

NON-TECHNICAL SUMMARY

prepared for Local Stakeholder Consultations (“LSCs”) for

VOLUNTARY CARBON PROJECT ACTIVITIES (“VPAs”) IN THE REPUBLIC OF MADAGASCAR

for the proposed gold standard programme of activities (“POA”)

“EFFECTIVE CLEAN COOKING BIOMASS SOLUTIONS PROGRAM FOR AFRICA”

Introduction

Effective Climate Solutions 1 FZCO (“ECCS1”) and its affiliates are pleased to announce Local Stakeholder Consultation (“LSC”) meetings for its planned Gold Standard VPAs in the Republic of Madagascar. These VPAs will be housed under the GS PoA “Effective Clean Cooking Biomass Solutions Program for Africa”.

The Republic of Madagascar is highly dependent on the consumption of non-renewable biomass (i.e. wood and charcoal) for domestic cooking needs. Household biomass consumption has negative impacts on the environment, including deforestation and land degradation, Green House Gas (“GHG”) emissions and the loss of soil fertility water retention capacity. Furthermore, indoor air pollution (“IAP”) associated with health-damaging pollutants released while combusting firewood and charcoal can lead to diseases (e.g. pneumonia, stroke, ischemic heart diseases, chronic obstructive pulmonary diseases and lung cancer).

Purpose and technology of the voluntary project activity (VPA)

ECCS1 and its affiliates will implement carbon project activities in Madagascar for the proposed Gold Standard Programme of Activities (PoA) ‘Effective Clean Cooking Biomass Solutions Program for Africa’.

The purpose of a typical VPA included under the PoA, ‘Effective Clean Cooking Biomass Solutions Program for Africa’, is the dissemination of highly efficient improved cookstoves (“ICS”) to households in Madagascar. This will also include households who use the ICSs for light commercial uses, such as restaurants operated in the domestic setting.

Several Green House Gases (GHGs), including carbon dioxide, are produced because of the incomplete combustion of biomass as used in traditional cook stoves. The ICS technologies designed for the VPAs have improved heat transfer efficiency as compared to the baseline traditional cook stoves, thereby reducing both the amount of non-renewable biomass consumed by the household to provide the same amount of energy required in the baseline scenario. This reduction in biomass consumption is the basis for reduced GHG & IPA emissions and for improved domestic impacts, including less time and money spent collecting and or purchasing biomass.

By using the ICS, the consumers assign and transfer all rights on the carbon credits to ECCS1 and its affiliates, who are designated as the Coordinating and Managing Entity of the PoA and the VPA Project Developer.

ICSs will be distributed through direct sale/distribution to households within the project boundary.

Target Group and Location

The target group of the VPA are urban, peri-urban or rural households using non-renewable biomass on traditional cookstoves (i.e., the baseline scenario of the target group) prior to receipt of an ICS. The VPA boundary includes urban, peri-urban and/or rural areas across the 23 regions of Madagascar.

Technology

A VPA may deploy different ICS models. The ICS models are highly efficient, and the designs take into account the local cooking culture in the project area to ensure that improvements in technology and improved standards of living do not come at the expense of cultural traditions. A VPA may opt to distribute other stove models over time.



ECO CHAR



ECO WOOD

PRODUCT SPECIFICATIONS		
PARAMETER	ECO WOOD	ECO CHARCOAL
Thermal Efficiency	53.7%	71.3%
Cooking Power Output (kW)	1.228kW	0.956kW
PM2.5 per useful energy delivered (mg/MJd)	210.2 mg/MJd	38.16 mg/MJd
CO per useful energy delivered (mg/MJd)	5.50 g/MJd	3.78 g/MJd
Safety Score	97.5%	90%

Implementation plan

- Distribution of the improved charcoal stoves will start in the second quarter of 2025. It is estimated that 250,000 ICSs will have been distributed by the end of the first crediting period.
- Local Stakeholder Consultations (LSC) are planned for three dates in 3 different locations across Madagascar:

- April 14 : Analamanga Region, Antananarivo

Venue : Zara Hotel, Antananarivo,Conference Center

Route boulevard de l'Europe Ankasina 67ha

Zoom Link :

