

# THE GOLD STANDARD MICRO-PROGRAMME OF ACTIVITIES DESIGN DOCUMENT

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NOTE: At the time of requesting registration, this form must be accompanied by a VPA-DD applying a real case.

## SECTION A. General description of micro-scale programme of activities (PoA)

### A.1 Title of the micro-scale programme of activities (PoA):

*Voluntary Gold Standard Multi-country Improved Cookstoves Programme of Activities*  
23/04/2015  
Version 05

### A.2. Description of the micro-scale programme of activities (PoA):

#### 1. General operating and implementing framework of PoA

The purpose of this micro-scale Programme of Activities (PoA) is the dissemination of improved cooking stoves (ICS) in Kenya. Other host countries that were included in the design consultation report shall be included at the time a real project is identified. These countries include: Uganda, Tanzania, South Africa, South Sudan, Ethiopia and Nigeria. The programme will promote stove categories that replace existing less efficient traditional three stones using woody-biomass.

The ICSs to be distributed are more efficient in transferring heat from the fuel to the pot/saucepan when compared to the traditional three stones to be replaced. By replacing inefficient stoves, the micro-scale PoA will save on consumption of woody biomass.

Southpole Carbon Asset Management Ltd is the coordinating/managing entity (CME) for this micro-scale PoA. As such, it will coordinate the efforts of different VPA implementing entities which will be contracted to distribute ICSs in the boundary of the micro-scale PoA and comply with the requirements of this micro-scale PoA.

The ICSs will be distributed at a subsidized price. The CME will be responsible for providing training and development to the implementing entity ensuring that correct procedures are followed during distribution of ICSs, including the correct recording of data required for monitoring activities.

When purchasing an ICSs, the beneficiary will provide certain information that will be recorded along with the unique stove serial number to enable tracking of the stove during monitoring. This information will form part of the Distribution Record. The beneficiary will also release ownership of the carbon credits generated by the ICS to the CME. Accordingly, the CME will use the carbon credit proceeds to subsidize the cost of ICSs sold to end users. The proceeds will also be used to recoup the associated costs incurred in the development and implementation of this micro-scale PoA, such as for the training of the implementing entities and for marketing of the benefits of ICS to overcome prevailing attitudes, as well as covering the costs of after sales services.

The data collected in each project activity Distribution Record will be transferred by the implementing entity to South Pole. South Pole will be responsible for cross-checking and ensuring data quality and control. The database created will serve as the basis for the calculation of emissions reductions and monitoring of project activities under the PoA.

The parties involved in the implementation of each project activity will be made aware and will have agreed that their activity is being subscribed to the micro-scale PoA.

## 2. Policy/measure or stated goal of the PoA

This PoA seeks to improve the access of households to clean and efficient cookstoves, by distributing efficient cookstoves.

The micro-scale PoA will have multiple benefits of reducing global GHG emissions, reducing pressure on forests and woody biomass resources, reducing indoor air pollution associated with use of traditional stoves and indirectly freeing up income that can be used for other purposes.

## 3. Confirmation that the proposed PoA is a voluntary action by the coordinating/managing entity.

Though the government is making efforts for clean cooking stoves yet there are no laws/policies mandating the adoption and/or dissemination of ICS in Kenya. Therefore, the proposed micro-scale PoA is a voluntary action by the CME (Southpole Carbon Asset Management Ltd) and the participating implementing entities.

### A.3. Coordinating/managing entity and participants of PoA:

The coordinating and managing entity of this micro-scale PoA and the entity which communicates with Gold Standard is Southpole Carbon Asset Management Ltd. Contact details are provided in Annex 1.

Name of Party involved (*) ((host) indicates a host Party)	Private and/or public entity(ies) project participants(*) (as applicable)	Kindly indicate if the Party involved wishes to be considered as project participant (Yes/No)
Switzerland	Southpole Carbon Asset Management Ltd	No
Kenya	Oserian Development Company Ltd	No

### A.4. Technical description of the micro-scale programme of activities:

#### A.4.1. Location of the micro-scale programme of activities:

##### A.4.1.1. Host Party(ies):

Kenya

#### A.4.1.2. Physical/ Geographical boundary:

The boundary of the micro-scale PoA is defined as the geographical area within which all the implemented micro-scale project activities included in the micro-scale PoA will occur. All ICSs in micro-scale project activities included in the PoA will be installed within the borders of Kenya



Figure 1: Map of Kenya

#### A.4.2. Description of typical micro-scale programme activity(ies):

A typical micro-scale programme activity will involve distribution of improved cook stoves to households or communities to replace the less efficient traditional three stones. The distribution of the ICSs will be achieved through a local implementer of the project activity.

The project activity implementer will provide the following services:

- Sale of the ICS to households,
- Data collection at the point of sale,
- Customer support,
- Monitoring for the continued use of the stove, and
- Monitoring of the sustainable development indicators.

South Pole will be responsible for capacity building of the project activity implementer thereby ensuring proper operation and implementation of the project activity.

South Pole and the local project activity implementer will together define areas of intervention where the stoves will be disseminated. However, the geographical boundary of the micro-scale project activity shall be the republic of Kenya. The micro-scale project activity is further limited by the micro-scale threshold of 10,000 tCO<sub>2</sub>e. Different micro-scale project activities will be implemented within the PoA boundary in different years. A sales record keeping system with a unique serial number for every stove sold will ensure that each stove can be traced to one specific micro-scale project activity to avoid double counting.

**A.4.2.1. First technology or practice to be employed in the PoA and the eligibility criteria for inclusion of the technology or practice in the PoA:**

All the Micro-scale project activities will deploy improved cook stoves reaching a thermal efficiency of at least 20%. The technical description and technical details shall be described in the respective micro-scale scheme project activity design document.

For example, the initial micro-scale project activities will deploy Envirofit M5000 wood fuel cookstove shown below.



Figure 1: Envirofit M5000 woodfuel cook stove

Other cook stoves produced by Envirofit and/or other manufacturers could be included in micro-scale project activities under the micro-scale PoA as well. Inclusion of such stoves would be subject to meeting the requirements of the end users and the eligibility criteria of the micro-scale PoA as specified below.

