



**Programme of activities design document form**  
(Version 08.1)

*Complete this form in accordance with the instructions attached at the end of this form.*

**BASIC INFORMATION**

<b>Title of the PoA</b>	Efficient And Clean Cooking For Mozambican Low Income Households PoA
<b>Version number of the PoA-DD</b>	Version 01.0
<b>Completion date of the PoA-DD</b>	01/11/2017
<b>Coordinating/managing entity</b>	South Pole Group
<b>Host Parties</b>	Mozambique
<b>Applied methodologies and standardized baselines</b>	AMS-II. G v.8.0
<b>Sectoral scopes linked to the applied methodologies</b>	3

## **PART I. Programme of activities (PoA)**

### **SECTION A. Description of PoA**

#### **A.1. Purpose and general description of PoA**

The start date of the programme is July 2015 as a pilot in the suburbs of Maputo. The implementation of the stoves started in January 2016. Therefore, this is a retroactive programme.

Firewood and charcoal are the main sources of energy for cooking, heating and illuminating the Mozambican households. 75% of urban households rely on wood and charcoal for their energy demands. In rural households, almost 98% use wood for energy while 2% use charcoal. Although 70% of the current population resides in rural areas, is not this part of the population that constitutes the major risk for threatening the forest resources, but the remaining 30% of the population that lives in the urban and peri-urban areas, that is still highly dependent depending on firewood and charcoal as the main source of domestic energy. The low-density population and high wood biomass availability in rural areas explain this pattern, while in the urban zones there is a prevalence of the opposite case. This, results in a very high pressure on forests adjacent to cities and along roads that are supplying the cities.

The use of improved cookstoves is one of the possible solutions to tackle the challenge that represents managing the loss of forest cover in urban and peri-urban areas and other ecosystems that act as fuel sources for dense populated areas. Although improved stoves are not a novelty in Mozambique, the majority of the people are not aware about the possibilities they offer in terms of reduction of fuel usage. Moreover, there are neither solid technical skills and production capabilities nor access to start up finance for energy business or business skills on marketing efficient cookstoves.

The purpose of the Programme is to reduce the greenhouse gas emission through the replacement of traditional cookstoves by improved cookstoves. The objective is to tackle major problems related to cooking in Mozambique: deforestation for wood and charcoal production, major incidence of respiratory diseases resulting from indoor air pollution and high expenditure in fuel for cooking.

In general, the project will contribute to the broader Millennium Development Goals by ensuring environmental sustainability, reducing child mortality rates; contribute to eradicate extreme poverty and hunger by reducing the number of people with income less than 1 USD by establishing a platform for employment.

Those objectives will be achieved through the active engagement of all stakeholders including the civil society, the government, the private sector, and the end beneficiaries of the stoves, which are the household members.

#### **A.2. Physical/geographical boundary of PoA**

All VPAs included in this PoA will be implemented in the territorial boundary of Mozambique.

Each VPA will be located within the territorial boundary of the host country and the physical location of the stoves distributed in that VPA will define the actual VPA boundary.

#### **A.3. Technologies/measures**

The PoA will be implemented using the approved methodology AMS-II.G, Version 8.0 - Energy Efficiency Measures in Thermal Applications of Non-Renewable Biomass. This category comprises appliances involving the efficiency improvements in the thermal applications of non-renewable biomass. Examples of these technologies and measures include the introduction and distribution of the improved cooking stoves by MozCarbon.

Wood and charcoal stoves other than the abovementioned could be included in a VPA under the PoA as well. Inclusion of such stoves would be subject to the completion of appropriate tests to prove that stove efficiencies meet the requirements of the methodology and the eligibility criteria of the PoA as further specified.

#### A.4. Coordinating/managing entity

The defined CME for the proposed PoA is the South Pole Group.

#### A.5. Parties and project participants

Parties involved	Project participants	Indicate if the Party involved wishes to be considered as project participant (Yes/No)
Austria	Austrian development Agency	No
Colombia	South Pole Group (private entity)	Yes (CME)
Finland	Ministry of Foreign Affairs (public entity)	No
Finland	KPMG Finland	No
Germany	GIZ (public entity)	No
Italy	AVSI (private entity)	Yes
Mozambique (Host party)	MozCarbon (private entity)	Yes (PO)
United Kingdom	Department for International Development	No

#### A.6. Public funding of PoA

This project received the Energy and Environment Partnership (EEP S&EA) grant, funded by the Governments of Finland, Austria, and United Kingdom and coordinated by KPMG Finland. The access to the EEP grant allowed for starting the first phase of the cookstoves project by helping to cover for the ICS importation costs.

The German Corporation for International Cooperation (GIZ) supported the monitoring and marketing.

In the case that any sources of public funding from Parties included in Annex I are received for a specific VPA to be included under the PoA, the VPA-DD will specify the sources of such funding. Furthermore, it shall provide an affirmation that such funding does not result in a diversion of official development assistance, is separate from, and is not counted towards the financial obligations of those Parties.

### SECTION B. Management system

The operational and management system for the implementation of the PoA will be as follows:

(a) The PO will be responsible for identifying, developing and managing all VPAs. Legal agreements with each PO will clearly specify that the activity operates under the PoA. The agreements will be available to the DOE upon request

(b) The provisions to ensure that those operating the VPA are aware of and have agreed that their activity is being subscribed to the PoA.

The PO will ensure that all involved parties in the VPAs (i.e. distributors, VPA operators if different from the PO) are trained adequately to meet the documentation requirements of the PoA. Physical or virtual meetings will be carried out where the parties involved will exchange their experiences and receive updates from the PO relevant to the proper execution of the PoA.

To ensure best practices, suitable training will be conducted by the PO for partners taking part in the project activity to make them aware of the rules and requirements of the CDM and the PoA in terms of distribution and data collection. The project activity will provide end-users with after-distribution service and support of the technology by means of the DOEs. In all cases the PO will support all parties and beneficiaries across the whole PoA and during the entire crediting period to ensure adequate training and maintenance of all VPAs.

These meetings and training sessions will take place at least once before the sale of the first ICS, and as needed according to the progress of the sales, or at least every month--whichever occurs earlier. The CME will provide to the DOE documentation of the meetings and trainings with all parties to demonstrate that were conducted. The materials could be any of the following, but are not limited to: photos, emails, participation sheets, self-statements, training materials, etc.

(c) A procedure for technical review of inclusion of VPAs. Following the requirements stated in the *Standard Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for Programme of Activities* EB 74, Annex 5, Version 03.0 prior to the start of the inclusion process for a new SSC-VPA under the PoA, the proposed SSC-VPA-DD will be reviewed by an independent compliance team. This compliance team, which shall be composed of personnel with adequate competencies, shall check if the SSC-VPA-DD is drafted following the lines of the Generic SSC-VPA-DD section and if the proposed VPA does comply with the eligibility criteria stated below. The compliance team shall also check that the proposed VPA is neither registered nor being neither registered under another PoA, nor registered or being registered as a standalone CDM Project Activity or voluntary Project Activity.

In order to ensure that the competencies of the members of the compliance team remain current, training and capacity development records in which all instruction sessions and workshops related to Gold Standard procedures and overall project management shall be established. The training and capacity development records shall be part of the VPA Inclusion Procedure.

The following Technical Review procedure is observed for VPA inclusion:

1. Verify that all eligibility criteria for inclusion in the PoA are met.
2. Check the procedure to avoid double counting.
3. Check if EIA has been undertaken (if required).
4. Check if stakeholder consultation has been undertaken (optional if already held within the boundaries of the SSC-VPA by the CME).
5. Check if all supporting documentation quoted in PoA-DD are in accordance with VPA details.
6. Complete all the sections of the SSC-VPA-DD.
7. Check emission reduction calculation.
8. Seek CME and PoA manager approval for the draft SSC-VPA-DD.
9. Deliver approval and contact agreement for VPA inclusion.
10. Contract a DOE.
11. Submit SSC-VPA-DD to the DOE.
12. CARs & CLRs closed.
13. Confirm the inclusion of the VPA in the PoA.

(d) A system/procedure to avoid double accounting e.g. to avoid the case of including a new VPA that has been already registered either as a CDM project activity or as a VPA of another PoA,

The PO maintain a master record for each VPA in order to proper identify them and avoid double counting. The PO will also check the CDM registry to verify whether a CDM project activity or VPA of another PoA has already included the same ICS model prior to the registry of a new VPA within the PoA, ensured by:

- 1) Verifying whether a CDM project activity or a VPA registered to another PoA has already included the same ICS model. The PO must confirm that the VPA is neither registered, nor seeking registration as a standalone (individual CDM) in any class whatsoever and that the VPA is not part of another registered PoA or potentially registered PoA for all the CDM activities in the same geographical boundary. The DOE can consult the publicly available CDM project listings in order to verify the required information. Furthermore, the PO shall verify all the CDM activities implementing ICS units in the same geographical area. In the case that projects are found and the same ICS unit model is being distributed, the PO is to provide all the unit serial numbers to demonstrate that it is not counted in other CDM project activity in order to avoid double counting.
- 2) Confirming that the specific VPA within this program is not part of another registered PoA. Each VPA is uniquely defined by specific inclusion criteria, the exact start/end date of the crediting period and other detailed information to ensure that the VPAs under the PoA are registered as an individual CDM project activity and not included in another registered PoA. For each VPA, the registered PoAs with the same project boundary will be checked. In the case that one or more PoAs are found within that boundary, the PO will list which ones are implementing the same ICS types from the same manufacturer. In the case that one or more PoAs are found to implement the same ICS models from the same manufacturer, the PO will provide all the ICS serial numbers to demonstrate that the same serial number is not counted in other VPA.
- 3) Confirmation that every ICS within a specific VPA is not double counted across the PoA. All ICS under the PoA are uniquely identified by a serial number imprinted on the stove and noted in the Sales Database. The serial number consists in an alpha numeric code indicating name of the manufacturer, product model, type of product (i.e. main product vs accessories), manufacturing factory location and unique serial number. Carbon waivers will be delivered to end users with each individual ICS stating that all carbon credits generated from the purchase and use of the ICS will be owned by the PO. Signed contractual agreements with partner organizations and distributors transferring carbon rights ownership to the PO, along with carbon rights waived to the PO from end-users, transfers all rights of the carbon credits solely to the PO. All carbon rights and agreements will be consolidated within the PO. To ensure that the installed appliances are claimed only once the PO will conduct periodic cross-checks against sales invoices within the PoA. A sample of the carbon waiver form with legible details of the end user will be drawn from the project database for sampling or, alternatively, if SMS or other electronic recording systems are used to collect warranty cards and user information, the sample will be drawn from the electronic database. Clustered random sampling (a subset of communities or regions chosen randomly from the sample population) may be used to ensure representativeness.

