

## ANNEX AM – POA PASSPORT TEMPLATE

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### **Annex 1 ODA declarations**

## SECTION A. Programme Title

Title: Fuel Efficient Stoves for Ethiopia Programme of Activity

Date: 14.04.2015

Version no.: 2.0

## SECTION B. Programme description

### Estimated start date of the programme

The starting date of the PoA was determined as 29/01/2014, the date of the first Submission of the PoA DD to the Gold Standard.

#### a) Policy/measure or stated goal that the PoA seeks to promote

The objective of the Programme of Activities (PoA) is to distribute over 200,000 fuel efficient cooking stoves (improved cookstoves, called “ICSs” further on) to particularly rural households or institutions in Ethiopia.

Besides saving greenhouse gases, the programme aims at

- bringing wood consumption down so as to allow natural recovery of forests and/or reforestation to take place (Fuel Wood Use is the main driver for deforestation and greenhouse gas emissions in Ethiopia<sup>1</sup>),
- diminishing Indoor Air Pollution from wood smoke and avoiding its harmful health consequences,
- diminishing the fuel wood bill for households

#### b) Framework for the implementation of the proposed PoA

The Fuel Efficient Stoves for Ethiopia Programme of Activity is a voluntary initiative of the World Food Programme Ethiopia (WFP), who will act as CME. For the implementation of the programme, the WFP will cooperate with different governmental institutions of Ethiopia, such as Environmental Protection Agency (EPA), the Ministry of Agriculture and Rural Development (MoARD) and its local offices at the level of Woredas (administrative units at the municipal level), the Ministry of Water and Energy, the Ministry of Education, and the Ministry of Finance and Economic Development.

The PoA will facilitate the procurement of ICSs from domestic production so that the end user can obtain them for free or at prices below 50% of the unsubsidized price. Carbon revenues will

<sup>1</sup> Environmental Protection Authority. 2003. *State of the Environment Ethiopia*. Addis Ababa: Environmental Protection Authority.  
<http://www.epa.gov.et/Download/Publications/State%20of%20Environment%20Report%20of%20Ethiopia-%202003.pdf>.

be used to fund ICS distribution and to cover monitoring costs.

Households and possibly also institutions will be targeted, for example by using the infrastructure within Woredas that are participating in the successful long-running MERET WFP programme (Managing Environmental Resources to Enable Transitions to more sustainable livelihoods). In case of households under the MERET framework, the MoARD at the Woreda level will buy ICSs, and development agents working for the MoARD will distribute the stoves in the Kebeles (administrative units at the village level). The WFP will provide 100% of funding to buy the ICSs from the producers. End users will receive ICSs for free or pay only a small contribution far below 50% of the unsubsidized price into a fund for the maintenance of stoves and community issues to be managed by Woreda offices.

### Technologies and measures

The PoA consists in the distribution of different fuel efficient wood stoves that are designed particularly for Ethiopian cooking habits. The PoA is open for different technologies, but the two main stove types to be disseminated are fixed Mirt stoves designed for *injera* baking (

Figure 1a) and Tikikil portable household cookstove for household cooking other than *injera* baking (

Figure 1b). These two stove types are distributed to households in pairs (one Mirt and one Tikikil stove).



Figure 1: a) and b): Stove types disseminated within this PoA<sup>2</sup>

Specific stoves may also be distributed to institutions. The technology deployed to institutions

<sup>2</sup> GIZ (2011):GIZ Stove Projects in Kenya, Ethiopia, Uganda, Improved cookstove Colloquium, Nairobi, <https://energypedia.info/images/a/a6/GIZ.pdf>

will highly depend on the type of institution and will thus be specified in detail in the CPA DD at time of CPA inclusion.

#### Mirt stoves – Stoves for *injera* baking

*Injeras* are large flat breads made of teff flour or other cereals such as maize or barley. They are baked on a large ceramic plate called *mitad*, which is traditionally heated over a three stone fire with very low thermal efficiency. The Mirt stove (Figure 2) is a closed stove that allows for *injera* baking at highly improved efficiency; additionally, it allows for the simultaneous preparation of sauces. The Mirt stove is a structure of ~0.6 x 1.0 m made out of cement, sand and mud with an enclosed heating chamber and a biomass fuel inlet opening in its front (Figure ). It has two heating zones: a big one for baking *injera* and a small one for cooking sauces or stews. Smoke is led out via an opening above the stove. The Mirt stove is locally manufactured in six pieces using metal moulds. The MoARD *Woreda* offices will buy the Mirt stoves and subsequently distribute the stoves to the end users. End users transport and install the stoves inside the kitchens after having been instructed by the MoARD staff. The *mitad* is not part of the Mirt stove; it is bought separately by end users and then attached to the Mirt stove.

Currently, Mirt is appearing in two varieties on the market: classic and slim Mirt. The difference is mainly on the wall thicknesses of their respective parts. Classic Mirt has quadrant parts and ‘U’ chimney stack, with a wall thickness of all 6 cm, whereas the corresponding size for slim Mirt is 4 cm. The type of Mirt stove distributed under the CPAs (slim or classic) will be defined in the specific CPA. The chimney stack releases the smoke next to the wall where it rises and escapes through the roof. This leads to a significant reduction of indoor air pollution since traditionally, *injera* baking is done on three stone fires inside the house<sup>3</sup>; thereby larger quantities of smoke are generated and distributed all around the hut. Mirt stoves with integrated chimney releasing the smoke directly to the outside do exist as prototypes, but have a much higher cost<sup>4</sup>. The average lifetime of Mirt is about five to seven years<sup>5</sup>.

