Gold Standard for the Global Goals
Key Project Information & Project Design Document (PDD)

Version 1.1 – August 2017

Gold Standard

KEY PROJECT INFORMATION

Title of Project:	Conserving the Mulanje Mountains, Malawi – Saving forests and empowering mountain communities with improved cookstoves (GS7142)
Brief description of Project:	Firewood and charcoal are the main cooking fuels for people in Malawi. Collected firewood and purchased charcoal meet the bulk of cooking energy needs nationwide. Firewood and charcoal are the kind of non-renewable woody biomass. Buring firewood or charcoal for cooking is not only leading to significant greenhouse gase emissions but familie also need to spend a lot of time and/or money on collecting and/or purchasing firewood and charcoal. Besides, firewood collection and charcoal production lead to deforestation and environmental degreadation. Thie project seeks to increase access of households and communities to improved cookstoves by disseminating affordable high thermal efficiency and low greenhouse gas emitting cooking stoves called Chitetezo Mbaula stove across Mulanje and Phalombe districts in Malawi. By using the improved stoves, firewood and charcoal consumed for cooking would be greatly reduced, so that greenhouse gas emissions would be greatly reduced; simultaneously the improved stoves can provide co-benefits to users in the form of relief from high fuel costs, reduced exposure to health-damanging indoor air pollutions, faster cooking, and increased cleanliness and convenience. In addition, reduced firewood and charcoal demand would lead to less forest cutting, and the reduction in deforestation.
Expected Implemetation Date: Expected duration of Project:	January 1, 2018 30 years
Project Developer:	Swiss Carbon Value Ltd.
Project Representative:	Mulanje Mountain Conservation Trust
Project Participants and any communities involved:	N/A
Version of PDD: Date of Version:	Version 1.0 October 29, 2018
Host Country / Location:	Malawi
Certification Pathway (Project Certification/Impact Statements & Products	Project Certification
Activity Requirements applied: (mark GS4GG if none relevant)	Community Services Activity Requirements (Version 1.1, 01.03.2018)

Methodologies applied:	AMS-II.G (Version 09.0)
Product Requirements applied:	GHG Emission Reductions & Sequestration Project Requirements (Version 1.1, 01.03.2018)
Regular/Retroactive:	Retroactive
SDG Impacts:	1 – SDG 7 Affortable and Clean Energy 2 – SDG 8 Decent Work and Economic Growth 3 – SDG 13 Climate Action n.
Estimated amount of SDG Impact Certified	1 – SDG 7 Affortable and Clean Energy Number of people reached by the project activity who have access to and can rely on affordable and clean cookstoves distributed under the project activity: 45,000 people/yr 2 – SDG 8 Decent Work and Economic Growth Number of people got involved in trainings and activities of improved stoves production and sales: 990 people 3 – SDG 13 Climate Action Estimated annual average greenhouse gas Emission Reductions generated for first crediting period: 36,334 tCO2/yr

SECTION A. Description of project

A.1. Purpose and general description of project

>> *(Provide a brief description of the project including the description of scenario existing prior to the implementation of the project.)*

Forests are major sources of energy in Malawi, supplying the greatest portion of energy requirements in the form of firewood and charcoal. Roughly 85% of the people in Malawi live in rural areas and the vast majority of them collect firewood for cooking, collected firewood meets the bulk of cooking energy needs nationwide. Most households in cities and some rural dwellers choose to or must purchase their cooking fuel (e.g. charcoal) at market. Burning firewood or charcoal for cooking is not only leading to significant greenhouse gas emissions but families also need to spend a lot of time and/or money on collecting and/or purchasing firewood and charcoal. In addition, firewood collection and charcoal production leads to deforestation and environmental degradation.

This project seeks to increase access of households and communities to improved cookstoves by disseminating affordable high thermal efficiency and low greenhouse gas emitting cooking stoves across Mulanje and Phalombe districts in Malawi. The targeted users of the improved stoves will be households and/or communities. Their old low efficiency and high greenhouse gas emitting stoves would be replaced.

The improved stoves to be distributed would significantly reduce firewood and charcoal demand for cooking, so that greenhouse gas emissions would be greatly reduced; simultaneously they can provide co-benefits to users and families in the form of relief from high fuel costs, reduced exposure to health-damaging indoor air pollutions, faster cooking (resulting in time-savings), and increased cleanliness and convenience.

Currently inefficient and polluting cooking regimes are deeply established throughout Sub-Saharan Africa and in Malawi in particular. With carbon finance this project aims to break the mould with affordable high efficiency stoves and move large populations away from conditions under which greenhouse gas emissions are unacceptably high and health effects are unacceptably harmful for the women and children spending long hours each day on firewood collection and in traditional kitchens.

A.2. Eligibility of the project under Gold Standard

>> *(Describe how the project meets the eligibility criteria as per section 3.1.1 of GS4GG Principles & Requirements document and the relevant activity requirements document)*

The project meets the eligibility criteria:

- The project is a single small-scale GS VER project;
- The project is located in Malawi, which has no mandatory operational schemes to reduce GHG emissions in any form and can host a Gold Standard VER project;

- The emission reductions of greenhouse gases intended to be achieved by the project are from Carbon Dioxide (CO2), whichi is eligible under GS4GG;

- The project belongs to the type of End-Use Energy Efficiency, as the project disseminates fuel-efficient cookstoves to end users to replace their low efficient traditional charcoal/firewood stoves, so charcoal and firewood consumptions could be reduced; According to the approved GS Community Services Activity Requirements, the project type is automatically eligible for Gold Standard Certification;

- No Official Development Assistance (ODA) is used for the implementation of the project.