(e) A record keeping system for each VPA under the PoA,

The PO will make sure that each VPA will maintain proper records in order to track emissions reductions. The monitoring methods are described in the section B.7.2 of this document. The PO is to record information from the partner organizations and the end-users in an electronic data base, updated regularly. The sales, distribution and monitoring records are to be kept by the PO. Whenever the VPA is implemented by a partner organization these records are to be transferred to the PO for proper record keeping.

The monitoring data used for verification and CERs issuance shall be kept for two years after

- a) The end of the crediting period or;
- b) The last issuance of CERs;

whichever occurs later.

The CME is to ensure the enforcement of the monitoring and reporting during the crediting period and to lead the review of reported results and data.

The CARs will be addressed by the CME in order to assure that procedures are kept up to date and future monitoring and reporting remains accurate.

The original installation records are to be kept as duplicates of the electronic records. The PO cross checks the installation records to make sure that installation was authentic and no double counting occurs.

(f) Measures for continuous improvements of the PoA management system. The CME shall meet with PO management as often as needed to ensure that all activities under the PoA are being appropriately and effectively managed. The Manager of Human Resources is responsible to ensure that:

- 1) Staffing requirements are regularly assessed and met;
- 2) Employee performance is closely monitored and assessed;
- 3) Workflow protocols are appropriately implemented and followed; and
- 4) The management system is functioning according to the requirements of the PoA.

All parts are regularly consulted to solicit feedback. That feedback is considered and adjustments to management structure and operations are made accordingly, as appropriate.

(g) The VPA is not a de-bundled component of another CDM programme activity or CDM project activity.

All VPAs included under the present PoA will be exempt from the de-bundling check when all types of ICS considered under the PoA show energy savings of less than 1% of the small scale threshold defined by the methodology AMS-II.G, version 3. The threshold to prove the activity is not a de-bundled action is deducted from the small- scale threshold for each VPA, which corresponds to 180GWh thermal energy per year as follows:

1% of 180GWh = 1.8GWh = 1,800,000KWh

Therefore, a de-bundling check will occur for any VPA that includes a technology type with a proven thermal energy savings of 1.8GWh/y.

(d) The provisions to ensure that those operating the VPA are aware of and have agreed that their activity is being subscribed to the PoA.

The PO will be responsible for identifying, developing and managing all VPAs. Legal agreements with each PO will clearly specify that the activity operates under the PoA. The agreements will be available to the DOE upon request.

The PO will ensure that all involved parties in the VPAs (i.e. distributors, VPA operators if different from the PO) are trained adequately to meet the documentation requirements of the PoA. Physical or virtual meetings will be carried out where the parties involved will exchange their experiences and receive updates from the PO relevant to the proper execution of the PoA.

To ensure best practices, suitable training will be conducted by the PO for partners taking part in the project activity to make them aware of the rules and requirements of the CDM and the PoA in terms of distribution and data collection. The project activity will provide end-users with after-distribution service and support of the technology by means of the DOs. In all cases the PO will support all parties and beneficiaries across the whole PoA and during the entire crediting period to ensure adequate training and maintenance of all VPAs.

These meetings and training sessions will take place at least once before the sale of the first ICS, and as needed according to the progress of the sales, or at least every month--whichever occurs earlier. The PO will provide to the DOE documentation of the meetings and trainings with all parties to demonstrate that were conducted. The materials could be any of the following, but are not limited to: photos, emails, participation sheets, self-statements, training materials, etc.

## **SECTION C. Demonstration of additionality of PoA**

The PoA is considered automatically additional as per the CDM TOOL21 Demonstration of additionality of small-scale project activities.

The section 5, paragraph 11, item c) states that 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 1 per cent of the small-scale CDM thresholds is deemed automatically additional.

The size of the programme units are no larger than 1 per cent of the small-scale thresholds, therefore is additional.

## **SECTION D. Start date and duration of PoA**

### **D.1. Start date of PoA**

The start date of the programme is July 2015 as a pilot in the suburbs of Maputo. The implementation of the stoves started in January 1st, 2016. Therefore, this is a retroactive programme.

### **D.2. Duration of PoA**

21 years

## **SECTION E. Environmental impacts**

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

1. Environmental Analysis is done at PoA level ☐
2. Environmental Analysis is done at VPA level ☐

Due to its small-scale nature and its overall positive environmental benefits, it is unlikely that the proposed distribution of efficient ICS will result in any negative environmental impacts. The project is therefore exempt from any Environmental Impact Assessment (EIA).

Nevertheless, if the DNA still requires an EIA, then this will be conducted for the first VPA but not for subsequent VPAs, unless specifically required by the DNA. Subsequent VPAs that are similar in terms of technology, distribution model, and potential environmental impacts would include the results of the initial EIA in their VPA-DDs when being put forward for inclusion in the PoA. Similarly, if the DNA requires an exemption from an EIA, then this would be obtained for the first VPA. The subsequent VPA-DDs would simply include a confirmation that exemption from conducting an EIA has been obtained.

### **E.2. Analysis of environmental impacts**

Not applicable, as the PoA includes only a small-scale project and the host party does not require an EIA.

Due to its small-scale nature and its overall positive environmental benefits, it is unlikely that the proposed distribution of efficient ICS will result in any negative environmental impacts.

If a DNA requires an Environmental Impact Assessment (EIA), then this will be conducted for the first VPA, but not for subsequent VPAs unless specifically required by the DNA. Subsequent VPA that are similar in terms of technology, distribution model, and potential environmental impacts would include the results of the initial EIA in their VPA-DDs when being put forward for inclusion in the PoA. Similarly, if the DNA requires an exemption from an EIA, then this will be obtained for the first VPA. The subsequent VPA-DDs will simply include a confirmation that exemption from conducting an EIA has been obtained.

### **E.3. Environmental impact assessment**

Not applicable as the EIA was not carried out. Please, refer to the section E2 of this document, above.

## **SECTION F. Local stakeholder consultation**

### **F.1. Level at which local stakeholder consultation is undertaken**

The LSC was carried out at PoA and VPA level.

The PoA LSC and the first VPA LSC were executed simultaneously on May 8th, 2013 in Maputo at the Eduardo Mondlane University (Complexo Pedagógico) following the GS rules.

The LSC was implemented at the PoA level to involve the relevant stakeholders within its geographic area, corresponding to the Mozambique country area itself. It was held in Maputo, the country capital.

The LSC is also conducted at the VPA level.

The First VPA LSC was coincident with the PoA LSC as the implementation area is located in Maputo. Future VPA LSC are to be conducted anytime a new implementation area is adjoined in order to give local government leaders, business owners, educators, beneficiaries and others the opportunity to learn about the project and voice any concerns. Stakeholder feedback is documented and MozCarbon responses are tracked on an ongoing basis. The meeting started at 10.00am at Eduardo Mondlane University Campus, Complexo Pedagógico 1501. The meeting was moderated by Hugo Mabilana, one of the project personnel. The meeting was opened by Managing Director of the project proponent Mr Micas Cumbana.

### **F.2. Modalities for local stakeholder consultation**

The invitations aimed to gather a broad range of people and organizations with direct relation to the subject of improved cooking, renewable energies and environment in general. The invited include NGOs working with environment, forest and clean energy, including clean cooking. Those NGOs are working in different aspects as field implementation, funding, Monitoring and evaluation. We also invited the local leaders of the anticipated neighbourhoods of stove dissemination, which will work as mobilizers of the community for adoption and continuous use of improved stoves. Apart of the leaders, in each neighbourhood we invited local people, especially women, which will be the final beneficiaries of the improved stoves. We also invited young people from the neighbourhoods which have the potential to work on stove promotion and distribution and in stove production and/or assembly.

We also invited the relevant government bodies, working in environment, forests and renewable energies. Are the examples the former MICOA (now MITADER, which is the Ministry of Land, Environment and Rural Development), the National Directorate for New AND Renewable Energy of the Ministry of Energy, the National Energy Fund, and the Ministry of Agriculture through the National Directorate of Forests and Wildlife.



We also invited companies and NGOs working in stove production with potential to be partners within the PoA, to supply high quality improved biomass cooking stoves.


These institutions and individuals constitute the necessary parts to give feedback for successful project implementation and are able to give input in different aspects, including: production of stoves, dissemination and awareness raising, funding, monitoring and evaluation, regulatory guidance to make sure the program fulfil national development goals, including environmental.

The public invitation was made through the most important newspaper of the country: Jornal Noticias. The invitation appeared three times in the newspaper during one week. Another way was to send letters to the neighbourhoods, so that the local leaders would spread the message to each block chief of neighbourhood and then those would have made the meeting know to the residents.

Other invitations were sent by email to the different stakeholders on the clean cooking and energy and environmental sector in general. Please, see text of invitation inside green box below.

