐ PP	☐ DNA ☐ PP	
h) In case of doubt regarding the authenticity of the letter of approval, describe how it was verified that the letter of approval is authentic					
A.4.7. Does the programme make provisions for meeting training and maintenance needs?	/1/	DR	The CME needs to make provisions for meeting training and maintenance needs for future CPAs.	~~CAR 17~~	OK
A.5. Contribution to Sustainable Development *The project/programme's contribution to sustainable development is assessed.*	/1/	DR			
A.5.1. Has the host Party confirmed that the programme	/1/	DR	LOA have not been submitted for host	~~CAR 1~~	

* MoV = Means of Verification, DR= Document Review, I= Interview

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
assists it in achieving sustainable development?			countries (Honduras, Mexico, Guatemala)		
A.5.2. Will the programme create other environmental or social benefits than GHG emission reductions?	/1/	DR	The project proposes to introduce cleaner, more efficient improved cooking stoves (ICS) to many urban and rural households across Honduras who, at present, uses traditional cook stoves that are inefficient and smoky. ICS will also reduce indoor air pollution levels and the various health risks associated with breathing polluted air; and result in a range of social and economic benefits to users. DNV was able to confirm the above during household visits that were conducted as part of the site visit.		OK
A.6. Small scale programme activity *It is assessed whether the project qualifies as small-scale CDM project activity*					
A.6.1. Do CPAs under the programme qualify as small scale CDM project activities as defined in paragraph 6 (c) of decision 17/CP.7 on the modalities and procedures for the CDM?	/1/	DR	The small scale CDM project activities as defined in paragraph 6 (c) of decision 17/CP.7 on the modalities and procedures specifies that SSC projects for Energy efficiency improvement project activities -which reduce energy consumption, on the supply and/or demand side, by up to the equivalent of 60 (GWh) per year. This is an equivalent of 180 GWh/year for thermal energy savings. The CME has included SSC threshold as eligibility criteria for CPA inclusion under this PoA. The SSC threshold for AMS II.G 180 GWh/year.		OK

* MoV = Means of Verification, DR= Document Review, I= Interview

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
A.7. Operational, management and monitoring plan for the programme					
A.7.1. Do the operational and management arrangements established by the coordinating entity include a record keeping system for each CPA under the programme?	/1/	DR	The operational and management arrangement established by the coordinating entity includes a clear record keeping system for each CPA under the programme. This has been described in the Section A.4.4.1 of the PoA DD, version1, dated 07 February 2012		OK
A.7.2. Do the operational and management arrangements established by the coordinating entity include a system/procedure to avoid including CPAs that have already been registered either as CDM project activity or as a CPA of another PoA?	/1/	DR	Double Counting The PoA Standard EB 65, Annex 3 requires that ***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 as a CPA of another PoA*** is implemented by the CME. It should be in particular elaborated on how compliance with the requirement for not including households from other cook stove programmes is demonstrated. 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, • 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?	~~CAR 18~~	OK

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
A.7.3. 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 coordinating entity will be responsible for identifying, developing, registering and managing all SSC-CPAs. Legal agreements with each CPA developer will clearly specify that the activity operates under the PoA.		OK
A.7.4. Does the monitoring plan include a description of a proposed statistically sound sampling method and procedure to be used by designated operational entities for verification of GHG emission reductions by CPAs under the programme? OR If the programme does not use verification method that applies a statistical method for sampling, has a system been defined to avoid double counting of CERs, and is the system transparent?	/1/	DR	The programme does not use verification method that applies a statistical method for sampling for DOE. The CME has defined a system to avoid double counting of CERs. This is through carbon waivers described in Section A.4.4.1 and warranty cards with legible user's details ss listed in the project database E.7.2. There are two different methods described under the two sections to avoid double counting. The information needs to be consistent and complete.	~~CAR 19~~	OK
B. Duration of the Programme of Activities, Crediting Period					
B.1.1. Are the programme starting date and length of the programme clearly defined and evidenced?	/1/	DR	The starting date of the PoA is given as 06 February 2012. Please provide the supporting documentation for this date.	~~CL 4~~	OK
B.1.2. Does the PoA design documentation confirm that the length of the PoA does not exceed 28 years?	/1/	DR	The PoA DD, version 1 confirms that the length of the PoA does not exceed 28 years.		OK
C. Environmental Impacts *Documentation on the analysis of the environmental*			☒ Analysis at PoA level ☐ Analysis at CPA level		

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
impacts will be assessed, and if deemed significant, an EIA should be provided to the validator.			This section must only be completed if the analysis of environmental impacts is at PoA level.		
C.1.1. Has an analysis of the environmental impacts of the programme been sufficiently described?	/1/	DR	The PoA DD states that the proposed project is not required to undertake an environmental impact assessment according to the Host Countries' regulations. The referenced document from the Host Country of Guatemala shall be submitted to DNV. The reference documents for the Host Countries of El Salvador, Nicaragua, Honduras and Mexico are in Spanish, the PP is requested to highlight the relevant parts and provide an English translation of the same.	~~CAR 20~~	OK
C.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA)?	/1/	DR	The PoA DD states that the proposed project is not required to undertake an environmental impact assessment according to the Host Countries' regulations. The referenced document from the Host Country of Guatemala shall be submitted to DNV. The reference documents for the Host Countries of El Salvador, Nicaragua, Honduras and Mexico are in Spanish, the PP	~~CAR 20~~	OK

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			is requested to highlight the relevant parts and provide an English translation of the same.		
C.1.3. Will the programme create any adverse environmental effects?	/1/	DR	The programme will not create any negative environmental effects.		OK
C.1.4. Are transboundary environmental impacts considered in the analysis?	/1/	DR	There are no transboundary environmental impacts foreseen by the implementation of this project activity.		OK
C.1.5. Have identified environmental impacts been addressed in the programme design?	/1/	DR	EIA has not been conducted for this project activity, as it is not a requirement from the Host countries for this type of project activity.		OK
C.1.6. Does the programme 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 Host Countries' regulations. The referenced document from the Host Country of Guatemala shall be submitted to DNV. The reference documents for the Host Countries of El Salvador, Nicaragua, Honduras and Mexico are in Spanish, the PP is requested to highlight the relevant parts and provide an English translation of the same.	~~CAR 20~~	OK
D. Stakeholder Comments *The validator should ensure that stakeholder comments have been invited with appropriate media and that due account has been taken of any comments received.*			☐ Consultation at PoA level ☒ Consultation at CPA level This section must only be completed if the analysis of environmental impacts is at PoA		

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			level.		
D.1.1. Have relevant stakeholders been consulted?	/1/	DR	El Salvador – CPA -001 The initial stakeholder meeting was held at Hotel Agape, Km 63, Carretera Sonsonate San Salvador on 27 October 2011. The invitations were emailed and followed up with phone calls or personal visits. A week prior to the meeting additional follow-up reminders were given to community members, government officials, NGOs, and academic. Given not all invitees were able to attend the meeting, summary notes from the meeting were sent to all invitees for further commentary and feedback. The meeting was conducted in the local language. The project was explained to the project participants followed by a group discussion of the social, environmental, and economic impacts of the project activity. In addition to the local stakeholder consultation meeting, the stakeholder process included: • Interviews with NGOs, public authorities and private relevant parties. • Pilot ICS delivered to gather feedback through focal groups and field surveys.		OK

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			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.		
D.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
D.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 Host Countries. If yes, has the stakeholder consultation process been conducted in lines with the Host Countries' requirements.	~~CL 5~~	OK
D.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 6~~	OK
D.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
E. Programme Baseline *The validation of the programme baseline establishes whether the selected baseline methodology is appropriate and whether the selected baseline represents a likely baseline scenario.*					
E.1. Baseline Methodology *It is assessed whether the programme applies an*					