<sup>3</sup> Kebede, Faris. 2002. “Survey of Indoor Air Pollution Problems in the Rural Communities of Jimma, Southwest Ethiopia.” Ethiopian Journal of Health Science 12 (1).

<sup>4</sup> Anteneh Gulilat. 2011. Stove Testing Results. A Report on Controlled Cooking Test Results Performed on “Mirt with Integrated Chimney” and “Institutional Mirt” Stoves. energypedia. [https://energypedia.info/images/5/50/Stove\\_testing\\_results\\_A\\_report\\_on\\_controlled\\_cooking\\_test\\_results\\_performed\\_on\\_Mirt\\_with\\_integrated\\_chimney\\_and\\_Institutional\\_mirt\\_stoves\\_Report\\_by\\_Anteneh\\_Gulilat\\_May\\_23\\_2011..pdf](https://energypedia.info/images/5/50/Stove_testing_results_A_report_on_controlled_cooking_test_results_performed_on_Mirt_with_integrated_chimney_and_Institutional_mirt_stoves_Report_by_Anteneh_Gulilat_May_23_2011..pdf).

<sup>5</sup> Bewket, Woldeamlak. 2011. Ethiopia’s Climate-Resilient Green Economy and the Importance of Fuel Efficient Stoves. Submitted to WFP- Ethiopia Addis Ababa.





**Figure 2: Mirt stove with baking plate (“mitad”) and cover<sup>6</sup>**

Smooth surface  
of slim mirt stove

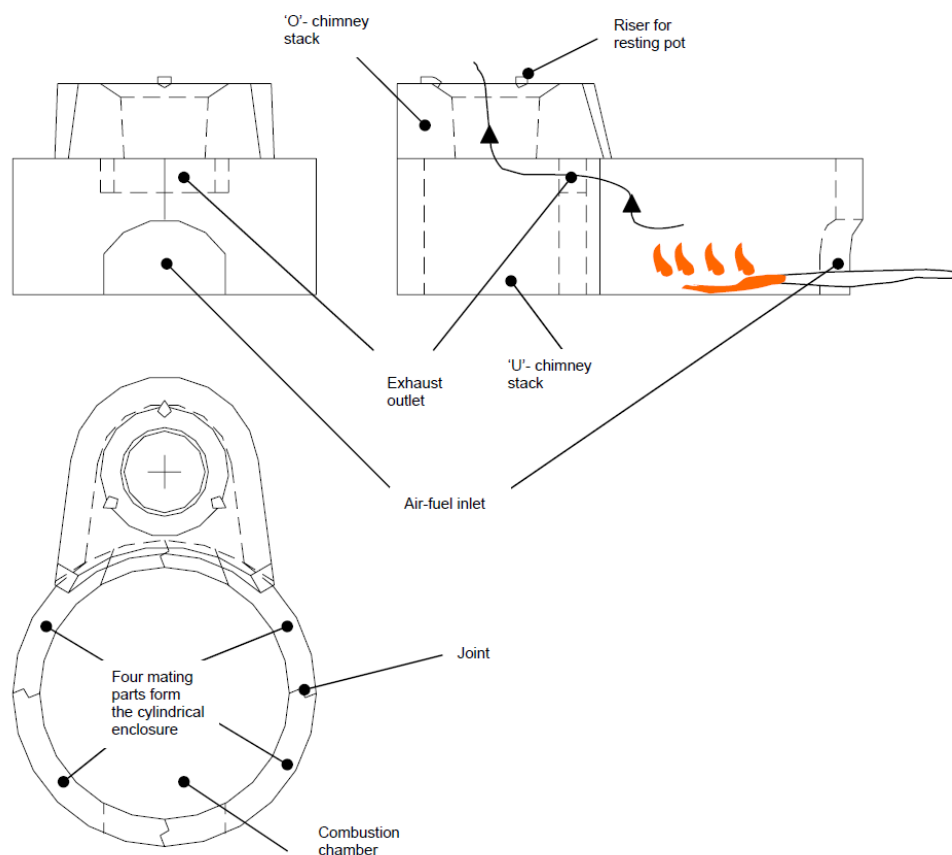


Shoulder for Mitad (clay  
pan) rest of classic mirt  
stove

**Figure 3: Slim Mirt stove on the left and classic Mirt on the right<sup>7</sup>**

<sup>6</sup>GIZ HERA (2011): “Mirt Stove Ethiopia.” [https://energypedia.info/images/a/a0/GIZ\\_HERA\\_2012\\_Mirt\\_stove.pdf](https://energypedia.info/images/a/a0/GIZ_HERA_2012_Mirt_stove.pdf).

<sup>7</sup> GTZ SUN ENERGY (2011)\_Memo, Result of stove testing



**Figure 4: Orthographic views of Mirt stove (not to scale)<sup>6</sup>**

### Tikikil stove - Portable household cook stove

Tikikil stove is a rocket stove, which is used for cooking (Figure a). It uses firewood as fuel, which is continuously fed to the combustion chamber. Tikikil is available in two types: single-skirt and double-skirt. Single-skirt Tikikil is designed to accommodate a 25 cm diameter pot (hence fixed size), which is a typical size used in most Ethiopian households. Double-skirt Tikikil can accommodate 27 cm and 31 cm diameters of pots. Smaller sized pots can also be accommodated but not with as much efficiency. Either of the types can be used for up to a 10 liters pot so long as it fits within the skirt<sup>8</sup>.