<p>República de Moçambique Tribunal Judicial da Província da Zambézia 1ª Secção Cível <b>ANÚNCIO</b> Proc. N.º 16/2012-D Ac. E.R. da Posse</p> <p>O EXCELENTÍSSIMO DOUTOR ALMERINO JAIME CHIZIANE, JUIZ DE DIREITO DA 1ª SECÇÃO CÍVEL DO TRIBUNAL JUDICIAL DA PROVÍNCIA DA ZAMBÉZIA</p> <p>—o—o—o—</p> <p><b>FAZ SABER</b>, que na acção com processo Especial de Reivindicação da Posse nº 16/2012-D, pendente no Cartório desta 1ª Secção Cível, movida pelo Autor Adamo Chamaune Selemane, com domicílio profissional nas Oficinas Chamaune, nesta cidade de Quelimane, contra José Domingos António José e Arnalda Onorato Sulemane Pereira, é por este meio CITADA a ré ARNALDA ONORATO SULEMANE PEREIRA, com a última residência conhecida nesta cidade, na Av. Julius Nyerere, Unidade 25 de Setembro, mais conhecido por Rufino Rufino, actualmente ausente em parte incerta, para contestar, apresentando a sua defesa no prazo de DEZ DIAS, que começa a correr finda que seja a dilação de mais CINCO DIAS a contar da data da segunda e última publicação do presente anúncio; movido pelos fundamentos constantes da petição inicial, da qual o duplicado da mesma se encontra à disposição da citanda, no Cartório da 1ª Secção Cível, para onde poderá obter nas horas normais de expediente, sob a cominação de se considerarem confessados os factos articulados pelo autor, com condenação da ré nas custas, selos e o mais legal, prosseguindo os autos à sua revelia, não contestando. Quelimane, aos dez dias do mês de Abril do ano dois mil e treze.</p> <p>O JUIZ DE DIREITO Dr. ALMERINO JAIME CHIZIANE A ESCRIVÃ DE DIREITO CREMILDE MÁRIO</p>	<p>República de Moçambique Ministério da Justiça CARTÓRIO NOTARIAL DA MATOLA <b>EXTRACTO PARA PUBLICAÇÃO</b> <b>HABILITAÇÃO DE HERDEIROS</b></p> <p>Certifico, para efeitos de publicação, que por escritura de dezanove de Setembro de dois mil e doze, exarada de folhas vinte e seis verso a folhas vinte e oito, do livro de notas para escrituras diversas número cento e vinte e nove B, deste Cartório Notarial da Matola, a cargo da Notária BATÇA BANU AMADE MUSSA, foi celebrada uma escritura de Habilitação de Herdeiros por óbito de JOÃO PENICELA MANJATE, de oitenta e dois anos de idade, no estado de solteiro, natural de Gaza, filho de Penicela Manjate e de Chemeca Delane, com última residência no bairro da Matola "C".</p> <p>Que o falecido não deixou testamento ou qualquer outra disposição de última vontade.</p> <p>Deixou como únicos e universais herdeiros dos seus bens, seus netos Paula Olívia Manjate, solteira, maior, natural da Matola e residente no bairro da Matola "B", Sérgio João Manjate, solteiro, maior, natural da Matola e residente no bairro da Matola "C", Carla Luisa Junqueiro Manjate, solteira, maior, natural da Matola e residente no bairro da Matola "A", em direito de representação de seu filho Junqueiro João Manjate, falecido em vinte e dois de Outubro de dois mil e dois, na sua residência, na Matola, que segundo a lei não há pessoas que prefiram ou que possam concorrer a esta sucessão aos indicados herdeiros.</p> <p>Que da herança fazem parte bens móveis e imóveis.</p> <p>ESTÁ CONFORME Cartório Notarial da Matola, aos vinte e sete de Novembro de dois mil e doze O Técnico (legível)</p>
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**MOZAMBIQUE CARBON INITIATIVES LDA**  
**[MOZCARBON]**

**CONVITE PARA REUNIÃO DE CONSULTA PÚBLICA**

A Mozambique Carbon Initiatives LDA (MozCarbon) tem vindo a desenvolver actividades que têm como fim último identificar, promover e comercializar os créditos de carbono no mercado. A mesma pretende implementar um Programa de Actividades (PoA) de disseminação de fogões melhorados em Moçambique visando reduzir as emissões de Dióxido de Carbono e outros gases e o desmatamento e degradação florestal bem como criar benefícios socio-económicos às comunidades. Deste modo, gostaríamos de convidar a todos interessados para uma reunião de consulta pública para a discussão e partilha de ideias em relação ao projecto bem como aos impactos ambientais e sociais do mesmo, sejam eles positivos ou negativos. Queiram por favor confirmar as presenças e ou para mais informações nos contactos abaixo.

**Data:** 08 de Maio de 2013  
**Local:** Campus Universitário da Universidade Eduardo Mondlane, Complexo Pedagógico 1501  
**Hora:** 10 horas

Elodia Miguel  
Mozambique Carbon Initiatives LDA,  
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The consultation was carried out with the following agenda:

- Opening of the meeting
  - The meeting started at 10.00am at Eduardo Mondlane University Campus, Complexo Pedagógico 1501. The meeting was moderated by Hugo Mabilana, one of the project personnel. The meeting was opened by Managing Director of the project proponent Mr Micas Cumbana. He presented the project personnel and the roles. Then, the presentation of each participant by stating the name, institution and the expectations on the meeting were carried out. After that, the Managing Director Micas Cumbana presented the company and objectives and expectations of the meeting (presentation available on request).

- Explanation of the programme
  - The objectives of the project for dissemination of improved stoves was presented as well as the concept of carbon credits and how those can be generated, with focus on improved cooking stoves. Also, the benefits of carbon credits mechanisms to improve accessibility of stoves and massification were presented, with the anticipated social, economic and environmental benefits. This was followed by an explanation of the social, economic and environmental impacts of improved stove adoption and continuous use. The steps of a carbon project was also presented and the current stage of the project was highlighted and the Local Stakeholders Consultation was indicated as one of the necessary and important steps to follow for a successful carbon project implementation.
  - It was also presented the experiences of SNV in the implementation of improved cooking stoves in Mozambique. SNV is a Holland based international NGO working on energy in different countries around the globe, with one of its components being the improved stoves.
- Discussion of continuous input / grievance mechanism
  - It was discussed during the meeting how the stakeholders could give inputs, opinions or suggestions during the duration of the crediting period. Participants were informed that all situations arising from the participation of stakeholders would be taken into account.
- Questions for clarification about the programme
  - Participants presented questions and comments which were answered or acknowledged by the moderator and project personnel.
- Blind SD exercise (to be conducted per methodology/technology/practice)
  - After the Questions and Answers session, the presenter introduced the concept of sustainable development indicators and asked the participants to present their ideas in terms of project impact towards those indicators. Participants were encouraged to rate the impact of the project on SD indicators using positive +, Negative – and neutral 0. Participants were encouraged to discuss and to present arguments towards their choices. After that, participants filled an SD Matrix sheet, rating the indicators. Also participants presented ideas on how those indicators can be monitored.
- Discussion on monitoring SD (to be conducted per methodology/technology/practice)
  - The presenter discussed with the stakeholders how the indicators would be monitored. The stakeholders engaged in a discussion and possible ways were presented and discussed
- Closure of the meeting

### F.3. Summary of comments received

Stakeholder comment	Was comment taken into account (Yes/ No)?	Explanation (Why? How?)
There is a need to create a sustainable market for the improved stoves in Mozambique	Yes	Stoves are not handed for free; people need to pay for stoves. If not possible in cash, instalments are allowed. MozCarbon and other sell stoves taking into account the need not to create market distortions. Also, significant part of the income from stoves is re-invested on stoves and awareness campaigns.

The issue of stove price should be seen with attention, as the majority of the people in neighbourhoods of Maputo are below the poverty line.	Yes	Stove is sold at less than 40% of its real cost. Also, there is the possibility for the people in the community to buy stoves in instalments
The stoves should be sold at subsidized price against the benefits of carbon credits	Yes	Stove is sold at less than 40% of its real cost. Also, there is the possibility for the people in the community to buy stoves in instalments
There is a need to use simple language when presenting the benefits of improved biomass stoves to the communities	Yes	It is important to highlight that the communication is the best vehicle to raise awareness of the communities about the benefits of using improved and clean stoves. The project proponent uses local and simple language in some cases to communicate with the people. The promoters were trained to explain project concepts in local simple language. Also, in general, the promoters are from the communities where the project is implemented, thus facilitating communication, by translating scientific and academic language to comprehensible meaning when explaining concepts like carbon credits, carbon dioxide, combustion, etc.
How to integrate the people who sell charcoal as is expected reduction in revenues because of the massive use of improved stoves?	Yes	Some of the people who sell charcoal are also stove promoters, thus earning a percentage (commission) per stove sold, generating income to fill the gap created by the decrease of charcoal sales.
There is a need of teaching cooking practices in terms of stove usage, to combine the	Yes	Each stove sold by a promoter is accompanied by an explanation of stove usage and maintenance,

benefits of the stoves with good cooking practices.		and also, cooking practices as soaking beans per example.
I heard about carbon and I still do not understand. I'm from the community. We will have to work very hard with the communities in order to make them use stoves and understand these concepts. In the community it is advised to use simple (local) language so people will understand the message. (Maria Leonor - Community representative)	Yes	The whole concept of carbon credits was re-explained based on the presentation. Also, considerable funds will be made available for awareness campaigns
(i) My observation is that families use 1.5 sacks of charcoal per month, equivalent to 3-5ton CERs/year. There is a need for the subsidies because if 1 stove generate 2 tons of carbon emission reductions, multiplying by the price of 8USD and stoves disseminated, there is a room for subsidies. (ii) Different presentations no mention to better use of stove and different cooking techniques to use stove efficiently. Even if this is not important for carbon credits this has to be implemented. Example soak beans before cooking, kitchen protection, etc (Peter Coughlin – Econ Policy Group)	Yes	(i) Donor Funded projects for example the CBNRM have failed after the donors left. This shows the risk of subsidies. Example Mbaula save 40% in charcoal. Meaning that savings can pay for the stove. But as a carbon project developer, for the project, the stove will be subsidized. But is good to create capacity in long term for the market intervenient to make stoves a profitable business to develop the market. Examples from Association Mbeu. (ii) In fact, one of the components of the stove is awareness raising and, this is contemplated.
Which will be the price of the stove? (Narciso Sozinho – Local resident)	Yes	We expect to sell the stoves for an affordable price. We expect not be more than 500MT per ICS. The project is selling stove for 500MT.
It is important because the project has its focus in the community. Changalane is a big supplier of charcoal to Maputo. How involve the charcoal producers in the	No	In fact, Changalane was a supplier of charcoal to Maputo. Now, there are no forests capable to produce charcoal for Maputo. Charcoal comes now from Gaza and some parts of Inhambane province. One