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
appropriate baseline methodology.					
E.1.1. Does the programme apply an approved methodology and the correct version thereof?	/1/	DR	The methodology used for this project activity is AMS II.G, version 3 "Energy efficiency measures in thermal applications of non-renewable biomass"		OK
E.1.2. Are the applicability criteria in the baseline methodology all fulfilled?	/1/	DR	Methodology applicability criteria: 1) This category comprises appliances involving the efficiency improvements in the thermal applications of non-renewable biomass. Examples of these technologies and measures include the introduction of high efficiency biomass fired cook stoves or ovens or dryers and/or improvement of energy efficiency of existing biomass fired cook stoves or ovens or dryers. The project comprises of dissemination biomass fired improved energy efficient cook stoves to replace the wood fuel fired traditional cooks stoves fired. Non-renewable biomass is used widely in the Host Countries. DNV was able to confirm this through the El Salvador NRB assessment described in section 2) Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods or referring to published	~~CAR 23~~	OK

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			literature, official reports or statistics The CME has not used information from sources that are acceptable as per the methodology AMS II.G, version3. 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		
E.2. Baseline Scenario Determination *The choice of the baseline scenario will be validated with focus on whether the baseline is a likely scenario, and whether the methodology to define the baseline scenario has been followed in a complete and transparent manner.*					
E.2.1. What is the baseline scenario?	/1/	DR	As per the methodology AMS II.G, version 3, 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.		OK
E.2.2. What other alternative scenarios have been considered and why is the selected scenario the most likely one?	/1/	DR	No other alternative has been considered, as the project is applicable to the methodology AMS II.G, version 3. As per the methodology AMS II.G, version 3, it is assumed that in the absence of the project activity, the baseline		OK

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			scenario would be the use of fossil fuels for meeting similar thermal energy needs.		
E.2.3. Has the baseline scenario been determined according to the methodology?	/1/	DR	As per the methodology AMS II.G, version 3, 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.		OK
E.2.4. Has the baseline scenario been determined using conservative assumptions where possible?	/1/	DR	As per the methodology AMS II.G, version 3, 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.		OK
E.2.5. Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?	/1/	DR I	The baseline sufficiently takes the national and sectoral policies and trends into account. DNV confirmed this during the interview with the Ministry of Energy and Power in Honduras.		OK
E.2.6. Is the baseline scenario determination compatible with the available data and are all literature and sources clearly referenced?	/1/	DR	As per the methodology AMS II.G, version 3, 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 is compatible with the available data and all literature sources are clearly referenced.		OK
E.2.7. Have the major risks to the baseline been identified?	/1/	DR	The CME needs to identify the major risks to the baseline	~~CL 8~~	OK
E.3. Additionality of the Programme of Activities					

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E.3.1. 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 EB requires that the PoA demonstrate that (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 (iv) If mandatory a policy/regulation is enforced, the PoA will lead to a greater level of enforcement of the existing mandatory policy/regulation. The PP shall provide more detailed and referenced explanation on the assessment and demonstration of additionality for the PoA. Additionality The financial barrier is general and applicable to any cook stove project. The PP may use the guidance provided by EB 35, Annex 34, "Non-binding best practice examples to demonstrate additionality for SSC project activities". Additionality The technological and institutional barriers	~~CAR 12~~ ~~CAR 14~~ ~~CAR 15~~ ~~CAR 16~~	OK

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			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 shall describe barriers specific to this project activity. Additionality The prevailing practice barrier references the "Residential Consumption of Wood Report, pg 22." Report. This report was published in year 2006. This report is considered to be outdated for assessing the penetration rate of the improved cook stoves in El Salvador.		
E.3.2. 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 been demonstrated that the programme will lead to a higher level of enforcement?	/1/	DR	The CME has not provided information on whether there are any mandatory policy/regulations requiring implementation of improved cookstoves	~~CAR 12~~	OK
E.3.3. Are all assumptions stated in a transparent and conservative manner?	/1/	DR	The assumption have not been stated in a transparent manner	~~CAR 12~~	OK
E.3.4. Is sufficient evidence provided to support the relevance of the arguments made?	/1/	DR	The CME has not provided evidence for the arguments made	~~CAR 12~~	OK
E.4. Calculation of GHG Emission Reductions – Project emissions *It is assessed whether the procedure for calculating project emissions is according to the methodology*					

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and whether the argumentation for the choice of default factors and values – where applicable – is justified.					
E.5.1. Has the procedure to calculate project emissions of an individual CPA been documented according to the approved methodology and in a complete and transparent manner?	/1/	DR	The CME has documented the procedure to calculate the project emissions of an individual CPA according to the approved methodology in a complete and transparent manner. The emission reduction from the implementation of the project activity is dependent on the fuel savings in each stove. AMS-II.G, version 3 provides three options to calculate the fuel savings ($B_{savings}$) from the improved cook stoves. The fuel savings is calculated based on the baseline fuel consumption in the traditional stove (B_{old}) and the fuel consumption in the improved cook stove distributed as part of this project activity. The parameters that effect the project emissions have been underlined under each option. **<u>Option 1</u>:** $B_{y,savings} = B_{old} - B_{y,new}$ Where:		OK

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			B_{old} Quantity of woody biomass used in the absence of the project activity in tonnes $B_{y,new}$ Annual quantity of woody biomass used 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)> **Option 2:** $B_{y,savings} = B_{old} * (1 - \eta_{old} / \eta_{new})$ **Equation (3)** Where: B_{old} Quantity of biomass used in the absence of the project activity in tonnes/ year η_{old} 1. Efficiency of the system		

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			being replaced, measured using representative sampling methods or based on referenced literature values (fraction), use weighted average values if more than one type of system is being replaced; 2. 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 η_{new} Efficiency of the system being deployed as part of the project activity (fraction), as determined using the Water Boiling Test (WBT) protocol. Use weighted average values if more than one type of system is being introduced by the project activity. **When using AMS-II.G version 3, Option 3:**		

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			$B_{y,savings} = B_{old} * (1 - \frac{SC_{new}}{SC_{old}})$ SC_{old} Specific fuel consumption or fuel consumption rate[3] of the baseline system/s i.e. fuel consumption per quantity of item/s processed (e.g. food cooked) or fuel consumption per hour, respectively. Use weighted average values if more than one type of system is being replaced SC_{new} Specific fuel consumption or the fuel consumption rate of the system/s deployed as part of the project i.e. fuel consumption per quantity of item/s processed (e.g. food cooked) or fuel consumption per hour respectively. Use weighted average values if more than one type of system is being introduced by the project activity		

[3] 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 (e.g. the CCT procedures specified by the Partnership for Clean Indoor Air (PCIA) <http://www.pciaonline.org/node/1050>).