South Pole Carbon Asset Management Ltd, as the micro-scale PoA coordinating entity, shall verify that eligibility conditions are met before allowing a micro-scale project activity to be included under this micro-scale PoA. The eligibility criteria for the inclusion of a micro-scale project activity in this micro-scale PoA, which shall be stated and confirmed in each micro-scale scheme project design document, are as follows:



No.	Eligibility criteria		Means of proof	Confirmation
	Description	Conditions to be met		
1.	Boundary and location of the project activity	The project activity is located within the boundary of Kenya	Location and boundary is defined in the specific VPA-DD.	Yes/No
2.	Project technology	<ul style="list-style-type: none"> <li>- The project activity should involve distribution of improved cooking stoves with thermal efficiency of at least 20%.</li> <li>- Information about compliance should be demonstrated by each VPA DD.</li> <li>- Check if any EIA or no objection certificate is required for this technology or project.</li> </ul>	<ul style="list-style-type: none"> <li>- In case the thermal efficiency of the distributed ICSs less than 20%, then they are not eligible for this PoA.</li> <li>- VPA DD mention whether the stoves comply with national regulations if any or not.</li> <li>- Each VPA DD to demonstrate if EIA or 'no objection certificate' is required or not.</li> </ul>	Yes/No
3.	Avoiding double counting	<p>The project activity includes a means of uniquely identifying the stoves to be distributed and the end-users who will receive stoves. This would also ensure that there is no double counting of the VPA being implemented in any other PoA or single project activity.</p> <p>Also a thorough analysis of available databases (GS, VCS, UNFCCC) to check whether the VPA is included in any other voluntary market or CDM project activity.</p>	<p>A unique serial ID number or other means of identification.</p> <p>Database and/or Distribution Record showing that end user details including name and address are to be collected along with Stove ID.</p> <p>Analysis of databases.</p>	Yes/No

4.	Fuel usage	The ICS distributed uses firewood and replaces a system that previously used non-renewable firewood.	Description provided in the project activity design document	Yes/No
5.	Micro-scale limit for VPAs	The aggregated annual emissions reductions for all the systems involved shall be not greater than 10,000 tCO <sub>2</sub> e	The maximum number of ICS will be determined in each VPA-DD depending on the ICS type used. If a VPA exceeds the applicable limit, the claimable emission reduction shall be capped at 10,000 tCO <sub>2</sub> e.	Yes/No
6.	Project activity crediting period does not exceed micro-scale PoA life	The duration of the crediting period of each project activity to be included in the micro-scale PoA shall not exceed the end date of the registered micro-scale PoA.	VPA-DD shall indicate the duration of the project activity crediting period, either for a single 10 year crediting period or a 7 year renewable crediting period. The final date for which ERs can be credited shall be no later than 28 years after the date of registration of the micro-scale PoA.	Yes/No
7.	Additionality	The micro-scale project activity is an emission reduction project in which each of the independent subsystems /measures achieve annual emission reductions equal to or less than 600 tCO <sub>2</sub> or annual energy savings equal to or less than 600 MWh or installed capacity is less than 1500 kW for households/communities	The VPA-DD shall demonstrate the emissions reduction capacity of each independent subsystem/measure.	Yes/No

8.	LSC	<p>VPA may apply any of the following approaches</p> <p><u>A) Grouped LSC</u></p> <p>The project to be apply the group LSC shall comply with the following conditions:</p> <ul style="list-style-type: none"> <li>i) Must be from the same host country boundary,</li> <li>ii) they will apply the same technology (firewood cook stoves),</li> <li>iii) same stove type (e.g. Envirofit M5000),</li> <li>iv) similar distribution mechanism shall be employed,</li> <li>v) the VPAs should be implemented within 3 years from the date of grouped LSC approval.</li> </ul> <p><u>b) LSC at VPA level</u></p> <p>In case a VPA cannot apply grouped LSC, it needs to conduct LSC at project level.</p>	<p>The VPA shall demonstrate that to qualify for a group LSC:</p> <ul style="list-style-type: none"> <li>i) The VPA is located in the same boundary as other grouped VPAs,</li> <li>ii) same stove type,</li> <li>iii) similar distribution channel is used,</li> <li>iv) implemented within the timeframe.</li> </ul>	
9.	Ownership of emission reductions can be clearly demonstrated	Only project activities which can clearly demonstrate transfer of ownership of credits from end-users to CME can be included.	Each VPA DD to demonstrate clear and transparent ownership of credits.	Yes/No
10.	Baseline/project activity	<p>ICS replacing the following:</p> <ul style="list-style-type: none"> <li>- Baseline fuel is firewood</li> <li>- The baseline stove is a three stone fire or a conventional device without a grate or a chimney</li> <li>- Project activity must demonstrate that the stoves being introduced are firewood burning stoves only</li> </ul>	<p>Each VPA DD to demonstrate the baseline</p> <p>Each VPA DD to demonstrate that stoves being introduced are firewood burning stove only</p>	Yes/No



11.	Prior consideration	Retroactive projects need to demonstrate prior consideration of carbon revenues irrespective of LSC (or group LSC) being done or not.	Each VPA DD to demonstrate whether there is prior consideration for carbon revenues or not.	Yes/No
12.	Start date of VPA	Documentary evidence on the start date of the VPA	Each VPA to clearly demonstrate the start date	Yes/No
13.	Target group	Target group consists of households/communities in rural area and distribution mechanism.	Each VPA DD to mention the target group involved and the distribution mechanism	Yes/No
14.	Use of baseline cookstoves	Projects can use baseline cookstoves as a backup or auxiliary as long as a mechanism is put into place to encourage the removal of old cookstove.	Each VPA DD to provide explanation on the use/removal of baseline cookstove.	Yes/No
15.	ODA	<ul style="list-style-type: none"> <li>- Projects should not receive ODA funding</li> <li>- In case any project is receiving a funding from Annex 1 country, then VPA to demonstrate that funding from Annex 1 country does not lead to ODA diversion.</li> </ul>	Each VPA to demonstrate whether it receives ODA funding or not and in the case there is, ensure that there is no diversion of ODA (see Annex 2 of VPA-DD)	Yes/No

**A.4.2.2. Second technology or practice to be employed in the PoA and the eligibility criteria for inclusion of the technology or practice in the PoA:**

Not Applicable

**A.4.3. Description of how the anthropogenic emissions of GHG by sources are reduced by the technology or practice below those that would have occurred in the absence of the registered PoA (assessment and demonstration of additionality):**

In the following it is demonstrated that:

- (i) The proposed PoA is a voluntary coordinated action;

The coordinating and managing entity is South Pole Carbon Asset Management. There is no legal obligation to implement cook stoves in the Kenya. Therefore all the activities undertaken are voluntary in action.

- (ii) If the PoA is implementing a voluntary coordinated action, it would not be implemented in the absence of the PoA;

See below for the demonstration of how the action would not be implemented in the absence of the micro scale PoA.

