



**Programme design document form for
small-scale CDM programmes of activities
(Version 03.0)**

Complete this form in accordance with the Attachment "Instructions for filling out the programme design document form for small-scale CDM programmes of activities" at the end of this form.

PROGRAMME DESIGN DOCUMENT (PoA-DD)

Title of the PoA	Empowering DRC communities through the use of Improved Cook Stoves
Version number of the PoA-DD	06
Completion date of the PoA-DD	16/09/2014
Coordinating/ managing entity	Climate Corporation Emissions Trading GmbH
Host Party(ies)	Democratic Republic of Congo (Host)
Sectoral scope(s) and selected methodology(ies), and where applicable, selected standardized baseline(s)	Sectoral scope: 3. Energy Demand Methodology: AMS-II.G Energy efficiency measures in thermal applications of non-renewable biomass ¹ ; Version 05.0

¹ <http://cdm.unfccc.int/methodologies/DB/REQC2MYZJJ6I7BC9SKCS32T2K87AOW>

PART I. Programme of activities (PoA)

SECTION A. General description of PoA

A.1. Title of the PoA

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(a) The title of the proposed PoA: Empowering DRC communities through the use of Improved Cook Stoves

(b) The current version number of the PoA-DD: Version 06

(c) The date the PoA-DD was completed (DD/MM/YYYY): 16/09/2014

A.2. Purpose and general description of the PoA

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The purpose of this small-scale Programme of Activities (SSC-PoA) is the dissemination of Improved Cook Stoves (ICS) to urban, peri-urban, and rural users (households, communities or SMEs) in 6 provinces of the Democratic Republic of Congo (DRC), replacing the traditional inefficient cook stoves and cooking devices.

Biomass in DRC is mostly non-renewable since the forestry practices in DRC are not sustainable. Several greenhouse gases (GHG), including carbon dioxide, are produced as a result of the combustion of non-renewable biomass as used in cook stoves. ICS improve heat transfer efficiency as compared to the baseline traditional cook stoves, thereby reducing the amount of fuel (wood and charcoal) used.

The PoA will reduce use of non-renewable biomass and thus as well the greenhouse gases accountable to it.

1. Policy/measure or stated goal that the PoA seeks to promote

The goal of this PoA is to improve the quality of life of communities via making ICS available to urban peri-urban, and rural users (households, communities or SMEs) cooking with biomass across DRC.

Since the forestry practices in DRC are not sustainable, the PoA will reduce use of non-renewable biomass and thus as well the greenhouse gases accountable to it.

2. Framework for the implementation of the proposed PoA

The PoA will be coordinated by Climate Corporation Emissions Trading GmbH (further on referred to as "Climate Corporation"), the Coordinating Managing Entity (hereby CME), which is the project participant providing the framework and incentives for the rest of parties involved to achieve the emission reductions. CPAs under this PoA will be implemented by CPA implementers - companies, NGOs or other entities that will sign a contractual agreement with CME.

3. Confirmation that the PoA is a voluntary action by the CME

There are no laws or policies in DRC which require the use of improved cook stoves by the users. This PoA is a voluntary action of Climate Corporation, the CME of this PoA.

4. Contribution of the proposed SSC-PoA to sustainable development

The installation of improved cook stoves has multiple health, environment, and socio-economic benefits:

Environmental benefits:

- *Forest resources and Biodiversity:* will be improved as the programme reduces pressure on remaining forest reserves in DRC.
- *Reduced GHG emissions:* will be achieved through reducing the cooking energy demand for non-renewable biomass.
- *Air quality:* Air pollution from charcoal production for project users will be reduced, as well as indoor air pollution from indoor cooking with solid fuels.

Social and Economic benefits:

- *Livelihood of the poor:* the circumstances of poor families will be improved since the cook stoves reduce fuel cost. Reduction in wood consumption implies relief from drudgery and more opportunity for productive activity, arising from less time spent collecting fuel.
- *Access to energy services:* The improved cook stoves require less fuel, which in many areas, is a scarce resource or very expensive to buy. Users have also found improved cook stoves more convenient, shortening the cooking time.
- *Health:* Reduction of indoor air pollution (carbon monoxide and particulate matter), reducing exposition for children and mothers, reducing children pneumonia, respiratory diseases, and cancer. In addition, risks associated with open fire cooking are reduced.

A.3. CMEs and participants of PoA

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The CME of the proposed SSC-PoA is Climate Corporation Emissions Trading GmbH.

Climate Corporation Emissions Trading GmbH is the entity which communicates with the Board.

CME will contract and coordinate individual CPA implementers.

A.4. Party(ies)

Name of Party involved (host) indicates host Party	Private and/or public entity(ies) project participants (as applicable)	Indicate if the Party involved wishes to be considered as project participant (Yes/No)
Democratic Republic of Congo (Host)	TaiCom Congo SPRL	No
Democratic Republic of Congo (Host)	Climate Corporation Emissions Trading GmbH	No

A.5. Physical/ Geographical boundary of the PoA

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The geographical area for the proposed PoA is the following 6 provinces of Democratic Republic of Congo:

1. Kinshasa
2. Bandundu
3. Bas-Congo
4. Province Orientale
5. Katanga
6. South Kivu

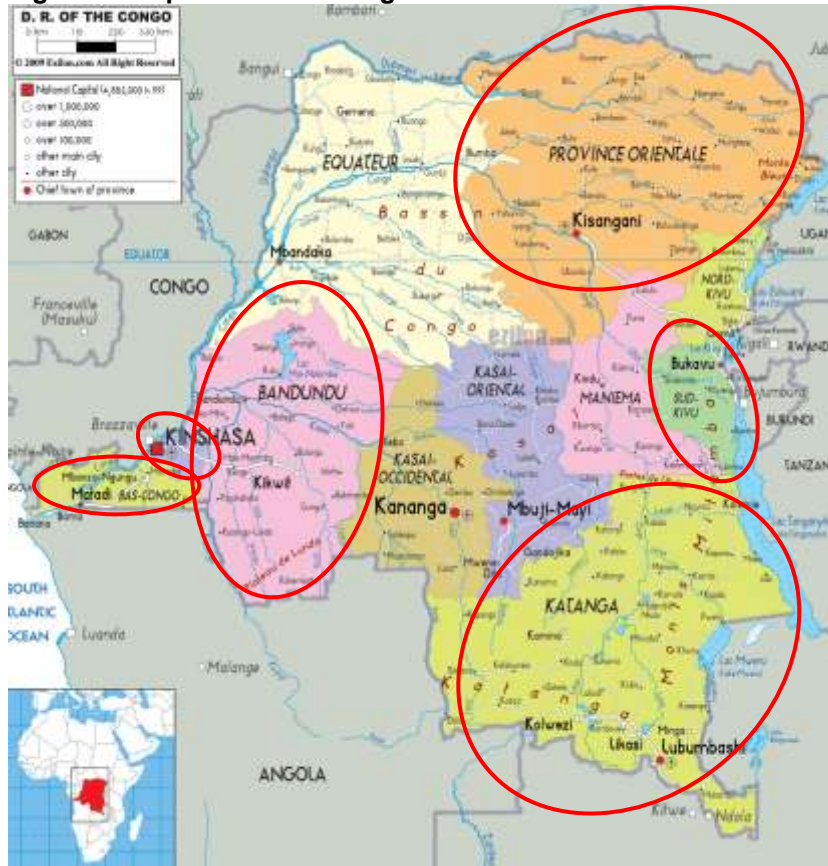
Geographical coordinates:²

² <https://www.cia.gov/library/publications/the-world-factbook/geos/cg.html> (Geography) , accessed October 2013

- Latitude: 0° 00' North of the Equator
- Longitude: 25° 00' East of Greenwich Meridian

All CPAs included in the PoA will be implemented within the territorial boundary of the selected provinces of the Host Country, and the physical location of cook stoves distributed in that CPA will form the actual CPA boundary.

Figure 1: Map of DRC showing administrative boundaries of the 6 provinces



A.6. Technologies/measures

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Sectoral scope	3. Energy Demand
Scale	Small scale

Project category ³ type &	Type (ii): Energy efficiency improvement projects Project category: G. Demand-side energy efficiency programmes for specific technologies
Applicable methodology	AMS-II.G Energy efficiency measures in thermal applications of non-renewable biomass ⁴
Version	05.0
Methodology elements key	<p><u>Typical Projects:</u></p> <p><i>Introduction of high-efficient thermal energy generation units utilizing non-renewable biomass or retrofitting of existing units (e.g. complete replacement of existing biomass fired cook stoves or ovens or dryers with more-efficient appliances) reduces use of non-renewable biomass for combustion</i></p> <p><u>Type of GHG emissions mitigation action</u></p> <p>(a) <i>Energy efficiency</i></p> <p><i>Displacement or energy efficiency enhancement of existing heat generation units results in saving of non-renewable biomass and reduction of GHG emissions</i></p>
Methodology scope	<p>Regarding technology:</p> <p><i>This category comprises efficiency improvements in thermal applications of non-renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency⁵ biomass fired cook stoves⁶ or ovens or dryers and/or energy efficiency improvements in existing biomass fired cook stoves, or ovens or dryers.</i></p>

Technology applied:

A typical CPA will replace traditional cook stoves using wood or charcoal with an ICS with higher efficiency. ICSs are more efficient than traditional cook stoves as they reduce heat loss and improve heat transfer and/or combustion efficiency. They are more efficient and burn more cleanly than traditional cooking devices, and as a result, reduce emissions of GHG from non-renewable biomass combustion.

During the lifetime of the proposed PoA several biomass cook stoves produced by different manufacturers may be included in the PoA. Inclusion of such cook stoves would be subject to compliance with the requirements of the methodology and the eligibility criteria of the PoA as described in the PoA-DD.

Each CPA will provide a detailed description on the specific cook stove model/s implemented and the baseline scenarios applied to each of them.

³ According to 4/CMP.1, Annex II, Appendix B

⁴ <http://cdm.unfccc.int/methodologies/DB/REQC2MYZJJ6I7BC9SKCS32T2K87AOW>

⁵ The efficiency of the project systems as certified by a national standards body or an appropriate certifying agent recognized by that body. Alternatively, manufacturers' specifications may be used.

⁶ Single pot or multi pot portable or in-situ cook stoves with specified efficiency of at least 20%.

At the time of inclusion, all new improved cook stove types will meet at minimum 20% thermal efficiency. Aging cook stoves will be monitored to capture changes in efficiency and emission reductions will be adjusted accordingly.

A.7 Public funding of PoA

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CME confirms that public funding of the PoA, if any, will not result in diversion of ODA.

Each CPA will declare any use of public funds in the CPA-DD and confirm that the public funding for the CPA does not result in a diversion of Official Development Assistance and is separate from and is not counted towards the donor country's financial obligations as party included in Annex 1 countries.