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
E.5.2. Have conservative assumptions been used when determining the procedure to be used to calculate the project emissions?	/1/	DR	The CME has made conservative assumptions when determining the procedure to calculate the project emissions. The default value has been used to calculate leakage which is conservative.		OK
E.5.3. Are uncertainties in the project emission calculation procedure properly addressed?	/1/	DR	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.	~~CAR 23~~	OK
E.5. Calculation of GHG Emission Reductions – Baseline emissions *It is assessed whether the procedure for calculating baseline emissions is according to the methodology and whether the argumentation for the choice of default factors and values – where applicable – is justified.*					
E.6.1. Has the procedure to calculate baseline emissions of an individual CPA been documented according to the approved methodology and in a complete and transparent manner?	/1/	DR	The procedure to calculate baseline emissions of an individual CPA has been documented as per AMS II.G, version 3 in a transparent manner. AMS-II.G, version 3 provides three options to calculate the fuel savings ($B_{savings}$) from the improved cook stoves. The fuel savings is calculated based on the baseline fuel		OK

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			consumption in the traditional stove (B_{old}) and the fuel consumption in the improved cook stove distributed as part of this project activity or the efficiency in the old and ICS. The baseline fuel consumption (B_{old}) is determined by using one of the following two options: (a) Calculated as the product of the number of systems multiplied by the estimated average annual consumption of woody biomass per appliance (tonnes/year). This can be derived from historical data or a survey of local usage, The parameters that effect the baseline emissions have been underlined under each option. **<u>Option 1</u>:** $B_{y,savings} = B_{old} - B_{y,new}$ Where: $\underline{B_{old}}$ <u>Quantity of woody biomass used in the absence of the project activity in tonnes</u> $B_{y,new}$ Annual quantity of woody		

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			biomass used 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)> **Option 2:** $B_{y,savings} = B_{old} * (1 - \eta_{old} / \eta_{new})$ **Equation (3)** Where: B_{old} Quantity of biomass used in the absence of the project activity in tonnes/ year η_{old} 1. Efficiency of the system being replaced, measured using representative sampling methods or based on referenced literature values (fraction), use weighted average values if		

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			more than one type of system is being replaced; 2. 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 η_{new} Efficiency of the system being deployed as part of the project activity (fraction), as determined using the Water Boiling Test (WBT) protocol. Use weighted average values if more than one type of system is being introduced by the project activity. **When using AMS-II.G version 3, Option 3:** $B_{y,savings} = B_{old} * (1 - \frac{SC_{new}}{SC_{old}})$		

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			SC_{old} Specific fuel consumption or fuel consumption rate[4] of the baseline system/s i.e. fuel consumption per quantity of item/s processed (e.g. food cooked) or fuel consumption per hour, respectively. Use weighted average values if more than one type of system is being replaced SC_{new} Specific fuel consumption or the fuel consumption rate of the system/s deployed as part of the project i.e. fuel consumption per quantity of item/s processed (e.g. food cooked) or fuel consumption per hour respectively. Use weighted average values if more than one type of system is being introduced by the project activity		
E.6.2. Have conservative assumptions been used when determining the procedure to be used to calculate 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, version 3. A default value of 0.10 may be optionally	~~CAR 28~~	OK

[4] 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 (e.g. the CCT procedures specified by the Partnership for Clean Indoor Air (PCIA) <http://www.pciaonline.org/node/1050>).

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
			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 PoA. Additionally, the CME has not provided supporting documentation for the same.		
E.6.3. Are uncertainties in the baseline emission estimates properly addressed?	/1/	DR	The uncertainties in the baseline emissions have been properly addressed		OK
E.6. Calculation of GHG Emission Reductions – Leakage *It is assessed whether the procedure for calculating leakage is according to the methodology and whether the argumentation for the choice of default factors and values – where applicable – is justified.*					
E.7.1. Has the procedure to calculate leakage emissions of an individual CPA been documented according to the approved methodology and in a complete and transparent manner?	/1/	DR	The CME chooses to account for all leakage in the project activity by applying the adjustment factor of 0.95 to the Bold. This is in lines with the requirements of the methodology AMS II.G, version 3.		OK
E.7.2. Have conservative assumptions been used when determining the procedure to be used to calculate the leakage emissions?	/1/	DR	The CME is being conservative by assuming the default factor for leakage		OK
E.7.3. Are uncertainties in the leakage emission estimates properly addressed?	/1/	DR	The uncertainties in the leakage emission have been properly addressed		OK
E.7. Emission Reductions					

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The emission reductions shall be real, measurable and give long-term benefits related to the mitigation of climate change.					
E.8.1. Does the PoA-DD provide a clear and correct way of calculating the emission reductions from each CPA?	/1/	DR	The PoA DD provides a clear and correct procedure for calculation the emission reduction from each CPA. According to AMS-II.G, version 3, Emission reductions are calculated as follows: $\mathbf{ER_y = \Sigma\ (B_{y,savings} * N_y * U_y) * (f_{NRB,y} * NCV_{biomass} * EF_{projected_fossil\ fuel})}$ **Equation (1)** Where: ER_y Emission reductions during the period y in tCO2e $B_{y,savings}$ Quantity of woody biomass that is saved in tonnes per appliance $f_{NRB,y}$ Fraction of woody biomass saved by the project activity in period y that can be established as non-renewable biomass		OK

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			$NCV_{biomass}$ Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.0156 TJ/tonne) $EF_{projected_fossilfuel}$ Emission factor for the substitution of non-renewable woody biomass by similar consumers. Use a value of 81.6 tCO2/TJ N_y Number of appliances of the type being deployed during period y as part of the SSC-CPA U_y Average usage rate (as opposite to drop-off) of appliances of type being deployed during period y as part of the SSC-CPA		
E.8. Monitoring Methodology *It is assessed whether the project applies an appropriate monitoring methodology.*					
E.9.1. Is the monitoring plan documented according to the approved methodology and in a complete and transparent manner?	/1/	DR	The monitoring plan has been documented as per the methodology AMS-II.G, version 3 in a complete and transparent manner.		OK
E.9.2. 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,	/1/	DR	The CME has not described the number of years the monitored data will be archived for.	~~CL 9~~	OK

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
for this programme, whichever occurs later?					
E.9. Monitoring Plan *It is established whether the monitoring plan provides for reliable and complete emission data over time.*					
E.10.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the greenhouse gas emissions within the programme boundary during the crediting period?	/1/	DR	The monitoring plan provides for the collection and archiving of relevant date necessary for the estimation or measuring GHG gases, this includes: Option 1 B_{new}- Quantity of woody biomass used in the absence of the project activity in tons – KPT – annually Option 2 η_{new}- Efficiency of the appliance being deployed as part of the SSC-CPA, weighted average if multiple systems.- WBT - Biennially Option 3 SC_{new}- Quantity of woody biomass used in the absence of the project activity in tons – Biennially – CCT N_y- Number of appliances deployed during period y as part of the SSC-CPA- Continuous using sales record U_y- Usage rate of appliances being deployed during as part of the SSC-CPA- Field survey – Biennially		OK

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			For CPAs that choose to determine B_{old} appliance efficiency will be determined by KPT or CCT and the value will be applicable to tstove models of that age. The CME needs to describe what the sample size will be for the KPT and CCT tests conducted and how the values will be extrapolated for all stoves. The PoA DD states that the "It is possible that baseline technologies are still used in the project activity. Bold will be discounted for any biomass consumed by traditional stoves still used in the project activity. Only the fraction of baseline wood fuel actually displaced by the project activity will be used for emission reduction calculations. The monitoring plan will survey local usage and apply fractional reductions to Bold as necessary." The CME has not described how the sample size will be determined and how they will ensure that the sample is representative. What will be the frequency of sampling and how will the values be extrapolated.		