- The voluntary coordinated action would not be implemented in the absence of the PoA. According to Annex U" Micro Programme rules and procedures",
- All project activities Meeting criteria any of the criteria listed below can be termed deemed additional
  - i. The project activity is located in a Least Developed Country (LDC), Small Island Developing States (SIDS) or a Land Locked Developing Country (LLDC). 5
  - ii. The project activity is located in a special underdeveloped zone of the host country identified by the Government before 28 May 2010. CME shall refer to the list published by the host country DNA.
  - iii. The project activity is located in any host country different from the countries defined above but project participants can demonstrate that project implementation will essentially benefit poor communities. No specific definition of 'poor communities' is pre-established. The Millennium Development Goals-based long term National Development Strategy (NDS) can serve as the basis to assess the eligibility of the targeted communities. Project participants shall seek approval from The Gold Standard Foundation on the basis of a formal request providing detailed arguments as to how the activity will benefit the poor communities.
  - iv. The project activity generates electricity:
    - a. As on-site generation, i.e. electricity generated at the point of use and no connection with any grid, OR b. Feeds into an existing or new local, low voltage isolated grid<sup>6</sup>.
    - b. It may also feed into the regional or national high voltage grid if convincing evidence can be provided to demonstrate that the implementation of the project activity will significantly improve electricity access for the poor local communities, households or SMEs.
  - v. The project activity employs specific renewable energy technologies or measures recommended by the host country DNA and approved by the CDM EB (project participants shall refer to the list published by the host country), OR approved by The Gold Standard Foundation.
  - vi. The project activity is an emission reduction project in which each of the independent subsystems or measures achieve annual emission reductions equal to or less than 600 tCO<sub>2</sub> or annual energy savings equal to or less than 600 MWh or installed capacity is less than 1500 kW for households/SMEs or communities. The limits defined above apply to each subsystem or the measure implemented.

Since all the individual subsystems generate less than 600 tCO<sub>2</sub> they can be termed deemed additional.

- (iii) If the PoA is implementing a mandatory policy/regulation, this would/is not enforced;

This PoA is not implementing a mandatory policy.

- (iv) If a mandatory policy/regulation is enforced, the PoA will lead to a greater level of enforcement of the existing mandatory policy/regulation.

Not applicable.

This micro-scale PoA reduces the use and demand for non-renewable biomass that would have been used in the replaced stove by using an efficient cook stove. This directly leads to reduced GHG emissions.

#### A.4.4. Operational, management and monitoring plan for the programme of activities (PoA):

The detailed steps involved in the operational, management and monitoring plan for the proposed micro-scale PoA are described below. The numbering of the steps corresponds with the diagram provided.

##### A.4.4.1. Operational and management plan:

Figure 3 below provides an overview of the distribution and monitoring activities involved in each VPA under the micro-scale PoA. Each numbered step has a corresponding descriptive paragraph. Steps 1-7 describe **Procedures for distribution of ICS**. Steps 8-12 describe **Procedures for the monitoring of emissions reductions**.