The stove has a cylindrical inner clay liner as combustion chamber, covered with galvanized sheet metal on the outside. The 4 cm thick liner has internal diameter of 11 cm and is 23.5 cm high. At its bottom is an 11 cm x 11 cm opening as fuel and air inlet. A fuel shelf made of a 6 mm steel round bar also constitutes part of the stove. The clay liner is produced by local potters while the metal cladding is done by metal artisans. The stove has a non-removable skirt. The fuel shelf is made up of a 5 mm radius round metal bar (Figure b). Slight variations of the measures given here or small design changes are possible.

<sup>8</sup> GIZ HERA. 2011. "Tikikil Stove Ethiopia."

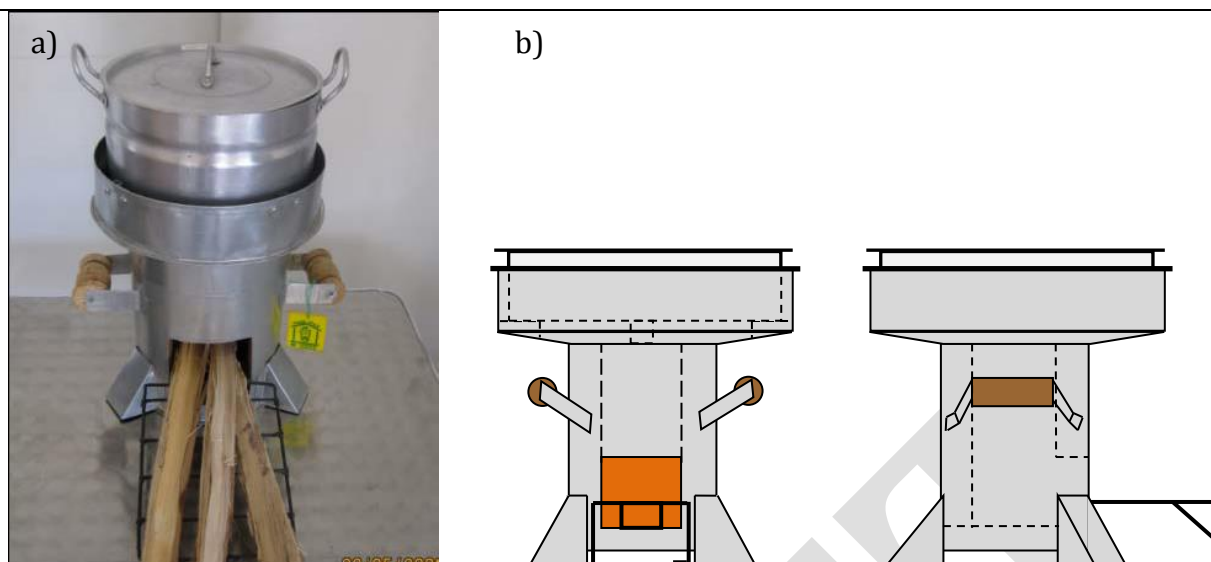


Figure 5: Photograph (a) and technical drawing (b) of Tikikil portable household cook stove.<sup>8</sup>

The Tikikil stove will be bought at the *Woreda* level and distributed to interested households at *Kebele* level along with the built in Mirt stove.

Other types of cooking stoves may also be distributed under the PoA, including the distribution to institutions, as long as they are based on the efficient combustion of biomass and replace other, less efficient biomass stoves.

## SECTION C. Proof of programme eligibility

### C.1. Location of the Programme of Activities (Physical/Geographical boundary)

Federal Democratic Republic of Ethiopia



Figure 1: The physical boundary of the PoA marked in red - the Federal Republic of Ethiopia. Source: <https://www.googlemaps.com> last access: 08.09.14

### C.2. Programme Type

Please tick where applicable<sup>9</sup>:

Programme type	Yes	No
Do the activities within the program, classify as a Renewable Energy	<input type="checkbox"/>	x

<sup>9</sup> In case your programme falls under all categories, please check all the 'Yes' boxes.



project?		
Do the activities within the program classify as an End-use Energy Efficiency Improvement project?	x	<input type="checkbox"/>
Do the activities within your program classify as a waste handling and disposal project?	<input type="checkbox"/>	x

*Please justify the eligibility of your programme:*

**Assessment of PoA eligibility:**

Criteria	Description	Eligibility Yes/No
Scale	CPAs under the PoA will be small-scale energy efficiency projects below 180 GWh thermal energy savings	Yes
Host country	Federal Democratic Republic of Ethiopia (Non-Annex 1 country)	Yes
Type	End-use energy improvement, "Improved distributed heating and cooking devices".	Yes
Greenhouse gases	CO <sub>2</sub>	Yes
Receipt of ODA in return for carbon credits	No ODA is received in return for carbon credits (see Annex 1)	Yes
Project timeframe	Not applicable, regular GS CDM registration stream	Yes
Other certification schemes	No other voluntary carbon schemes	Yes
CPA compliance with GS eligibility criteria	All CPAs under the PoA are compliant with the eligibility criteria stated above	Yes

**PoA timeframe:**

The duration of the PoA is as per the CDM PoA crediting period and shall not exceed 28 years. This is a regular CPA/ PoA submission since a Local Stakeholder Consultation has been conducted as per Gold Standard requirements before the start of implementation.

The starting date of the PoA was determined as 29/01/2014, the date of the first Submission of the PoA DD to the Gold Standard.

The project aims to disseminate improved cook stoves in the Federal Democratic Republic of

Ethiopia. Therefore the project is in accordance with Gold Standard's project type eligibility criteria given in the GS toolkit Annex C i.e. "Improved distributed heating and cooking devices". End users are aware of and willing to give up their rights on emission reductions by signing contractual agreement with the project developer.