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Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
E.10.2. Are the choices of programme GHG indicators reasonable and conservative?	/1/	DR	Yes		OK
E.10.3. Is the measurement method clearly stated for each GHG value to be monitored and deemed appropriate?	/1/	DR	Yes		OK
E.10.4. Is the measurement equipment described and deemed appropriate?	/1/	DR	The measurement for the monitored parameters is mainly through survey or lab/field tests and does not include measurement equipment.		OK
E.10.5. Is the measurement accuracy addressed and deemed appropriate? Are procedures in place on how to deal with erroneous measurements?	/1/	DR	Yes		OK
E.10.6. Is the measurement interval identified and deemed appropriate?	/1/	DR	The measurement interval have been identified and deemed appropriate. The measurement interval for each parameter has been described below: Option 1 B_{new}- – KPT – Annually Option 2 η_{new} - WBT -Biennially Option 3 SC_{new}- Biennially – CCT N_y- Continuous using sales record U_y- Field survey – Biennially		OK
E.10.7. Is the registration, monitoring, measurement and reporting procedure defined?	/1/	DR	The registration, monitoring and measurement procedures are defined		OK

* MoV = Means of Verification, DR= Document Review, I= Interview

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
E.10.8. 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	All parameters are monitored through surveys and data records. There is no monitoring equipment used and hence no requirement for calibration.	~~CL 11~~	OK
E.10. Management System and Quality Assurance for Monitoring and Reporting *It is checked that programme implementation is properly prepared for and that critical arrangements are addressed.*					
E.13.1. Is the authority and responsibility of overall programme management clearly described?			The CME will be responsible for the overall programme management and the operations and management have been clearly described in the PoA DD		OK
E.13.2. Are procedures identified for training of monitoring personnel?			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
E.13.3. Are procedures identified for emergency preparedness for cases where emergencies can cause unintended emissions?			Unintended emissions from emergencies are not expected in this project scenario		OK
E.13.4. Are procedures identified for review of reported results/data?			The PP has to identify procedures to review reported results.	~~CL 12~~	OK
E.13.5. Are procedures identified for corrective actions in order to provide for more accurate future			The PP has to identify corrective actions in order to provide for more accurate future	~~CL 12~~	OK

* MoV = Means of Verification, DR= Document Review, I= Interview

Checklist Question	Ref	MoV	Assessment by DNV	Draft Concl.	Final Concl.
monitoring and reporting?			monitoring and reporting.		

* MoV = Means of Verification, DR= Document Review, I= Interview

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, Guatemala, Mexico and the Letter of Approval from the DNA of United Kingdom shall to be submitted to DNV.	A.4.3 A.4.4	A.6 The LoA for Mexico, Nicaragua and El Salvador has been submitted Guatemala and Honduras is no longer a Host country for this PoA.	PP has provided LoA for Mexico, Nicaragua and El Salvador. Guatemala and Honduras is no longer a Host country for this PoA. CAR 1 is 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 section A.4.1.2 updated to define the geographical boundary.	The geographical boundary has been revised .The host country Honduras and Guatemala has been removed from the PoA. The geographical boundary now includes the national boundaries of El Salvador, Nicaragua and Mexico 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 A.4.2.2 does not follow the standard for development of eligibility criteria	A.2.4	PoA-DD section A.4.2.2. 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 eligibility criteria have been updated to include the minimum requirements of EB 65, Annex 3, PoA standard. CAR 3 is closed.
CAR 4	A.3.2	PoA-DD section A.4.2.2. has been	The eligibility criteria does not refer to

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
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 avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo) 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		updated to include in the eligibility criteria the condition to avoid double counting of emission reductions like unique identifications of product and end-user locations (logo, serial number break down and method to avoid double counting).	the unique identification system developed for the PoA DD. The evidence recommended for the demonstrating that there will be no double counting at the time of CPA inclusion is not satisfactory. CAR 4 is open
CAR 4 (continued) The eligibility criteria does not refer to the unique identification system developed for the PoA DD. The evidence recommended for the demonstrating that there will be no double counting at the time of CPA inclusion is not satisfactory.	A.3.2	The PP has been revised to include the same	The eligibility criteria refer to the unique identification system developed for the PoA DD. CAR 4 is closed
CAR 5 The guideline of EB 65, Annex 3, requires that the eligibility criteria includes a condition to describe the specifications of technology/measure including the level and type of service, performance specifications including compliance with	A.3.3	PoA-DD section A.4.2.2. has been updated to include in the eligibility criteria the technological specifications of the product/s to implement including the level and type of service, performance specifications and specific language in the sales receipts	PoA-DD section A.4.2.2. has been updated to include in the eligibility criteria the technological specifications of the product/s to implement including the level and type of service, performance specifications and specific language in the sales receipts

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
testing/certifications		confirming the stove distributed in new.	confirming the stove distributed in new. CAR 5 is closed
CAR 6 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. The PP shall include a condition to check the start date of the CPA through documentary evidence.	A.3.4	PoA-DD section A.4.2.2. has been updated to include in the eligibility criteria the condition to check the start date of each CPA through documentary evidence.	The PP proposes to submit the sales receipt as evidence for the start of the CPA. However, will this evidence be available at the start of the first CPA. CAR 6 is open
CAR 6 (continued) The PP proposes to submit the sales receipt as evidence for the start of the CPA. However, will this evidence be available at the start of the first CPA.	A.3.4	The sales receipt will be checked at the time of verification	The sales receipt will be checked at the time of verification CAR 6 is closed
CAR 7 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. The PP shall specify the applicability criteria and other requirements of the methodology AMS II.G, version 3 in the eligibility criteria.	A.3.5	PoA-DD section A.4.2.2. has been updated to include in the eligibility criteria the condition to ensure compliance with applicability of the methodology applied to the CPAs.	The eligibility criteria for AMS II.G, version 3 includes the demonstration of 1. 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 The PP has not satisfactorily demonstrated that NRB has used since 31 December 1989 using for Nicaragua and Mexico 2. This category comprises appliances involving the efficiency

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
			improvements in the thermal applications of non-renewable biomass. The CPA developer will provide Product data sheets or specification or product information sheets from manufacturer. CAR 7 is open
CAR 7 is Continued he eligibility criteria for AMS II.G, version 3 includes the demonstration of 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 The PP has not satisfactorily demonstrated that NRB has used since 31 December 1989 using for Nicaragua and Mexico	A.3.5	The PoA DD has been revised to reflect the same	The PoA DD has been revised and now demonstrates that NRB has been used in all host countries since 1989. CAR 7 is closed
CAR 8 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. The PoA DD, Section A.4.2.2 does not	A.3.7	PoA-DD section A.4.2.2. 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.	The PP does not provide guidance or description on how the stakeholder consultation should be conducted for the CPA inclusions. CAR 8 is open

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
include a condition to meet this requirement.			
CAR 8 (continued) The PP does not provide guidance or description on how the stakeholder consultation should be conducted for the CPA inclusions	A.3.7	The details have been entered in the PoA DD	The PoA DD has been revised to described the stakeholder consulation process. CAR 8 is closed
CAR 9 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. The PP does not describe the target group for this project activity and the distribution mechanism.	A.3.8	PoA-DD section A.4.2.2. has been updated to include in the eligibility criteria and the specifications regarding target groups and distribution mechanism.	The PP has included the target groups in the eligibility criteria. CAR 9 is closed
CAR 9.1 The PoA has three separate target groups identified. Each of the target group, have different baseline scenarios. The PP has not described how the baseline will be determined for each target group, how the baseline survey will be conducted, what is the target population, what is the technology that will be implemented and what is the estimated emission reduction.		The details have been entered in the PoA DD	The PoA DD has been updated to describe the sampling design for the determination of the baseline fuel usage. CAR 9.1 is closed
CAR 10 The guideline from EB 65, Annex 3 requires that there conditions to provide an	A.3.12	PoA-DD section A.4.2.2. has been updated to include in the eligibility criteria the conditions to provide an	A statement from the CME or the CPA operator does not demonstrate that there is ODA.