SECTION B. Demonstration of additionality and development of eligibility criteria

B.1. Demonstration of additionality for PoA

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According to the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities⁷, 3.1 (p4), "*PoAs that consist of one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of the "Guidelines for demonstrating additionality of small-scale project activities."*⁸

According to these Guidelines (EB68 Annex27), paragraph 1, project participants shall provide an explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers:

- a) *Investment Barrier*
- b) *Technological Barrier*
- c) *Barrier due to prevailing practices*
- d) *Other barriers*

As per the paragraph 2 of these guidelines, 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 also comprises of:

- (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;*

Improved cook stoves being promoted in this PoA fulfil the criteria of the positive list, as follows:

- The users are households, or communities or SMEs

⁷ http://cdm.unfccc.int/sunsetcms/storage/contents/stored-file-20130729142721859/meth_stan04.pdf

⁸ http://cdm.unfccc.int/Reference/Guidclarif/meth/methSSC_guid05.pdf

- The improved cook stoves are isolated units
- The maximum energy saving of each unit is not larger than 5% of the small-scale CDM thresholds.

The SSC threshold for energy efficiency improvement project activities which reduce energy consumption is 180 GWh_{th} per year.

Thus the limit for each ICS is as follows: 5% of 180 GWh_{th} = 9 GWh_{th} of energy savings per year

Actual savings will be calculated per each ICS type in the CPA-DD.

Biomass (wood and charcoal) is the main source of fuel for cooking in DRC. Baseline scenario is described in section B.4 of Part II of this PoA. Dissemination of improved cook stoves will reduce the use of non-renewable biomass being used for cooking. In the absence of the PoA, the users continue using a larger share of non-renewable biomass for cooking with the traditional cook stoves which results in GHG emissions. Hence the PoA is additional.

B.2. Eligibility criteria for inclusion of a CPA in the PoA

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Table 1: Eligibility Criteria for inclusion of a CPA

Ref. to PoA Standard (par. 16)	Eligibility Criteria	
	Category	Description
(a)	Geographical Boundary	All cook_stoves listed in the CPAs will be located in one of the 6 provinces of the DRC.
(b)	Double-counting	All CPAs will be checked to prevent double counting and that they are not registered as a separate CDM project activity, or as part of another registered CDM PoA.
(c)	Technology	Each CPA will implement improved biomass cook stoves with minimum efficiency of 20%.
(d)	Start date	Start date of the PoA is date of publication of the PoA-DD for global stakeholder consultation; 14/02/2014. All CPAs will state very clearly their start date, and evidence that their start date is not prior to the start date of the PoA.
(e)	Methodology	Each CPA will comply with the methodology used for this PoA, i.e. AMS-II.G (Energy efficiency measures in thermal applications of non renewable biomass), Version 05.0. <u>Applicability criteria of the methodology are:</u> 1. Small scale: <i>Aggregate energy savings of a single project activity shall not exceed the equivalent of 60 GWh per year or 180 GWh thermal per year in fuel output</i> 2. Technology: <i>efficiency improvements in thermal applications of non-renewable biomass</i> <i>Examples of applicable technologies and measures include the introduction of high efficiency biomass fired cook stoves or ovens or dryers and/or energy efficiency improvements in existing biomass fired cook stoves, or ovens or dryers.</i>

		<p>3. Non-renewable biomass: <i>non-renewable biomass has been used in the project region since 31 December 1989, using survey methods or referring to published literature, official reports, or statistics</i></p> <p>This criterion is demonstrated at the PoA-level, as described in section B.3 of the PoA-DD, no action needed by CPA.</p> <p>4. Leakage to be considered: Each CPA will describe how the leakage is considered.</p>
(f)	Additionality	<p>As described in the section B.1 above, additionality for all CPAs is demonstrated according to “<i>Standard for Demonstration of Additionality, Development of Eligibility Criteria and application of multiple methodologies for Programme of Activities</i>”, and “<i>Guidelines for the demonstration of additionality of small scale project activities</i>”.</p> <p>CPAs having the following characteristics are thus automatically additional:</p> <ul style="list-style-type: none"> • The improved cook stoves disseminated under each CPA would be isolated units • The users of the cook stoves would be households, or communities or SMEs • The size of the each unit will be no larger than 5% of the small-scale CDM thresholds – 9 GWh_{th} of energy savings per year.
(g1)	Stakeholder meeting	Local stakeholder consultation is done at CPA level, as described in section F of the PoA-DD. Local stakeholder consultation report must be provided with CPA-DD.
(g2)	Environmental Impact Analysis	The EIA is established at the PoA level as described in section E of the PoA-DD. No further action needed at the CPA level to satisfy this eligibility criterion.
(g3)	Monitoring	<p>As per the methodology, monitoring shall:</p> <ul style="list-style-type: none"> • consist of checking of all devices or a representative sample thereof, at least once every two years (biennial) to determine if they are still operating; those devices that have been replaced by an equivalent in-service device can be counted as operating. • consist of checking the efficiency of all devices or a representative sample thereof annually • include data on the amount of woody biomass saved under the project activity that is used by non-project households/users (who previously used renewable energy sources) • ensure that either: <ul style="list-style-type: none"> a) The replaced low efficiency devices are disposed of and not used within the boundary or within the region; or b) If baseline cook stoves continue to be used, monitoring shall ensure that the fuel-wood consumption of those cook stoves is excluded from B_{old}. <p>Each CPA has procedures in place to track the distribution of cook stoves.</p>
(g4)	Approval of CPA by CME	<p>Each CPA has a project implementer that is either the Coordinating Entity or another entity that has signed a contractual agreement with the CME.</p> <p>Those agreements include all rights and responsibilities of both parties, e.g. approval procedures by the CME, monitoring requirements, CER rights transfer. This eligibility criterion is not necessary if the CPA implementer is the CME.</p>

(g5)	Inclusion of CPA	CPA inclusion by CME shall be confirmed in the CPA-DD.
(g6)	CER rights transfer	The users purchasing the ICS shall sign an agreement with the CME to transfer the carbon credit rights of these cook stoves.
(h1)	Funding from Annex I countries	Each CPA will state clearly in the CPA-DD the source of public funding, if any.
(h2)	No diversion of ODA	If public funding is used for any CPA, the relevant Annex I party will confirm that the funding is not a diversion of ODA for that CPA.
(i)	Target Group and distribution mechanism	The CPA serves households, communities or SMEs either in urban, peri-urban or rural areas, and distributes the cook stoves through adequate distribution channels.
(j)	Sampling	<p>Provide a sampling method (e.g. in the monitoring plan and baseline studies) that follows the “Standard For Sampling And Surveys for CDM Projects and Programmes of Activities”</p> <p>The sampling plan contains information relating to: (a) sampling design; (b) data to be collected; and (c) implementation plan.</p> <p>The CPA complies with the following confidence interval and error requirement:</p> <ul style="list-style-type: none"> • When biennial inspection is chosen a 95% confidence interval and a 10% margin of error requirement for the sampling parameter. • When annual inspection is used, a 90% confidence interval and a 10% margin of error requirement is achieved for the sampled parameters. In cases where survey results indicate that 90/10 precision or 95/10 precision (above) is not achieved, the lower bound of a 90% or 95% confidence interval of the parameter value is chosen as an alternative to repeating the survey efforts to achieve the 90/10 or 95/10 precision. <p>If required, leakages are estimated and accounted for on a sample basis using a 90/30 precision for the selection of samples.</p>
(k)	De-bundling	<p>As per “Guidelines on assessment of debundling for SSC project activities” Part II, paragraph 10: <i>“If each of the independent subsystems/measures (e.g., biogas digester, solar home system) included in the CPA of a PoA is no larger than 1% of the small-scale thresholds defined by the methodology applied, then that CPA of PoA is exempted from performing de-bundling check i.e., considering as not being a de-bundled component of a large scale activity”</i>.</p> <p>The size of the each ICS will be no larger than 1% of the small-scale CDM thresholds – 1.8 GWh_{th} of energy savings per year.</p>

Updating the eligibility criteria

According to the “**Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities**”, CME shall update the eligibility criteria in case of situations stipulated in Section 3.2.2. of the Standard (if the version of methodology applied by the proposed PoA is revised or replaced subsequent to being placed on hold) and in accordance with these criteria.

The updates will be included in a new version of the PoA-DD (e.g. version 1.1), validated by a DOE, and submitted it to the Board for approval. Approved changes will take immediate effect.

B.3. Application of technologies/measures and methodologies

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The small-scale methodology AMS-II.G “Energy Efficiency measures in thermal applications of non-renewable biomass” will be used as baseline and monitoring methodology for each SSC-CPA included in this PoA. This methodology is approved by the EB for the application in a PoA. (Meeting Report of EB 70, Annex 30).

Reference: <http://cdm.unfccc.int/methodologies/DB/REQC2MYZJJ6I7BC9SKCS32T2K87AOW>

Justification of the chosen methodology:

Methodology Requirement	Description of Project Justification and Typical CPA Compliance
<p>Small scale: <i>Aggregate energy savings of a single project activity shall not exceed the equivalent of 60 GWh per year or 180 GWh thermal per year in fuel output</i></p>	<p>The maximum number of ICS is defined for each CPA according to the specific ICS models distributed, and corresponding cook stove performance, to ensure a maximum energy saving of 180 GWh_{th}/year per CPA.</p> <p>This will be described in the CPA-DD.</p> <p>During the monitoring the CPA shows annual energy savings data that demonstrate that the CPA does not exceed the small-scale threshold for each year of the CPA crediting period.</p> <p>In cases where the number of ICSs in any CPA exceeds the energy limit, the number of ERs shall be capped at those generated by ICSs saving in aggregate a maximum of 180GWh_{th} per year. Any additional emission savings will either not be counted in the program or included in another CPA as appropriate.</p>
<p>Technology: <i>“This category comprises efficiency improvements in thermal applications of non-renewable biomass.</i> <i>Examples of applicable technologies and measures include the introduction of high efficiency⁹ biomass fired cook stoves¹⁰ or ovens or dryers and/or energy efficiency</i></p>	<p>All CPAs will implement new, high efficiency¹¹ (at minimum 20%) biomass fired improved cook stoves (various models of wood or charcoal cook stoves).</p> <p>New ICS will displace existing traditional cooking devices using non-renewable biomass.</p> <p>This will be ensured by recording the fuel used prior to ICS installation and baseline cook stove</p>

⁹ The efficiency of the project systems as certified by a national standards body or an appropriate certifying agent recognized by it. Alternatively manufacturers’ specifications may be used.”

¹⁰ Single pot or multi pot portable or in-situ cook stoves with specified efficiency of at least 20%.

¹¹ The efficiency of the project systems as certified by a national standards body or an appropriate certifying agent recognized by it. Alternatively manufacturers’ specifications may be used.”