A.3. Legal ownership of products generated by the project and legal rights to alter use of resources required to service the project

>> (*Justify that project owner has full and uncontested legal ownership of the products that are generated under Gold Standard Certification and has legal rights concerning changes in use of resources required to service the Project for e.g water rights, where applicable.*)

The project owner (Mulanje Mountain Conservation Trust, a local NGO) has full and uncontested legal ownership of the emission reductions that are generated under this Gold Standard project, and has legal rights concerning changes in use of resources required to service the Project for ownership of emission reductions.

A.4. Location of project

A.4.1. Host Country

>>
Malawi

A.4.2. Region/State/Province etc.

>>
Mulanje District and Phalome District

A.4.3. City/Town/Community etc.

>>
Mulanje and Phalome

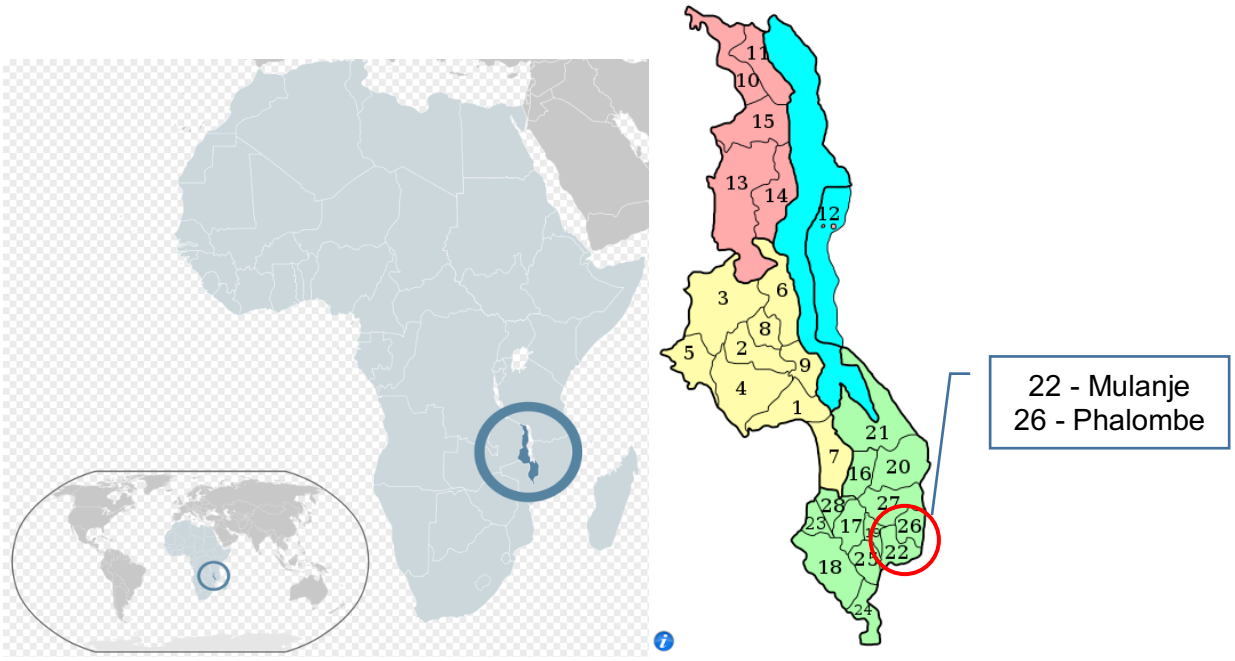
A.4.4. Physical/Geographical location

>> (*Include information allowing the unique identification of this project.)*
The project would initially distribute the improved stoves in Mulanje and Phalome districts. The distribution network will gradually be expanded to cover nearby regions and then in all regions of the country.
Mulanje: 16˚00'S, 35˚35'E

Phalome: 15˚40'S, 35˚40'E

The whole area of Malawi extends between:

Latitude	9˚23'27" S and 17˚08'29" S
Longitude	32˚40'37" E and 35˚55'03" E



A.5. Technologies and/or measures

>> *(Describe the technologies and measures to be employed and/or implemented by the project, including a list of the facilities, systems and equipment that will be installed and/or modified by the project. Include information essential to understand the purpose of the project and how it will contribute positively to three SDGs.)*

The improved cookstove (Chitetezo Mbaula stove) is produced by using a kind of local clay. After modeling and baking, the ceramic chamber can be built, which can increase combustion efficiency and retain heat, then reduce the fuel consumption. During use, a single pot rests at the top of the stove. The Chitetezo stove can reach a thermal efficiency of 34%. It consumes above 50% less wood fuel than the traditional low efficient stoves.

SDG 7 – Affordable and Clean Energy

The clean and high efficient cook stoves distributed in the project activity consume less wood fuel than traditional low efficient stoves, such as the three-stone fires. Reduced wood fuel consumption improves the air quality of the kitchen due to less smoke would be generated by using the high efficiency project stove, and relieves the pressure on tree cutting for wood fuel so that forest can be conserved. With the support of carbon revenue from the project activity, the improved stoves are affordable to end users, which provide people with reliance on clean technology.