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance. The PP does not include an eligibility condition for affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance		affirmation that funding from Annex I parties does not result in a diversion of official development assistance. The CME confirms there is no ODA by means of the following evidences: 1. Statement of CME provided at the PoA level 2. Statement of the CPA operator (in case of being different from the CME)	CAR 10 is open.
CAR 10 (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 PP does not include an eligibility condition for affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance	A.3.12	The details have been entered in the PoA DD	The PoA DD has been revised to 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 10 is closed.
CAR 11 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 countries (Party) in Section A.3 of the PoA DD. Additionally, there is language in the PoA DD (e.g. section A.4.1.2 "The geographical	A.4.1	PoA-DD section A.4.1.2 and A.3 have been updated to define the Host Countries involved in this program.	The PP has stated the Host countries that are part of this PoA i.e. Mexico, Nicaragua and El Salvador CAR 11 is closed

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
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.			
CAR 12 The EB requires that the PoA demonstrate that (v) The proposed PoA is a voluntary coordinated action; (vi) If the PoA is implementing a voluntary coordinated action, it would not be implemented in the absence of the PoA; (vii) If the PoA is implementing a mandatory policy/regulation, this would/is not enforced; and (viii) If mandatory a policy/regulation is enforced, the PoA will lead to a greater level of enforcement of the existing mandatory policy/regulation. The PP shall provide more detailed and referenced explanation on the assessment and demonstration of additionality for the PoA.	E.3.1 E.3.2 E.3.3 E.3.4	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.	(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. *However, the PP has not provided supporting documentation to demonstrate that there are no mandatory laws, policies or requirements mandating the use of ICS. This is a multi country PoA and the PP has not demonstrated the voluntary coordinate action for any of the four Host Countries.* *b. The PP has not demonstrated that the PoA is a voluntary coordinated action and would not be implemented in the absence of CDM.* CAR 12 is open

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
CAR 12 (continued) (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. *However, the PP has not provided supporting documentation to demonstrate that there are no mandatory laws, policies or requirements mandating the use of ICS. This is a multi country PoA and the PP has not demonstrated the voluntary coordinate action for any of the four Host Countries.* *b. The PP has not demonstrated that the PoA is a voluntary coordinated action and would not be implemented in the absence of CDM.*	E.3.1 E.3.2 E.3.3 E.3.4	Submitted policies and regualtions in each country to demonstrate that switching to ICS is not required by regulation and not part of poilicy	Submitted policies and regulations in each country to demonstrate that switching to ICS is not required by regulation and not part of policy. CAR 12 is closed.
CAR 13 Additionality The guideline from EB 65, Annex 3, III.A. requires "PoAs that consist of one or more small-scale projects as CPAs shall include		PoA-DD section A.4.2.2. has been updated to state that "attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities" has been	PoA-DD section A.4.2.2. has been updated to state that "attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities" has been

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
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” The PP shall state that they are using “attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities” to demonstrate additionality. Additionally, the CPA eligibility criteria shall include requirement from “attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities”		used to demonstrate additionality, and that additionality is now included in the eligibility criteria.	used to demonstrate additionality, and that additionality is now included in the eligibility criteria. CAR 13 is closed.
CAR 14 Additionality The financial barrier is general and applicable to any cook stove project. The PP may use the guidance provided by EB 35, Annex 34, “Non-binding best practice examples to demonstrate additionality for SSC project activities”.		PP has revised financial barrier section with specific Latin American references. Additionality guidance from EB 35, Annex 34 and other CDM guidance was used to demonstrate additionality.	The PP has not described the financial barrier as per the guidance for demonstration of barriers. The PP has tried to demonstrate additionality across four countries in the same paragraph. The barriers have not been described specifically for each country. The barriers for each country cannot be assumed to be similar, unless demonstrated. CAR 14 is open
CAR 14 (continued) The PP has not described the financial barrier		PP has revised financial barrier section with specific Latin American	The PoA DD has been revised to describe the additionality assessment in

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
as per the guidance for demonstration of barriers. The PP has tried to demonstrate additionality across four countries in the same paragraph. The barriers have not been described specifically for each country. The barriers for each country cannot be assumed to be similar, unless demonstrated.		references. Additionality guidance from EB 35, Annex 34 and other CDM guidance was used to demonstrate additionality.	lines with the guidance for demonstration of barriers. CAR 14 is closed.
CAR 15 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 shall describe barriers specific to this project activity.		PoA-DD section A.4.2 has been updated to demonstrate additionality.	The PP has remove the technological barrier from the PoA DD. CAR 15 is closed.
CAR 16 Additionality The prevailing practice barrier references the "Residential Consumption of Wood Report, pg 22." Report. This report was published in year 2006. This report is considered to be outdated for assessing the penetration rate of the improved cook stoves in El Salvador.		PoA-DD section A.4.2 has been updated to demonstrate additionality using the investment analysis.	The prevailing practice barrier has been removed from the additionality demonstration. CAR 16 is closed.
CAR 17 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 provisions are	The PoA DD Section A.4.1 (ii) has been revised to include the commitments by the CME to meeting training and maintenance needs for future CPAs.

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
		detailed to show 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.	Car 17 is closed.
CAR 18 Double Counting The PoA Standard EB 65, Annex 3 requires that ***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 as a CPA of another PoA*** is implemented by the PP. 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, • 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?	**A.4.4**	PoA-DD section A.4.4.1 (ii) 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 section now describes how entries in the PoA database will be checked to avoid double counting and how the DOE may carry out the verification of the methods/data.	The PoA DD has been revised to include an in-depth monitoring system that will check for a new CPA that has been already registered either as a CDM project activity or as a CPA of another PoA. CAR 18 is closed.
CAR 19 The programme does not use verification method that applies a statistical method for sampling for DOE. The CME has defined a system to avoid	A.7.4	The system to avoid double counting has been integrated and expanded to account for all levels of consistency. PoA-DD section A.4.4.1 describes the	The system for verifying that there is no double counting has been made consistent across the PoA DD. CAR 19 is closed.

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
double counting of CERs. This is through carbon waivers described in Section A.4.4.1 and warranty cards with legible user's details as listed in the project database under Section E.7.2. There are two different methods described under the two sections to avoid double counting. The information needs to be consistent and complete.		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.	
CAR 20 The PoA DD states that the proposed project is not required to undertake an environmental impact assessment according to the Host Countries' regulations. The referenced document from the Host Country of Guatemala shall be submitted to DNV.	C.1.1 C.1.2 C.1.6	Submitted	The document referencing that EIA is not required has been submitted to DNV. CAR 20 is closed.
CAR 21 Stakeholder Consultation The media used for Stakeholder Consultation seems to be limited to personal invitations. The CME has not demonstrated that the all relevant stakeholders were made aware of the project activity and were given an opportunity to participate in the stakeholder consultation.	D.1.6	Due to extreme weather conditions that resulted in extensive flooding and road closures, it was not possible to reach the site of the publisher to post the advert in the newspaper. This was compensated by posting flyers publically throughout the community and using alternative ways to making stakeholders aware of the program.	The stakeholder consultation meeting was announced using flyers publically throughout the community and using alternative ways to making stakeholders aware of the program. CAR 21 is closed.
CAR 22		Sources have been changed and updated	The PP has now demonstrated that the

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
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. The CME has not used information from sources that are acceptable as per the methodology AMS II.G, version3. 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**		to include credible sources	NRB has been used since 31 December 31, 1989. FAO data has been used to demonstrate that non- renewable biomass . CAR 22 is closed.
CAR 23 The applicability criteria for AMS-II.G, version 3 requires that 2. 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. The CME has not described how the PoA meets the above applicability criteria for each country including Honduras, Nicaragua, Guatemala, Mexico and El Salvador.		PoA-DD section E.2 has been updated to justify the applicability for each Host Country showing that non-renewable biomass has been used since 31 December 1989.	The use of NRB from the year 1989 has not been demonstrated using acceptable literature for Nicaragua and Mexico. CAR 23 is open.
CAR 23 (continued)		PoA DD has been update	The PoA DD has been update to