<p><i>improvements in existing biomass fired cook stoves or ovens or dryers.”</i></p>	<p>type of all ICS purchasers. Any ICSs replacing cook stoves using fossil fuels (such as kerosene and LPG) will not be recorded in the CPA database (i.e., ICS may be still installed, but will not be included within the installation record and emission reduction calculations).</p>
<p>Non-renewable biomass: <i>“The project participants are able to show that non-renewable biomass has been used since 31 Dec 1989, using survey methods or referring to published literature, official reports or statistics.”</i></p>	<p>Demonstration of use of the NRB in the DRC: According to FAO¹², area of forest and other wooded land in DRC decreased in between years 1990-2005 by 1.07% which is a loss of 357,000 ha.</p> <p>Although the natural assets have so far been rather well preserved, and deforestation rates in the Congo Basin are among the lowest in the tropical rainforest belt and are significantly below rates in most other African regions, a two-year study coordinated by World Bank¹³ suggests that</p> <ul style="list-style-type: none"> • Deforestation rates are likely to increase in the future to sustain development and poverty reduction. • Increasing agricultural productivity is not sufficient to limit pressure on forests. • Wood extraction for domestic fuel wood or charcoal production will continue to grow for the next few decades and could create a massive threat to forests in densely populated areas.
<p>Leakage to be considered:</p>	<p>Each CPA will describe how the leakage is considered, related to:</p> <ul style="list-style-type: none"> • devices currently being utilised outside the project boundary are transferred to the project activity • non-renewable woody biomass saved by the project activity shall be assessed based on ex post surveys of users and the areas from which this woody biomass is sourced (using 90/30 precision for a selection of samples) • use/diversion of non-renewable woody biomass saved under the project activity by non-project households/users that previously used renewable energy

¹² <http://www.fao.org/forestry/country/32185/en/cog/>

¹³ <http://www.profor.info/sites/profor.info/files/docs/DeforestationTrendsCongoBasin-ExecSumm-English.pdf>

	sources
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B.4. Date of completion of application of methodology and standardized baseline and contact information of responsible person(s)/ entity(ies)

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Date of completion of application of methodology and standardized baseline: 31/07/2014

Contact person: Clemens Ploechl

Organization: Energy Changes Projektentwicklung GmbH

Street/P.O. Box: Obere Donaustrasse 12/28

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SECTION C. Management system

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Climate Corporation is the Managing/Coordinating Entity (CME) and the project developer of this PoA. The CME will contract companies, NGOs or other entities to act as CPA implementers.

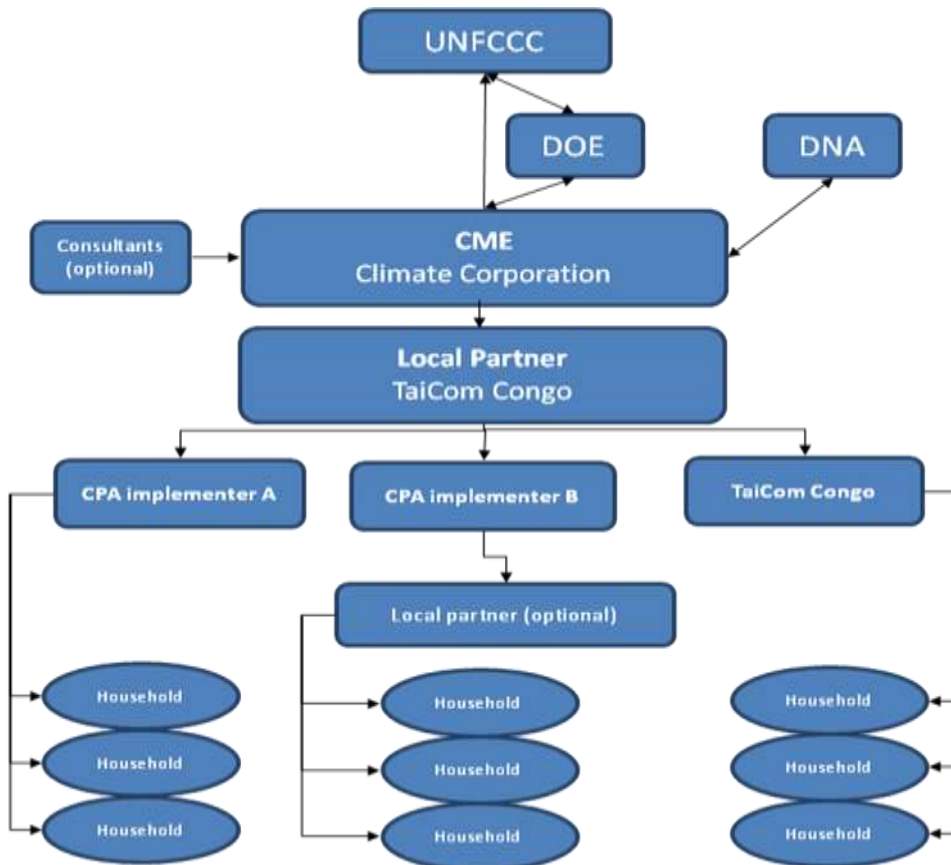
CME is responsible for:

- Preparation and registration of the PoA
- Assigning and communication with DOE (validation of PoA, approval of CPAs inclusions, verifications)
- Communication with the CDM Executive Board
- Coordination of CPA implementers and 3rd parties, if applicable
- Keeping PoA database and reporting for verification periods
- Contracting 3rd party organizations to perform baseline studies and monitoring tasks
- Recruitment of new CPAs, their assessment, and inclusion under PoA (after DOE approval)
- Signing ERPA with carbon credit buyers and revenues to CPA implementers

Each CPA implementer under this PoA will sign a standard contractual agreement with the CME to participate in the PoA as a CPA implementer, in which the CPA implementer will commit itself to the following requirements:

- Those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA.
- The CPA implementer shall not assign a new CPA that has been already registered either as a CDM project activity or as a CPA of another PoA.
- Passing the rights to the CERs generated onto the CME
- Monitor, keep the records, and report to the CME

Organisational set-up of the PoA:



Operational/management arrangements established by the CME for implementation of the proposed PoA include:

1. 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 of this PoA is a single company. Therefore management of Climate Corporation will be responsible for implementation of the PoA and its CPAs.

The CME will assign the tasks to individual personnel and/or hire new (internal employees or external consultants) if needed after the PoA gets registered at UNFCCC.

Position	Responsibilities & competencies
CME	• Secures the legal and economic issues (contracts, invoices, etc.)

- Secures external carbon consultant (optional)
- Keeps files on training and education
- Secures training for the its staff and for CPA implementers (if applicable)
- Trades the CERs
- Identifies and evaluates new CPAs
- Ensures that all requirements and eligibility criteria are met by all assigned CPAs
- Keeps a database of CPAs (PoA database)
- Communicates with CPA implementers (if applicable)
- Collects monitoring data from CPAs
- Prepares monitoring reports for emission reductions verification
- Any post-registration changes of the PoA-DD
- Quality control

2. *The provisions to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA;*

Contractual agreements with CPA implementers will ensure that all parties involved in implementing the CPAs are aware and agree that the CPAs are subscribed to the PoA.

At the user level, users are informed that their activity is being subscribed to the PoA and that they cede all rights on the CERs to the CME. Thus users are informed that the ICS is given to them due to CDM revenues stemming from emission reductions from using the ICS.

3. *Records of arrangements for training and capacity development for personnel*

Climate Corporation shall conduct or arrange training and capacity building for its own personnel and CPA implementers, based on any identified needs, and will keep records of the trainings.

4. *Roles and responsibilities for inclusion of CPA*

The CME is responsible for assessing each CPA prior to inclusion. This includes:

- CPA implementer has signed a contractual agreement with the Coordinating Managing Entity
- CPA meets the eligibility criteria of the PoA,
- Reviewing/finalization of CPA-DDs and the evidence documentation.

Then CME submits the CPA to the DOE for inclusion approval.

5. *Training and maintenance process*

In CPAs that promote locally manufactured cook stoves, training of new manufacturers – if required – will be performed by the CPA implementer, or the CME or a partner organization. Sales staff for both locally manufactured and imported cook stoves will be trained by the CPA implementer or CME. Information related to the use and maintenance of the cook stoves will be delivered to end users through demonstrations or included in a user guide that accompanies the cook stove. Each CPA will develop training and maintenance processes that are appropriate to the type of cook stove it promotes and to its target market.

6. Record keeping system for each CPA under the PoA

The CPA implementers will maintain records on end user contact information, cook stove data and other inventory information in a manner that enables the CME and DOE to verify that dissemination is indeed occurring and ICS are being used by users within the border of the host country that results in a decrease in greenhouse gas emissions.

Data on the cook stoves are recorded in the field by CPA implementer's personnel and/or contracted partners (e.g. sales points), and reported to the CPA implementer. CPA implementer keeps the records and enters the data to the CPA database. CPA database is established with assistance from the CME to ensure that data is collected correctly and organized in a useable fashion.

Minimum data to be collected include:

- Name of the customer and contact details (phone number, if available)
- Address, location
- Replaced cook stove type and fuel
- ICS type and size
- Date of sale
- Unique identification code of the cook stove

The CPA implementers will report the data to CME as per conditions set in the contractual agreements.

The CME will enter the data to the PoA database.

In addition, the CME will order field monitoring surveys from external experts, as needed.

The CME will store PoA database, CPA implementers' reports, and results of surveys, and cook stove tests for monitoring purposes and will keep the records until 2 years after the end of the crediting period or the last issuance of CER for the PoA, whichever occurs later.

7. Avoiding double counting

In each CPA-DD it will be stated that the CPA has not been and will not be registered either as a single CDM project activity or as a CPA under another PoA.

Each improved cook stove will carry a unique identification code. Code generation will be described in the CPA-DD.

Before recording the ICS into the CPA database, the identification code will be cross-referenced to guarantee that no double counting has occurred.

Next cross-check (and quality control) will be done by the CME when entering the data to the PoA database.

8. Monitoring process

The monitoring will follow the requirements of the methodology AMS II.G:

- consist of checking the efficiency of all devices or a representative sample thereof annually (PoA level – responsibility of CME)

- checking of all devices or a representative sample thereof, at least once every two years (biennial) to determine if they are still operating; those devices that have been replaced by an equivalent in-service device can be counted as operating. (CPA level – responsibility of CPA implementers)
- include data on the amount of woody biomass saved under the project activity that is used by non-project households/users (who previously used renewable energy sources) (CPA level – responsibility of CPA implementers)
- ensure that either:
 - a) The replaced low efficiency devices are disposed of and not used within the boundary or within the region (CPA level – responsibility of CPA implementers);
or
 - b) If baseline cook stoves continue to be used, monitoring shall ensure that the fuel-wood consumption of those cook stoves is excluded from B_{old} . (CPA level – responsibility of CPA implementers)

9. SSC-CPA included in the PoA is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity

All CPAs included under the proposed PoA will be exempt from the de-bundling check when all types of ICS considered under the PoA show energy savings of less than 1% of the small scale threshold defined¹⁴ by the methodology AMS-II.G.