SDG 8 – Decent Work and Economic Growth

The project owner (a local NGO) has organized in total 66 local stove producer groups, which are mailnly made up of female residents from local communities. They are provided with traininigs of how to produce the improved stoves and how to sell the stoves. Women and girls can get paid outside of agriculture through stove producing and selling. Villagers from local communities are willing to be member of the producer groups, as they can learn skills from those trainings and also increase their incomes through stoves sales.

SDG 13 – Climate Action

The project includes conducting awareness raising sessions at the village level, which covers topics on global warming, climate change, the contribution of inefficient cooking on climate change and rapid deforestation rates. It also shares on how a transition to a clean and fuel-efficient cookstove can reduce the environmental and climate damage, in addition to improving the health and safety and economic well-being of the users.

The project is expected to reduce the greenhouse gas emissions, as the improved cookstoves disseminated by the project have high thermal efficiency which would reduce the fuel wood burning for daily cooking.

A.6. Scale of the project

>> *(Define whether project is micro scale, small scale or others. Justify the scale referring to relevant activity requirement.)*

The project is a small scale project, as the project belongs to Type II Energy-efficiency improvement project, and according to the methodology AMS-II.G (Version 09.0), the aggregate energy savings

of the project activity does not exceed the equivalent of 180 GWh thermal per year in fuel input. Please find the calculation below:

Parameter	Unit	Value	Source
Firewood NCV	MJ/kg	15.6	IPCC 2006
Charcoal NCV	MJ/kg	29.5	IPCC 2006
Thermal efficiency of the improved stove	%	34	Thermal efficiency test results from stove specification and builders manual
Thermal efficiency of the baseline stove	%	10	AMS-II.G
Number of improved stoves in operation during one year	Number	45,000	Based on the deployment plan, the maximum number of improved stoves in operation during one year in the first crediting period
Firewood consumption in baseline scenario per household per year	kg/HH/yr	2,250	Page 12, Analysis of Wood needs in rural household in TA Chadza, Lilongwe District, Malawi.pdf
Charcoal consumption in baseline scenario per household per year	kg/HH/yr	87.6	Calculated: 4,020,350 HH = 18,091,575[1] / 4.5[2] 87.6 = 352,000[3] * 1000 / 4,020,350
Firewood saving per household per year	kg/HH/yr	1,588.2	Calculated 1,588.2 = 2,250 – 2,250 * 10% / 34%
Charcoal saving per household per year	kg/HH/yr	61.8	Calculated 61.8 = 87.6 – 87.6 * 10% / 34%
Conversion factor	GWh/GJ	0.00027778	-
Aggregate energy saving per year	GWh/yr	113 < **180**	Calculation: 105.3 = 15.6 * 1,588.2 * 34% * 45,000 / 1000 * 0.00027778 7.7 = 29.5 * 61.8 * 34% * 45,000 / 1000 * 0.00027778 113 = 105.3 + 7.7

A.7. Funding sources of project

>> (Provide the public and private funding sources for the project. Confidential information need not be provided.)

N/A

[1] Popoluation of Malawi in 2016 is 18,091,575.

http://www.worldometers.info/world-population/malawi-population/

[2] Page 2, the average household size in Malawi is 4.5 members.
https://dhsprogram.com/pubs/pdf/SR237/SR237.pdf

[3] Page 11, the total charcoal demand in 2016 exceeds 352,000 tonnes.

https://afr100.org/sites/default/files/Restoration_Malawi_Charcoal-Strategy_lowq.pdf

A.8. Assessment that project complies with 'gender sensitive' requirements

>> (Answer the four mandatory questions included under Step 1 to 3 in "Gold Standard Gender Equality Guidelines and Requirements" available here.)

Question 1: Does the project reflect the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy? Explain how.

The project reflects the key gender issues and requirements of Gender Sensitive design and implementation.

On the design side, the project is aimed to avail households with clean cooking solutions. The project will result in reduction of firewood and charcoal comsumptions, which would generate harmful smoke and cause air pollution when burning in low efficiency and traditional stoves. In the overwhelming majority of the households in Malawi, the kitchen chores (including sourcing fuel, cooking and cleaning) are handled by women. While getting involved most of the time with the kitchen related activities, women are more exposed to the indoor air pollution and the associated hazard. Situation is more aggravated with a fact that the women are also responsible for taking care of the children and the children who normally need mother's support to perform their activities are bound to accompany their mother in kitchen. This situation has led to enhanced exposure of the women and children to kitchen smoke and associated health consequences. Since the project aims to reduce the polluting firewood and charcoal from the kitchen, the primary beneficiary would be the women and children. Furthermore, the project is focused to the socially disadvantaged group of people, which also justifies the dimension of social inclusion in the project design.

On the implementation side, the project has trained and deployed women in the producting and marketing of the improved cookstoves. Project implementer has orgnasied local people, mainly are women, to form producer groups, and provided trainings on how to construct improved stoves and how to distribute the stoves to end users. Project implementer opines that promotional activities are better addressed with women in the forefront. During the life of the project, the project participant believes to create a conducive environment where women are able to be trained to master a new technology, create awareness of the product and process, and in long run, to organize themselves and create business opportunities for themselves. This women prioritized mode of project development and implementation helps address gender equality issues; in the meantime, addressing issues related to environmental sustainability and natural resource management.

Question 2: Does the project align with exsiting country policies, strategies and best practices? Explain how.