Pre Announcement	Yes	No
Was your programme previously announced?	<input type="checkbox"/>	x
Explain your statement on pre announcement  There has not been a public announcement of the project going ahead without carbon funding. The project was planned as a project financed entirely by carbon revenues right from the beginning (Only a small pilot project was realized before the GS project started; it will not be part of the PoA).		

### C.3. Greenhouse gas

[See Toolkit 1.2.d]

Greenhouse Gas	
Carbon dioxide	x
Methane	<input type="checkbox"/>
Nitrous oxide	<input type="checkbox"/>

## SECTION D. Stakeholder Consultation and Sustainability Assessment at PoA/ CPA (VPA) level

	PoA	CPA/VPA
At what level is the LSC done?	<input type="checkbox"/>	x
At what level is the SD assessment done?	<input type="checkbox"/>	x
At what level is the DNH assessment done?	<input type="checkbox"/>	x

The local stakeholder consultation, carried out in Bahir Dar on 15.Nov. 2013 shall be valid for a group of the first 5 CPAs. The decision of conducting one LSC for a group of CPAs was based on the facts that all CPAs will:

- deploy the same technology. A combination of Mirt and Tikikil stove will be used in all CPAs covered by this LSC. The ICS deployed will reach a thermal efficiency of at least 20% and will be presented to the HH in cooking demonstrations.
- be included within and not later than 3 years after the first CPA inclusion
- fulfil the requirements of the Do No Harm Assessment of the GS Passport
- deploy the same distribution mechanism
- take place in the same project area
- address the same target population

Therefore, all included CPAs need to fulfil the following inclusion criteria with evidences provided at time of CPA listing and checked at the stage of validation.

N°	Inclusion criteria	Evidence document
1	The activity of the CPA is similar, i.e. it is the dissemination of improved cookstoves (ICS)	CPA-DD
2	The ICS deployed in the CPA has a thermal efficiency of at least 20%	The results of a water boiling test or of any other stove testing protocol which is in compliance with the applied methodology are described in the specific CPA-DD Section D.7.1.
3	The ICS type is similar i.e. combination of Mirt and Tikikil stove	Stove type, stove specifications and compliance with the technological requirements of AMS-II G is described in the specific CPA-DD Sections A.5 (stove types and specifications) and D.2. (compliance technological requirements).
4	The CPAs are close enough to each other in time	(CDM) CPA inclusion within 3 years of first (CDM) CPA inclusion of that group of CPAs
5	CPA is in line with the Do No Harm Assessment requirements as determined in the PoA Passport and does not compromise any of the safeguarding principles.	Written declaration by implementing agency/ PP
6	Documented cooking demonstrations are carried out for the HH where ICS dissemination will take place	Documentation of cooking demonstrations carried out

7	Distribution mechanism	The dissemination of ICSs to households will be the same for all CPAs of that group. It will be achieved in cooperation with the Ministry of Agriculture and its offices at the Woreda level. The CPAs will be implemented under the institutional setting described in section C of the PoA-DD.
8	Project area	<p>The geographic boundary of the PoA is the Federal Democratic Republic of Ethiopia. All CPAs are determined by number of stoves, not by geographic boundaries. CPAs may overlap geographically, but the group of CPAs will be implemented within the core area of the project, comprised of the four regions: Tigray, Amhara, Oromia and SNNPR.</p> <p>Document: Stove distribution database</p>
9	Target population	The target population of all CPAs of this group is rural households. Rural households in Ethiopia have very similar cultural and socio-economic characteristics in terms habits related to cooking (staple food injera) and fuel wood collection. Therefore project impacts on target population will be the same all over Ethiopia.

A new LSC will be conducted in the following cases:

- for the inclusion of the 6th CPA
- in case an area with different cooking habits should be identified and included into the PoA (such as a refugee camp with people stemming from another country)
- a new stove type is included (e.g for institutions, schools)
- stoves are distributed to other regions than the core region (Tigray, Amhara, Oromia and



SNNPR)



*Provide justification if the LSC/SD/DNH assessment is done only at PoA level.*

*Provide set of Sustainable Development Criteria for inclusion of CPA/VPA if SD assessment is done only at PoA level*

## **SECTION E. Outcome of the stakeholder consultation process at PoA level**

### **E.1. Assessment of stakeholder comments**

#### **[See Annex J]**

[See PoA - Local Stakeholder Consultation Report section C.3 and insert table from 'iii Assessment of comments'. Insert a summary of alterations based on comments]

#### **Minutes of physical meeting(s)**

The meeting was held on November 15<sup>th</sup> 2013 at 08:30 AM, at Jacaranda Hotel, in Bahirdar, Amhara, Ethiopia. It was held in Amharic.

All the invitees are directly or indirectly affected by the project. The World Food Programme as CME tried to include all different groups of affected people. Participant from all over Ethiopia were invited by making use of WFP's sub-offices in the four target regions.

Attendants from the following authorities took part in the LSC:

- ICS users
- Users of traditional stoves
- Village Chairmen
- Governmental institutions (Regional Bureaus of Ministry of Agriculture, Ministry of Water and Energy and Health Bureau, Mines & Energy Agency, MoE, Federal)
- Non-governmental Organizations working in Ethiopia (GIZ, Regional Sub-offices of WFP)

The meeting started with a formal welcome of the deputy head of the regional Bureau of Agriculture and the WFP representative as representative of the CME. It was explained that the LSC was part of the GS validation process.