The threshold defined by AMS II.G is the general small-scale threshold of energy efficiency projects – 180 GWh_{th} .

Thus the threshold to prove the activity is not a debundled action is deducted, as follows:

$$1\% \text{ of } 180 \text{ GWh}_{th} = 1.8 \text{ GWh}_{th} = 1,800,000 \text{ kWh}_{th}$$

Therefore, a de-bundling check will occur only for CPAs that include a technology type with a proven thermal energy savings of $1.8 \text{ GWh}_{th}/y$.

SECTION D. Duration of PoA

D.1. Start date of PoA

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Starting date of the PoA is date of publication of the PoA-DD for global stakeholder consultation; 14/02/2014.

¹⁴ This is based on the clarification from “Guidelines on assessment of debundling for SSC project activities, v03 (EB 54, Annex 13, par. 10) for determining the occurrence of debundling under a Programme of Activities (PoA)”, if each of the independent subsystem/measures included in the CPA of a PoA is no larger than 1% of the small scale threshold defined by the methodology applied, then that CPA of PoA is exempted from performing de-bundling check, i.e. considered as being not a de-bundled component of a large scale activity. See specific CPA-DD section A.4.6.

D.2. Duration of the PoA

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The length of the proposed PoA will be 28 years.

SECTION E. Environmental impacts**E.1. Level at which environmental analysis is undertaken**

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1. Environmental Analysis is done at PoA level
2. Environmental Analysis is done at SSC-CPA level

Justification: Assessment of the need for an environmental analysis is done at PoA level as the environmental impact does not depend on the specific geographical location where the ICS are used.

DRC does not require an Environmental Impact Assessment for the installation of efficient cook stoves. As per Act of the Ministry of environment, nature protection, and tourism Nr. 11/009 of 09/07/2009 on basic principles relating to the protection of the environment¹⁵, infrastructure projects that may have an impact on the environment are subject to an environmental and social impact pre-study. Projects implementing improved cook stoves are not considered as infrastructure projects with environmental impacts.

In contrary, the following environmental benefits of the PoA have been identified:

- *Forest resources and Biodiversity*: will be improved as the programme reduces pressure on remaining forest reserves in DRC.
- *Reduced GHG emissions*
- *Air quality*: Children and mothers will be exposed to fewer air pollutants through reduced emission of carbon monoxide and particulate matter. Air pollution from cooking with solid fuel is a key risk factor for childhood pneumonia as well as many other respiratory diseases and cancer.

No negative impacts can be identified.

E.2. Analysis of the environmental impacts

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The EIA is not requested by the national legislation for ICS projects

¹⁵ <http://www.mecnt.gouv.cd/images/DOWN/loi%20n11.pdf>

SECTION F. Local stakeholder comments**F.1. Solicitation of comments from local stakeholders**

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1. Local stakeholder consultation is done at PoA level
2. Local stakeholder consultation is done at SSC-CPA level ✓

F.2. Summary of comments received

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This information is provided at CPA level.

F.3. Report on consideration of comments received

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This information is provided at CPA level.

SECTION G. Approval and authorization

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Letter of Approval and Authorization of CME coordination from host country DRC have been received on July 10th, 2014.

PART II. Generic component project activity (CPA)**SECTION A. General description of a generic CPA****A.1. Purpose and general description of generic CPAs**

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The purpose of a typical small-scale Component Project Activity (CPA) is the dissemination of improved cook stoves (ICS) to urban peri-urban, and rural users (households, communities or SMEs) in 6 provinces of the Democratic Republic of Congo (DRC), replacing the inefficient traditional cook stoves and cooking devices, thus reducing fuel consumption. A typical CPA will be implemented by CPA implementers.

Several greenhouse gases (GHG), including carbon dioxide, are produced as a result of the incomplete combustion of biomass as used in cook stoves. More GHG emissions result from use biomass which is non-renewable. ICS improve heat transfer efficiency as compared to the baseline traditional cook stoves, thereby reducing both the amount of wood fuel used by unit appliance implemented and the emission of GHGs.

SECTION B. Application of a baseline and monitoring methodology and standardized baseline

B.1. Reference of methodology(ies) and standardized baseline(s)

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The small-scale methodology AMS-II.G “Energy Efficiency measures in thermal applications of non-renewable biomass”, Version 5.0 will be used as baseline and monitoring methodology for SSC-CPAs included in this PoA. This methodology is approved by the EB for the application of PoA (Meeting Report of EB 70, Annex 30).

Reference: <http://cdm.unfccc.int/methodologies/DB/REQC2MYZJJ6I7BC9SKCS32T2K87AOW>

B.2. Applicability of methodology(ies) and standardized baseline(s)

>>

A single methodology is applied across the PoA: AMS-II.G “Energy Efficiency measures in thermal applications of non-renewable biomass”, Version 05.0

Reference: <http://cdm.unfccc.int/methodologies/DB/REQC2MYZJJ6I7BC9SKCS32T2K87AOW>

Therefore the Part I, section B.3 of the PoA-DD constitutes the justification for the choice and applicability of the selected methodology.

Methodology Requirement	Description of Project Justification and Typical CPA Compliance
<p>Small scale: <i>Aggregate energy savings of a single project activity shall not exceed the equivalent of 60 GWh per year or 180 GWh thermal per year in fuel output</i></p>	<p>The maximum number of ICS is defined for each CPA according to the specific ICS models distributed, and corresponding cook stove performance, to ensure a maximum energy saving of 180 GWh_{th}/year per CPA.</p> <p>This will be described in the CPA-DD.</p> <p>During the monitoring the CPA shows annual energy savings data that demonstrate that the CPA does not exceed the small-scale threshold for each year of the CPA crediting period.</p> <p>In cases where the number of ICSs in any CPA exceeds the energy limit, the number of ERs shall be capped at those generated by ICSs saving in aggregate a maximum of 180GWh_{th} per year. Any additional emission savings will either not be counted in the program or included in another CPA as appropriate.</p>
<p>Technology: <i>“This category comprises efficiency improvements in thermal applications of non-renewable biomass. Examples of applicable technologies</i></p>	<p>All CPAs will implement new, high efficiency (at minimum 20%) biomass-fired improved cook stoves (various models of wood or charcoal cook stoves).</p> <p>New ICS will displace existing cooking devices using non-renewable biomass.</p>

<p><i>and measures include the introduction of high efficiency¹⁶ biomass fired cook stoves¹⁷ or ovens or dryers and/or energy efficiency improvements in existing biomass fired cook stoves or ovens or dryers.”</i></p>	<p>This will be ensured by recording the fuel used prior to ICS installation and baseline cook stove type of all ICS purchasers. Any ICSs replacing cook stoves using fossil fuels (such as kerosene and LPG) will not be recorded in the CPA database (i.e., ICS may be still installed, but will not be included within the installation record and emission reduction calculations).</p>
<p>Non-renewable biomass: <i>“The project participants are able to show that non-renewable biomass has been used since 31 Dec 1989, using survey methods or referring to published literature, official reports or statistics.”</i></p>	<p>As demonstrated at the PoA-level: According to FAO, area of forest and other wooded land in DRC decreased in between years 1990-2005 by 1.07% which is a loss of 357,000 ha.</p>
<p>Leakage to be considered:</p>	<p>Each CPA will describe how the leakage is considered, related to:</p> <ul style="list-style-type: none"> • devices currently being utilised outside the project boundary are transferred to the project activity • non-renewable woody biomass saved by the project activity shall be assessed based on ex post surveys of users and the areas from which this woody biomass is sourced (using 90/30 precision for a selection of samples) • use/diversion of non-renewable woody biomass saved under the project activity by non-project households/users that previously used renewable energy sources

B.3. Sources and GHGs

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The project boundary is the physical, geographical site of the improved cook stoves.

A description of the sources and gases included in the project boundary is presented below:

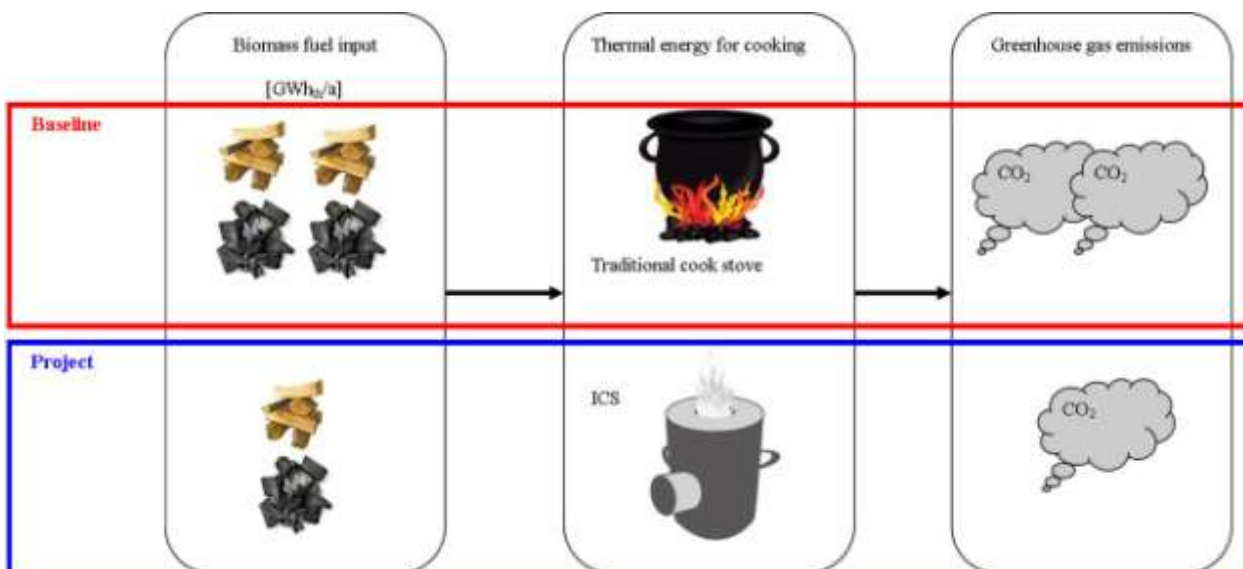
	Sources	Gas	Included?	Justification/Explanation
Baseline	Combustion of non-renewable biomass for cooking	CO ₂	Yes	Main source of emissions
		CH ₄	No	Excluded for simplification; in accordance with the methodology.
		N ₂ O	No	

¹⁶ The efficiency of the project systems as certified by a national standards body or an appropriate certifying agent recognized by it. Alternatively manufacturers’ specifications may be used.”