The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis. The project aligns with all the rights to the women conferred by the constitution of the Republic of Malawi. The project has been implemented in the households of backward communities where the women are the primary beneficiary. Further more, the project involves women in the forefront of the supply chain of the improved stoves, which can help fostering their entrepreneurial skills and empower them be part in social dialogue.

Question 3: Does the project address the questions raised in the Gold Standard Safeguarding Principles & Requirements document? Explain how.

The project addresses some of the questions raised in the Gold Standard Safeguarding Principle & Requirements:

1. Is there a possibility that the Project might reduce or put at risk women's access to or control of resources, entitlements and benefits?
No, on the contrary the Project increase women's access to or control of resources, entitlements and benefits.

2. Is there a possibility that the Project can adversely affect men and women in marginalised or vulnerable communities (e.g., potential increased burden on women or social isolation of men)?
No, the Project brings positive effect on beneficiaries in terms of employment and social upliftment of the communities.

3. Is there a possibility that the Project might not take into account gender roles and the abilities of women or men to participate in the decisions/designs of the project's activities (such as lack of time, child care duties, low literacy or educational levels, or societal discrimination)?
No, the project does not involve in any form discrimination in any kind of form.

4. Does the Project take into account gender roles and the abilities of women or men to benefit from the Project's activities (e.g., Does the project criteria ensure that it includes minority groups or landless peoples)?
Yes, the project takes into account gender roles and abilities of women/men. Workload is allocated based on the type of work to be carried out.

5. Does the Project design contribute to an increase in women's workload that adds to their care responsibilities or that prevents them from engaging in other activities?
No, on the contrary the project leads to increased empowerment and income of women thereby uplifiting the living standards of women.

6. Would the Project potentially reproduce or further deepen discrimination against women based on gender, for instance, regarding their full participation in design and implementation or access to opportunities and benefits?
No, the project doesn't reproduce or further deepen discrimination against women.

7. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and priorities of women and men in accessing and managing environmental goods and services?
No, in fact, the project leads to improved accesses of women to use and develop natural resources.

8. Is there a likelihood that the proposed Project would expose women and girls to further risks or hazards?

No, on the contract the project leads to reduced firewood and charcoal consumptions, which would reduce the exposure of women and girls to indoor air pollutions and the time for women and girls to collect fuels in hazardous surroundings.

Question 4: Does the project apply the Gold Standard Stakeholder Consultation & Engagement Procedure, Requirements & Guidelines? Explain how.

Yes. The project is currently seeking for retroactive GS registration. The 1st round Stakeholder Consultation meetings have been done in July 2018 with the participation of different stakeholder categories. During each meeting, the Key Project Information and the Input & Grievance Mechnisms have been introduced to the local stakeholders, the questionnaire regarding the sustainable development indicators and monitoring of the indicators have been explained, and meeting evaluation forms have been provided to the local stakeholders.

SECTION B. Application of selected approved Gold Standard methodology

B.1. Reference of approved methodology

>>
Project type: (b) End - Use Energy efficiency
Approved methodology applied: AMS-II.G, Energy efficiency measures in thermal applications of non-renewable biomass (Version 09.0)
Reference: http://cdm.unfccc.int/methodologies/DB/DP2BYDIV6RTMZPEZ2EDLYGLJDPSSU3

B.2. Applicability of methodology

>> (Justify the choice of the selected methodology(ies) by demonstrating that the project meets each applicability condition of the applied methodology(ies))

Justification for the choice of the selected methodology is given below in the table:

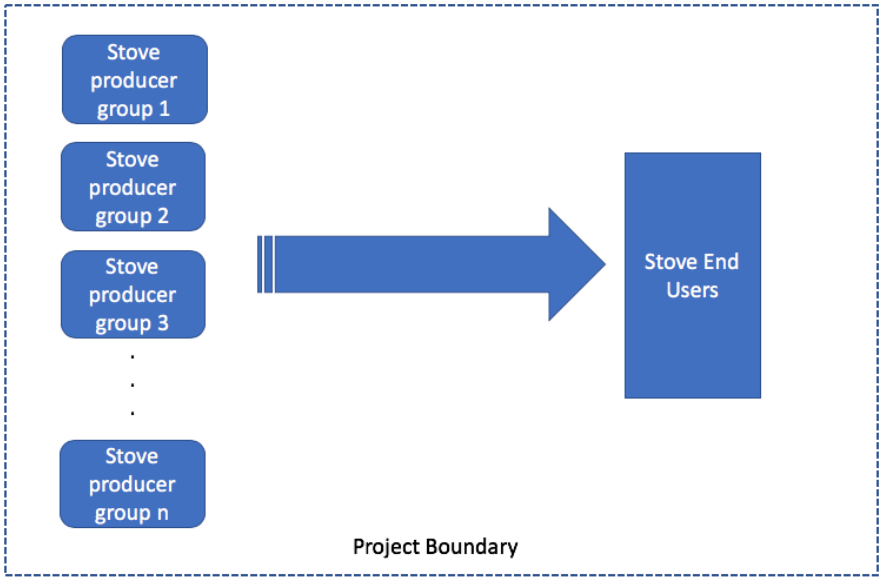
Applicability Condition	Justification
This methodology is applicable to project activities that: introduce efficient thermal energy generation units utilizing non-renewable biomass (e.g. complete replacement of existing biomass-fired cookstoves or ovens or dryers with more efficient appliances), or retrofit existing units reducing the use of non-renewable biomass for combustion.	The project activity introduces improved high efficiency cookstoves utilizing charcoal and firewood to replace existing low efficiency traditional biomass-fired cookstoves.
This methodology is applicable to project activities that: displace or enhance energy efficiency of existing heat generation units results in saving of non-renewable biomass and reduction of GHG emissions.	The project activity displaces existing low efficiency traditional biomass-fired cookstoves with improved high efficiency stoves so that firewood and charcoal consumptions can be saved and GHG emissions can be reduced.