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
The applicability criteria for AMS-II.G, version 3 requires that 2. 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. The CME has not described how the PoA meets the above applicability criteria for each country including, , Nicaragua and Mexico			demonstrate that the The applicability criteria for AMS-II.G, version 3 requires that 2. 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. CAR 23 is closed.
CAR 24 The estimation of the baseline emissions for all options given in the methodology AMS-II.G, version 3 requires the estimation of $f_{NRB.}$ The f_{NRB} value has not been estimated at the PoA level for all the countries included in the PoA.	E.6.1	The estimation of the f_{NRB} value is to be determined at the CPA level. The PoA level contains the framework to establish the value for each country at the first CPA.	The estimation of the f_{NRB} value is to be determined at the CPA level. The PoA level contains the framework to establish the value for each country at the first CPA. CAR 24 is closed.
CAR 25 The estimation of the baseline emissions for all options given in the methodology AMS-II.G, version 3 requires the estimation of $B_{old.}$ The guidelines on how to conduct the survey and the maximum B_{old} value has not been provided at the PoA level for all the countries included in the PoA.	E.6.1	The estimation of the B_{old} value is to be determined at the CPA level. The PoA level contains the framework to establish the value for each country at the first CPA.	Please refer to CAR 31. CAR 25 is closed.

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
CAR 26 Project emission calculation and monitoring The CME needs to properly address the uncertainties in the project emission calculation procedure. The project involves the testing of the aging stoves using options, such as CCT and KPT annually or biennially. However, the CME has not described how the sample size for the tests will be selected and how the values from these test results will be extrapolated.	E.5.3 E.10.1	PoA-DD section E.6.2 "Generalities" clarifies that the parameters to be considered for each option are assessed according to the PoA requirements established in section E.6.3 and E.7 of the PoA-DD and the specific requirements established in section B.5.1 and B.6.1 of the specific CPA. The specific emission reduction calculation tool[5] designed for the chosen option will be used by inputting results from the field/lab tests (along with the rest of parameters necessary for that option) to obtain the resulting $B_{y,savings}$ value.	The requirement in the specific requirements established in the section B.5.1 and B.6.1 of the specific CPA has not been addressed satisfactorily. CAR 26 is open.
CAR 26 (continued) The requirement in the specific requirements established in the section B.5.1 and B.6.1 of the specific CPA has not been addressed satisfactorily The PP has not provide the details of the sample design, including the objective, target population, sampling plan etc	E.5.3 E.10.1	The PoA DD has been revised	The PoA DD has been revised to clearly describe the sampling plan for each parameter. CAR 26 is closed.
CAR 27 The PoA DD states that the EIA assessment has been conducted at the PoA level. However, the CME has not demonstrates that	E.11.1	Honduras is not a Host Country of this program anymore.	The communication with the Nation Environmental authority notifying the EIA exemption is provided as

[5] See Annex 5 of the Generic CPA-DD.

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
the EIA is not required for Mexico and Honduras. CME has not submitted the letter of exemption from Mexico and the registration with SERA, the national environmental agency (Honduras).		The conclusive communication with the National Environmental Authority notifying the EIA exemtion is provided as supporting document to the DOE.	supporting document to DNV. CAR 27 is closed.
CAR 28 EB 65 requires that the CME shall have the competencies to check the features of potential CPAs and ensure that each CPA meets all the requirements and eligibility criteria before inclusion in the registered PoA. The CME shall develop and implement a management system that is specified in point 17 (a) – (g) made available to the DOE at the time of validation of the PoA. The CME does not have a satisfactory quality management system in place and has not submitted the relevant documents to the DOE.	E.13.1	The competencies of the CME with the management system at the time of validation of the PoA has been updated including the submission to the DOE of the relevant documentation.	The PP has described the management system in the Revised PoA DD. CAR 28 is closed.
CAR 29 The survey design has not been described for commercial and institutional stoves for each of the host countries. The following has not been address for the surveys at the PoA level. • Sampling Objective.		The PoA DD has been revised	The PoA DD has been revised to clearly describe the sampling plan for each parameter. CAR 29 is closed.

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
• 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.			
CL 1 The identity of the coordinating or managing entity shall be identified. The company name in Section A.2 is not consistent with Annex 1.		Identity of the CME has been updated in section A.2.	The coordinating entity has been identified as UpEnergy Group Inc. CL 1 is closed.
CL 2 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 in included in Section A 4.2.2		PoA-DD section A.4.2.2 has been updated to include the requirements for the debundling check.	The PP has included the de-boundline check in the revised PoA DD, Section A.4.2.2. CL 2 is closed.
CL 3 The CME shall provide an English translation of the Water Boiling Test (WBT)		The document has been translated and provided as supporting document to the DOE.	The translated document of the WBT test has been received and reviewed by DNV. CL 3 is closed.
CL 4	B.1.1	The date has been updated.	The starting date of the PoA has been

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
The starting date of the PoA is given as 06 February 2012. Please provide the supporting documentation for this date.			revised to 14 February 2012, the day the PoA DD was published for stakeholder consultation. CL 4 is closed.
CL 5 The CME needs to describe whether a stakeholder consultation process is required by regulations/laws in the Host Countries. If yes, has the stakeholder consultation process been conducted in lines with the Host Countries' requirements.	D.1.2	PoA-DD section D has been updated to demonstrate the requirements for the stakeholder process for each country. See supporting documents provided to the DOE: Host Country "Requirement for CDM PoAs".	The requirements for stakeholder consultation for each of the Host countries have been included in the revised PoA DD. CL 5 is closed.
CL 6 A summary of the stakeholder comments need to be submitted to DNV.	D.1.3	The LSC report is provided to the DOE.	A detailed description of the stakeholder comments have been provided to DNV. 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 Host Countries' regulation. The reference documents for the Host Countries of El Salvador, Nicaragua, Honduras and Mexico are in Spanish, the PP is requested to highlight the relevant parts and provide an English translation of the same.	C.1.1 C.1.2 C.1.6	Documents have been translated and are provided as supporting documents to the DOE.	DNV has received the translated version of the supporting documents. CL 7 is closed.
CL 8 The baseline scenario as per the methodology		Jimenez, Rodolfo D. Informe "Proyecto apoyo de la matriz de acciones para la	Jimenez, Rodolfo D. Informe "Proyecto apoyo de la matriz de acciones para la

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
AMS II.G, version 3, 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.		integración y desarrollo energético de Centroamerica. Organization Latinoamericana de Energía" (OLADE report, provided as supporting document) states that study by CEPAL (2008) reports in page 14 that since the application of the model developed by Diaz (2000) the consumption of firewood in Central America in both the residential and small industry was 263,019 TJ in 2006, suffering a slight increase of more than 48,000 TJ till reaching the 311,310 TJ in 2020.	integración y desarrollo energético de Centroamerica. Organization Latinoamericana de Energía" (OLADE report, provided as supporting document) states that study by CEPAL (2008) reports in page 14 that since the application of the model developed by Diaz (2000) the consumption of firewood in Central America in both the residential and small industry was 263,019 TJ in 2006, suffering a slight increase of more than 48,000 TJ till reaching the 311,310 TJ in 2020. CL 8 is closed.
CL 9 All monitored data required for verification and issuance shall be kept for two years after the end of the crediting period or the last issuance of CERs, for this programme, whichever occurs later? The CME has not described the number of years that the monitored data will be archived.		The PoA has been updated to reflect that all monitored data required for verification and issuance shall be kept for two years after the end of the crediting period or the last issuance of CERs.	The PoA has included a statement the data will be archived for two years after the end of the crediting period. CL 9 is closed.
CL 10 The CME has not identified procedures for review of reported results/data and procedures for corrective actions in order to provide for more accurate future monitoring		PoA-DD section A.4.4.1 (i) has been updated to describe the procedures.	The PP has revised the procedures for review of reported results/data and procedures for corrective actions in order to provide for more accurate future monitoring and reporting.