Then the scope and the purpose of the PoA were presented by WFP and atmosfair. WFP focused on the explanation of administration and implementation issues, including the planned modalities of stove distribution and the plans to start the implementation of the programme in Amhara, Oromya, Tigray and South (SNNPR) regions. atmosfair explained the CDM and Gold Standard process in general and its specific implications for this cook stove PoA. After that a regional GIZ representative presented the efficient cook stove technology, with focus on the two stove models that will be distributed in the PoA, the Mirt and the Tikikil stove. He gave details about the local production of these stoves, their functioning and instructions for their usage.

After a short tea break, efficient stove users from a pilot activity in Ebnat Woreda reported their experiences. They mentioned, among others, that the 3 stone fires which they used before had considerable disadvantages due to high fuel consumption, fire hazard for children and smoke generation. They reported that with the efficient stoves they save fuel and thereby also time to collect firewood. They liked the new stoves because they also help overcome health and security issues for women and children and because they are comfortable to use, moreover they mentioned that on the long term, they expect an improvement of natural vegetation with less erosion, due to reduced firewood extraction.

The next point of the agenda consisted in a question-and-answer session. Participants were requested to ask questions on all the presentations they heard and other relevant issues. For details of question-and-answer session of the LSC meeting please refer to the LSC Report.

After the lunch break, the participants worked on the sustainability matrix. After a general explanation of the matrix and the indices, three groups were formed. Each of the groups obtained more detailed guidance on how to fill the sustainability matrix and then discussed on scores for the different indicators and justifications. At the same time, they discussed on possible monitoring of the SD indicators. Then each group presented its results to the plenary where the final scores (see local stakeholder report section D.2), as well as recommendations for SD monitoring were agreed on.

Afterwards, the continuous input and grievance mechanism was discussed. WFP suggested contact details which the participants agreed on (see GS Passport section E.3).

Then a short open session of comments and questions followed which centered on the administrative framework of the PoA. The role of the different institutions and ministries, which had already been discussed in the question-and-answers session, was explained again. The discussion mainly centered on the roles of the different ministries and their agents at Woreda level. It was found that there are some differences between Woredas in terms of organisational structure, but that these differences would not impact the implementation of the PoA since flexibility will be given to Woredas for the details of stove distribution. It was explained again that

the PoA was planned as an “open” PoA where other institutions will be given the possibility to insert their own CPAs into the PoA in the future; and that this should be possible at low or no costs since the dissemination of clean cook stoves is a priority for the country.

Participants also agreed that the meeting had a sufficient outreach to be regarded as a stakeholder meeting at the PoA level.

Participants then filled in the feedback forms, and there was also a short evaluation of the meeting. Participants expressed their satisfaction with the meeting and with the fact that representatives of four different regions had been invited. There was also a consensus that stove dissemination should start as soon as possible.

The meeting was then closed.

### Assessment of all comments

Many stakeholders underlined their interest in participating in the project. The questions and comments turned around the following issues:

Stakeholder comment	Was comment taken into account (Yes/ No)?	Explanation (Why? How?)
Suggestion to give carbon revenues directly to the communities.	The comment was taken into account, but without changing the PoA.	The expected revenues are already needed to subsidize the stoves that will be distributed to communities nearly for free.
Suggestion of some stakeholders to give responsibility of stove distribution to the Ministry of Water/Energy instead of the Ministry of Agriculture.	The comment was taken into account by giving flexibility to woredas for stove distribution, working with the staff most suitable for stove distribution, independently to which ministry they would belong.	It was explained that the ministry of agriculture counts with the best network at the village level and therefore has the main responsibility in stove distribution.
Suggestion to extend the PoA more quickly, including other areas from the beginning.	The comment was taken into account, but without changing the PoA.	Implementation will be as quick as possible in any case; distribution of 200,000 stoves is however a huge task, it is necessary to start with some defined areas.
Suggestion to include other	The comment was not taken	This specific PoA is for cook stoves exclusively, CDM does

measures and technologies.	into account.	not allow for combining with other technologies; but in any case, it is sensible to focus on a certain technology.
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### Summary of alterations based on comments

Flexibility will be given to woredas for stove distribution, they may work with the staff most suitable for stove distribution, independently to which ministry they would belong.

This was however not a huge alteration and it will not change the overall implementation plan.

### E.2. Stakeholder Feedback Round (in case LSC is done at PoA level)

Not applicable LSC done on CPA level.

### E. 3. Discussion on continuous input / grievance mechanism

[See Annex W]

Discuss the Continuous input / grievance mechanism expression method and details, as discussed with local stakeholders.

	Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator)	Justification
Continuous Input / Grievance Expression	WFP sub offices in all four regions Amhara region: Desse	The bureau of agriculture is a central place that will be known to beneficiaries.



Process Book	Tigray: Mekele Oromia: Nazaret and Dire Dawa South: Hawassa  All woredas: District offices of the bureau of agriculture	
Telephone access	Kassu Kebede WFP Country office Mobile: 0911 339116 Land line: 0115 515188	Ato Kassu Kebede is coordinating the implementation and can directly receive input.
Internet/email access	Kassu Kebede WFP Country office <a href="mailto:kassu.kebede@wfp.org">kassu.kebede@wfp.org</a>  <a href="mailto:WFP.Addisababa@wfp.org">WFP.Addisababa@wfp.org</a>	Ato Kassu Kebede is coordinating the implementation and can directly receive input.  Alternatively the general contact of WFP Ethiopia is presented here.
Nominated Independent Mediator (optional)	n.a.	Stakeholders agreed that no mediator would be necessary since there will always be a close contact between ICS users and Kebele assistants.