In the case of cookstoves, the methodology is applicable to introduction of single pot or multi pot portable or in-situ cookstoves with rated efficiency of at least 20 per cent.	The project activity introduces single pot portable cookstoves with efficiency of 34%.
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.	According to the calculation in section A.6, the estimated maximum aggregate energy savings of the project activity are 113 GWh thermal per year, not exceeding 180 GWh thermal per year in fuel input.
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.	The non-renewable biomass has been used in the project region since 31 December 1989.
For cases where the biomass is sourced from renewable sources, the project participants should use a corresponding Type I methodology.	The biomass used in the project region are firewood and charcoal, which are sourced from non-renewable sources.
If the project device requires a specific fuel for this device (e.g. briquettes, pellets, woodchips), the consumption of the fuel should be monitored during the crediting period.	No specific fuel is required for the project stove. The project stoves are using the same kinds of fuels as the baseline stoves, which are firewood and charcoal.

B.3. Project boundary

>> *(Present a flow diagram of the project boundary, physically delineating the project, based on the description provided in section A.5 above.)*

Based on the methodology "Energy efficiency measures in thermal applications of non-renewable biomass (Version 09.0)", the project boundary is the physical, geographical site of the efficient devices that utilize biomass. The project boundary for the project activity is as demonstrated in the diagram below:



For the purpose of GHG mitigation/sequestration following table shall be completed (delete if not required)

Source		GHGs	Included?	Justification/Explanation
Baseline scenario	Source 1 Combustion of charcoal and firewood for cooking	CO_2	Yes	Important source of emissions
		CH_4	No	Excluded for simplification
		N_2O	No	Excluded for simplification
Project scenario	Source 1 Combustion of charcoal and firewood for cooking	CO_2	Yes	Important source of emissions
		CH_4	No	Excluded for simplification
		N_2O	No	Excluded for simplification

B.4. Establishment and description of baseline scenario

>> *(Explain how the baseline scenario is established in accordance with guidelines provided in GS4GG Principles & Requirements and the selected methodology(ies). In case suppressed demand baseline is used then same should be explained and justified.)*

As per the methodology of AMS-II.G (Version 09.0), 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.
In the absence of the project activity, households use non-renewable biomass (firewood and charcoal) as fuel for cooking purposes; traditional charcoal/wood stoves such as 3-stone fires are used by households for fuel combustion.

B.5. Demonstration of additionality

>> (If the proposed project is not a type of project that is deemed additional, as stated below, then follow guidelines in section 3.5.1 of GS4GG Principles & Requirements to demonstrate additionality.)

The table below is only applicable if the proposed project is deemed additional, as defined by the applied approved methodology or activity requirement or product requirement.

Specify the methodology or activity requirement or product requirement that establish deemed additionality for the proposed project (including the version number and the specific paragraph, if applicable).	Methodological tool of "Demonstration of additionality of small-scale project activities" (Version 12.0), Paragraph 11 (c) defines additionality if "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."
Describe how the proposed project meets the criteria for deemed additionality.	• The project activity is solely composed of isolated improved cookstoves where the users of the stoves are households or communities or SMEs; • The aggregate energy saving of each improved cookstove is around 0.0025 GWh thermal, which does not exceed 1.8 GWh thermal energy savings per year.

B.6. Sustainable Development Goals (SDG) outcomes

B.6.1. Relevant target for each of the three SDGs

>> (Specify the relevant SDG target for each of three SDGs addressed by the project. Refer most recent version of targets here .)

SDGs	Targets
SDG 7 Affordable and Clean Energy	Target:

Ensure access to affordable, reliable, sustainable and modern energy for all	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services Indicator: 7.1.2 Proportion of population with primary reliance on clean fuels and technology The project provides clean and high efficiency cookstoves to reduce the firewood and charcoal consumptions. Households can have access to and rely on clean technology.
SDG 8 Decent Work and Economic Growth Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Target: 8.3 Promote developmet-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalizaiton and growth of micro-, small- and medium- sized enterprises, including through access to financial services Indicator: 8.3.1 Proportion of informal employment in non-agriculture employment, by sex The project has engaged local villagers in paid work by organising stove production groups and providing stove manufacture and distribution trainings to them.
SDG 13 Climate Action Take urgent action to combat climate change and its impacts	Target: 13.B Promote mechanisms for raising capacity for effective climate change–related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities Indicator: 13.B.1 Number of least developed countries and small island developing States that are receiving specialized support, and amount of support, including finance, technology and capacity-building, for mechanisms for raising capacities for effective climate change-related planning and management, including focusing on women, youth and local and marginalized communities The project includes conducting awareness raising sessions at the village level, which covers topics on global warming, climate change, the contribution of inefficient cooking on climate change and rapid deforestation rates. It also shares on how a transition to a clean and fuel-efficient cookstove can reduce the environmental and climate damage, in addition to improving the health and safety and economic well-being of the users. The support of carbon finance is based on the emission reductions generated by the project

B.6.2. Explanation of methodological choices/approaches for estimating the SDG outcome

>> (Explain how the methodological steps in the selected methodology(ies) or proposed approach for calculating baseline and project outcomes are applied. Clearly state which equations will be used in calculating net benefit.)