Corrective action and/ or clarification requests	Reference to Table 2	Response by project participants	Validation conclusion
and reporting.			CL 10 is closed.
CL 11 The data and parameters in the monitoring plan in Section E.6.3 in the PoA DD have not followed the requirements have not followed the specific units, frequency and descriptions as designated by the methodology AMS-II.G, version 3.		The monitoring plan has been updated to satisfy the requirements from teh methodology.	The PoA DD has been revised to follow the parameters. CL 11 is closed.

Table 4 Forward action requests

Reference to Tabl 2	Forward action request	Response by Project Participant
A.3	**FAR 1** The logo and 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 logo and unique id will have to be verified at the time of CPA inclusion.	Not applicable
A.3	**FAR 2** 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.	Not applicable

APPENDIX B

PROTOCOL FOR ASSESSING COMPLIANCE OF SPECIFIC CDM PROGRAMME ACTIVITIES WITH THE PROGRAMME OF ACTIVITIES

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
A. General description of CPA					
A.1. Project boundaries					
A.1.1 Are the CPA's spatial boundaries (geographical) clearly defined, allowing the unique identification of the CPA?					
A.1.2 Are the CPA's system boundaries (components and facilities used to mitigate GHGs) clearly defined?					
A.1.3 Has it been demonstrated that the CPA is within the geographical borders of the PoA?					
A.1.4 Has it been confirmed that no part of the CPA is registered as a CDM project or included in a registered POA?					
A.2. Participation requirements					
A.2.1 Which Parties and CPA implementer are participating in the CPA? Are they included in the PoA?					
A.3. Duration of the CDM programme activity, Crediting Period					
A.3.1 Are the CPA's starting date and operational lifetime clearly defined and evidenced?					
A.3.2 Has the crediting period been clearly defined and is the start of the crediting period deemed to be reasonable?					
A.3.3 Has it been confirmed that the length of the CPA crediting period does not exceed the end of PoA?					
B. Eligibility of CPA and Estimation of Emission Reductions					
B.1. Eligibility criteria for CDM Programme Activities *It is assessed whether the CPA complies with the criteria for*					

CHECKLIST QUESTION		Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
inclusion in the registered programme of activities.						
B.1.1	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 1 – The CPA is located within one of the Host Countries, in El Salvador, Mexico and Nicaragua. 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.					
B.1.2	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 CPA inclusion stage, however the ICS unique numbering can also be checked during verification. In the event that any deployed ICS is found not in line with CPA double counting criteria, those ICS will not be counted in the emission reduction calculation.					
	=					
B.1.3	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 3 – The CPA is exclusively bound to the PoA. Confirmation that					

	CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
	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.					
B.1.4	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 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) 4) Cedes the DO's rights to the carbon credits generated from CPAs under the PoA to the CME..					
B.1.5	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 whether the project activity has or does not have public funding.					
B.1.6	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 6 – The CPA start date shall not be before PoA webhosting date (i.e. not prior to webhosting for global stakeholder consultation which was on					

CHECKLIST QUESTION		Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
	14/02/2012).. Please note that not all ICS installations may have been deployed at CPA inclusion stage, however the ICS start date can also be checked during verification. In the event that any deployed ICS is found not in line with CPA start date, those ICS will not be counted in the emission reduction calculation					
B.1.7	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;(ii) The date when the CPA was included in accordance with the Project cycle procedure;					
B.1.8	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 8 – The CME approves each CPA to be included into its registered PoA.					
B.1.9	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 9 – The CPA consists of replacement of conventional firewood cookstoves for 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					

CHECKLIST QUESTION		Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
	involving the efficiency improvements in the thermal applications of non-renewable biomass as per AMS II. G, ver. 3. 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.					
B.1.10	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 10 – The ICS disseminated under the CPA has a specified efficiency of at least 20%					
B.1.11	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 11 – Only new ICS will be disseminated. Please note that not 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 in line with the technical requirement, those ICS will not be counted for emission reduction calculation.					
B.1.12	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 12 – In accordance with AMS_11.G, Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods.					

CHECKLIST QUESTION		Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
B.1.13	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 13 – In accordance with paragraph 9 of Annex 32 to the EB47 Report, "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. Please note that not all ICS may have been deployed at CPA inclusion stage, but the 1% threshold however can also be checked during verification, and in case any deployed ICS type will be found not in line with the de-bundling requirement, those ICS will not be counted for emission reduction calculation.					
B.1.14	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 14 – The CPA will remain under the thermal threshold of 180 GWhth/a thermal energy savings (threshold as per clarification request SSC_233) throughout the crediting period of the CPA. 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					

CHECKLIST QUESTION		Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
	not be counted for emission reduction calculation.					
B.1.15	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 15 – Additionality is demonstrated using the guidance of "Attachement A of Appendix B of the Simplified Modalities and Procedures for Small-Scale CMD Project Activities"as described in the PoA DD: Investment barriers described in thePoA-DD also apply for the CPA level. Please note that ICS may have not been deployed yet at CPA inclusion stage, but the additionality can also be checked during verification. In the case that any deployed ICS models that are not in line with the additionality requirements are found, those ICS will not be counted in the emission reduction calculation.					
B.1.16	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 is demonstrated at the PoA level at section E.2 through the assessment of "justification of the choice of the methodology and why it is applicable to the CPAs".					
B.1.17	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 18 – The 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,					