project? (Maposse – One World University)		way to involve the producers is to teach techniques to add value to the charcoal produced, so they could sell in higher markets. Charcoal vendors were integrated in selling improved stoves in fixed charcoal selling points. They earned a percentage for each stove sold, filling the gap of the anticipated decrease of charcoal sales.
We are project developer with same intentions as yours. Who will certify? You said that there was no limitation in terms of stoves to be used in the project. We were advised by the consultant to use certified stoves (showing envirofit stoves). Our project is equal but the one difference is in the product to be distributed. I suggest you to use better stoves. Is one of the weakness of your project. The one you presented are not certified (I don't know). Which authority after the Ministry of Environment will certify the stoves? (Alessandro Galimberti – Fundação AVSI)	Yes	<p>We will not distribute stoves for free. So families have to disburse some cash to have it. We are working to determine the price to be affordable. There are experiences and studies from PROBEC with the price people are willing to pay for charcoal improved stoves. Sales strategies include community sales, door to door and fixed stations. There are two separate mechanisms for the carbon projects. One is validation which is external auditing. Other is registration. There is CDM and Gold Standard. We will go for Gold Standard.</p> <p>About the quality of stoves to be used. We are working with faculty of engineering to test the stoves to comply with carbon requirements. Also with a lab in the Johannesburg University (SETAR). We are working to improve the locally available stoves.</p> <p>Currently, the project distributes Envirofit (world lead manufacturer of improved biomass stoves) and Chazam, which are certified by accredited laboratories.</p>
Do you have producers of stoves?	Yes	We will include different stoves, as long as they are

<p>Modalities for buying from producers and when?</p> <p>What type of stoves are you considering?</p> <p>If there is a producer ready today, are you able to buy? (Peter Coughlin – Econ Policy Group)</p>		<p>approved by the laboratory through the test.</p> <p>We have contacts with different producers which we cannot mention as a matter of business confidentiality.</p> <p>First, we will buy with associations which we are working with.</p> <p>We are working with stove producers associations.</p> <p>Micas Cumbane responded: we have funds to fulfill the expectations from the project. E.g, we were selected to implement the EEP S&amp;EA project in Mozambique, donor funding constitutes part of the available funding, apart of the investors.</p>
<p>You said you will distribute in the first phase 13000 stoves. For how long will you distribute? (Sitoe – Kulima NGO)</p>	Yes	<p>The distribution has to be quick as we are eager to see the benefits to the poor. We expect to distribute the stoves in one year and, as it is a PoA, it is expected thousands of stoves delivered to the poor.</p>
<p>Which mechanisms to fulfill the social, economic and environmental? (Maposse-One World University)</p>	Yes	<p>The proponent will make sure that all actors are involved in the project. The socio-economic will be fulfilled by allowing more people to access clean energy, reduce the expenditure in fuel, reduce indoor pollution and associated respiratory diseases. The environmental benefits will be the reduction of emission of greenhouse gases and reduction of deforestation and forest degradation.</p>
<p>Working currently with SNV in stoves and your project is one of the kind we would be interested in funding</p>	Yes	<p>As a result of the comments and the follow up meetings with GIZ, the proponent decided to implement Envirofit and Chazam</p>

<p>We are to install a lab at UEM premises. Working with UEM to test stoves. We have to guarantee quality so we need a lab for testing. We have to use certified stoves.</p> <p>We have to work all together to avoid duplicating efforts.</p> <p>The stoves under the EnDev framework must at least be 40% efficient compared to traditional stoves. We have to work together to meet this criteria.</p> <p>(Rosario Loayza – Biomass Component Manager GIZ-EnDev)</p>		<p>stoves, suggested within these meetings.</p> <p>Also, further work was done with the proponent to install a Biomass Emissions Testing Center (BECT) at Eduardo Mondlane University, dedicated to do different tests within the biomass sector.</p> <p>This testing center was further integrated as one of the RTKC (Regional Testing and Knowledge Centers) within the framework of the Global Alliance for Clean Cookstoves.</p> <p>About the need for collaboration among biomass energy stakeholders, the proponent is a member of the renewable energy steering committee in Mozambique.</p>
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#### F.4. Consideration of comments received

The DNA for Mozambique is the MITADER.

The DNA approved the Project Proposal (PIN, for its acronym in Portuguese) and does not oppose to the project development. It does request the handing of 4 PDD printed copies and 1 digital copy, to be delivered to the DNA.

Please, refer to Section F3, Summary of comment received, above for consideration of comments received by the project owner.

#### SECTION G. Approval and authorization

As a Gold Standard project, DNA approval is not required. Nevertheless, the DNA of the country, the Ministry of the Land, Environment and Rural Development (MITADER), former Ministério para a Coordenação da Acção Ambiental (MICOA), expressed that it does not oppose to the project development.

All the projects participants have a contract with MozCarbon, where they state their agreement to their participation in this project.



## 5) Generic component project activity (VPA)

### SECTION H. Description of generic VPA

#### H.1. Title of generic VPA

Efficient And Clean Cooking For Mozambican Low Income Households – (site name) VPA (#)

#### H.2. Reference number of generic VPA

The number of the generic VPA is to be added to each end of the VPA name, as a cardinal number, in chronologic order, as the following example:

Efficient And Clean Cooking For Mozambican Low Income Households – (site name) VPA (1)

Efficient And Clean Cooking For Mozambican Low Income Households – (site name) VPA (2)

(...)

Efficient And Clean Cooking For Mozambican Low Income Households – (site name) VPA (#)

#### H.3. Purpose and general description of generic VPA

The purpose of this application to the Gold Standard is to devise a successful and continued cookstove programme aiming to reduce the greenhouse gas emission through the replacement of traditional cookstoves by improved cookstoves. The objective is to tackle major problems related to cooking in Mozambique: deforestation for wood and charcoal production, major incidence of respiratory diseases resulting from indoor air pollution and high expenditure in fuel for cooking.

The Programme will distribute and monitor the use of at least 250.000 improved biomass cookstoves (wood and charcoal) in Mozambican cities, with the aim of controlling deforestation and degradation processes of Mozambican forests, reduce the emission of Greenhouse Gases (GHG) and improve the air quality and offer better health conditions to users of domestic stoves. Several types of stoves were identified and some were distributed: Envirofit models (CH2200 charcoal, Econochar charcoal, Econofire wood), Rocket Works, Mbaula stove (a stove with a metal sheet or aluminium with clay based charcoal rest), Zavala stove (clay based charcoal stove) and ACE 1 cookstove. The project is in line with the objectives of the Government of Mozambique and aimed to:

1) reduce absolute poverty: the programme will contribute by creating income and employment through the improved stove value chain, will save fuel, so that money saved can serve other family needs, will reduce indoor air pollution related diseases, so that will have direct consequences to family's economies and will also be reflected in the country's finance.

2) Improve environmental sustainability: The programme will contribute reducing deforestation and forest degradation and lowering the emission of anthropogenic greenhouse gases.

In general, the project will contribute to the broader Millennium Development Goals by ensuring environmental sustainability, reducing child mortality rates; contribute to eradicate extreme poverty and hunger by reducing the number of people with income less than 1 USD by establishing a platform for employment. However, if future VPAs cover stove types that require a different approach, methods will be assessed accordingly.

The project began as a PDD limited to Mozambique. The VPAs are to target poor neighbourhoods throughout the country's territory, continuing the distribution of the cookstoves mentioned in the PDD whenever the baseline conditions are met, thus following the method of the first VPA.

Those objectives will be achieved through the active engagement of all stakeholders including the civil society, the government, the private sector, and the end beneficiaries of the stoves which are the household members.

#### H.4. Technologies/measures

The purpose of the Programme is to reduce the greenhouse gas emission through the replacement of traditional cookstoves by improved cookstoves. The objective is to tackle major problems related to cooking in Mozambique: deforestation for wood and charcoal production, major incidence of respiratory diseases resulting from indoor air pollution and high expenditure in fuel for cooking.

The range of the age and average lifetime of the equipment based on the manufacturer's specifications and industry standards which corresponds to 4 years

Firewood and charcoal are the main sources of energy for cooking, heating and illuminating the Mozambican households. 75% of urban households rely on wood and charcoal for their energy demands. In rural households, almost 98% use wood for energy while 2% use charcoal. Although 70% of the current population resides in rural areas, is not this part of the population that constitutes the major risk for threatening the forest resources, but the remaining 30% of the population that lives in the urban and peri-urban areas, that is still highly dependent depending on firewood and charcoal as the main source of domestic energy. This pattern is explained by the low density population and high wood biomass availability in rural areas, while in the urban zones there is a prevalence of the opposite pattern. This, results in a very high pressure on forests adjacent to cities and along roads that are supplying the cities.

According to Marzoli (2007) <sup>1</sup>, this demand for biomass is responsible for the increasing deforestation and forest degradation, which have been identified as the main sources of environmental problems in the country. Additionally, the use of non-efficient technologies for cooking aggravates the problem resulting in higher energy and biomass losses.

Furthermore, non-efficient stoves contribute to the deterioration of the health condition of the population as a result of smoke emissions that concentrate harmful gases and particles inside the houses.

The models used in the first VPA include the Envirofit models CH2200 (charcoal) and Econochar (charcoal), and the Rocket Works Cha Zama cookstove.

Subsequent VPAs will use the same as the first VPA and might include the Envirofit Econofire (wood), Rocketworks Mbaula stove (a stove with a metal sheet or aluminium with clay based charcoal rest), Zavala stove (clay based charcoal stove) and the ACE 1 cookstove.

Other stoves can be included, as long as they comply with the PoA rules.

One stove per household is to be distributed in each VPA, in the designated neighbourhoods.

The monitoring for this type of project is carried out during house visits in order to test the cookstoves performance. The type of equipment necessary to perform these tests is minimal as it consists mostly in the observation of the normal functioning of the stove.