SDGs	Method
SDG 7 Affordable and Clean Energy	Target: 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services Indicator: 7.1.2 Proportion of population with primary reliance on clean fuels and technology Monitoring Parameter: Number of people reached by the project activity who have access to and can rely on affordable and clean cookstoves distributed under the project activity Monitoring Method: Stove sales records collection Purpose: Aimed at gathering and analyzing stove sales data . Calculation Method: Baseline outcomes: 0 Project outcomes: Average number of stoves sold per year X Average number of people per household
SDG 8 Decent Work and Economic Growth	Target: 8.3 Promote developmet-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalizaiton and growth of micro-, small- and medium- sized enterprises, including through access to financial services Indicator: 8.3.1 Proportion of informal employment in non-agriculture employment, by sex Monitoring Parameter: Number of people got involved in trainings and activities of improved stoves production and sales Monitoring Method: Ongoing training and sales data collection and storage. Purpose: To measure the number of people participating in the activities of trainings, stove production and sales. The records of producer groups and training courses collect and maintain the total number of people who have participated in those productive activities. Calculation Method: Baseline outcomes: 0 Project outcomes: count number of people participating in trainings and stove production and sales activities.
SDG 13 Climate Action	Target: 13.B Promote mechanisms for raising capacity for effective climate change–related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities Indicator: 13.B.1 Number of least developed countries and small island developing States that are receiving specialized support, and amount of support, including finance, technology and capacity-building, for mechanisms for raising capacities for effective climate change-related planning and management, including focusing on women, youth and local and marginalized communities Monitoring Parameter: Annual average greenhouse gas Emission Reductions

	Monitoring Method: Ongoing data collection and storage for ER calculation; and Household surveys. Purpose: To measure emission reductions generated from replacement of old traditional low efficiency stoves with improved high efficiency stoves. The stove sales records collect and record the number of improved stoves sold; The surveys collect usage information from sampled households. Calcualtion Method: As per the methodology AMS-II.G (Version 09.0), $ER_y = \sum\sum ER_{y,i,j} - LE_y$ $ER_{y,i,j} = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected\_fossilfuel}$ $B_{y,savings,i,j} = B_{old,i,j} \times (1 - \eta_{old,i,j} / \eta_{new,i,j})$

B.6.3. Data and parameters fixed ex ante for monitoring contribution to each of the three SDGs

(Include a compilation of information on the data and parameters that are not monitored during the crediting period but are determined before the design certification and remain fixed throughout the crediting period like IPCC defaults and other methodology defaults. Copy this table for each piece of data and parameter.)

Relevant SDG Indicator	SDG 13 Climate Action
Data/parameter	$f_{NRB,y}$
Unit	-
Description	Fraction of woody biomass saved by the project activity during year y that can be established as non-renewabole biomass.
Source of data	CDM default value
Value(s) applied	81%
Choice of data or Measurement methods and procedures	As per the draft methodological tool "calculation of fraction of non-renewable biomass"
Purpose of data	Calculation of emission reductions
Additional comment	-

Relevant SDG Indicator	SDG 13 Climate Action
Data/parameter	$NCV_{biomass}$
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
Value(s) applied	Wood fuel: 0.0156 (based on the gross weight of the wood that is 'air-dried') Charcoal: 0.029

Choice of data or Measurement methods and procedures	-
Purpose of data	Calculation of emission reductions
Additional comment	-

Relevant SDG Indicator	SDG 13 Climate Action
Data/parameter	$EF_{projected\_fossilfuel}$
Unit	t CO_2/TJ
Description	Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers
Source of data	AMS-II.G (Version 09.0)
Value(s) applied	63.7
Choice of data or Measurement methods and procedures	This value represents the emission factor of the substitution fuels likely to be used by similar users, on a weighted average basis. The value is calculated, based on the global average ratio of cooking fuels (the normalized ratio of kerosene and liquefied petroleum gas (LPG) excluding coal), i.e. 9 per cent for kerosene (71.5 t CO2/TJ) and 91 per cent for LPG (63.0 t CO2/TJ).
Purpose of data	Calculation of emission reductions
Additional comment	-

Relevant SDG Indicator	SDG 13 Climate Action
Data/parameter	$\eta_{old,i,j}$
Unit	-
Description	Efficiency of the old devices being replaced by project devices of type i and batch j
Source of data	AMS-II.G (Version 09.0)
Value(s) applied	According to the methodology, value applied can be determined from the two options below: (i) Default 0.1 or 0.2; (ii) Establish prior to start of implementation based on survey Here for ex ante calculation, 0.1 is applied.