*The Continuous input / grievance mechanism should be implemented for all activities within the PoA as per feedback received during PoA LSC. All issues identified at the activity level (CPA/VPA) during the crediting period through any of the Methods shall have a mitigation measure in place. The identified issue should be discussed in the revised activity Passport and the corresponding mitigation measure should be added to sustainability monitoring plan in the activity Passport.*

## **SECTION F. Outcome Sustainability Assessment<sup>10</sup>**

### **F.1. 'Do no harm' Assessment**

Do no harm Assessment done on CPA level.

<sup>10</sup> In case, DNH/SD assessment is done at the Programme level, DNH/SD assessment per technology/practice included in the Programme shall be provided. In case the DNH/SD assessment is done at the activity level this section may not be filled.

## F.2. Sustainable Development matrix

[See Toolkit 2.4.2 and Annex I]

Insert table as in section D3 from your Stakeholder Consultation report (Sustainable Development matrix).

Indicator	Mitigation measure	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
Gold Standard indicators of sustainable development	If relevant, copy mitigation measure from 'Do No Harm' assessment, and include mitigation measure used to neutralise a score of '-'	Check <a href="http://www.undp.org/mdg">www.undp.org/mdg</a> and <a href="http://www.mdgmonitor.org">www.mdgmonitor.org</a>  Describe how your indicator is related to local MDG goals	Defined by Coordinating and Managing Entity	<u>Negative impact:</u> score '-' <u>No change impact:</u> score '0' <u>Positive impact:</u> score '+'
Air quality	n.a	Ensure environmental sustainability	<b>Parameter:</b> Number of ICSs sold disseminated/ in use. Question to ICS users during monitoring if indoor air quality has improved.  <b>Explanation:</b> The reduction of cooking smoke due to the usage of ICS will have a positive impact on the indoor air quality, since less harmful smoke and CO is produced while cooking.	+

Water quality and quantity	n.a	Ensure environmental sustainability	<p><b>Parameter:</b> (Decreased) Fuel wood consumption influencing water household of the soil and runoff.</p> <p><b>Explanation:</b> No direct impact on water quality and quantity, thus the connection to the project activity is hard to determine.</p>	0
Soil condition	n.a	Ensure environmental sustainability	<p><b>Parameter:</b> Soil erosion caused by deforestation. Parameter will not be monitored because scoring is zero.</p> <p><b>Explanation:</b> No direct impact on soil condition thus the connection to the project activity is hard to determine.</p>	0
Other pollutants	n.a	Ensure environmental sustainability	<p><b>Parameter:</b> Use of harmful chemicals, level of noise, light pollution. Parameter will not be monitored because scoring is zero.</p> <p><b>Explanation:</b> No other pollutants issues will be involved in this project. The project does not involve any harmful chemicals. No light pollution during sleeping hours or high levels of noise are expected.</p>	0

Biodiversity	n.a	Ensure environmental sustainability	<p><b>Parameter:</b> Number of affected and/or threatened plants or animals. Parameter will not be monitored because scoring is zero.</p> <p><b>Explanation:</b> No direct impact on biodiversity, thus the connection to the project activity is hard to determine.</p>	0
Quality of employment	n.a	Eradicate extreme poverty and hunger	<p><b>Parameter:</b> Trainings for stove producers.</p> <p><b>Explanation:</b> Qualified jobs will be created for stove producers, they will receive trainings and supervision on stove production and possible safety measures during stove production.</p>	+
Livelihood of the poor	n.a	Eradicate extreme poverty and hunger	<p><b>Parameter:</b> Money spent for fuel wood purchase or time spent to collect fuelwood. Parameter will not be monitored because scoring is zero.</p> <p><b>Explanation:</b> The ICS will improve the livelihood of the poor because they will spend less time and money for firewood collection. Also people inside their houses will suffer less from smoke. But since these parameters are better attributable to other indicators the indicator is set neutral.</p>	0
Access to affordable and clean energy services	n.a	Ensure environmental sustainability	<p><b>Parameter:</b> Number of ICSs distributed</p> <p><b>Explanation:</b> Access to efficient technology at a highly reduced price.</p>	+



Human and institutional capacity	n.a	Promote gender equality	<p><b>Parameter:</b> Asset of free time for women for child care or income generation. Parameter will not be monitored because scoring is zero.</p> <p><b>Explanation:</b> Reduction in time needed for fuelwood collection thus freeing up time for childcare or income-generating activities. Reducing or eliminating the need to gather wood empowers women. The time savings for fuelwood collection will be monitored for parameter “Quantitative employment and income generation”. However, how time savings will affect childcare and women empowerment is difficult to quantify, therefore this parameter is scored zero.</p>	0
Quantitative employment and income generation	n.a	Eradicate extreme poverty and Hunger	<p><b>Parameter:</b> Number of jobs created by the project activity. Qualitative question in the monitoring questionnaires on the savings for fuel wood for stove users (time and/or money).</p> <p><b>Explanation:</b> The project will generate various employment opportunities for local stove producers.</p>	+