¹⁷ Single pot or multi pot portable or in-situ cook stoves with specified efficiency of at least 20%.

Project	Combustion of non-renewable biomass for cooking	CO ₂	Yes	Main source of emissions
		CH ₄	No	Excluded for simplification; in accordance with the methodology.
		N ₂ O	No	

Flow diagram of equipment, mass and energy:



B.4. Description of baseline scenario

>>

A typical SSC-CPA under the PoA consists of the dissemination of ICS, which by definition are small appliances providing energy efficiency improvements in the thermal applications of non-renewable biomass, in accordance with AMS-II.G.

In accordance with the methodology, “it is assumed that in the absence of the project activity, the baseline scenario would be the use of fossil fuels for meeting similar thermal energy needs”.

B.5. Demonstration of eligibility for a generic CPA

>>

To be eligible for inclusion in the PoA, a CPA must meet the following criteria:

Ref. to PoA Standard (par. 16)	Eligibility Criteria		Mean of proof / Evidence Document (to be checked at CPA inclusion & described in the CPA-DD)
	Category	Description	
(a)	Geographical Boundary	All cook stoves listed in the CPAs will be located in one of the 6 provinces of the DRC.	The CPA-DD will clearly describe the region/province/administrative district where the CPA is being implemented.
(b)	Double-counting	All CPAs will be checked to prevent double counting and are not registered as a separate CDM project activity, or as part of another registered CDM PoA.	<p>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</p> <p>Each CPA will implement system of unique identification codes to prevent double-counting of individual cook stoves.</p> <p><u>Documents/evidence to be checked</u></p> <ul style="list-style-type: none"> • UNFCCC website, UNEP Risoe • CPA-DD monitoring plan
(c)	Technology	Each CPA will implement improved biomass cook stoves with minimum efficiency of 20%.	<p><u>Documents/evidence to be checked</u></p> <ul style="list-style-type: none"> • Technology specification (e.g. manufacturer specifications, certificates, tests)
(d)	Start date	<p>Start date of the PoA is date of publication of the PoA-DD for global stakeholder consultation; 14/02/2014.</p> <p>All CPAs will state very clearly their start date, and evidence that their start date is not prior to the start date of the PoA.</p>	<p>The start date of each CPA will be defined in the CPA-DD.</p> <p><u>Documents/evidence to be checked</u></p> <ul style="list-style-type: none"> • Date of launch of CPA as signified by substantial investment, or • Date of first ICS sold under the CPA, or • Submission of prior consideration form
(e)	Methodology	<p>Each CPA will comply with the methodology used for this PoA, i.e. AMS-II.G (Energy efficiency measures in thermal applications of non renewable biomass), Version 05.0.</p> <p><u>Applicability criteria of the methodology are:</u></p>	<p>Each CPA will comply with the CDM methodology used in the PoA. Fulfilment of the applicability criteria will be described in the CPA-DD.</p> <p><u>Documents/evidence to be checked</u></p>

		<p>1. Small scale: <i>Aggregate energy savings of a single project activity shall not exceed the equivalent of 60 GWh per year or 180 GWh thermal per year in fuel output</i></p> <p>2. Technology: <i>efficiency improvements in thermal applications of non-renewable biomass.</i></p> <p>3. <i>Examples of applicable technologies and measures include the introduction of high efficiency biomass fired cook stoves or ovens or dryers and/or energy efficiency improvements in existing biomass fired cook stoves, or ovens or dryers. Non-renewable biomass: Demonstrate that non-renewable biomass has been used since 31 December 1989, using survey methods or referring to published literature, official reports, or statistics.</i></p> <p>This criterion is demonstrated at the PoA-level, as described in section B.3 of the PoA-DD, no action needed by CPA.</p> <p>4. Leakage to be considered: Each CPA will describe how the leakage is considered.</p>	<p>1. Annual energy savings data for each year of the CPA crediting period. The estimated maximum number of ICSs is to be defined in the CPA-DD.</p> <p>2. Technology specification of the implemented ICS types in the CPA-DD</p> <p>3. N/A Demonstrated at the PoA level, as described in Section B.3 of the PoA-DD.</p> <p>4. Emissions reduction calculation in the CPA-DD</p>
(f)	Additionality	<p>Additionality for all CPAs is demonstrated according to “<i>Standard for Demonstration of Additionality, Development of Eligibility Criteria and application of multiple methodologies for Programme of Activities</i>”, and “<i>Guidelines for the demonstration of additionality of small scale project activities</i>”.</p> <p>CPAs having the following characteristics are thus automatically additional:</p> <ul style="list-style-type: none"> • The improved cook stoves disseminated under each CPA would be isolated units • The users of the cook stoves would be households, or communities or SMEs • The size of the each unit will be no larger than 5% of the small- scale CDM thresholds - 9 GWh_{th} of energy savings per year. 	<p><u>Documents/evidence to be checked</u></p> <ul style="list-style-type: none"> • Technology specification and the energy saving per each ICS type in the CPA-DD. • Contract of CPA implementer with CME
(g1)	Stakeholder Meeting	<p>Local stakeholder consultation is done at CPA level, as described in section F of the PoA-DD. Local stakeholder</p>	<p><u>Documents/evidence to be checked:</u>Local stakeholder consultation report</p>

		consultation report must be provided with CPA-DD.	
(g2)	Environmental Impact Analysis (EIA)	The EIA is established at the PoA level as described in section E of the PoA-DD. No further action needed at the CPA level to satisfy this eligibility criterion.	N/A Environmental Impact Analysis is carried out on PoA level.
(g3)	Monitoring	<p>As per the methodology, monitoring shall</p> <ul style="list-style-type: none"> • consist of checking of all devices or a representative sample thereof, at least once every two years (biennial) to determine if they are still operating; those devices that have been replaced by an equivalent in-service device can be counted as operating. • consist of checking the efficiency of all devices or a representative sample thereof annually • include data on the amount of woody biomass saved under the project activity that is used by non-project households/users (who previously used renewable energy sources) • ensure that either: <ul style="list-style-type: none"> a) The replaced low efficiency devices are disposed of and not used within the boundary or within the region; or b) If baseline cook stoves continue to be used, monitoring shall ensure that the fuel-wood consumption of those cook stoves is excluded from B_{old}. <p>Each CPA has procedures in place to track the distribution of cook stoves.</p>	<p><u>Documents/evidence to be checked</u></p> <ul style="list-style-type: none"> • Monitoring plan in the CPA-DD <p>or</p> <ul style="list-style-type: none"> • CPA database and paper records of sales (Sale receipts) if the project is in operation already
(g4)	Approval of CPA by CME	<p>Each CPA has a project implementer that is either the Coordinating/Managing Entity or another entity that has signed a contractual agreement with the CME.</p> <p>Those agreements include all rights and responsibilities of both parties, e.g. approval procedures by the CME, monitoring requirements, carbon credit rights transfer. This eligibility</p>	<p><u>Documents/evidence to be checked</u></p> <ul style="list-style-type: none"> • Contractual agreement between CPA implementer and Coordinating/Managing Entity, if applicable

		<p>criteria is not necessary if the CPA implementer is the CME.</p>	
(g5)	Inclusion of CPA	<p>Each CPA inclusion by CME shall be confirmed in the CPA-DD</p>	<p><u>Documents/evidence to be checked</u></p> <ul style="list-style-type: none"> • Statement in the CPA-DD
(g6)	CER rights transfer	<p>The users purchasing the ICS shall sign an agreement with the CME to transfer the carbon credit rights of these cook stoves.</p>	<p><u>Documents/evidence to be checked</u></p> <ul style="list-style-type: none"> • Statement in the CPA-DD <p>or</p> <ul style="list-style-type: none"> • CER right transfer agreement clause in the ICS sale documents
(h1)	Funding from Annex I countries	<p>Each CPA will state clearly in the CPA-DD the source of public funding, if any.</p>	<p><u>Documents/evidence to be checked</u></p> <ul style="list-style-type: none"> • Statement of the CPA implementer.
(h2)	No diversion of ODA	<p>If public funding is used for any CPA, the relevant Annex I party will confirm that the funding is not a diversion of ODA for that CPA.</p>	<p><u>Documents/evidence to be checked</u></p> <ul style="list-style-type: none"> • Statement of the CPA implementer. • If there is funding, statement from the funder that funds are not a diversion of ODA
(i)	Target Group and distribution mechanism	<p>The CPA serves households, communities or SMEs either in urban, peri-urban or rural areas, and distributes the cook stoves through adequate distribution channels.</p>	<p><u>Documents/evidence to be checked</u></p> <p>The target group are rural, peri-urban, and urban households, communities and SMEs.</p> <p>Each CPA-DD will state very clearly the target group and the distribution mechanism used.</p>
(j)	Sampling	<p>Provide a sampling method (e.g. in the monitoring plan and baseline studies) that follows the “Standard For Sampling And Surveys for CDM Projects and Programmes of Activities</p> <p>The sampling plan contains information relating to: (a) sampling design; (b) data to be collected; and (c) implementation plan.</p> <p>The CPA complies with the following confidence interval and error requirement:</p> <ul style="list-style-type: none"> • When biennial inspection is 	<p><u>Documents/evidence to be checked</u></p> <ul style="list-style-type: none"> • The sampling plan presented in the CPA-DD

		<p>chosen a 95% confidence interval and a 10% margin of error requirement for the sampling parameter. When annual inspection is used, a 90% confidence interval and a 10% margin of error requirement is achieved for the sampled parameters. In cases where survey results indicate that 90/10 precision or 95/10 precision (above) is not achieved, the lower bound of a 90% or 95% confidence interval of the parameter value is chosen as an alternative to repeating the survey efforts to achieve the 90/10 or 95/10 precision.</p> <p>If required, leakages are estimated and accounted for on a sample basis using a 90/30 precision for the selection of samples.</p>	
(k)	De-bundling	<p>As per “Guidelines on assessment of debundling for SSC project activities¹⁸” Part II, paragraph 10: <i>“If each of the independent subsystems/measures (e.g., biogas digester, solar home system) included in the CPA of a PoA is no larger than 1% of the small-scale thresholds defined by the methodology applied, then that CPA of PoA is exempted from performing de-bundling check i.e., considering as not being a de-bundled component of a large scale activity”.</i></p> <p>The size of the each ICS will be no larger than 1% of the small-scale CDM thresholds – 1.8 GWh_{th} of energy savings per year.</p>	<p><u>Documents/evidence to be checked</u></p> <ul style="list-style-type: none"> • Technology specification and the energy saving per each ICS type in the CPA-DD. • Statement in the CPA-DD

B.6. Estimation of emission reductions of a generic CPA

B.6.1. Explanation of methodological choices

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The following methodological choices for calculation of the emission reductions of each CPA will be used for each type of implemented ICS. The same type of cook stoves involves cook stoves using the same fuel (either wood or charcoal) and having the same efficiency.