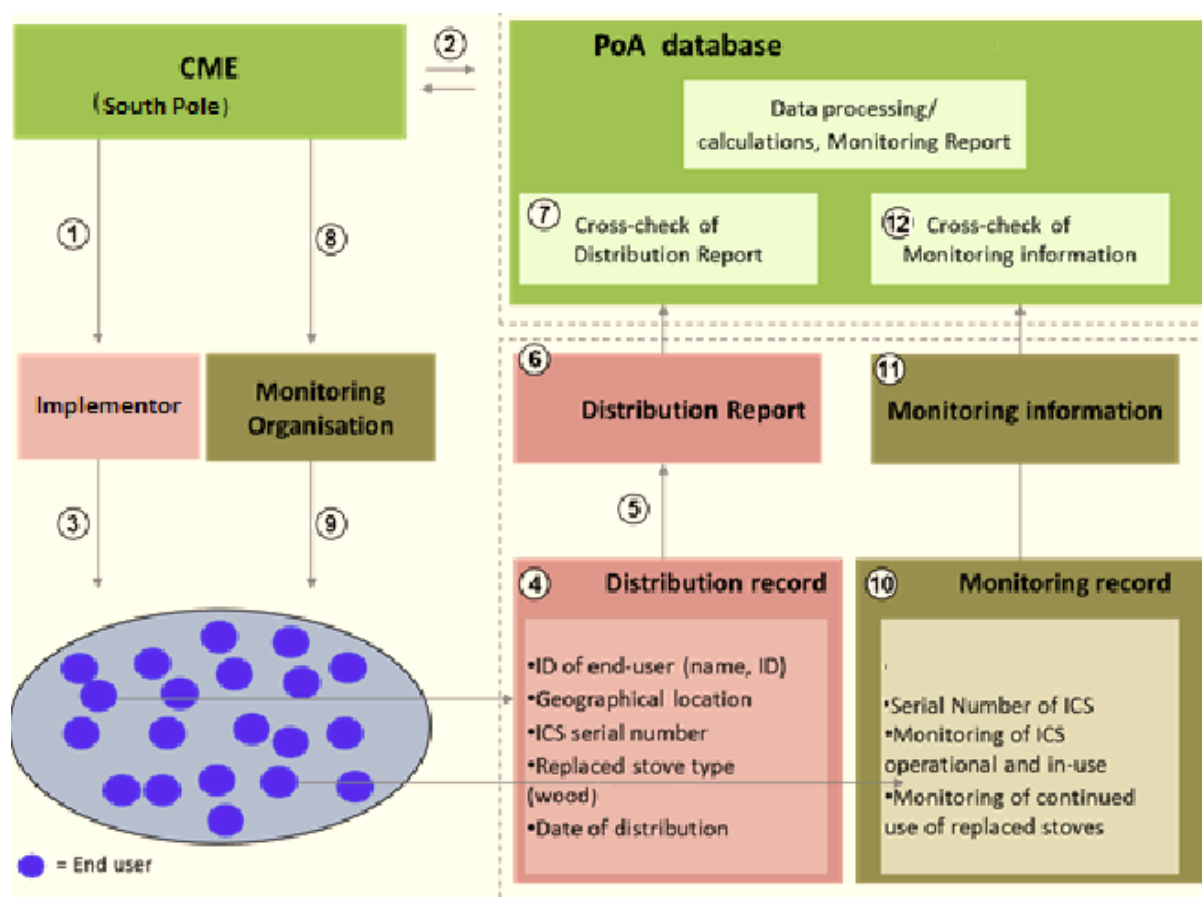


Figure 2: ICS distribution and monitoring plan

## ***Procedures for distribution of ICS***

1. The CME will coordinate the activities to be undertaken by each VPA implementer involved in the micro-scale PoA. As part of the inclusion of a VPA under the micro-scale PoA, a legally-binding contractual agreement will be signed by the VPA implementer and the CME. Under the agreement, the roles and responsibilities of the CME and the VPA implementer will be clearly spelled out. Further, the VPA implementer will ascribe its activity to the micro-scale PoA as part of entering into this agreement. Any parties the VPA implementer contracts will also be required to enter into a contractual agreement, similarly ascribing their activities to the micro scale PoA. Suitable training will be conducted for VPA implementers taking part in new VPAs to make them aware of the GS rules and procedures with respect to micro-scale PoA and their requirements in terms of distribution and data collection. Guidance will be provided to each VPA implementer on the correct procedures to be followed during distribution. The agreement will also define carbon ownership rights.
2. The CME will keep a record of the serial numbers of the ICS units distributed by each VPA implementer. This will enable cross-checking of the individual units claimed to have been distributed by each implementer during the proposed micro scale PoA, thus helping to avoid double counting and improve accountability.
3. The VPA implementer will be responsible for the implementation of the distribution programme within a specific VPA. ICSs will be distributed to end users by the VPA implementer directly or via technicians, retailers, agents or other third parties that are sub-contracted by the VPA implementer. Any such third parties will be trained by the VPA implementer who will be responsible for ensuring correct procedures according to the micro-scale PoA are fulfilled, as will be required of the VPA implementer by its agreement with the CME.
4. During the distribution itself, each VPA implementer shall make sure that necessary data is correctly obtained from the customer and recorded in the VPA Distribution Record/sales receipt, firstly to avoid double counting and secondly to enable tracking of the ICS for monitoring purposes. This data will include and contained in the sale receipt:
  - **Name/Identification of end user that will be using the stove**
  - **Geographical location of stove**, which could be determined by a fixed address/location if applicable, or by using GPS data.
  - **Stove unique serial ID number**
  - **Type of old stove which the ICS is replacing**
  - **Stove distribution date**

Additional information will be recorded in the case of each individual VPA if deemed necessary to ensure effective tracking of stoves, accurate emissions reduction calculations and effective monitoring procedures under the particular circumstances of that VPA (for example, where applicable a phone number will also be collected).

At the time of distribution, via the sale receipt, the VPA implementer will also obtain the customer's approval to exclusively assign carbon rights to the CME.

This template shall not be altered. It shall be completed without modifying/adding headings or logo, format or font.

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5. The VPA implementer is responsible for ensuring that the data contained in each individual VPA Distribution Record is provided in the correct format and is complete and accurate.
6. The VPA implementer will provide a VPA Distribution Report in form of sales receipts to the CME on a regular basis. Either a carbon copy of the VPA Distribution Records or scanned copies of each record will be provided to the CME. The VPA implementer will maintain archives of past VPA distribution records.
7. The CME will perform cross-checks on the distribution information received from each VPA implementer. The CME will be responsible for maintaining a secure database (excel based), the micro-scale PoA database, covering the VPAs within the micro-scale PoA. The unique serial number linked to each stove and the unique VPA ID number eliminates any risk of double-counting of ICSs between VPAs. This will form the part of technical review for inclusion of VPA's. Incase during the cross checks any defect is found, CME together with VPA implementer will make sure things are done accordingly.

### ***Procedures for the monitoring of emissions reductions***

8. SP will coordinate all ex-post monitoring activities in the micro-scale PoA. It will be responsible for implementing the monitoring plan, ensuring the quality of data obtained and the use of this data for emissions reduction calculations. However, the actual field measurements to be conducted during monitoring will most likely be performed by third parties. In the case of using contractors, however, SP will still be responsible for setting the procedures and providing oversight and training to the contractors.
9. Monitoring activities will involve selecting a sample of stoves from the micro-scale PoA database and visiting the premises where these stoves are located to monitor the required parameters as part of the micro-scale PoA following the guidelines in section 4.2 option b of the methodology.
10. During monitoring, the individuals carrying out the monitoring activities (either the VPA implementer or a third party) on behalf of the CME will follow the instructions provided during training, to check and record the monitoring parameters.
11. The CME will perform cross-checks on the data provided from monitoring. This data will be contained in a secure database that will form part of the micro-scale database, which will be maintained by the CME.
12. The Database will provide the necessary data for emissions reduction calculations and will provide the outputs which will form the basis of the Monitoring Report to be produced by the CME at the end of each monitoring period. The data contained in the database will be made available to the DOE during verification.



#### **A.4.5. Public funding of the programme of activities (PoA):**

No ODA financing is used. See Annex 2

### **SECTION B. Duration of the micro-scale programme of activities (PoA)**

#### **B.1. Starting date of the Programme of Activities (PoA):**

10/04/2013– the date the first stove was distributed.

#### **B.2. Length of the programme of activities (PoA):**

28 years

### **SECTION C. Stakeholders' comments**

#### **C.1. Summary of stakeholder comments on the PoA design:**

Note: Refer to the PoA Design Consultation Report for a full report on stakeholder comments on the design of the PoA.

#### **C.2. Please indicate the level at which local stakeholder consultation is conducted. Justify the choice:**

1. Local stakeholder consultation is done at PoA level
2. Local stakeholder consultation is done at VPA level x

The local stakeholder consultation will be held in each host country, and where necessary for each VPA. This is so because of the country specific factors, and also VPA specifics. However, in accordance with the micro-scale guidance, the local stakeholder consultation for a number of VPAs in a host country can be combined. As it is the case for the first VPAs in Kenya under this PoA.

The project activities implemented by other entities and possibly in other areas within the PoA boundary, shall undertake a local stakeholder consultation at the VPA level, and the results shall be included in the VPA-PDD.

#### **C.3. Brief description how comments by local stakeholders have been invited and compiled:**

Not Applicable

**C.4. Summary of the comments received:**

Not Applicable

**C.5. Report on how due account was taken of any comments received and on measures taken to address concerns raised:**

Not Applicable

**C.6. Discussion on continuous input/grievance mechanism:**

	<b>Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator)</b>	<b>Justification</b>
Continuous Input / Grievance Expression Process Book	Book shall be maintained at the distribution point.  Utilize the local communal meeting where available	This is good practice to keep a record of the reported grievances
Telephone access	To be provided for each VPA	
Internet/email access	info@goldstandard.org  info@southpolecarbon.com	This is to enable any interested party to raise their grievances
Nominated Independent Mediator (optional)	Nominated Staff of the local implementer	To be defined in the project activity design document

**C.7. Report on stakeholder consultation feedback round at the PoA level:**

To be conducted after the LSC approval process for each host country.

The approach to be taken by the CME to conduct the SFR include:

The CME will invite all the stakeholders that were invited and attended the LSC including the GS support NGOs.

The CME will send out invitations via emails to the GS support NGOs and other stakeholders with email accounts. The invitations will also include the PoA DD, VPA DDs that include the LSC for the stakeholders to make their comments. GS guidance of allowing 2 months shall be complied with.

The CME shall follow the invitations with reminders half- way the period to remind the stakeholders before the deadline for making their comments. SFR will be conducted at each VPA level.

**SECTION D. Application of an existing baseline and monitoring methodology or of a new methodology submitted as part of this micro-programme of activities**

**D.1. Title and reference of an approved baseline and monitoring methodology, or full description of a new methodology, applied to technologies or practices included in the PoA:**

The Gold Standard Simplified Methodology for Efficient Cookstoves, version 2.2.