<https://us02web.zoom.us/meeting/register/G2-IxioJS02YYnas-V2FQQ>

- April 16: Atsinanana Region, Tamatave

Venue : CALYPSO HOTEL & SPA TAMATAVE

Street : Lieutenant Noel Ambodimanga

Zoom Link :

<https://us02web.zoom.us/meeting/register/Azy8QVBeSM-gCtmOqBm9dA>

- April 18: Vakinankaratra Region, Antsirabe

Venue : LE ROYAL PALACE

Lot 0512 C 61 Tsarasaotra

Route d'Ambositra Tsarasaotra

Zoom Link :

<https://us02web.zoom.us/meeting/register/hF8NIKPiSryt5kl9bxZhKQ>

Carbon credits

Greenhouse gas (GHG) emission reductions achieved through saving of non-renewable biomass will result in carbon credits following certification rules and procedures.

The revenues from the sale of carbon credits help amongst others to

- a) distribute improved cookstoves to a subsidized price affordable for end-users.
- b) scale up and expand the Programme, thus reaching a wider range of end-users.

- c) generating more jobs;
- d) further invest in R&D, hence, to produce high quality stoves at lower cost;
- e) provide a reliable after-sales service.
- f) sensitize and raise awareness amongst end-users about the benefits and how to use the improved cookstoves.

Contribution to Sustainable Development Goals (SDGs)



Besides reducing GHG emission in line with the United Nations Sustainable Development Goal (SDG) number 13 'Climate Action'¹, this project will also seek to increase other long-term sustainability benefits for the local families as well as the local environment. Project activities under the PoA are expected to contribute to different Sustainable Development Goals (SDGs) in the following way:

1. Reduction in end-user expenses related to the purchase of fuel for cooking. Household expenditure on fuel can account for a substantial contribution to domestic budgets. A reduction in nonrenewable biomass consumption can create significant financial savings, allowing households to employ those savings to other constructive uses, or savings. **(in line with SDGs 1 'No Poverty')**
2. A reduction in carbon monoxide and particulate matter emissions during combustion in households will reduce indoor air pollution and thereby decrease incidences of respiratory diseases, headaches, and itchy eyes, particularly for women and children who spend a lot of their time in cooking activities **(in line with SDG 3 'Good health and well- being')**.
3. The design efficiencies of improved cookstoves allow for shorter mealtimes and reduce the frequency of fuel purchases. This then creates time savings,

¹ <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

particularly for women and girls, who provide unrecognized labor associated with fuel collection and meal preparation, creating time that can be used for constructive activities of this group of beneficiaries **(in line with SDG '5 Gender Equality')**.

4. The VPA will accelerate increased access to clean, modern, and efficient cooking technologies **(in line with SDG 7 'Affordable and Clean Energy')**
5. Sales agents and data collection enumerators will receive specialized training with respect to the use of the improved cookstoves, economic, and environmental benefits **(in line with SDG 4 'Quality Education')**.
6. The implementation of the VPA will create jobs for people employed for the manufacturer, distribution, sales, and customer support for the respective projects **(in line with SDG 8 Decent Work for All)**
7. Fuel savings associated with the use of the improved cookstoves will have a collective benefit of reducing the demand for non-renewable biomass in Africa, which is associated with deforestation **(in line with SDG 15 SDG 15 'Life on Land')**

Compliance With Safeguards Principles

The VPAs will follow the GS Safeguarding Principle and Requirement to ensure that the project does not undermine or conflict with any national, sub-national or local regulations for fuel supply/household cooking.

A high-level summary of compliance is provided below:

Social Principles

- **Principle 1: Human rights:** The distribution of improved cooking devices or any activities related to the operation of the PoA or its respective VPAs, has minimal risk of contravening any human rights laws or international conventions and all the associated provisions listed in the Safeguarding Principles (version 2.1) of the Gold Standard for Global Goals. At the national Local Stakeholder Consultation (LSC) level, the CME shall conduct

and communicate to stakeholders a comprehensive review of all applicable laws and regulations to ensure that each Host Party's regional, national, and internationally ratified internal conventions and protocols on human rights have been adhered to.