¹⁸ http://cdm.unfccc.int/Reference/Guidclarif/ssc/methSSC_guid17.pdf

The emission reductions of the CPA are sum of emission reductions achieved by each of the applied type of the cook stoves.

$$ER_y = B_{y,savings} \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected\ fossil\ fuel} \times N_{y,i} \quad \text{Equation (1)}$$

Where:

ER_y	Emissions reductions during the year y (tCO ₂ e)
$B_{y,savings}$	Quantity of woody biomass that is saved in tonnes per device
$N_{y,i}$	Number of project devices of the type i operating in year y , determined as per paragraph 22 of the methodology
$f_{NRB,y}$	Fraction of woody biomass used in the absence of the project activity in year y that can be established as non renewable biomass using nationally approved methods or government data or approved default country specific fraction of non-renewable woody biomass (f_{NRB}) values available on the CDM website ¹⁹
$NCV_{biomass}$	Net calorific value of the non-renewable biomass that is substituted (IPCC default for wood fuel: 0.015 TJ/tonne, wet basis)
$EF_{projected_fossil\ fuel}$	Emission factor for the substitution of non-renewable woody biomass by similar consumers. (81.6 t CO ₂ /TJ ²⁰)

Determining $B_{y,savings}$:

The methodology provides three options for determining $B_{y,savings}$ – the quantity of woody biomass saved by the project activity:

- Option 1: kitchen performance test (KPT)
- Option 2: water boiling test (WBT)
- Option 3: controlled cooking test (CCT)

The CPAs will choose an option according to the data availability.

No matter which option is used by CPA, the parameter $B_{y,savings}$ will be established for each ICS category/type, since different types of cook stoves are expected to have different performance. This should be achieved by sampling of the cook stoves and described in the CPA-DD.

↳ $B_{y,savings}$ Option 1:

¹⁹ Default values endorsed by designated national authorities and approved by the Board are available at <http://cdm.unfccc.int/DNA/fNRB/index.html> .

²⁰ This value represents the emission factor of the substitution fuels likely to be used by similar users, on a weighted average basis. It is assumed that the mix of present and future fuels used would consist of a solid fossil fuel (lowest in the ladder of fuel choices), a liquid fossil fuel (represents a progression over solid fuel in the ladder of fuel use choices), and a gaseous fuel (represents a progression over liquid fuel in the ladder of fuel use choices). Thus a 50% weight is assigned to coal as the alternative solid fossil fuel (96 t CO₂/TJ) and a 25% weight is assigned to both liquid and gaseous fuels (71.5 t CO₂/TJ for kerosene and 63.0 t CO₂/TJ for liquefied petroleum gas (LPG)).

$$B_{y,savings} = B_{old} - B_{y,new,KPT}$$

Equation (2)

Where:

B_{old} Quantity of woody biomass used in the absence of the project activity in tonnes per device

$B_{y,new,KPT}$ Annual quantity of woody biomass used in year y in tonnes per device, 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>>

↳ $B_{y,savings}$ Option 2

Based on whether $\eta_{y,new}$, or $B_{y,new,survey}$ is used for monitoring, either the Equation (3) or (4) can be used:

$$B_{y,savings} = B_{old} \times \left(1 - \frac{old}{new,y} \right) \quad \text{Equation (3)}$$

$$B_{y,savings} = B_{y,new,survey} \times \left(\frac{\eta_{new,y}}{\eta_{old}} - 1 \right) \quad \text{Equation (4)}$$

Where:

B_{old} Quantity of woody biomass used in the absence of the project activity in tonnes per device

$B_{y,new,survey}$ Annual quantity of woody biomass used during the project activity in tonnes per device, determined through a survey

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 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

$\eta_{new,y}$ Efficiency of the system being deployed as part of the project activity (fraction), as determined annually²¹ using the Water Boiling Test (WBT) protocol carried out in accordance with national standards (if available)

²¹ Biennial monitoring (i.e. monitoring once every two years) may be chosen, if the project proponents are able to demonstrate that the efficiency of the cook stove does not drop significantly as compared to the initial efficiency of the new device, over a time period of two years of typical usage.

or international standards or guidelines²². Use weighted average values if more than one type of system is being introduced by the project activity.

↳ $B_{y,savings}$ Option 3

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

Where:

SC_{old} Specific fuel consumption or fuel consumption rate²³ of the baseline devices 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 device is being replaced

$SC_{new,y}$ Specific fuel consumption or the fuel consumption rate in year y of the devices 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

Determining B_{old} :

The methodology provides two options for determining B_{old} – the quantity of woody biomass used in the absence of the project activity (in tonnes per device).

The CPAs will use option:

- a) Calculated as the product of the number of devices multiplied by the estimated average annual consumption of woody biomass per device (tonnes/year). This may be derived from historical data or a survey of local usage;

For CPAs that involve charcoal cook stoves:

When charcoal is used as the fuel, the quantity of woody biomass may be determined by:

- a) using a default wood to charcoal conversion factor of 6 kg of firewood (wet basis) per kg of charcoal (dry basis)²⁴.
- b) Alternatively, credible local conversion factors determined from a field study or literature may be applied.

²² *In all cases the testing protocol shall be the same for both the device being replaced and the device being deployed.*

²³ *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>>).*

²⁴ <http://www.ipcc-nggip.iges.or.jp/public/gl/guidelin/ch1ref3.pdf>

Determination of $N_{y,i}$:

Not all the ICS will be in use from the 1st day of any year. Dissemination will be ongoing and ICSs will be added every day. $N_{y,i}$ will be also adjusted for cook stoves that are operational for less than a year, in pro rata basis. Number of ICSs operational for one year (N) included in the monitoring period will be calculated with the following formula:

$$N_{y,i} = \sum_{D=1}^n Nd \times \frac{D_{y,i}}{365} \tag{Equation (7)}$$

Where:

Nd Number of devices operating for „D“ days during the monitoring period

D Number of days of operation of the device in year y

$D = 1, 2, 3, \dots$

Accounting for the leakage:

- if ex-post survey of users and the areas from which this woody biomass is sourced quantifies an increase in the use of non-renewable woody biomass by the non-project users, that is attributable to the project activity:

B_{old} is adjusted for the quantified leakage

- B_{old} is multiplied by a net to gross adjustment factor of 0.95 to account for leakages

B.6.2. Data and parameters fixed ex-ante

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Data that are calculated with equations provided in the selected methodology(ies) or default values specified in the methodology(ies) should not be included in the compilation.

Data / Parameter	$f_{NRB,y}$
Data Unit	fraction
Description	Fraction of woody biomass saved by the project activity in year y that can be established as non renewable biomass
Source of data	UNFCCC national default value for DRC http://cdm.unfccc.int/DNA/fNRB/index.html
Value(s) applied	0.9
Choice of data or Measurement methods and procedures	default
Purpose of data	Calculation of baseline and project emissions
Additional comment	The parameter is prescribed by the methodology as monitored. However, since the nationally approved default value is available, it can be reported ex-ante.

Data / Parameter	B_{old}
Data Unit	tonnes/year
Description	Average annual consumption of woody biomass per device
Source of data	Historical data or survey of local usage
Value(s) applied	-
Choice of data or Measurement methods and procedures	Will be specified in the CPA-DD. If a survey of local usage is the source of data, this survey follows the representative sampling methods as described in paragraph 22 of the applied methodology.
Purpose of data	Calculation of baseline emissions
Additional comment	If option (a) is used to determine B_{old}

Data / Parameter	η_{old}
Data Unit	-
Description	Efficiency of the device being replaced
Source of data	AMS-II.G.
Value(s) applied	0.10/0.2
Choice of data or Measurement methods and procedures	Default values 0.10 - 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; 0.2 - for other types of systems
Purpose of data	Calculation of baseline and project emissions.
Additional comment	If Option 2 is used to determine $B_{y,savings}$ CPAs may use other values if the data is available - 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

Data / Parameter	SC_{old}
Data Unit	tonnes/quantity of item/s processed (e.g. food cooked), or tonnes/ hour
Description	Specific fuel consumption or fuel consumption rate of the baseline devices
Source of data	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 >).

Value(s) applied	-
Choice of data or Measurement methods and procedures	To be specified in the CPA-DD
Purpose of data	Calculation of baseline and project emissions.
Additional comment	If Option 3 is used to determine $B_{y,savings}$

Data / Parameter	CF
Data Unit	Number
Description	conversion factor charcoal to wood
Source of data	<i>Projet Makala/CIFOR – Bois énergie en RDC : Analyse de la filière des villes de Kinshasa et de Kisangani; December 2011 (pg. 25) http://urbsef.cirad.fr/en/content/download/4097/32023/version/1/file/Projet+Makala+-+Analyse+de+la+filière+bois+énergie++à+Kinshasa+et+Kisangani_web.pdf</i>
Value(s) applied	6.67
Choice of data or Measurement methods and procedures:	local conversion factor
Purpose of data	Calculation of baseline emissions
Additional comment	To be used by CPAs involving charcoal cook stoves

B.6.3. Ex-ante calculations of emission reductions

>>

The following methodological choices for calculation of the emission reductions of each CPA will be used for each type of implemented ICS. The same type of cook stoves involves cook stoves using the same fuel (either wood or charcoal) and having the same efficiency.

The emission reductions of the CPA are sum of emission reductions achieved by each of the applied type of the improved cook stoves.

The CPA will select the calculation option according to the data availability. The chosen options will be clearly described in the CPA-DD.

Since the CPA may include both the wood and the charcoal cookstoves, the emission reductions of the CPA are the sum of emission reductions achieved by each type of the cook stove:

Example of ex-ante emission reductions calculation:

$$ER_y = B_{y,savings} \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossilfuel} \times N_{y,i}$$

Equation (1)

Where:

Value:

ER_y	Emissions reductions during the year y (tCO ₂ e)	Calculated
$B_{y,savings}$	Quantity of woody biomass that is saved in tonnes per device	Calculated from parameter B_{old}
$N_{y,i}$	Number of project devices of the type i operating in year y	As per CPA database, for ex-ante estimation values from the implementation plan are used
$f_{NRB,y}$	Fraction of woody biomass used in the absence of the project activity in year y that can be established as non- renewable biomass	0.9 ²⁵
$NCV_{biomass}$	Net calorific value of the non-renewable biomass that is substituted – wood, wet basis	0.015 TJ/tonne
$EF_{projected_fossilfuel}$	Emission factor for the substitution of non-renewable woody biomass by similar consumers.	81.6 t CO ₂ /TJ

Calculation of the total ER of the example CPA:

$$ER_{y,CPA} = \sum ER_{y,wood} + ER_{y,charcoal}$$

Determination of $B_{y,savings}$:

- Option 1:

$$B_{y,savings} = B_{old} - B_{y,new,KPT} \tag{Equation (2)}$$

- Option 2:

$$B_{y,savings} = B_{old} \times \left(1 - \frac{old}{new,y} \right) \tag{Equation (3)}$$

OR

$$B_{y,savings} = B_{y,new,surbey} \times \left(\frac{\eta_{new,y}}{\eta_{old}} - 1 \right) \tag{Equation (4)}$$

- Option 3:

$$B_{y,savings} = B_{old} \times \left(1 - \frac{SC_{new,y}}{SC_{old}} \right) \tag{Equation (5)}$$

²⁵ Default values endorsed by designated national authorities and approved by the Board are available at <http://cdm.unfccc.int/DNA/fNRB/index.html>.