Choice of data or Measurement methods and procedures	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
Purpose of data	Calculation of emission reductions
Additional comment	-

Relevant SDG Indicator	SDG 13 Climate Action
Data/parameter	LE_y
Unit	Fraction
Description	A net to gross adjustement factor to account for leakages
Source of data	AMS-II.G (Version 09.0)
Value(s) applied	0.95
Choice of data or Measurement methods and procedures	-
Purpose of data	Calculation of emission reductions
Additional comment	-

Relevant SDG Indicator	SDG 13 Climate Action
Data/parameter	$B_{old,p}$
Unit	tonnes/person/year
Description	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
Source of data	Default value from AMS-II.G (Version 09.0)
Value(s) applied	0.5
Choice of data or Measurement methods and procedures	-
Purpose of data	Calculation of emission reductions
Additional comment	-

Relevant SDG Indicator	SDG 13 Climate Action
Data/parameter	$N_{p,HH}$
Unit	Number
Description	Average number of persons served per household prior to project implementation
Source of data	Page 12, Household Size and Composition Around the World 2017 (Data Booklet)
Value(s) applied	4.5
Choice of data or Measurement methods and procedures	-
Purpose of data	Calculation of emission reductions
Additional comment	-

Relevant SDG Indicator	SDG 13 Climate Action
Data/parameter	$B_{old,HH}$
Unit	tonnes/household/year
Description	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
Source of data	This parameter shall be determined ex ante by using one of the following options: 1. $B_{old,HH} = B_{old,p} \times N_{p,HH}$ 2. Based on the historical data or a sample survey conducted as per the latest version of "sampling and surveys for CDM project activities and programme of activities". If the monitoring period is shorter or longer than one year, the result may be extrapolated for the monitoring period
Value(s) applied	Option 1 is applied to determine $B_{old,HH}$: $B_{old,HH} = 0.5 \times 4.5 = 2.25$
Choice of data or Measurement methods and procedures	-
Purpose of data	Calculation of emission reductions
Additional comment	-

Relevant SDG Indicator	SDG 13 Climate Action
Data/parameter	$B_{old,i,j}$

Unit	tonnes/year
Description	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 device type i and batch j
Source of data	This parameter shall be determined ex ante $B_{old,i,j} = B_{old,HH} / N_{d,HH}$
Value(s) applied	$B_{old,i,j} = 2.25 / 1 = 2.25$
Choice of data or Measurement methods and procedures	-
Purpose of data	Calculation of emission reductions
Additional comment	-

B.6.4. Ex ante estimation of outcomes linked to each of the three SDGs

>> (Provide a transparent ex ante calculation of baseline and project outcomes (or, where applicable, direct calculation of net benefit) during the crediting period, applying all relevant equations provided in the selected methodology(ies) or as per proposed approach. For data or parameters available before design certification, use values contained in the table in section B.6.3 above. For data/parameters not available before design certification and monitored during the crediting period, use estimates contained in the table in section B.7.1 below)

SDGs	Ex ante estimation of outcomes
SDG 7 Affordable and Clean Energy	Baseline outcomes: 0 Project outcomes: 45,000 people The estimation is based on assumptions of initially 10,000 improved stoves sold per year, and averagely 4.5 people per household.
SDG 8 Decent Work and Economic Growth	Baseline outcomes: 0 Project outcomes: 990 people In total there are 66 stove production groups, and on average 15 people in each group.
SDG 13 Climate Action	Baseline and Project outcomes: $ER_y = \sum\sum ER_{y,i,j} - LE_y$ $ER_{y,i,j} = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected\_fossilfuel}$ $B_{y,savings,i,j} = B_{old,i,j} \times (1 - \eta_{old,i,j} / \eta_{new,i,j})$ $B_{old,i,j} = B_{old,HH} / N_{d,HH}$ $B_{old,HH} = B_{old,p} \times N_{p,HH}$ $B_{y,savings,i,j}$ = 2.25 x (1 - 0.1 / 0.34) = 1.588 tonnes/household-year ERy = 1.588 x $N_{y,i,j}$ x 1 x 81% x 0.0156 x 63.7 = 36,334 tCO2/yr (Details for calculation please refer to ER estimation spreadsheet)

B.6.5. Summary of ex ante estimates of each SDG outcome

Year	Baseline estimate	Project estimate	Net benefit
Year 1	12,818	0	12,818
Year 2	30,948	0	30,948
Year 3	42,479	0	42,479
Year 4	45,877	0	45,877
Year 5	49,548	0	49,548
Total	181,670	0	181,670
Total number of crediting years	5		
Annual average over the crediting period	36,334	0	36,334

B.7. Monitoring plan

B.7.1. Data and parameters to be monitored

(Include specific information on how the data and parameters that need to be monitored in the selected methodology(ies) or proposed approaches or as per mitigation measures from safeguarding principles assessment or as per feedback from stakeholder consultations would actually be collected during monitoring. Copy this table for each piece of data and parameter.)

Relevant SDG Indicator	SDG 13 Climate Action
Data / Parameter	$N_{y,i,j}$
Unit	-
Description	Number of project devices of type i and batch j operating during year y
Source of data	Monitoring
Value(s) applied	Assuming 20,000 improved stoves are sold in the first project year and stoves are distributed at a consistent rate with the year to year increasing rate of 8%, for each year in the crediting period the newly sold stoves are equally distrubted throughout the 12 months of first operation year, the lifetime of the improved stove is 3 years with linear decreasing in efficiency, and the uage rates of different stove age groups are 100%, 75%, 50%, 0% for the first four operation years.
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	-
Purpose of data	Calculation of emission reductions
Additional comment	-

Relevant SDG Indicator	SDG 13 Climate Action
Data / Parameter	μ_y
Unit	Fraction
Description	Adjustment to account for any continued use of pre-project devices during the year y
Source of data	As per the methodology, equation 6 is applied, so the parameter is a fraction based on monitoring results.
Value(s) applied	Here for ex ante ER estimation, 1.0 is applied.
Measurement methods and procedures	According to the methodology, this parameter should be monitored using one of the two methods. As data loggers described in method 1 is not practical, surveys described in method 2 would be applied: 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.
Monitoring frequency	At least once every two years (biennial)
QA/QC procedures	-
Purpose of data	Calculation of emission reductions
Additional comment	-

B.7.2. Sampling plan

>> (If data and parameters monitored in section B.7.1 above are to be determined by a sampling approach, provide a description of the sampling plan.)