- **Principle 2: Gender equality and Women's Empowerment:** The use of efficient devices in substitution or reduction of traditional woody biomass will generate specific outcomes that benefit and respect women's rights. Individual benefits, and an assessment of baseline conditions in the pre-project scenario, shall be provided for each LSC as a requirement to SDG 5 claims as intended in the PoA Design.
- **Principle 3: Community Health and Safety:** There are no real or perceived negative community health outcomes envisaged for the VPA. The CME shall ensure that all VPAs (through the respective LSCs and Design Documentation) define and communicate compliance with all safeguards associated with health and safety working conditions including assessments that protect the health and safety of people employed for the operation of the VPA.
- **Principle 4: Cultural Heritage, Indigenous Peoples, Displacement and Resettlement:**

The VPA is defined by the installation of portable cooking devices, so there is no risk that the VPA's implementation will affect any cultural heritage sites. The CME shall ensure that all VPAs demonstrate compliance with this requirement and update all stakeholders at the VPA level with specific respect to each VPA's safeguards to protect:

- Against alteration, damage, or removal of any sites, objects, or structures of significant cultural heritage Sites of cultural and historical heritage
- Against forced eviction and displacement
- Land tenure and other rights
- The rights of Indigenous people

- **Principle 5: Corruption:** The CME shall ensure, and all VPAs will be required to demonstrate and communicate to stakeholders that corruption and corrupt practices of any kind shall not be tolerated in the implementation of any VPA for the life of the PoA.
- **Principle 6 – Economic Impacts:** The CME will not tolerate the inclusion of any VPAs that use forced labor or engage in any employment practices that violate international and national labor laws. Each VPA must demonstrate and communicate to stakeholders all safeguards and compliance with the provisions of Principle 6 of the Gold Standard Safeguarding Principles Requirements.

Environmental and Ecological Principles

Principle 7: Climate and Energy

- **Emissions:** The project will decrease GHG emissions from the baseline scenario over a period of up to 20 years (PoA duration). Using the project cookstoves will help avoid the emissions of many tons of CO₂ in the atmosphere.
- **Energy Supply:** This project's objective is to implement improved cookstoves that use less non-renewable biomass. So intrinsically, the quantity of wood taken from natural resources is reduced compared to the baseline scenario.

Principle 8 Water

- **Impact on Natural Water Patterns/Flows:** The project will not have any negative impact on the water resources in the region. There will be no meaningful change in the volume of water available for consumption by the households.
- **Erosion:** The project reduces notably fuelwood consumption and thus protects the natural forest cover. Therefore, the possibility of erosion will indirectly be reduced, and water stability enhanced.

Principle 9: Environment, Ecology and Land Use

- **Landscape Modification and Soil:** No crops or other products will be produced in the project.
- **Vulnerability to Natural Disasters:** There will be no impact by the project on natural disasters. The project will not lead to any land use changes and will have no impact on the land within the project area. No exacerbation of natural or human-caused hazards can therefore be expected.
- **Biosafety and Genetic Resources:** No GMOs will be used in the project.
- **Release of pollutants:** Due to the project activities fuelwood consumption is expected to be reduced, and no fossil fuel is expected to be burned, there is no risk of releasing pollutants to the environment.
- **Hazardous and Non-hazardous Waste:** In the production phase of the technologies, the project outsources the services of local manufacturers that adhere to strict safety requirements as required by law and as such there is no possibility of generation of hazardous and non-hazardous waste during the project. The project will implement a repair and waste management strategy throughout the project's lifetime.
- **Pesticides and Fertilizers:** The project does not involve the application of pesticides and fertilizers.
- **Harvesting of Forests:** The project will reduce fuel wood demand and thus also the harvest rate of forests. Therefore, the project has a positive impact on the forest cover.
- **Food security:** The project does not impact on the growth of food nor the quality of the food.
- **Animal welfare:** The project does not involve animal husbandry.
- **High Conservation Value Areas and Critical Habitats:** Each VPA will be required to demonstrate safeguards and compliance with national and international protocols on critical habitats and biodiversity.
- **Endangered Species:** The VPA is not envisaged to have any impact on their habitat as it only affects existing households.
- **Invasive alien species:** The project will not introduce any alien species.