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<sup>1</sup> Available at: <http://bit.ly/2gtmMzi>

## SECTION I. Application of selected methodologies and standardized baselines

### I.1. Reference to methodologies and standardized baselines

This PoA applies the methodology AMS-II.G v.8.0: Energy Efficiency Measures in Thermal Applications of Non-Renewable Biomass Version 03, Sectoral Scope 03.

The PoA is considered automatically additional under the CDM TOOL21 Demonstration of additionality of small-scale project activities.

There is no standardized baseline for cookstoves projects in Mozambique.

### I.2. Applicability of methodologies and standardized baselines

The methodology AMS-II.G requires that the technology used in the project shall be small appliances involving efficiency improvements in the thermal applications of non-renewable biomass, including efficient biomass cooking stoves, which is the technology disseminated under this PoA.

The methodology measures below constitute the justification for the choice of the selected methodology by showing that each generic VPA meets each applicability condition of the methodology.

CDM Methodology Measure	Project Justification
The 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 input	This PoA falls into a small-scale project and does not exceed the maximum thresholds.
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.	Forest degradation in Mozambique has been a consistent problem for decades, and non-renewable biomass has been used since before 31 Dec 1989. The population is strongly dependent on woody fuels and 80% of the population uses wood and charcoal to supply the household needs in terms of thermal energy, causing deforestation at a large scale. <sup>2</sup>
For cases where the biomass is sourced from renewable sources, the project participants should use a corresponding Type I methodology.	N.A

### I.3. Application of multiple methodologies

Does not apply.

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<sup>2</sup> Falcão, D. (2013) "Produção e Consumo Doméstico de Combustíveis Lenhosos em Moçambique". Faculdade de Ciências e Tecnologia of the Universidade Nova de Lisboa. Lisbon, Portugal.

**I.4. Project boundary, sources and greenhouse gases (GHGs)**

The project boundary corresponds to the national boundaries of Mozambique.

Source		GHG	Included?	Justification/Explanation
Baseline	Combustion of non-renewable biomass for cooking	CO <sub>2</sub>	Yes	Important source of emissions
		CH <sub>4</sub>	No	Not considered as per the methodology. Exclusion is conservative assumption.
		N <sub>2</sub> O	No	Not considered as per the methodology. Exclusion is conservative assumption.
Project activity	Combustion of non-renewable biomass for cooking	CO <sub>2</sub>	Yes	Important source of emissions
		CH <sub>4</sub>	No	Not considered as per the methodology. Exclusion is conservative assumption.
		N <sub>2</sub> O	No	Not considered as per the methodology. Exclusion is conservative assumption.

**I.5. Establishment and description of baseline scenario**

Firewood and charcoal are the main sources of energy for cooking, heating and illuminating the Mozambican households. 75% of urban households rely on wood and charcoal for their energy demands. In rural households, almost 98% use wood for energy while 2% use charcoal. Although 70% of the current population resides in rural areas, is not this part of the population that constitutes the major risk for threatening the forest resources, but the remaining 30% of the population that lives in the urban and peri-urban areas, that is still highly dependent depending on firewood and charcoal as the main source of domestic energy. This pattern is explained by the low density population and high wood biomass availability in rural areas, while in the urban zones there is a prevalence of the opposite pattern. This, results in a very high pressure on forests adjacent to cities and along roads that are supplying the cities.

According to Marzolli (2007), this demand for biomass is responsible for the increasing deforestation and forest degradation, which have been identified as the main sources of environmental problems in the country. Additionally, the use of non-efficient technologies for cooking aggravates the problem resulting in higher energy and biomass losses.

Furthermore, non-efficient stoves contribute to the deterioration of the health condition of the population as a result of smoke emissions that concentrate harmful gases and particles inside the houses.

**I.6. Estimation of emission reductions**

The total ex-ante estimated emissions reduction is 2,652,314.03 tCO<sub>2</sub>e calculated for the first crediting period corresponding to the first 7 years of the project.

**I.6.1. Explanation of methodological choices**

It is assumed that in the absence of the project activity, the baseline scenario would be the projected use of fossil fuels to meet similar thermal energy needs as those provided by the project devices.

As per the methodology, emission reductions are calculated as:

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

Where:

$i$	=	Indices for the situation where more than one type of project device is introduced to replace the pre-project devices <sup>3</sup>
$j$	=	Indices for the situation where there is more than one batch of project device
$ER_y$	=	Emission reductions during year $y$ in t CO <sub>2</sub> e
$ER_{y,i,j}$	=	Emission reductions by project device of type $i$ and batch $j$ during year $y$ in t CO <sub>2</sub> e
$LE_y$	=	Leakage emissions in the year $y$

$$ER_{y,i,j} = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected\_fossil\ fuel} \quad \text{Equation (2)}$$

Where:

$B_{y,savings,i,j}$	=	Quantity of woody biomass that is saved in tonnes per cook stove device of type $i$ and batch $j$ during year $y$
$f_{NRB,y}$	=	Fraction of woody biomass that can be established as non-renewable biomass using survey methods or government data or default country specific fraction of non-renewable woody biomass (fNRB) values available on the CDM website <sup>4</sup>
$NCV_{biomass}$	=	Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.015 TJ/tonne, based on the gross weight of the wood that is 'air-dried')

<sup>3</sup> For example, in some instances, full replacement of the pre-project device would require the implementation of more than one project device (e.g. one stove suitable for cooking and the other stove suitable for cooking/boiling water).

<sup>4</sup> Default values endorsed by designated national authorities and approved by the Board are available at <http://cdm.unfccc.int/DNA/fNRB/index.html> or [http://cdm.unfccc.int/methodologies/standard\\_base/index.html](http://cdm.unfccc.int/methodologies/standard_base/index.html).

$EF_{projected\_fossilfuel}$	=	Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers. Use a value of 81.6 t CO <sub>2</sub> /TJ <sup>5</sup>
$N_{y,i,j}$	=	Number of project devices of type <i>i</i> and batch <i>j</i> operating during year <i>y</i>
$\mu_y$	=	Adjustment to account for any continued use of pre-project devices during the year <i>y</i> when applying equations 6 and 8 (fraction). Use 1.0 in other cases

$B_{y,savings,i,j}$  due to implementation of efficient thermal devices is estimated as per the following equation:

Option 3: water boiling test (WBT):<sup>6</sup>

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

The calculations in the equations above assume that there is only one device per household. Considering that baseline surveys or other methods may estimate the total consumption per household, an adjusted formula as below shall be used in case more than one project device is used in the household. For example, if 2 project devices are installed per household, 0.5 times the baseline woody biomass consumption per household ( $B_{old,HH}$ ) is used as the total annual quantity of woody biomass that would have been used in the absence of the project activity in each device ( $B_{old,i,j}$ ). Where more detailed data is available e.g. the thermal capacity of the project devices and respective utilisation hours, a weighted average thermal output ( $HR_{y,i,j}$ ) may be used to determine the savings of baseline consumption for each device.

$$B_{old,i,j} = B_{old,HH} \div N_{d,HH} \quad \text{Equation (4)}$$

$$B_{old,HH} = B_{old,p} \times N_{p,HH} \quad \text{Equation (5)}$$

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<sup>5</sup> 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 per cent weight is assigned to coal as the alternative solid fossil fuel (96 t CO<sub>2</sub>/TJ) and a 25 per cent weight is assigned to both liquid and gaseous fuels (71.5 t CO<sub>2</sub>/TJ for kerosene and 63.0 t CO<sub>2</sub>/TJ for liquefied petroleum gas (LPG)).

<sup>6</sup> Based on whether  $\eta_{new,i,j}$  or  $B_{y=1,new,i,j,survey}$  is used for monitoring, either equation (6) or (7) may be used respectively.

Where:

$B_{old,HH}$	=	Annual quantity of woody biomass that would have been used in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices (tonnes/household/year)
$N_{d,HH}$	=	Number of project devices per household (number)
$B_{old,p}$	=	Annual quantity of woody biomass that would have been used per person in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices (tonnes/person/year)
$N_{p,HH}$	=	Average number of persons per household (number)

Where charcoal is used as the fuel by baseline (old) or project (new) devices, the quantity of woody biomass shall be determined by using a default wood to charcoal conversion factor of 6 kg of firewood (wet basis) per kg of charcoal (dry basis).<sup>7</sup> Alternatively, credible local conversion factors determined from a field study or literature may be applied.

The life span<sup>8</sup> of each type of the project devices shall be documented in the PDD based on manufacturer's specification.

Based in the manufacturer's specifications, we accounted the lifespan to be of 3 years.

The loss in efficiency of the project devices  $i$  in each batch  $j$  due to aging shall be accounted during the monitoring period  $y$ . The Project participant may choose any option below to account for the loss in efficiency; the option should be identified and fixed ex ante in the PDD at the time of registration.

- (a) A default schedule of linear decrease in efficiency up to the terminal efficiency assumed as 20 per cent shall be applied through the life span of the project device<sup>9</sup>. For example, if the life span of project device is five years and project device has an efficiency of 30 per cent at commissioning then a 2 per cent decrease in efficiency every year shall be applied; or
- (b) Manufacturer of project devices shall confirm with technical justification based on certification by a national standards body or an appropriate certifying agent recognized by that body that no decrease in efficiency of project device is envisaged during the crediting period ; or
- (c) Determine<sup>10</sup> the rate of efficiency drop for a representative sample of the first batch of project device  $i$  in year  $y$  and assume that same rate of loss in efficiency applies to all

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<sup>7</sup> Refer to: <<http://www.ipcc-nggip.iges.or.jp/public/gl/guidelin/ch1ref3.pdf>>. The term 'wet basis' assumes that the wood is 'air-dried' as is specified in the IPCC default table.

<sup>8</sup> The life span should be reported in cases where the PPs are opting to account the efficiency loss as per paragraph 25 (a).

<sup>9</sup> If the efficiency of the project devices falls below 20%, it is no longer eligible to be considered a project device.