Access to investment	n.a	Eradicate extreme poverty and hunger	<p><b>Parameter:</b> Amount of domestic and foreign direct investment Parameter will not be monitored because scoring is zero.</p> <p><b>Explanation:</b> The fuel wood comes from local supply so the reduction of its use will have no effect on balance of payments and investment.</p>	0
Technology transfer and technological self-reliance	n.a	Eradicate extreme poverty and Hunger	<p><b>Parameter:</b> Development of a new technology. Parameter will not be monitored because scoring is zero.</p> <p><b>Explanation:</b> A new technology introduced to the households and thus made available for the people. But uptake outside the project area difficult to determine.</p>	0
<b>Justification choices, data source and provision of references</b>  (A justification paragraph and reference source is required for each indicator, regardless of score)				
Air quality	<p>Air quality will be improved since ICS burn wood more efficiently with less smoke generation. Unimproved stoves emit large amounts of smoke that is inhaled by cooks. Smoke is harmful and may cause health problems such as: coughing, eye irritation, asthma, headaches, lung problems, etc. The World Health Organization estimates that 4.3 million people a year die prematurely from illness attributable to the household air pollution caused by the inefficient use of solid fuels (2012 data)<sup>11</sup>. The improved cook stoves emit fewer pollutants. The Mirt and the Tikikil Stove both have the advantage of low emissions. From the Memo Report provided by GIZ it can be seen that Mirt has a potential to significantly reduce pollutant levels in the kitchen compared to three stone/open fire- around 90% and 30% respectively for CO and Particulate Matter were recorded.<sup>12</sup></p> <p>Firewood savings are due to more efficient burning.</p> <p>Evidence of direct relationship between improved cook stoves</p>			

<sup>11</sup> <http://www.who.int/mediacentre/factsheets/fs292/en/#>

<sup>12</sup> GTZ SUN ENERGY (2011)\_Memo, Result of stove testing:  
[https://energypedia.info/wiki/File:Memo\\_Result\\_of\\_stove\\_testing\\_Hiwote\\_Teshome\\_Internal\\_report\\_GTZ-SUN\\_Energy\\_06.06.2007.pdf](https://energypedia.info/wiki/File:Memo_Result_of_stove_testing_Hiwote_Teshome_Internal_report_GTZ-SUN_Energy_06.06.2007.pdf)

	<p>and emissions of air pollutants include:</p> <p>R. Perez Padilla et al, 2010. 'Respiratory health effects of indoor air pollution' in International Journal of Tuberculosis and Lung Disease, vol. 14 no. 9, pp1079-1086. The text says that one half of the world's population is exposed to high concentrations of solid fuel smoke (biomass and coal) that are produced by inefficient open fires, mainly in the rural areas of developing countries.</p> <p>WHO, 2002. World Health Report: Reducing Risks, Promoting Healthy Life. World Health Organisation, Geneva. According to the report, studies have shown reasonably consistent and strong relationships between the indoor use of solid fuel and a number of diseases. These analyses estimate that indoor smoke from solid fuels causes about 35.7% of lower respiratory infections, 22.0% of chronic obstructive pulmonary disease and 1.5% of trachea, bronchus and lung cancer. Indoor air pollution may also be associated with tuberculosis, cataracts and asthma. Further the report states that: The most important interventions to reduce this impact are better ventilation, more efficient vented stoves, and cleaner fuels.</p> <p>Cited in Eduardo Carcia-Frapolli et al, 2010. 'Beyond Fuelwood Savings: Valuing the economic benefits of introducing improved biomass cookstoves in the Purechepa region of Mexico' in Ecological Economics, vol. 69, pp2298-2605. The study recognizes that efficient cookstoves have been distributed in order to combat very significant health as well as climate change impacts from the use of biomass for cooking. Further it analyses the economic benefits of the use of ICS and reveals they stem from fuelwood savings and reductions in health impacts.</p> <p>Technical measurements of indoor air pollution are costly and sophisticated. Since evidence shows direct links between use of improved cook stoves and reduction in exposure to harmful smoke and particulate matter, this project will monitor this indicator based on wood consumed by households and also by asking households if they perceive an improvement of indoor air.</p>
Water quality and quantity	<p>There might be a slight indirect positive impact due to the prevention of soil erosion which typically leads to increased sedimentation when eroded soil material is washed into rivers (see e.g. <a href="http://www.un.org/esa/sustdev/csd/csd15/lc/GTZ_hem.pdf">www.un.org/esa/sustdev/csd/csd15/lc/GTZ_hem.pdf</a> and Iowa State University 2009, Resource Conservation Practices: Soils Erosion and Water Quality.<sup>13</sup> However there is no direct impact on quality and quantity of water. There is no kind of release of pollutants into any kind of water linked to the implementation of the project. Therefore a neutral score was chosen.</p>
Soil condition	<p>By reducing fuelwood consumption and the pressure on the forest resources, the project can contribute to the preservation of the forest cover and hence protect against soil erosion (see e.g. <a href="http://www.un.org/esa/sustdev/csd/csd15/lc/GTZ_hem.pdf">www.un.org/esa/sustdev/csd/csd15/lc/GTZ_hem.pdf</a>). But since this positive effect is only an indirect consequence of the project, a neutral scoring was chosen.</p>