**D.1.1 Justification of the choice of the methodology and why it is applicable to a considered technology or practice (s):**

Methodology Applicability requirement	This micro-scale PoA justification
Methodology is applicable to the micro-scale programmes and micro-scale activities introducing new wood fired cookstoves that reduce the use of non-renewable firewood or switch from non-renewable to renewable firewood to meet thermal energy requirement for household cooking.	The VPA under the micro-scale PoA will distribute ICSs that will reduce the use of non-renewable firewood to meet thermal energy requirements for household cooking.
The baseline stove is a three stone fire or a conventional device without a grate or a chimney i.e with no improved combustion air supply or flue gas ventilation.	The baseline stove is a three stone fire.
The project stove is a single pot or multiple pot portable or an in-situ cookstove with a specified efficiency of at least 20%.	The project stove is a single pot, portable and with efficiency greater than 20%

The project boundary can be clearly identified and the cookstoves counted in the proposed project activity are not included in any other voluntary market or CDM project activity.	Each stove has a unique identification number. Therefore no double counting issue. Also, the proposed activities are not included in any other PoA or developed as stand alone projects.
The Project proponent must clearly communicate if the entity is claiming the ownership rights to sell the emission reductions resulting from project activity	Right to ownership of documents are clearly demonstrated. End users are made aware about the transfer of ownership during the local meetings and distribution of cookstoves.
Use of baseline cookstoves	Only as back up in parallel to Improved coosktoves. End users are encouraged not use the baseline stove except as a back up stove. It can also be checked during monitoring by asking them how many times the baseline stove has been used.

**D.1.2 Justification of the choice of the methodology and why it is applicable to another considered technology or practice:**

Not Applicable

**D.2. Title and reference of another approved baseline and monitoring methodology, or full description of a new methodology, applied to technologies or practices included in the PoA:**

Not Applicable

**D.2.1 Justification of the choice of the methodology and why it is applicable to a considered technology or practice:**

Not Applicable

**D.2.2 Justification of the choice of the methodology and why it is applicable to another considered technology or practice:**

Not Applicable

### **D.3. Description of the sources and gases included in the VPA (s) boundary**

#### **D.3.1 Description of the sources and gases included in the technology or practice boundary**

The project boundary is the geographical area where the efficient wood cooking stoves are distributed and in use and this is restricted to the republic of Kenya.

The table below illustrates the GHG emissions sources included:

	Source	GHGs	Included?	Justification/Explanation
<b>Baseline</b>	Combustion of non-renewable biomass for cooking	CO <sub>2</sub>	Yes	Important source of emissions
		CH <sub>4</sub>	Yes	Important source of emissions
		N <sub>2</sub> O	Yes	Minor source of emissions
<b>Project</b>	Combustion of non-renewable biomass for cooking	CO <sub>2</sub>	Yes	Important source of emissions
		CH <sub>4</sub>	Yes	important source of emissions
		N <sub>2</sub> O	Yes	Minor source of emissions

### **D.4. Description of how the baseline scenario is identified and description of the identified baseline scenario for technology(ies) or practice(s):**

#### **D.4.1 Description of how the baseline scenario is identified and description of the identified baseline scenario for each type of technology or practice:**

The baseline scenario is non-renewable firewood consumption to meet thermal energy requirement for household cooking.

In the project activity, all cookstoves are installed progressively; the baseline is considered by-default and fixed till the end of the useful life of the cookstoves (introduced in the project activity) useful life or the registered crediting period, whichever occurs earlier. If the project cookstove is replaced with a cookstove of similar efficiency prior to the end of the crediting period, the same baseline shall be applicable till the end of the useful life of the replaced cookstoves or the registered crediting period, whichever occurs earlier. In all cases, for application of a renewable crediting period, the baseline shall be reassessed as per the latest version of the methodology and Gold Standard rules on renewal of crediting period.



**D.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the technology(ies) or practice(s) being included as registered PoA (assessment and demonstration of additionality of VPA):**

A project scenario is the adoption of an efficient cookstove to meet thermal energy requirements for household cooking by the end users in the target area.

The current practice is cooking on the traditional three stones. A lot of heat that would have been used to cook is lost to the surrounding area hence requiring more wood fuel. Without the project activity, this would be the continued practice.

The efficient wood cook stoves on the other hand are more efficient in transferring heat from the fuel to the pot, thus saving fuel (wood) compared to the traditional three stone stoves. Therefore, by reducing the total amount of wood fuel required for cooking, the replacement of traditional stoves by efficient ones reduces the amount of GHG emitted into the atmosphere.

**D.5.1. Assessment and demonstration of additionality for a typical technology or practice:**

According to micro scale scheme rules paragraph 7, Regular cycle activities that meet any one of the criteria defined in this paragraph (and meet the eligibility requirements under section 1 of the micro scale scheme rules) shall be deemed additional.

VPAs under this micro scale PoA meet the eligibility requirements in section 1 of the micro-scale scheme rules and paragraph 7 (vi) - *the project activity is an emission reduction project in which each of the independent subsystems/measures achieve annual emission reductions equal to or less than 600 tCO<sub>2</sub> or annual energy savings equal to or less than 600 MWh or installed capacity is less than 1500 kW for households/ SMEs / communities.*

*This will be assessed at each VPA level.*

**D.5.2. Key criteria and data for assessing additionality of a technology or practice:**

In accordance to micro scale scheme rules paragraph 7 (vi), each activity is deemed additional as long as each of independent subsystems or measures achieve annual emission reductions equal or less than 600 tCO<sub>2</sub>.

## **D.6. Estimation of Emission reductions of technology(ies) or practice(s):**

**D.6.1. Explanation of methodological choices, provided in the baseline and monitoring methodology applied, selected for a technology or practice:**

**D.6.2. Equations, including fixed parametric values, to be used for calculation of emission reductions of a technology or practice:**

The emissions reductions are calculated as follows:

$$ER_y = \sum_{t=0}^{x_{toy}} N_{p,y} * P_y * U_{p,y} * (f_{NRB,y} * EF_{b,fuel,CO_2} + EF_{b,fuel,non-CO_2}) * (1 - DF_{b,Stove,y}) \dots\dots\dots(1)$$

Where:

- $N_{p,y}$  Number of project cookstoves of each age group operational in the year y
- $P_y$  Quantity of firewood that is saved in the year y (tons per household per year y)
- $U_{p,y}$  Usage rate for project cookstoves in the year y, based on adoption rate and drop off rate revealed by usage surveys (fraction)
- $f_{NRB,b,y}$  Fraction of biomass, used in the year y for baseline scenario, which can be established as non-renewable. Default value of 0.92 applied as provided by the CDM executive board and endorsed by Kenya on 19<sup>th</sup> September 2012
- $EF_{b,fuel,CO_2}$  CO<sub>2</sub> emission factor of firewood that is substituted or reduced. (Default value for wood fuel 1.747 tCO<sub>2</sub>/ton of wood)
- $EF_{b,fuel,non-CO_2}$  Non-CO<sub>2</sub> emission factor of firewood that is substituted or reduced. (Default value for wood fuel 0.455 tCO<sub>2</sub>/ton of wood)
- $DF_{b,Stove,y}$  Usage of baseline cookstoves during the year y (fraction) in project scenario
- X y-1
- Y Year of the crediting period

$$P_y = B_{b,y} * (1 - \eta_b / \eta_{p,y}) \dots \dots \dots (2)$$

Where:

- $B_{b,y}$  Quantity of firewood consumed in baseline scenario during year y (tonnes per household per year)
- $\eta_{p,y}$  Efficiency of project cookstove in year y (fraction)
- $\eta_b$  Efficiency of the baseline cookstove being replaced (fraction). A default value of 10% shall be used if the replaced cookstove is a three stone fire, or a conventional device without a grate or a chimney i.e. with no improved combustion air supply or flue gas ventilation

$$\eta_{p,y} = \eta_p * (DF_\eta)^{y-1} * 0.94 \dots \dots \dots (3)$$

Where

- $\eta_{p,y}$  Efficiency of project cookstove in year y (fraction)
- $\eta_p$  Efficiency of project cookstove (fraction) determined at the start of the project activity. In the situation where project stove efficiency is determined using WBT, this is the value determined annually as a result of the test.
- $DF_\eta$  Discount factor to account for efficiency loss of project cookstove per year of operation (Fraction). The default value for this parameter is 0.99 i.e. 1% efficiency loss/year.
- 0.94 Adjustment factor to account for uncertainty related to project cookstove efficiency test

**D.6.3. Data and parameters that are to be reported in VPA-DD form for a technology or practice:**

<b>Data / Parameter:</b>	<b>EF<sub>b,fuel,CO2</sub></b>
<b>Data unit:</b>	tCO <sub>2</sub> /tonne of firewood
<b>Description:</b>	CO <sub>2</sub> emission factor arising from use of firewood in baseline scenario
<b>Source of data used:</b>	IPCC default values, table 1.4 of chapter 1 of Vol.2, 2006 IPCC Guidelines for National Greenhouse Gas Inventories.
<b>Value applied:</b>	1.747

Justification of the choice of data or description of measurement methods and procedures actually applied:	Default value
Any comment:	

<b>Data / Parameter:</b>	<b>EF<sub>fuel,non-CO2</sub></b>
Data unit:	tCO <sub>2</sub> /tonne of firewood
Description:	Non-CO <sub>2</sub> emission factor arising from use of firewood in baseline scenario
Source of data used:	IPCC default values, table 2.9 of chapter 2 of Vol.2, 2006 IPCC Guidelines for National Greenhouse Gas Inventories.
Value applied:	0.455
Justification of the choice of data or description of measurement methods and procedures actually applied:	Default value
Any comment:	

<b>Data / Parameter:</b>	<b>η<sub>b</sub></b>
Data unit:	Fraction
Description:	Efficiency of the cookstove being used in the baseline scenario
Source of data used:	The Gold Standard Simplified Methodology for Efficient Cookstove, version 2.2
Value applied:	10%

Justification of the choice of data or description of measurement methods and procedures actually applied:	Value provided by the methodology
Any comment:	

<b>Data / Parameter:</b>	$\eta_p$
Data unit:	Fraction
Description:	Efficiency of the cookstove being used in the project scenario
Source of data used:	Product Performance sheet
Value applied:	estimated at each VPA level
Justification of the choice of data or description of measurement methods and procedures actually applied:	The efficiency provided by the stove manufacturer. The testing is done in accordance with the stove testing protocol.
Any comment:	

<b>Data / Parameter:</b>	$B_{b,y}$
Data unit:	Tonnes of firewood per household per year
Description:	Firewood consumption for cooking in the baseline
Source of data used:	Determined by survey of local usage (option b in the methodology).
Value applied:	Estimated at each VPA level



Justification of the choice of data or description of measurement methods and procedures actually applied:	A simple random survey was carried out amongst the end users to determine the fuel wood consumption. Following the guidance in the methodology, since the target project population was more than 1000, 162 households were surveyed asking them the amount of fuel wood used both during the wet and dry season. The amount used was provided in batches. The surveyor weighed the batch to determine the average weight of the batch.
Any comment:	

<b>Data / Parameter:</b>	$f_{NRB,y}$
Data unit:	Fractional non renewability
Description:	Non-renewability status of wood fuel during year y
Source of data used:	Default NRB value provided by the CDM executive board and endorsed by Kenya, date of acceptance 19 September 2012.
Value applied:	0.92 <sup>1</sup>
Justification of the choice of data or description of measurement methods and procedures actually applied:	Default value
Any comment:	

## **D.7. Application of the monitoring methodology and description of the monitoring plan:**

### **D.7.1. Data and parameters to be monitored by each technology or practice:**

<b>Data / Parameter:</b>	$U_{p,y}$
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<sup>1</sup> <http://cdm.unfccc.int/DNA/fNRB/index.html>

Data unit:	fraction
Description:	Usage rate in project scenario p during year y
Source of data to be used:	Annual usage survey/monitoring survey
Value of data applied for the purpose of calculating expected emission reductions	0.95
Description of measurement methods and procedures to be applied:	Annual household survey
QA/QC procedures to be applied:	Transparent data analysis and reporting
Any comment:	A usage parameter will be derived for each age group of project cookstove being credited.

<b>Data / Parameter:</b>	<b>N<sub>p,y</sub></b>
Data unit:	Number of project cookstoves being credited (units)
Description:	Cookstoves in the project database for project scenario p through year y
Source of data to be used:	Total sales record
Value of data applied for the purpose of calculating expected emission reductions	To be provided in the VPA
Description of measurement methods and procedures to be applied:	Continuous monitoring of the sales record
QA/QC procedures to be applied:	Transparent data analysis and recording

Any comment:	The project data base is consulted to determine the distributed units per project activity.
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<b>Data / Parameter:</b>	<b>DF<sub>n</sub></b>
Data unit:	Fraction
Description:	Discount factor to account for efficiency loss of project cookstove
Source of data to be used:	Default value: 0.99 i.e. 1% efficiency loss per year
Value of data applied for the purpose of calculating expected emission reductions	0.99
Description of measurement methods and procedures to be applied:	Annual application of the loss factor
QA/QC procedures to be applied:	Transparent data analysis and recording
Any comment:	This default can be used if stoves are found in good condition during annual survey. During surveys, if its found that project stoves are not in working condition the proportionate population of project cook stoves should be excluded from the data base until these cookstoves are replaced with new cook stove.