<sup>10</sup> Example: For the representative sample of Batch 1, if the efficiency of a new project device is 30% and at the end of Year 1, the efficiency is monitored to be 29%; the loss rate is (30%-29%)/1=1%. Then this 1% loss rate is to be assumed to be applicable for all the devices in the first batch and subsequent batches for first year of operation.

other batches. In other words, it may be assumed that the degradation of efficiency measured in a representative sample of the first batch of project devices  $i$  apply to all subsequent batches. The efficiency of the project devices in the first batch has to be monitored annually through representative samples and this rate of loss in efficiency may be applied correspondingly to all batches.

- (d) Determine the loss in efficiency annually from a representative sample of each batch and use the actual loss rate that is measured.

The option (a) was taken for this project.

If the life span of devices is less than the crediting period it shall be demonstrated that the devices shall be replaced after the life span has ended. In such cases, if it cannot be demonstrated that the project devices will be replaced with new devices, no emission reductions can be claimed beyond the life span of the project devices.

In this project the stoves are to be replaced as they reach the end of their expected lifetime. For that reason the project claims 100% of efficiency in ER in the fourth year, as in the first.

#### **Determination of the value of the Fraction $f_{NRB,y}$**

The fraction of non-renewable biomass ( $f_{NRB}$ ) is determined from the default values endorsed by designated national authorities and approved by the Board.

#### **I.6.2. Data and parameters fixed ex ante**

In addition to the parameters listed in the tables below, the provisions on data and parameters not monitored in the tools referred to in this methodology apply.



Data/Parameter	Charcoal use per standard adult/day
Data unit	kg
Description	Where charcoal is used as the fuel by baseline (old) or project (new) devices, the quantity of woody biomass shall be determined by using a default wood to charcoal conversion factor of 6 kg of firewood (wet basis) per kg of charcoal (dry basis). Alternatively, credible local conversion factors determined from a field study or literature may be applied.
Source of data	Refer to: <a href="http://www.ipcc-nggip.iges.or.jp/public/gl/guidelin/ch1ref3.pdf">http://www.ipcc-nggip.iges.or.jp/public/gl/guidelin/ch1ref3.pdf</a> . The term 'wet basis' assumes that the wood is 'air-dried' as is specified in the IPCC default table
Value(s) applied	Baseline = 0,74 kg; Project = 0,22 kg
Choice of data or Measurement methods and procedures	CDM default value
Purpose of data	Calculation of baseline emissions and calculation of project emissions
Additional comment	-

Data/Parameter	$N_{p,HH}$
Data unit	Number
Description	Average number of persons per household
Source of data	From KPT Chamanculo
Value(s) applied	4.53
Choice of data or Measurement methods and procedures	Field data
Purpose of data	Calculation of baseline emissions and calculation of project emissions
Additional comment	-

Data/Parameter	$N_{d,HH}$
Data unit	Number
Description	Number of project devices per household
Source of data	PO provided information. 1 stove per household.
Value(s) applied	1
Choice of data or Measurement methods and procedures	Baseline information
Purpose of data	Calculation of baseline emissions
Additional comment	-

Data/Parameter	Average annual biomass savings per stove
Data unit	Tonnes
Description	Average annual biomass savings per stove
Source of data	KPT
Value(s) applied	4.94
Choice of data or Measurement methods and procedures	Field data – KPT
Purpose of data	Calculation of project emissions
Additional comment	-

### I.6.3. Modalities for ex ante calculation of emission reductions

In this project, for ex-ante calculation of VPA emission reductions, the WBT (option 3) option provided in the methodology AMS-II.G version 08.0 is used.

When option 3 is applied, the following table is used for ex-ante calculations:

	Value	Unit	Source/Reference
$N_{y,i}$	[XX]	N/A	Database from the PO. Distributed ICS.
$B_{old,HH}$	[XX]	tonnes/household/year	From Chamanculo KPT. The KPT shall 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): <a href="http://www.pciaonline.org/node/1049">http://www.pciaonline.org/node/1049</a> )
$N_{d,HH}$	[XX]	Number	From KPT. The KPT shall 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): <a href="http://www.pciaonline.org/node/1049">http://www.pciaonline.org/node/1049</a> ).
Charcoal use per standard adult/day	[XX]	kg	From KPT. The KPT shall 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): <a href="http://www.pciaonline.org/node/1049">http://www.pciaonline.org/node/1049</a> ).
Firewood biomass	6	N.A.	Methodology
$B_{old,i,j}$	[XX]	tonnes/year	$B_{old,i,j} = B_{old,HH} / N_{d,HH}$
$\eta_{old,i,j}$	21.28	%	Efficiency average from Testing Report Baseline
$\eta_{new,i,j}$	33.09	%	Efficiency average from ICS WBT
$B_{y,savings,i,j}$	[XX]	tonnes/year	$B_{y,savings,i,j} = B_{old,i,j} \times \left(1 - \frac{\eta_{old,i,j}}{\eta_{new,i,j}}\right)$
$f_{NRB,y}$	0.91	N/A	CDM web
$NCV_{biomass}$	0.029	TJ/tonne	IPCC Guidelines
$EF_{projected\_fossilfuel}$	81.6	tCO <sub>2</sub> /TJ	Default value
$\mu_y$	0.5 or 1	N/A	Methodology
Baseline Emissions	[XX]	tCO <sub>2</sub> /y	$ER_y = B_{y,savings} * f_{NRB,y} * NCV_{biomass} * EF_{projected\_fossilfuel} * N_{y,i} * \mu_y$
Project emissions (PE <sub>y</sub> )	[XX]	tCO <sub>2</sub> /y	-
Leakage emissions (LE <sub>y</sub> )	[XX]	tCO <sub>2</sub> /y	0, does not need to be accounted for

Emission reduction	[XX]	tCO2/y	$ER_y = B_{y,savings} * f_{NRB,y} * NCV_{biomass} * EF_{projected\_fossilfuel} * N_{y,i} * \mu_y$
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## I.7. Monitoring plan

### I.7.1. Data and parameters to be monitored

Data/Parameter	$N_{y,i,j}$
Data unit	-
Description	Number of project devices of type i and batch j operating during year y.
Source of data	Monitoring
Value(s) applied	250.000
Measurement methods and procedures	Measured directly or based on a representative sample. Sampling standard shall be used for determining the sample size to achieve 90/10 confidence precision. A discount shall be applied based on the percentage of devices operational as determined by the sample survey e.g. if survey shows that 10% of the devices is non-operating, an adjustment factor of 0.9 shall be applied to number of project devices commissioned in a particular batch. Separate samples shall be taken for each batch.
Monitoring frequency	At least once every two years (biennial)
QA/QC procedures	As mentioned in the monitoring plan
Purpose of data	-
Additional comment	<p>- If equation (6) under option 3 (WBT) is used combined with direct measurement of Biomass new, then <math>\mu_{y,i,j}</math> (parameter 2) may be assumed as 1.0.</p> <p>- When the data loggers are used, the days when only project devices or only pre-project devices are used will be attributed accordingly. The days where both devices have been used, if the data loggers are able to detect and record the time each device has been used (e.g. in hours), the share in the total duration of utilization will be used to attribute a fraction of this day to one or to the other device. Alternatively, if the data loggers are not able to determine the duration of the utilization, but only the situation of the device being on or off (i.e. used or not used during that day), the share of 50:50 may be used</p>

Data/Parameter	$\mu_y$
Data unit	Fraction
Description	Adjustment to account for any continued use of pre-project devices during the year y
Source of data	When applying equations 6 and 8, it is a fraction based on monitoring results. In other cases (i.e. applying equations 3, 5 and 7), use 1.0.
Value(s) applied	0.5
Measurement methods and procedures	<p>This parameter should be monitored using one of the following methods: 1. If the pre-project devices are decommissioned and no longer used, as determined by the monitoring survey its value is 1.0. If both the project devices and pre-project devices are used together, measurement campaigns shall be undertaken using data loggers such as stove utilization monitors (SUMs) which can log the operation of all devices (recording the situation of the device being used or not during any <u>day'd</u> of the measurement campaign) in order to determine the average device utilization intensity (to establish the relative share of the usage of the devices). The measurement campaign shall be conducted in at least 10 randomly selected participant households of the project activity or the component project activity (CPA) for at least 90 days during the year y. If seasonal variation is observed, the average value determined through the campaign shall be annualised taking into account seasonal variation of device utilization. 2. Alternatively, surveys may be conducted if the use of data loggers to record the continued operation of baseline devices is demonstrated to be not practical, for example when the baseline device is the three stone fire. The surveys should be designed to capture the cooking habits and stove usage of households in the region, including quantification of use of baseline devices, by formulating questions and/or collecting evidences to determine the frequency of usage of both the project devices and baseline devices. For example if there were 3 pre-project devices per household and it was determined during the survey that use of one of them continues during the crediting period then a conservative adjustment factor of 0.66 is applied for the relevant monitoring period. Another example would be the case where there was only one pre-project device per household and its use during the project period continues along with the project stove to meet 25% of the cooking needs of the household in which case the adjustment factor will be 0.75. Where a more precise data is available i.e. the thermal capacity of the project and pre-project devices and respective utilisation hours, a weighted average adjustment factor may be used.</p>
Monitoring frequency	At least once every two years (biennial)
QA/QC procedures	-
Purpose of data	