Other pollutants	There is no evidence to suggest that this type of projects relates to any other pollutants like increased noise level, noise frequency or light pollution.
Biodiversity	By reducing fuelwood consumption and the pressure on the forest resources, the project may contribute to the preservation of the forest cover and hence biodiversity (see e.g. <a href="http://www.un.org/esa/sustdev/csd/csd15/lc/GTZ_hem.pdf">www.un.org/esa/sustdev/csd/csd15/lc/GTZ_hem.pdf</a> ). But since this positive effect is only an indirect consequence of the project, a neutral scoring was chosen.
Quality of employment	Cook stove producers working for the project will receive trainings on stove construction, including safety measures. Additionally a handbook for cookstove construction will be provided. A list and agenda of the trainings will be provided during monitoring. Without the project, no safety training will be provided for the stove producers. The provision of first aid kits and training on how to act in cases of injuries will increase safety and wellbeing at work and thus increase quality of employment.
Livelihood of the poor	The project will improve livelihoods by fuelwood savings and time savings, as well as by the creation of new jobs in stove production. The Mirt and Tikikil stove save about 50% of the fuel compared to a three-stone stove. This is due to the closed burning chambers and the resulting higher efficiency of energy use for cooking. Due to the firewood savings, households need to collect less firewood and thus save time that, can be used for other activities. Evidence can be found on: <a href="http://www2.gtz.de/dokumente/bib-2010/gtz2010-0202en-stove-carbon-market.pdf">http://www2.gtz.de/dokumente/bib-2010/gtz2010-0202en-stove-carbon-market.pdf</a> World Bank, 2011. 'Household Cookstoves, Environment, Health, and Climate Change: a New Look at an Old Problem' available at <a href="http://cleancookstoves.org/resources_files/household-cookstoves.pdf">http://cleancookstoves.org/resources_files/household-cookstoves.pdf</a> Both parameters are monitored under different indicators (access to affordable and clean energy services and quantity of employment and income generation). However, since the livelihood of the poor also strongly depends on factors such as education, access to health and sanitary services etc., which cannot be influenced by the project, the indicator is scored neutral.
Access to affordable and clean energy services	The project is designed to provide cleaner, safer, more affordable and more efficient cooking equipment than traditional stoves to poor household by means of carbon finance. The savings of non-renewable biomass due to the project will be also be measured as part of the monitoring of ER.
Human and institutional capacity	The use of ICS might have a slightly positive impact on gender equality by reducing time spent cooking and the time spent to collect wood (both task made mainly by women). <a href="http://www.appropedia.org/Improved_cook_stoves">http://www.appropedia.org/Improved_cook_stoves</a> However, the project does not anticipate contributing to human and institutional capacity in such a way that it can be easily attributed to the project. Gender equality, education and empowerment are not directly addressed by the project activity. Since any such impact is difficult to demonstrate, a neutral score is given.
Quantitative employment and income generation	The project will lead to increased economic and employment opportunities. Jobs will be created particularly for stove producers, i.e. mainly stove construction workers and possibly also jobs in the management of new manufacturers. The number of jobs created will be



	monitored. Furthermore we will qualitatively monitor the income generation of stove uses through savings for fuel wood for stove users (time and/or money). Stakeholders discussed this parameter during the LSC together with the parameter of income generation of the stove producers and decided to monitor those parameters together under the “quantitative employment and income generation” indicator. For them it seemed the surplus of income which remains for the household due to lower fuelwood expenses is equivalent to income generation. Therefore the parameters are listed here together.
Access to investment	There will be no significant effect on the balance of payments since only fuel wood is replaced and no imported fuels. Firewood is the common fuel in rural Ethiopia (Environmental Protection Authority (2003): State of the Environment Ethiopia. Addis Ababa: Environmental Protection Authority, Annex 4).
Technology transfer and technological self-reliance	The project disseminates a new technology on a larger scale in selected areas. It is however not yet possible to assess a possible uptake of the technology outside the project area – therefore a neutral score is given.

## SECTION G. Sustainability Monitoring Plan<sup>14</sup>

Since SD assessment was done at CPA level, please see CPA Passport for information.

### Continuous input mechanism

### Additional remarks monitoring

## SECTION H. Additionality, conservativeness, inclusion criteria and other deviations<sup>15</sup>



This section is only applicable if the section on additionality and/or your choice of baseline does not follow Gold Standard guidance

### H.1. Additionality

<sup>14</sup> In case, DNH/SD assessment is done at the Programme level, SD monitoring parameters pertaining to SD aspects, safeguarding principles per technology/practice shall be provided. In case DNH/SD assessment is done at the activity level this section may not be filled.

<sup>15</sup> Only for CDM PoAs

**[See Toolkit 2.3]**

Not applicable. The project proponent followed Gold Standard guidance for additionality.

**H.2. Conservativeness**

**[See Toolkit 2.2]**

Not applicable. The project proponent followed Gold Standard guidance for baseline Selection and Monitoring Methodology.

**H.3 Other deviations from CDM documentation (if applicable)**

## ANNEX 1 ODA declaration

[See Toolkit Annex D]



United Nations  
**World Food Programme**

Programa  
Mundial  
de Alimentos

Programme  
Alimentaire  
Mondial

برنامج  
الأغذية العالمية

The Food Aid Organisation of the United Nations System

REF: CC54/13

08 November 2013

Dear Sirs,

### ANNEX D - OFFICIAL DEVELOPMENT ASSISTANCE DECLARATION

**RE: Declaration of Non-Use of Official Development Assistance  
by Project Owner of Gold Standard ID GS 2550**

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

*Project Representative:* Hakan Tongul

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

#### I. The Gold Standard Documentation

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

#### II. Duty to Notify Upon Discovery

If I learn or if I am given any reason to believe at any stage of project design or implementation that ODA has been used to support the development or implementation of the project, or that an entity providing ODA to the host country may at some point in the future benefit directly or indirectly from the carbon credits generated from the project as a condition of investment, I will notify The Gold Standard immediately using the Amended ODA Declaration Form provided below.

#### III. Investigation

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

...2/

✉ 25584 code 1000  
Addis Ababa  
Ethiopia

☎ 011-5515188

FAX: 011-5514433



United Nations  
**World Food Programme**

**Programa  
Mundial  
de Alimentos**

**Programme  
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Mondial**

**برنامج  
الأغذية العالمي**

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#### IV. Sanctions

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

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

Sincerely yours,

  
Hakan Tongul  
Head of Programmes



The Gold Standard Foundation  
79 Avenue Louis Casai  
Geneva Cointrin, CH-1216  
Switzerland

✉ 25584 code 1000  
Addis Ababa  
Ethiopia

☎ 011-5515188

FAX: 011-5514433