<b>Data / Parameter:</b>	<b>DF<sub>p,stove,y</sub></b>
Data unit:	Fraction
Description:	Discount factor to account for the baseline stove use in project scenario p during the year y
Source of data to be used:	Monitoring surveys

Value of data applied for the purpose of calculating expected emission reductions	0.05
Description of measurement methods and procedures to be applied:	Annual surveys
QA/QC procedures to be applied:	Transparent data analysis and recording
Any comment:	The discount factor for baseline-stove use will be determined based on number of meals cooked using the baseline stove. The required information shall be captured through sample surveys carried out following a random sampling approach for each age-group of the project stove.

#### **D.7.2. Description of the monitoring plan for a technology(ies) or practice(s):**

##### **D.7.2.1 Description of the monitoring plan for a technology or practice:**

The monitoring activities will involve data collection during distribution as well as usage information post distribution. The data collected during distribution will involve information about the stove, the purchaser and location to enable one to uniquely identify each ICS unit and avoid double counting. This will form what is called the sales record. The CME will enter into a contract with the VPA implementer to distribute the stoves, as well as carry out the monitoring activities that occur during the distribution of stoves. The CME or through their associates will ensure that the distributor is trained on how to capture the sales data.

The VPA implementer is fully responsible to ensure the correct distribution process and data gathering is followed.

The figure below provides a graphical overview of the operational and management structure described above, showing responsibilities for distribution, data collection and data verification.

Whether sold by the VPA implementer directly, or via retailers, a range of information will be collected from each customer to ensure that the customer in question is not registered as part of another project or that it is not double counted within the same project activity and to enable tracking of the stove during monitoring.

The following information is to be recorded by the retailer or, in the case of a direct sale from the VPA implementer, on a standard form existing at the time of distribution:

- Name/Identification of end user;
- The phone number of the end-user (if available);
- Alternate phone number (e.g. close relative) (if available/necessary);
- Geographical location (fixed address if possible, alternatively some other means of locating the stove could be used – eg. address of church to which the person belongs);
- Serial ID number of ICS (visible on a metal plate riveted to the bottom of the stove and on a sticker on the cardboard box containing the stove);





**Figure 3: Serial number plate attached to the ICS**

- Type of old stove being replaced;
- Model of ICS being distributed;
- Date of distribution;

The above information is collected on a sales record form indicated below.







### KENYA IMPROVED COOKSTOVES PROGRAMME

**SIGNED TRANSFER OF CARBON RIGHTS** EMIK032524

From stove recipient to Southpole Carbon Asset Management Ltd

This is to acknowledge that this stove is part of the Gold Standard Micro-scale PoA – Kenya Improved Cookstoves Programme. The stove is sold to me at a subsidized price because of the carbon credits revenues. Southpole Carbon Asset Management (SP) is using the carbon revenues generated to subsidize the cost of the stove. I therefore assign all rights to the carbon emissions saved to SP for the cost of the stove. I guarantee access to a representative of the project to maintain and monitor the condition of the stove.

Atayilo ajo ore ele jiko na erubata e Gold standard Project – Kenya Improved Cookstoves Programme oljiko sidaini le yiarare. Etimirakaki lyiok kulo Jikoi Tenkinyanga nalelek – tenkaraki empasai ompuruonshi. Egira South pole Carbon Asset Management (SP) aasishore Empesai naasotu oompuruoshi eiteelek enkinyiaangunoto oljiko. Niaku asho esipat pookienishunoto empuru SP. to mpesai oljiko aasipaki aitasheiki te sial olturor teramatara onkitashekinotooljiko.

CLIENT DETAILS / OLAINYIANGANI	
IS THIS STOVE GOING TO BE USED IN YOUR HOUSEHOLD OR IS IT A GIFT? A MAE ELE JIKO EYASISHORE TE NKAJI INO, ASHU NCHOOYO? EMPUTA KULO KILIKU	<input checked="" type="checkbox"/> STOVE IS FOR MY HOUSE/OLENKAJI AAI <input type="checkbox"/> STOVE IS A GIFT/KAISHOOYE
PLEASE FILL OUT THE INFORMATION BELOW FOR THE HOUSEHOLD THAT WILL BE USING THE STOVE	
CUSTOMER NAME/ENKARNA ENOPENY <b>NAFTALY KAMORE KAMAU</b>	
ADDRESS/KENYA ID NUMBER/OSANDUKU LE POSTA <b>22109181</b>	CITY OR VILLAGE/ENKANASA COUNTRY/EKOP <b>NIKOIRIENITO KENYA</b>
TEL/ NAMBA E SIMU <b>0724873757</b>	SIGNATURE/TUTUKUNYA <b>[Signature]</b> DATE OF SALE/NTARIKINI NINYIANGUA <b>12/04/13</b>
STOVE INFORMATION ILOMON OPIRTA OLJIKOMAX: 1 STOVE PER FORM*	
10 DIGIT CODE ON BOTTOM OF STOVE NAMBARI TOMON TIABORI OLJIKO <b>M15000</b>	STOVE SALE PRICE/MPESAI OLJIKO <b>300/=</b>
WHAT TYPE OF STOVE IS BEING REPLACED? KAA ABILA OLJIKO EGIRAI AIBELEKENY	<input checked="" type="checkbox"/> THREE STONES TRADITIONAL STOVES/OLJIKO LOO SOITO OKUNI LENKIMA <input type="checkbox"/> FIREWOOD STOVE / OLJIKO LOO ILKEEK

In case of any grievances, please contact the distributor undersigned. You can also visit your local distribution point where a book is available and you record your complaint. Further you can call Lemanken Aramat on 0722273218 or send an email to [info@southpolecarbon.com](mailto:info@southpolecarbon.com)