Determination of B_{old} according to Option (a): Calculated as the product of the number of devices multiplied by the estimated average annual consumption of woody biomass per device (tonnes/year).

If the CPA involves charcoal cook stoves:

The quantity of woody biomass may be determined by:

- a) using a default wood to charcoal conversion factor of 6 kg of firewood (wet basis) per kg of charcoal (dry basis)²⁶.
CF = 6
- b) Alternatively, credible local conversion factors determined from a field study or literature may be applied.
CF = 6.67²⁷

Determination of $N_{i,y}$:

$$N_{i,y} = \sum_{D=1}^n N_d \times \frac{D}{365} \tag{Equation (7)}$$

Accounting for the leakage:

- if ex-post survey of users and the areas from which this woody biomass is sourced quantifies an increase in the use of non-renewable woody biomass by the non-project users, that is attributable to the project activity:
 B_{old} is adjusted for the quantified leakage
- B_{old} is multiplied by a net to gross adjustment factor of 0.95 to account for leakages

²⁶ <http://www.ipcc-nggip.iges.or.jp/public/gl/guidelin/ch1ref3.pdf>

²⁷ Source: *Projet Makala/CIFOR – Bois énergie en RDC : Analyse de la filière des villes de Kinshasa et de Kisangani*; December 2011 (pg. 25) http://ur-bsef.cirad.fr/en/content/download/4097/32023/version/1/file/Projet+Makala+-+Analyse+de+la+filière+bois+énergie++à+Kinshasa+et+Kisangani_web.pdf

B.7. Application of the monitoring methodology and description of the monitoring plan

B.7.1. Data and parameters to be monitored by each generic CPA

Data / Parameter	$N_{y,i}$
Data Unit	Number
Description	Number of project devices that are operating in year y
Source of data	CPA database
Value(s) applied	-
Measurement methods and procedures	As per paragraph 22 of the methodology: Monitoring shall consist of checking of all devices or a representative sample thereof, at least once every two years (biennial) to determine if they are still operating; those devices that have been replaced by an equivalent in-service device can be counted as operating. Primary data collection, for each cook stove type
Monitoring frequency	at least once every two years (biennial)
QA/QC procedures	Sampling will be conducted by applying the 95/10 confidence precision for the sample size calculation.
Purpose of data	Calculation of baseline and project emissions
Additional comment	N_y is adjusted according to actual operational days D during a given monitoring period y . The sales date for each appliance listed in the CPA database signifies the start of operation for each appliance type. The operational days of each appliance is divided by the total number of days of the current monitoring period to determine the adjusted N_y number of devices in operation.

Data / Parameter	$B_{y,new,KPT}$
Data Unit	t/year
Description	Annual quantity of woody biomass used during the project activity in tonnes per device
Source of data	Primary data collection - KPT
Value(s) applied	-
Measurement methods and procedures	Kitchen Performance Test As per paragraph 23 (a) of the methodology: monitoring shall determine the fuel consumption per operating device of all operating devices or a representative sample thereof,
Monitoring frequency	Annually or biennially Biennial monitoring may be chosen, if it can be demonstrated that the efficiency of the cook stove does not drop significantly as compared to the initial efficiency of the new device, over a time period of two years of typical usage.
QA/QC procedures	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)
Purpose of data	Calculation of project emissions
Additional comment	If Option 1 is used to determine $B_{y,savings}$

Data / Parameter	$B_{y,new,survey}$
Data Unit	t/year
Description	Annual quantity of woody biomass used during the project activity in tonnes per device
Source of data	Primary data collection - survey
Value(s) applied	-
Measurement methods and procedures	Household survey of all project households or a representative sample thereof
Monitoring frequency	Annually
QA/QC procedures	Sampling will be conducted by applying the 95/10 confidence precision for the sample size calculation.
Purpose of data	Calculation of project emissions
Additional comment	If Option 2, Equation (4) is used to determine $B_{y,savings}$

Data / Parameter	$\eta_{new,y}$
Data Unit	fraction
Description	Efficiency of the device being deployed as part of the project activity in year y
Source of data	Surveys based on the Water Boiling Test protocol
Value(s) applied	-
Measurement methods and procedures	Water Boiling Test Weighted average values if more than one type of system is being introduced by the project activity In all cases the testing protocol shall be the same for both the device being replaced and the device being deployed.
Monitoring frequency	Annually or biennially Biennial monitoring may be chosen, if it can be demonstrated that the efficiency of the cook stove does not drop significantly as compared to the initial efficiency of the new device, over a time period of two years of typical usage.
QA/QC procedures	WBT protocol shall be carried out in accordance with national standards (if available) or international standards or guidelines.
Purpose of data	Calculation of project emissions
Additional comment	If option 2 is used to determine $B_{y,savings}$

Data / Parameter	SC_{new,y}
Data Unit	ton fuel/unit putput OR ton fuel/hour
Description	Specific fuel consumption or fuel consumption rate in year y of the project device(s) deployed as part of the project that is fuel consumption per quantity of item/s processes (e.g. food cooked) or fuel consumption per hour respectively
Source of data	Primary data collection - CCT
Value(s) applied	-
Measurement methods and procedures	Controlled Cooking Test As per paragraph 23 (c) of the methodology: monitoring shall consist of determining the specific fuel consumption of all operating devices or a representative sample thereof, Weighted average values if more than one type of system is being introduced by the project activity
Monitoring frequency	Annually or biennially Biennial monitoring may be chosen, if it can be demonstrated that the efficiency of the cook stove does not drop significantly as compared to the initial efficiency of the new device, over a time period of two years of typical usage.
QA/QC procedures	Sampling will be conducted by applying the 95/10 confidence precision for the sample size calculation.
Purpose of data	Calculation of project emissions
Additional comment	If option 3 is used to determine B _{y,savings}

Data / Parameter:	D
Data unit:	days
Description:	number of days of operation of devices during the monitoring period
Source of data:	CPA database
Value(s) applied	D=1,2,3,n)
Measurement methods and procedures:	Not all the ICS will be sold on 1 st day of any year. Every day, sales will be added. The database contains the information on sales date sourced from the sales receipt.
Monitoring frequency:	continuously
QA/QC procedures:	Cross-checking the sales receipt and CPA database for a representative sample
Purpose of data	Calculation of project emissions
Additional comment:	Adjustment of N _{y,i}

Data / Parameter:	LE_y
Data unit:	-
Description:	Leakage related to the non-renewable woody biomass saved by the project activity - due to the use/diversion of non-renewable woody biomass saved under the project activity by non-project households/users that previously used renewable energy sources
Source of data:	Calculated based on ex-post surveys of users and the areas from which the woody biomass is sourced OR B_{old} is adjusted by default value factor as per methodology
Value(s) applied	- If default value is used: $0.95 \times B_{old}$
Measurement methods and procedures:	If the leakage assessment quantifies an increase in the use of non-renewable woody biomass by the non-project households/users, that is attributable to the project activity, then B_{old} is adjusted to account for the quantified leakage. If devices currently being utilised outside the project boundary are transferred to the project activity, then leakage is to be considered.
Monitoring frequency:	Annually or biennially
QA/QC procedures:	If ex-post surveys are used: Using 90/30 precision for a selection of samples If default value is used: N/A
Purpose of data	Calculation of leakage emissions
Additional comment:	If confirmed by ex-post surveys Adjustment of B_{old}

B.7.2. Description of the monitoring plan for a generic CPA

All the CPAs will follow the same monitoring methodology as described in this PoA-DD. The CME oversees the monitoring process.

Monitoring activities include:

1. Data on the cook stoves are recorded in the field by CPA implementer's personnel and/or contracted partners (e.g. sales points), and reported to the CPA implementer. CPA implementer keeps the records and enters the data to the CPA database. CPA database is established with assistance from the CME to ensure that data is collected correctly and organized in a useable fashion.

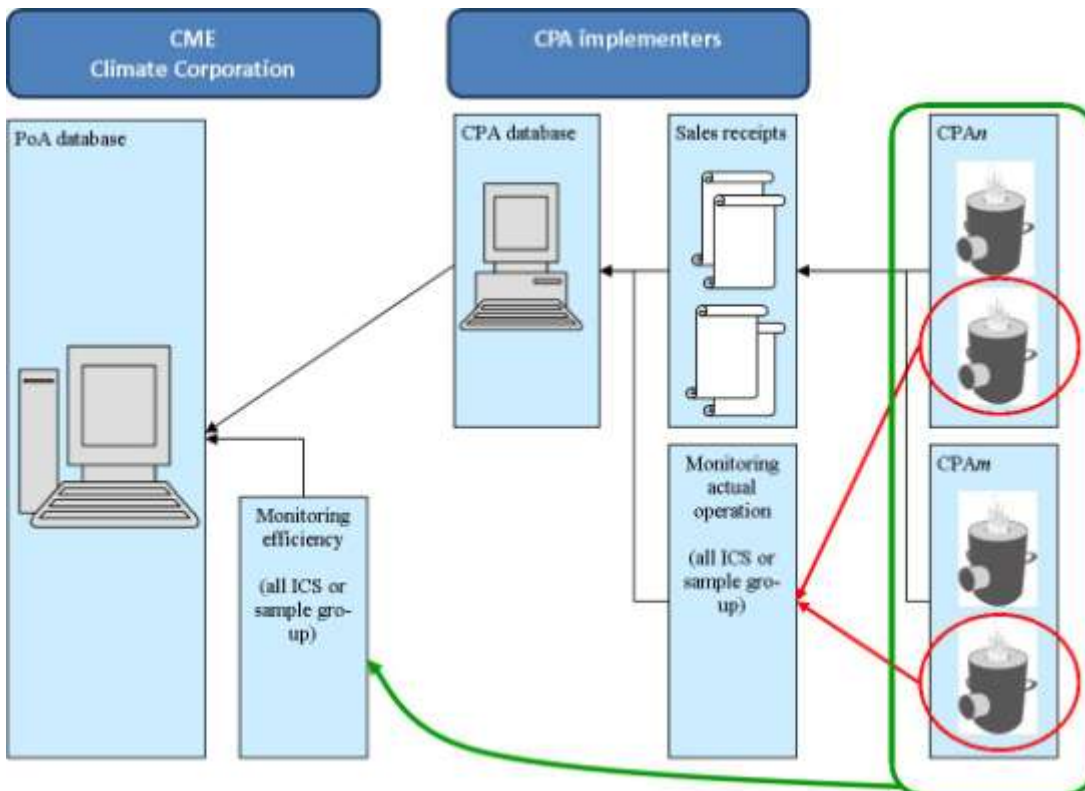
Minimum **data to be recorded at the point of sale** include:

- Name of the customer and contact details (phone number, if available)
- Address, location
- Replaced cook stove type and fuel
- ICS type and size

- Date of sale
 - Unique identification code of the cook stove (generation of the code will be described in the CPA-DD)
2. **Data management:** CPA implementer keeps the records and enters the data to the CPA database. The CPA implementers will maintain records on end user contact information, cook stove data, and other inventory information in a manner that enables the CME and DOE to verify that dissemination is indeed occurring and ICS are being used by users within the border of the host country that results in a decrease in greenhouse gas emissions.
 - Before recording the ICS into the CPA database, the identification code will be cross- referenced to guarantee that no double counting has occurred.
 - In order to confirm the displacement of non-renewable woody biomass, only the ICS where the household was using non-renewable woody biomass for cooking in the baseline situation will be included in the CPA. This will be confirmed in sales receipt by each of the users.
 3. The CPA implementer will keep the CPA database up-to-date at least annually by checking all the cook stoves or a representative sample thereof and collecting the data on actual operation of the distributed ICS in accordance with eligibility criterion (g3).
 4. If sampling is applied, it will be in accordance with eligibility criterion (j). See Sampling plan below for more details
 5. The CPA implementers will report the data to CME as per conditions set in the contractual agreements.
 6. Original copies of all the documents will be kept by the CPA implementers and kept for two years after the end of the crediting period.

CPA implementers will be assisted by the CME in monitoring as needed. Monitoring activities might be carried out partly by external, specialised consultants reporting to the CME/CPA implementers.

Flow-chart for the roles and responsibilities of the monitoring:



Quality Assurance and Quality Control

The CME is responsible to supervise all monitoring activities. A CPA database template will be developed by the CME to store the data collected.

All field personnel involved in distribution/sales of the ICSs will be trained in the proper installation, use, and maintenance of the appliances, and will be provided with sufficient training to introduce recipient households to the proper operation and maintenance of the device, as well as contact information for the CME.

Sampling plan:

i. Sampling objectives and reliability requirements:

Efficiency of the stoves is determined on the PoA level, under responsibility of CME.

Proportion of operating stoves and the share of households where both ICS and old inefficient cook stoves are used are monitored on the CPA level, under responsibility of the CPA implementer (as specified in PoA-DD, Part I., Section C., paragraph 8).

Objective of the sampling is to determine the values of these parameters with 90/10 confidence/precision.

The CPAs will conduct the biennial monitoring to :

- determine if ICSs are still operating; those devices that have been replaced by an equivalent in-service device can be counted as operating.
- identify any sources of leakage and report to CME:
 - confirm that the replaced low efficiency devices are disposed of and not used within the boundary or within the region; or
 - if baseline cook stoves continue to be used, (fuel-wood consumption of those cook stoves will be excluded from B_{old})
 - if non-renewable woody biomass saved under the project activity is used by non-project households/users (who previously used renewable energy sources)
 - If devices currently being utilised outside the project boundary are transferred to the project activity.

Monitoring personnel (CPA personnel or contracted external experts), coordinated by the CME, will be trained on the basic concept of the programme and administering of the developed monitoring form before sending to the field.

Data from the filled monitoring forms will be recorded in the software (e.g. MS Excel or similar) by CPA implementer and reported to the CME.

ii. Target Population and sampling frame:

The target population will be the complete set of ICS distributed by all the CPAs in each category/type

The total number of ICSs distributed and operated per type of ICS in a monitoring period will be the total sampling frame per that ICS type.

The CPA databases will serve as a basis for sampling.

iii. **Sampling method:** Stratified random sampling will be conducted biennially²⁸ covering each group of the same ICS type (strata).

iv. **Sample size:**

The sample size for each of the type of ICS distributed under the PoA is determined using the Standard: *Sampling and surveys for CDM project activities and programmes of activities, Version 04.1*²⁹.

The level of precision will be 90/10 (90% confidence interval and 10% margin of error), as required for the small-scale project activities.

The minimum sample size to obtain proportion of operational ICS is calculated using the equation for stratified random sampling as per the Guideline: *Sampling and surveys for CDM project activities and programmes of activities Version 03.0*³⁰, as follows:

$$n \geq \frac{1.645^2 NV}{(N - 1) \times 0.1^2 + 1.645^2 V} \quad \text{(Equation 4, paragraph 24. of the sampling guideline)}$$

$$V = \frac{SD^2}{\bar{p}^2}$$

$$SD^2 = \frac{(g_a \times p_a (1 - p_a)) + p_b (g_b \times (1 - p_b)) + (g_c \times p_c (1 - p_c)) + \dots + (g_k \times p_k (1 - p_k))}{N}$$

(Equation 5, paragraph 24. of the sampling guideline)

$$\bar{p} = \frac{(g_a \times p_a) + (g_b \times p_b) + (g_c \times p_c) + \dots + (g_k \times p_k)}{N}$$

(Equation 6, paragraph 24. of the sampling guideline)

Where:

n Sample size

N Total number of devices

p Expected proportion of operational ICSs of the respective type i in the population. 0.9 (As new stoves will be used, it is assumed that only 10% will not be operational at the end of the monitoring period) After the first monitoring period, the value will be updated based on the actual results from the previous monitoring period.

1.645 Confidence interval (90%)

²⁸ If a significant drop in efficiency of the stoves is confirmed by the CME on PoA level, the CPA implementers will be requested to change the frequency to annual.

²⁹ http://cdm.unfccc.int/filestorage/e/x/t/extfile-20131128104214767-meth_stan05.pdf/meth_stan05.pdf?t=UUZ8bjVpeGRqfDDOrHkO4L5zCToWtZgoDrvW

³⁰ http://cdm.unfccc.int/filestorage/e/x/t/extfile-20131010103828384-meth_guid48.pdf/meth_guid48.pdf?t=Zld8bjVpdnFvfDApTw22PjEjqoBCv24v4l4i

- 0.1 Level of relative precision (10%)
- SD^2 Overall variance
- \bar{p} Overall proportion of operational ICSs
- g_i Total number of ICSs of type i

The sample size of each type i (strata) is then determined, as follows:

$$n_i = \frac{g_i}{N} \times n$$

Example: if there are 2,000 of ICSs type a, and 500 of ICSs of type b, the sample group will be as follows:

$$n=29.692$$

$$n_a=23.754$$

$$n_b=9.938$$

If the above equation results in a total sample size of less than 30, the sample size will be drawn from at least 30 cook stoves.

In order to anticipate any data missing and bias, 10% oversampling will be applied.

Appendix 1. Contact information of coordinating/managing entity and responsible person(s)/ entity(ies)

CME and/or responsible person/ entity	<input checked="" type="checkbox"/> CME <input type="checkbox"/> Responsible person/ entity for application of the selected methodology(ies) and, where applicable, the selected standardized baseline(s) to the PoA
Organization	Climate Corporation Emissions Trading GmbH
Street/P.O. Box	Guntramsdorfer Strasse 103
Building	-
City	Moedling
State/Region	-
Postcode	2340
Country	Austria
Telephone	+43 2236 8002 7000
Fax	+43 2236 8002 7099
E-mail	office@climatecorp.com
Website	www.climatecorp.eu
Contact person	Michael Novoszad
Title	Director
Salutation	Mr.
Last name	Novoszad
Middle name	-

CME and/or responsible person/ entity	<input type="checkbox"/> CME <input type="checkbox"/> Responsible person/ entity for application of the selected methodology(ies) and, where applicable, the selected standardized baseline(s) to the PoA
Organization	TaiCom Congo SPRL
Street/P.O. Box	N°1 Père Boka avenue – Gombe/ N°1 TaiCom Station (Dingi Dingi) – Nsele / P.O.Box : 823 KIN 1
Building	-
City	Kinshasa
State/Region	Kinshasa
Postcode	243
Country	Democratic republic of Congo
Telephone	+243 999940502 / +243819977070
Fax	-
E-mail	taicom.congo@gmail.com
Website	www.taicomafrika.com
Contact person	Joseph NKINZO TCHIBO
Title	President & CEO
Salutation	Mr.
Last name	Tchibo
Middle name	Nkinzo

Appendix 2. Affirmation regarding public funding



Climate Corporation • Emissions Trading GmbH
Gunttr: Jnsdorferstr. 103 • 23:10 1\bdlinq •\u. tnt-1

Modling, 17 February 2014

To whom it may concern,

Climate Corporation Emissions Trading GmbH, as the CME of the Programme of Activities "Empowering DRC communities through the use of Improved Cook Stoves" confirms herewith that no public funds from Annex I countries have been used for this PoA which would cause a diversion from Official Development Assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "MN".

Michael Novoszad
Managing Director

Appendix 3. Applicability of methodology(ies) and standardized baseline(s)

All information is provided in Part I., Section B.3.

Appendix 4. Further background information on ex ante calculation of emission reductions

Please, see separate excel sheet attached.

Appendix 5. Further background information on the monitoring plan

N/A. This is left blank intentionally.

Appendix 6. Summary of post registration changes

N/A. This is left blank intentionally.

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
03.0	25 June 2014	<p>Revisions to:</p> <ul style="list-style-type: none"> • Include the Attachment: Instructions for filling out the programme design document form for small-scale CDM programme of activities (these instructions supersede the "Guideline: Completing the programme design document form for small-scale CDM programme of activities" (Version 03.0)); • Include provisions related to standardized baselines; • Add contact information on a responsible person(s)/ entity(ies) for the application of the methodology (ies) to the PoA in B.4 and Appendix 1; • Add general instructions on post-registration changes in paragraphs 2 and 3 of general instructions and Fehler! Verweisquelle konnte nicht gefunden werden.; • Change the reference number from <i>F-CDM-SSC-PoA-DD</i> to <i>CDM-SSC-PoA-DD-FORM</i>; • Editorial improvement.
02.0	13 March 2012	<p>EB 66, Annex 13</p> <p>Revision required to ensure consistency with the "Guidelines for completing the programme design document form for small-scale CDM programmes of activities".</p>
01.0	27 July 2007	<p>EB33, Annex43</p> <p>Initial adoption.</p>
<p>Decision Class: Regulatory Document Type: Form Business Function: Registration Keywords: programme of activities, project design document, SSC project activities</p>		