Additional comment	<p>- If equation (6) under option 3 (WBT) is used combined with direct measurement of Biomass new, then <math>\mu_{y,i,j}</math> (parameter 2) may be assumed as 1.0. - When the data loggers are used, the days when only project devices or only pre-project devices are used will be attributed accordingly. The days where both devices have been used, if the data loggers are able to detect and record the time each device has been used (e.g. in hours), the share in the total duration of utilization will be used to attribute a fraction of this day to one or to the other device. Alternatively, if the data loggers are not able to determine the duration of the utilization, but only the situation of the device being on or off (i.e. used or not used during that day), the share of 50:50 may be used</p>
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Data/Parameter	$\eta_{new,i,j}$
Data unit	Fraction
Description	Efficiency of the device of each type i and batch j implemented as part of the project activity.
Source of data	-
Value(s) applied	
Measurement methods and procedures	<p>Efficiency shall be measured/estimated as per the following:</p> <ol style="list-style-type: none"> <li>1. The efficiency of the project devices shall be based on certification by a national standards body or an appropriate certifying agent recognized by that body.</li> <li>2. Alternatively, manufacturer specifications on efficiency based on water boiling test (WBT) may be used. The sampling test of stoves by such certification bodies/agents or manufacturers shall be conducted following a 90/10 precision in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities"</li> <li>3. However, the following simplified approach may be used, when the efficient cook-stoves are produced by a manufacturer with a good quality management system in place to ensure that the individual equipment produced do not vary beyond the range of acceptance limits (e.g. characteristics such as materials, critical dimensions): <ol style="list-style-type: none"> <li>(i) Conduct a sample test on three cook stoves with three tests conducted for each stove;</li> <li>(ii) If the standard deviation of the nine test results indicated above is very small and 90/10 precision requirement is met (in this case, the value of the t-distribution for 90 per cent confidence shall be used instead of Z value), the efficiency determined is acceptable, otherwise more sample tests would be required until 90/10 precision is met</li> </ol> </li> </ol>
Monitoring frequency	<p>(i) Recorded at the time of commissioning/distribution</p> <p>(ii) Adjusted for the loss if efficiency as paragraph 25.</p>
QA/QC procedures	As mentioned in the monitoring plan
Purpose of data	-
Additional comment	-

<b>Data/Parameter</b>	$NCV_{\text{biomass}}$
Data unit	TJ/tonne
Description	Net calorific value of the non-renewable woody biomass, briquettes or charcoal used in project devices.
Source of data	IPCC default
Value(s) applied	0.015
Measurement methods and procedures	IPCC default for wood fuel, 0.015 TJ/tonne
Monitoring frequency	Yearly
QA/QC procedures	As mentioned in monitoring plan
Purpose of data	-
Additional comment	-

<b>Data/Parameter</b>	$f_{\text{NRB},y}$
Data unit	-
Description	Fraction of woody biomass saved by the project activity during year $y$ that can be established as non-renewable biomass
Source of data	CDM value for Mozambique
Value(s) applied	0.91
Measurement methods and procedures	The useful thermal energy shall be calculated based on the rated capacity of the project device multiplied by the number of utilization hours. Refer equation 4
Monitoring frequency	Ex ante
QA/QC procedures	As mentioned in monitoring plan
Purpose of data	-
Additional comment	-



Data/Parameter	$\eta_{old,i,j}$
Data unit	%
Description	Efficiency of pre - project device, which is a three stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney; for other types of devices, a default value of 0.2 may be optionally used. Use weighted average values (taking the amount of woody biomass consumed by each device as the weighting factor) if more than one type of device is being replaced
Source of data	Baseline WBT
Value(s) applied	21.28
Measurement methods and procedures	The useful thermal energy shall be calculated based on the rated capacity of the project device multiplied by the number of utilization hours. Refer equation 4
Monitoring frequency	Fixed for each individual household when included in the project activity database
QA/QC procedures	As mentioned in monitoring plan
Purpose of data	-
Additional comment	-

<b>Data/Parameter</b>	Life Span
Data unit	Number of years
Description	The operating life time of the project device. The life span should be reported in cases where the PPs are opting to account the efficiency loss as per paragraph 25
Source of data	Manufacturer (certified by a national standards body or an appropriate certifying agent recognized by that body)
Value(s) applied	3
Measurement methods and procedures	-
Monitoring frequency	Fixed and recorded at the time of commissioning/distribution
QA/QC procedures	As mentioned in monitoring plan
Purpose of data	-
Additional comment	-

<b>Data/Parameter</b>	Life Span
Data unit	Number of years
Description	The operating life time of the project device. The life span should be reported in cases where the PPs are opting to account the efficiency loss as per paragraph 25
Source of data	Manufacturer (certified by a national standards body or an appropriate certifying agent recognized by that body)
Value(s) applied	3
Measurement methods and procedures	-
Monitoring frequency	Fixed and recorded at the time of commissioning/distribution
QA/QC procedures	As mentioned in monitoring plan
Purpose of data	-
Additional comment	-

Data/Parameter	$N_{d,HH}$
Data unit	Number
Description	Number of project devices distributed per household
Source of data	Internal records
Value(s) applied	1
Measurement methods and procedures	-
Monitoring frequency	Recorded at the time of commissioning/distribution of project devices
QA/QC procedures	As mentioned in monitoring plan
Purpose of data	-
Additional comment	-

### 1.7.2. Sampling plan

A statistically valid sample of the locations where the devices are deployed, with consideration, in the sampling design, of occupancy and demographic differences can be used to determine parameter values used to calculate emission reductions, as per the relevant requirements for sampling in the “Standard for sampling and surveys for CDM project activities and programmes of activities”. When biennial inspection is chosen a 95 per cent confidence interval and a 10 per cent margin of error shall be achieved for the sampling parameter. On the other hand when the project proponent chooses to inspect annually, a 90 per cent confidence interval and a 10 per cent margin of error shall be achieved for the sampled parameters. In cases where survey results indicate that 90/10 precision or 95/10 precision are not achieved, the lower bound of the 90 per cent or 95 per cent confidence interval of the parameter value may be chosen as an alternative to repeating the survey efforts to achieve the 90/10 or 95/10 precision.

Efficiency of devices may be monitored in a common survey with other monitoring parameters; therefore, a random sub-sample within the common survey can be taken for which stove efficiency is tested, as long as the required precision for stove efficiency is achieved.

### 1.7.3. Other elements of monitoring plan

The PO shall maintain a record for the date of commissioning of project devices of each type *i* and batch *j*.

According to the Tool 16 v4 "Project and leakage emissions from biomass" leakage does no need to be accounted for. Therefore leakage will not be monitored.

Relevant parameters shall be monitored and recorded during the crediting period as indicated in section 1.7.1. above. The applicable requirements specified in the “General guidelines for SSC CDM methodologies” are also an integral part of the monitoring guidelines and therefore shall be followed by the project participants.

MozCarbon, the PO, is responsible for overall monitoring management. The sampling effort, data collection, consolidation and results analysis will be undertaken by a team adequately trained, well aware of CDM requirements/Gold standard foundation requirements and supervised by the PO. A

compensation system based partly on objective performance criteria may be established in order to encourage workers to perform work of the best quality possible, as long as this does not challenge the sincerity of monitoring.

The human resources dedicated to the monitoring tasks will consist of:

- A monitoring manager;
- A data manager;
- Field supervisors;
- Field agents

Their role description is displayed in the table below.

Role	Description
Monitoring manager	<p>The person responsible for:</p> <ul style="list-style-type: none"> <li>- Ensuring that all the VPAs and units within each VPA are following the monitoring steps in accordance with the registered monitoring plan as required by the UNFCCC guidelines and approved applied methodologies;</li> <li>- Ensuring that the equipment and measurements in the field are in line with the measurement methods and recording frequency and storing approaches;</li> <li>- Ensuring that all the monitoring data collected from project sites are consolidated and processed digitally in a central database;</li> <li>- Ensuring all monitoring team members received a proper training;</li> <li>- Ensuring that each VPA produces a coherent and standard monitoring report.</li> </ul>
Data manager	<p>The person responsible for:</p> <ul style="list-style-type: none"> <li>- Collecting all data for monitoring;</li> <li>- Register data in electronic database and keep hardcopies;</li> <li>- Following up with data calculations and annual monitoring set up.</li> </ul>
Fields supervisors	<p>The person responsible for:</p> <ul style="list-style-type: none"> <li>- Organizing monitoring in the field;</li> <li>- Product identification and maintenance of continuous record of the issued serial numbers along with distribution and commissioning;</li> <li>- Customer training and introduction to O&amp;M during installation and commissioning;</li> <li>-Field agents training;</li> <li>- Collect Legal agreements with end-users and transfer to data manager.</li> <li>-Cross check monitoring information collected by Field agents.</li> </ul>
Field agents	<p>-The people employed locally working on diverse task for the PoA including monitoring tasks.</p> <p>The person responsible for:</p> <ul style="list-style-type: none"> <li>-Going in the field and collect raw data from households for monitoring.</li> </ul>

	-Make sign sale agreement to end-users
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Training will be provided to all the monitoring staff before the commencement of monitoring works, to ensure the project participants' ability to implement the described monitoring plan.

Training will be conducted for monitoring agents to master their expected tasks in surveying, in order to ensure monitoring rigour and quality as well as minimal refusals or biases.

Special circumstances such as former traditional stove still operating, or dual improved cookstoves owner etc. will be carefully integrated to the training and simulated.

Personnel involved in VPA inclusion, VPA/PoA level monitoring and PO level review and approval shall have either, alone or collectively as a team, the necessary competence including:

- Knowledge of the CDM technical and methodological aspects;
- Skills to apply relevant principles, procedures and techniques for VPA inclusion, verification and review and approval
- As a team leader to:
  - Plan and make effective use of resources;
  - Understand the different functions and lead the team to reach conclusion;
  - Prepare the relevant reports and handle all follow up actions.

A key aspect is training and education. The PO is responsible for ensuring that the procedures are carried out properly. Training is provided on the PoA management system that has been established so roles, responsibilities and communication channels are clear.

All documents, lists and questionnaires produced during monitoring shall be saved under electronic format with physical copies securely stored as evidences under the direct responsibility of the data manager and the supervision of the monitoring manager and should be kept and archived electronically for two years after the end of the crediting period or the last issuance of VERs, whichever occurs later.

## SECTION J. Crediting period type and duration

The crediting period lasts 7 years and can be renewed two more times, up to 21 years.