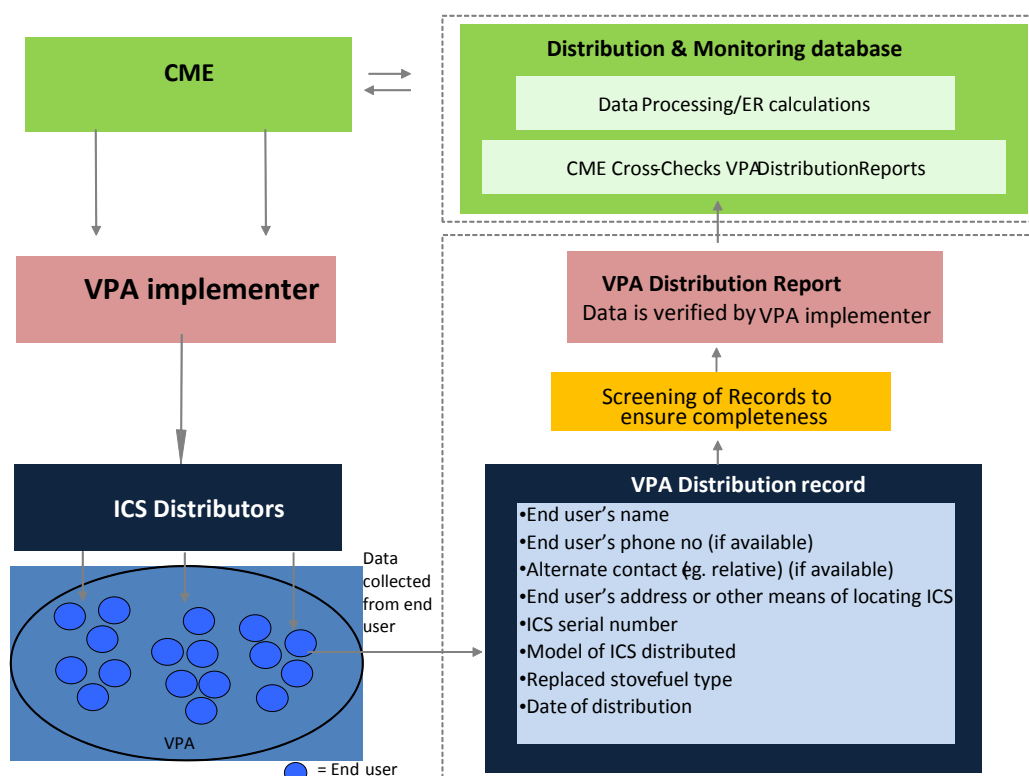
CUSTOMER SIGNATURE/OLAINYIANGANI <b>[Signature]</b>	DATE/ENTARIKINI <b>12/04/13</b>
DISTRIBUTOR SIGNATURE/OLAMIRANI <b>GEORGE OSERIAN</b>	DATE/ENTARIKINI <b>12/04/13</b>

WHITE COPY – CUSTOMER      PINK – SP COPY      YELLOW – OSERIAN COPY

\* ONLY FULLY COMPLETED AGREEMENTS WILL BE CONSIDERED VALID AND CAN BE TAKEN INTO ACCOUNT

**Figure 4: Sale record form**

The above processes are summarized in the figure below.



**Figure 5: Operational structure and key responsibilities for data collection during distribution**

During post distribution, monitoring activities will involve selecting a sample of stove from the sales record and visiting the premises where these stoves are located to monitor the following parameters:

- Check if project stoves are operational and in use
- Check if there is any on-going use of replaced stoves

The CME may undertake the actual monitoring activities itself (i.e. visiting premises selected during sampling) or it may coordinate third parties contracted to undertake the actual monitoring activities. In the case of using contractors, it will be responsible for oversight and providing guidance and training to the parties involved.

The entity responsible for monitoring will ensure that the data collected for each monitoring period is provided to the CME. Either the originals or scanned copies of the data will be provided. The CME will maintain archives of the records and make these available during verification. CME to ensure that the PoA DD is verified systematically (with all the VPA's), and a sampling approach will be involved in each of the VPA.

CME to ensure that physical conditions of cookstoves are monitored on an annual basis through survey questionnaires.

**D.8 Date of completion of the application of the baseline study and monitoring methodology and the name of the responsible person(s)/entity(ies)**

23/04/215

Ms. Tanushree Bagh and Mr. Lars Osterwalder  
South Pole Carbon Asset Management Ltd.

## Annex 1

### CONTACT INFORMATION ON COORDINATING/MANAGING ENTITY and PARTICIPANTS IN THE MICRO - PROGRAMME of ACTIVITIES

Organization:	Southpole Carbon Asset Management Ltd
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Represented by:	
Title:	Director, Climate Solutions
Salutation:	Mr.
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Middle Name:	
First Name:	Thomas
Department:	
Mobile:	
Direct FAX:	
Direct tel:	
Personal E-Mail:	t.camerata@southpolecarbon.com

## Annex 2

### INFORMATION REGARDING PUBLIC FUNDING

Per the Official Development Assistance Declaration attached, the project claims no public funding for the project activity.



#### ANNEX D - OFFICIAL DEVELOPMENT ASSISTANCE DECLARATION

Date: 19/03/2015

The Gold Standard Foundation

79 Avenue Louis Casal

Geneva Colntrin, CH-1216

Switzerland

RE: Declaration of Non-Use of Official Development Assistance (ODA) by Project Owner of G5 2504 ("Project")

*South Pole Carbon Asset Management Ltd. (CME)*

As Project Owner of the above-referenced Project, and acting on behalf of all Project Participants, I now make the following representations:

*Christoph Grobbee*

I hereby declare that I am duly and fully authorized by the Project Owner of the above-referenced project to act on behalf of all Project Participants and make the following representations:

#### I. The Gold Standard Documentation

I am familiar with the provisions of The Gold Standard Documentation relevant to ODA. I understand that the above-referenced Project is not eligible for Gold Standard registration if the Project receives or benefits from ODA with the condition that some, or all, of the carbon credits [CERs, ERUs, or VERs] coming out of the Project are transferred to the ODA donor country. I hereby expressly declare that no financing provided in connection with the above-referenced Project has come from or will come from ODA that has been or will be provided under the condition, whether express or implied, that any or all of the carbon credits issued as a result of the Project's operation will be transferred directly or indirectly to the country of origin of the ODA.

In the event the Project is a Programmes of Activities where the CME is also implementing one or more Component Project Activities (CPAs) or Voluntary Project Activities (VPAs), I further acknowledge and understand that this Declaration is applicable to all of the CPAs/VPAs where the CME and the CPA/VPA implementing entity is the same.

#### II. Duty to Notify Upon Discovery

If I learn or if I am given any reason to believe at any stage of project design or implementation that ODA has been used to support the development or implementation of the Project covered by this Declaration, or that an entity providing ODA to the host country may at some point in the future benefit directly or indirectly from the carbon credits generated from the Project as a condition of







investment, I will notify The Gold Standard immediately using the Amended ODA Declaration Form provided below.

### III. Investigation

The Gold Standard reserves the right to conduct an investigation into any project it reasonably believes may be receiving ODA with the condition that some or all of the carbon credits from the Project will be transferred to the ODA donor country.

### IV. Sanctions

I am fully aware that the sanctions identified in The Gold Standard Terms and Conditions may be applied to me or the above-referenced Project in the event that any of the information provided above is false or I fail to notify The Gold Standard of any changes to ODA in a timely manner.

I swear that all of the statements contained herein are true to the best of my knowledge.

Signed: [Signature]  
 Name: Dr. Christoph Grobner Renee Hanke  
 Title: CFO CEO  
 On behalf of: South Pole Carbon Asset Management Ltd  
 Place: Zurich



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