CHECKLIST QUESTION		Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
	eligible target groups are any of the following: Residential biomass users, Commercial biomass users, Institutional biomass users. Assumptions made at the PoA level for any scope regarding these target groups are applicable to subsequent CPAs (i.e. baseline studies, ER calculation, monitoring plan).					
B.1.18	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.					
B.1.19	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 19 –The Local Stakeholder Consultation is established at the CPA level* as described in section D of the PoA-DD.					
B.1.20	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 20 –The EIA is established at the PoA level for each host country as described in section C of the PoA-DD†. No further actions are needed at the CPA level to satisfy the eligibility criteria.					
B.1.21	Has it been sufficiently justified that the CPA complies with Eligibility Criteria 21 – Sampling of					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
appliances within the CPA must meet the requirements of AMS-II.G v.3 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 baseline fuel consumption (i.e. as it is the case for commercial and institutional baselines for the first CPA in El Salvador, and other residential baselines for other Host Countries but El Salvador) and monitoring tasks during the crediting period. Conditions and its requirements are outlined for baselines in Annex 3 of the PoA-DD and for monitoring tasks in section E.7.2.					
B.1.22 Has it been sufficiently justified that the CPA complies with Eligibility Criteria 22 – Baseline parameters to be established at CPA level - 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}: as per the approach outlined in PoA-DD Section E.6.2, applying Option (a) of paragraph 7 of AMS-II.G v.3; SC_{old} and/or n_{old} : When Option 2 of paragraph 6 of AMS-II.G v.3 aplies n_{old}: as					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
per the approach outlined in E.6.2. When Option 3 of paragraph 6 of AMS-II.G v.3 aplies SC_{old}: as per the approach outlined in E.6.2. NRB for Nicaragua and Mexico.					
B.2. Calculation of GHG Emission Reductions – Project emissions *It is assessed whether the project emissions are stated according to the methodology and the PoA-DD and whether the argumentation for the choice of default factors and values - where applicable – is justified.*					
B.2.1 Is the calculation of project emissions of the CPA in accordance with the procedure described in the PoA-DD?					
B.2.2 Are CPA-specific conservative assumptions used when calculating the project emissions?					
B.2.3 Are CPA-specific uncertainties in the project emission estimates properly addressed?					
B.3. Calculation of GHG Emission Reductions – Baseline emissions *It is assessed whether the baseline emissions are stated according to the methodology and the PoA-DD and whether the argumentation for the choice of default factors and values – where applicable – is justified.*					
B.3.1 Is the calculation of baseline emissions of the CPA in accordance with the procedure described in the PoA-DD?					
B.3.2 Are CPA-specific conservative assumptions used when calculating the baseline emissions?					
B.3.3 Are CPA-specific uncertainties in the baseline					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
emission estimates properly addressed?					
B.4. Calculation of GHG Emission Reductions – Leakage *It is assessed whether leakage emissions are stated according to the methodology and the PoA-DD and whether the argumentation for the choice of default factors and values – where applicable – is justified.*					
B.4.1 Is the calculation of leakage emissions of the CPA in accordance with the procedure described in the PoA-DD?					
B.4.2 Are CPA-specific conservative assumptions used when calculating the leakage emissions?					
B.4.3 Are CPA-specific uncertainties in the leakage emission estimates properly addressed?					
B.5. Emission Reductions *The emission reductions shall be real, measurable and give long-term benefits related to the mitigation of climate change.*					
B.5.1 Has it been demonstrated that the total emission reductions of the CPA of activities will be real, measurable and give long-term benefits related to the mitigation of climate changeP					
B.6. Monitoring Methodology *It is assessed whether the CPA applies an appropriate monitoring methodology.*					
B.6.1 Is the monitoring plan for the CPA documented according to the approved methodology, in accordance with the programme of activities and in a complete and transparent manner?					
B.6.2 Will all monitored data required for verification and issuance be kept for two years after the end of the					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
crediting period or the last issuance of CERs, for this programme, whichever occurs later?					
B.7. Data and Parameters Available at Validation *It is established whether appropriate values were selected for parameters determined ex-ante.*					
B.7.1 Does the applied methodology allow determining the selected values ex-ante?					
B.7.2 Have adequate assumptions been used for determining the values and are underlying calculations correct?					
B.7.3 Has sufficient documentary evidence been presented to verify the selected values or to verify the input data used in the calculation of the values of the parameters determined ex-ante.					
B.8. Ex-Post Monitoring *It is established whether the monitoring plan provides for reliable and complete emission data over time.*					
B.8.1 Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the greenhouse gas emissions within the CPA boundary during the crediting period?					
B.8.2 Are the choices of CPA GHG indicators reasonable and conservative?					
B.8.3 Is the measurement method clearly stated for each GHG value to be monitored and deemed appropriate?					
B.8.4 Is the measurement equipment described and deemed appropriate?					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
B.8.5 Is the measurement accuracy addressed and deemed appropriate? Are procedures in place on how to deal with erroneous measurements?					
B.8.6 Is the measurement *interval* identified and deemed appropriate?					
B.8.7 Is the *registration, monitoring, measurement* and *reporting* procedure defined?					
B.8.8 Are procedures identified for *maintenance* of monitoring equipment and installations? Are the calibration intervals being observed?					
B.8.9 Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)					
B.9. CPA Management Planning *It is checked that programme implementation is properly prepared for and that critical arrangements are addressed.*					
B.9.1 Is the authority and responsibility of overall CPA management clearly described?					
B.9.2 Are procedures identified for training of monitoring personnel?					
B.9.3 Are procedures identified for emergency preparedness for cases where emergencies can cause unintended emissions?					
B.9.4 Are procedures identified for review of reported results/data?					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
B.9.5 Are procedures identified for corrective actions in order to provide for more accurate future monitoring and reporting?					
C. Environmental impacts *It is assessed whether environmental impacts of the CPA have been properly addressed.*			☐ Analysis at PoA level ☐ Analysis at CPA level This section must only be completed if the analysis of environmental impacts must be at CPA level.		
C.1.1. Has an analysis of the environmental impacts of the CPA been sufficiently described?					
C.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA)?					
C.1.3. Will the programme create any adverse environmental effects?					
C.1.4. Are transboundary environmental impacts considered in the analysis?					
C.1.5. Have identified environmental impacts been addressed in the programme design?					
C.1.6. Does the programme comply with environmental legislation in the host country?					
D. Stakeholders' comments *It is assessed whether stakeholders have been properly consulted in the development of the CPA.*			☐ Consultation at PoA level ☐ Consultation at CPA level This section must only be completed if the analysis of environmental impacts is at PoA level.		
D.1.6. Have relevant stakeholders been consulted?					
D.1.7. Have appropriate media been used to invite comments by local stakeholders?					
D.1.8. If a stakeholder consultation process is required					

CHECKLIST QUESTION		Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
	by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?					
D.1.9.	Is a summary of the stakeholder comments received provided?					
D.1.10.	Has due account been taken of any stakeholder comments received?					

APPENDIX B

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
Ms. Bachamanda 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.

Ramesh Ramachandran
Mr. Ramachandran holds a Master's Degree in Environmental Engineering and a Post Graduate Diploma in Operations Management. He possesses a combined experience of more than 15 years in the field of a) design and operation/maintenance of wastewater treatment (as part of working in wastewater design & equipment supply, firm), b) environmental consulting and c)production integrated environmental auditing. His experience also covers the fields of developing & designing EMS systems, resource/energy conservation, waste minimisation and cleaner production in various manufacturing, process and chemical industries.

In DNV he has experience of more than 5 years in validation and verification of numerous CDM projects in DNV, both in India & abroad. He has also been involved as a Lead Auditor in Management System Audits such as ISO 9001, ISO 140001 and OHSAS 18001 standards in various industrial sectors for more than 5 years in DNV.
His qualification, industrial experience and experience in CDM demonstrate his sufficient sectoral competence in energy generation from renewable energy sources , electrical distribution, waste handling and disposal.

Gonzalo Sandoval
Mr. Sandoval 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.

Scott Burns
Mr. 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.

Alexander Osadchiev

Mr. Osadchiev holds a PhD's Degree in Power Engineering. He has an overall experience of around thirty years. Prior to joining DNV he had around twenty years' experience in Power Engineering industry covering energy management in plant and system level, energy efficiency technologies and energy efficiency improvement, energy distribution and demand. His experience in the field of Management Systems (MS) also covers Energy, Quality, Environmental, and OHSAS management. He is Russian member of ISO Technical committee: TC 242 Energy Management (Standardization in the field of energy management, including for example: energy efficiency, energy performance, energy supply, procurement practices for energy using equipment and systems, and energy use as well as measurement of current energy usage, implementation of a measurement system to document, report, and validate continual improvement in the area of energy management). As a member of TC 242 he is taking part in ISO Energy Management standards preparation including ISO 50001, ISO 50004, and others ongoing.

He was involved in implementation of MS for several projects in Power Engineering industry including Power Plants, Energy intensive Organizations, regional power systems. He has also been actively involved in implementation and auditing of Management Systems such as ISO 9001, ISO 140001 and OHSAS 18001 standards in Power Engineering industry for more than three years.

He has qualification of CDM/JI validator, verifier, and sector expert. His has experience of around 4 years in validation, determination, and verification of several CDM/JI projects in DNV, both in Russia & abroad. His qualification, industrial experience and experience in CDM/JI projects were basement for conferring him rank of sector expert in following technological sectors:

A. Thermal energy generation from fossil fuels and biomass including thermal electricity from solar,
B. Electricity distribution,
C. Heat distribution,
D. Energy demand,
E. Household end use energy efficiency,
F. Waste disposal (including waste disposal for energy generation).