## SECTION K. Eligibility criteria for inclusion of VPAs

No.	Eligibility criterion Category	Eligibility criterion - Required condition	Supporting evidence for inclusion	Description of this CPA in relation to the criterion and supporting evidence
1	Boundary and location of the VPA	The VPA is located within the boundary of the country within the PoA boundary.	Location boundary is specified in the specific VPA-DD.	All the VPAs will be located inside of Mozambique's geographic boundaries

No.	Eligibility criterion Category	Eligibility criterion - Required condition	Supporting evidence for inclusion	Description of this CPA in relation to the criterion and supporting evidence
2	Avoiding double counting	The VPA includes a means of uniquely identifying the stoves to be distributed and the end-users who will receive stoves.	Photo or similar proof that stoves have a unique serial ID number or other means of identification.  Database and/or Distribution Record showing that end user details including name and address are to be collected along with Stove ID.	All the serial numbers and batch numbers are recorded in the project database, as well as the address and GPS location of each home an ICS is delivered.
3	Technology requirements	The ICS uses one of the following fuel types: <ul style="list-style-type: none"> <li>• Wood fuel</li> <li>• Charcoal</li> </ul> The ICS has a minimum efficiency of 20%(AMS II.G, Version 8.0, para 1)	Technical specification of ICS provided	All the technical specifications are up to the methodology requirements. Technical specifications are reviewed at the purchase time.
4	Start date of VPA	The start date of the VPA shall be after the PoA validation start date (i.e. not prior to 13 December 2011, which was the date the PoA was made available online on the UNFCCC website for global stakeholder consultation). However, retroactive projects have different rules and the start date of the VPA does not need to be after the PoA validation start date.	The start date of the VPA will be specified in each VPA-DD.	The start date of the programme is July 2015 as a pilot in the suburbs of Maputo. The implementation of the stoves started in January 1st, 2016.

No.	Eligibility criterion - Category	Eligibility criterion - Required condition	Supporting evidence for inclusion	Description of this CPA in relation to the criterion and supporting evidence
5	Non-renewable biomass in use since Dec 1989	The first VPA in each country will demonstrate that non-renewable biomass has been in use since December 1989.	Information sourced from survey methods, published literature, official reports or statistics.	Forest degradation in Mozambique has been a consistent problem for decades, and non-renewable biomass has been used since before 31 Dec 1989. The population is strongly dependent on woody fuels and 80% of the population uses wood and charcoal to supply the household needs in terms of thermal energy, causing deforestation at a large scale. <sup>11</sup>
6	Additionality of VPAs	The VPA shall satisfy the methodology additionality conditions for small-scale VPAs: savings must be under 180 GWh <sub>th</sub> /year so it can be deemed as automatically additional under the methodology	For the first VPA it shall be demonstrated that its savings are under the methodology threshold	All the energy saving will be checked in order not to surpass the threshold
7	Official Development Assistance (ODA)	The VPA is either: a) not receiving any funding from Annex I parties; or b) the Annex I party funds do not result in a diversion of ODA.	a) Confirmation by the DO or CME b) Affirmation by the funding party	The PO does not transfer credits to the Donor Country
8	End-user group	The VPA is either aimed at households, community organisations (eg. schools) or small/medium enterprises.	The VPA-DD specifies the target end-user group and the appropriate baseline.	The end-user group is clearly defined as the communities of the selected neighbourhoods

<sup>11</sup> Falcão, D. (2013) "Produção e Consumo Doméstico de Combustíveis Lenhosos em Moçambique". Faculdade de Ciências e Tecnologia of the Universidade Nova de Lisboa. Lisbon, Portugal.

No.	Eligibility criterion Category	Eligibility criterion - Required condition	Supporting evidence for inclusion	Description of this CPA in relation to the criterion and supporting evidence
9	Sampling	Sampling of stoves within the VPA must meet the requirements of AMS II G v8.0 and the “Standard on Sampling and Surveys for CDM Projects and Programmes of Activities” (the Sampling Standard).	The VPA-DD either specifies a) sampling will be undertaken as part of the PoA Sampling Plan, or b) if VPA-specific sampling is to be undertaken, the VPA Sampling Plan must meet the requirements of AMS II G v8.0 and the Sampling Standard	The VPA sampling plan is designed to comply with the AMS II G v08.0 specifications
10	SSC Limit for VPAs	The annual energy savings of each VPA shall not go beyond the limits of 180 GWh <sub>th</sub> /year over the entire crediting period.	The maximum number of ICS will be determined in each VPA-DD depending on the technology used. If a VPA exceeds the applicable limit, the claimable emission reduction shall be capped at 180 GWh <sub>th</sub> /year.	This VPA can distribute a maximum of 14,554 ICS units. So far it has distributed 6379. It will distribute more stoves up to the threshold limit, but never surpassing it.



No.	Eligibility criterion Category	Eligibility criterion - Required condition	Supporting evidence for inclusion	Description of this CPA in relation to the criterion and supporting evidence
11	Exempted from de-bundling	Each ICS reduces energy consumption by less than 180 GWh <sub>th</sub> /year, according to the the Methodological Tool for Assessment of debundling for small-scale project activities v4.0 and the decision 1/CMP.2	Specific energy savings for the applied ICS estimated using Excel sheet or similar tool.	In the decision 1/CMP.2, paragraph 28 line b) states that a Type II project activities or those relating to improvements in energy efficiency which reduce energy consumption, on the supply and/or demand side, shall be limited to those with a maximum output of 60 GWh per year, or an appropriate equivalent, in this case 180 GWh <sub>t</sub> per year. If so, the Methodological Tool for Assessment of debundling for small-scale project activities v4.0 states in the paragraph 10 that the project activity can qualify to use simplified modalities and procedures for small-scale CDM project activities.
12	Contractual agreement	In the case that the PO is not responsible for implementing the VPA, the organization responsible for VPA implementation, known as the Distributing Organisation (DO), has signed a contractual agreement with the CME to participate in the PoA.	Contract signed by the parts.	1. As part of the inclusion of this SSC-VPA under the PoA, an agreement will be signed by the distributing organization representing its associated ICS technicians and the PO. The agreement will include specific provisions and declarations that confirm the SSC-VPA project implementers agree that their activity is being subscribed under the PoA.

## Appendix 1. Contact information of coordinating/managing entity and project participants

<b>Coordinating/managing entity and/or project participants</b>	<input type="checkbox"/> Coordinating/managing entity <input type="checkbox"/> Project participant
<b>Organization name</b>	Austrian Development Agency
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<b>Contact person</b>	

<b>Coordinating/managing entity and/or project participants</b>	<input checked="" type="checkbox"/> Coordinating/managing entity <input type="checkbox"/> Project participant
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<b>Fax</b>	

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<b>Contact person</b>	

<b>Coordinating/managing entity and/or project participants</b>	<input type="checkbox"/> Coordinating/managing entity <input type="checkbox"/> Project participant
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<b>Country</b>	Finland

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<b>Coordinating/managing entity and/or project participants</b>	<input type="checkbox"/> Coordinating/managing entity <input type="checkbox"/> Project participant
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<b>Contact person</b>	

<b>Coordinating/managing entity and/or project participants</b>	<input type="checkbox"/> Coordinating/managing entity <input checked="" type="checkbox"/> Project participant
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<b>Coordinating/managing entity and/or project participants</b>	<input type="checkbox"/> Coordinating/managing entity <input checked="" type="checkbox"/> Project participant
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<b>Coordinating/managing entity and/or project participants</b>	<input type="checkbox"/> Coordinating/managing entity <input type="checkbox"/> Project participant
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**Appendix 2. Affirmation regarding public funding**

N/A

**Appendix 3. Applicability of methodologies and standardized baselines**

N/A

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

N/A

**Appendix 5. Further background information on monitoring plan**

N/A

**Appendix 6. Summary report of comments received from local stakeholders**

N/A

**Appendix 7. Summary of post-registration changes**

N/A

## Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
08.1	28 June 2017	Revision to: <ul style="list-style-type: none"> <li>• Remove a duplicated instruction;</li> <li>• Make editorial improvement.</li> </ul>
08.0	7 June 2017	Revision to: <ul style="list-style-type: none"> <li>• Improve consistency with the “CDM project standard for programmes of activities” and with the PDD and VPA-DD forms;</li> <li>• Make editorial improvement.</li> </ul>
07.0	25 May 2017	Revision to: <ul style="list-style-type: none"> <li>• Ensure consistency with the “CDM project standard for programmes of activities” (CDM-EB93-A07-STAN) (version 01.0);</li> <li>• Incorporate the “Programme design document form for small-scale CDM programmes of activities” (CDM-SSC-PoA-DD-FORM);</li> <li>• Make editorial improvement.</li> </ul>
06.0	15 April 2016	Revision to ensure consistency with the “Standard: Applicability of sectoral scopes” (CDM-EB88-A04-STAN) (version 01.0).
05.0	9 March 2015	Revision to: <ul style="list-style-type: none"> <li>• Include provisions related to choice of start date of PoA;</li> <li>• Include provisions related to delayed submission of a monitoring plan;</li> <li>• Provisions related to local stakeholder consultation;</li> <li>• Add exception for generic VPA where technology is under positive lists;</li> <li>• Make editorial improvement.</li> </ul>
04.1	5 August 2014	Editorial revision to correct the document information table.
04.0	25 June 2014	Revision to: <ul style="list-style-type: none"> <li>• Include the Attachment: Instructions for filling out the project design document form for CDM programme of activities (these instructions supersede the Guideline: Completing the programme design document form for CDM programme of activities (Version 04.0));</li> <li>• Include provisions related to standardized baselines;</li> <li>• 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;</li> <li>• Add general instructions on post-registration changes in paragraphs 2 and 3 of general instructions and Appendix 6;</li> <li>• Change the reference number from F-CDM-PoA-DD to CDM-PoA-DD-FORM;</li> <li>• Make editorial improvement.</li> </ul>



<i>Version</i>	<i>Date</i>	<i>Description</i>
03.0	3 December 2012	EB 70 Revision to reflect changes to the <i>Guideline: Completing the programme design document form for CDM programmes of activities</i> (EB 70, Annex 6).
02.0	13 March 2012	EB 66 Revision required to ensure consistency with the "Guidelines for completing the programme design document form for CDM programmes of activities" (EB 66, annex 12).
01.0	27 July 2007	EB 33, Annex 41 Initial publication.
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