As per AMS-II.G, Version 09.0, for parameter μ_y – Ajustment to account for any continued use of pre-project devices during the year y, two methods can be chosen to monitor the parameter, one is to use the data loggers and the other is to use surveys. Data loggers are not practical for the project, so surveys would be conducted to capture the cooking habits and stove usage of households in the target regions.

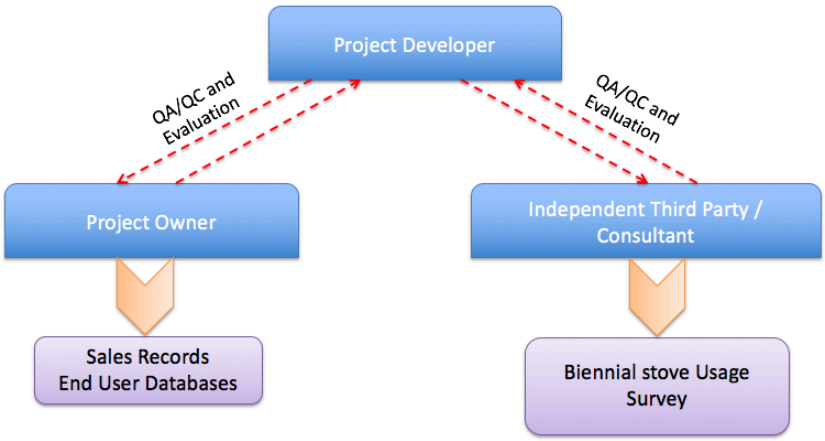
Every two years a third party consultant would be hired by the project developer to conduct the survey to quantify the use of baseline devices. Responses to questions in questionnaires collected from the sampled stove end users would be used to determine the frequency of usage of both the project stoves and baseline stoves. Simply random sampling would be applied for the consultant to sample the households from the end user database. Sampling standard would be used for determining the sample size to achieve 90/10 confidence precision.

B.7.3. Other elements of monitoring plan

>>

1. Monitoring operational and management structure

The monitoring structure consists of three parts: i) continuous maintenance of total sales records and end user databases, responsible by the project owner; ii) on-going biennial monitoring activities, organised by the project developer and conducted by the independent third party or consultant; iii) quality assurance, quality control and evaluation, responsible by the project developer. Please see the monitoring system schematic diagram below:



The project owner should maintain accurate and complete sales records and end user databases with electronic backups. Data collected by PO should include name of end user, date of sale, geographic area of sale, model/type and quantity of stoves sold, contact information (telephone number if available and address), mode of use, etc. The number of end users with contact information shall be large enough, in order to ensure an adequate end user pool to which random samplings for surveys can be applied.

The independent third party or consultant would be hired by project developer to conduct the biennial stove usage survey. The consultant(s) is responsible for accurate and objective data collection, and hardcopies data with electronic backups collected from surveys and tests by the consultant(s) should be well kept and provided as requirements.

The project developer would collect all needed records and supporting documentation from the project owner and the consultant(s) and is responsible for quality assurance and quality control, and monitoring data analysis and evaluation of emission reductions.

2. Data collection and QA/QC procedure

The project activity has proper data collection and QA/QC procedures, which run through the whole processes from stove production to stove sales.

All the stoves produced by the stove production groups and all stoves sold by sales agents would be properly recorded, and numbers of production and sales would be cross checked periodically.

The stove production and sales records, and end user databases would be sent to the project developer yearly for data cross-check and emission reduction calculation. Any faulty data would be

excluded from ER calculation. The end user databases would also be sent to the third party or consultant(s) for conducting the biennial stove usage surveys, during which samples have been selected from the databases, so that another layer of quality check can also be made by the consultant to see if the sales have actually happened and if any false.

3. Provisions for data archiving

Data monitored and required for verification and issuance are kept and archived for at least two years after the end of the final crediting period or the last issuance of VERs, whichever occurs later. Data are archived at the end of each month using electronic spreadsheets. The electronic files will be stored on hard disk or CD-ROM. Physical documentation will be collected and stored by the project owner and consultant(s).

SECTION C. Duration and crediting period

C.1. Duration of project

C.1.1. Start date of project

>> (Specify start date of the project, in the format of DD/MM/YYYY. Describe how this date has been determined as per the definition of start date provided in section 3.4.3 of GS4GG Principles & Requirements document and provide evidence to support this date.)
01/01/2018 (The first one or more than one improved stoves have been distributed)

C.1.2. Expected operational lifetime of project

>> (*Specify in years)*
30 years

C.2. Crediting period of project

5 years for each Design Certification Renewal Cycle and in total two Design Cerification Renewal Cycles

C.2.1. Start date of crediting period

>> (Specify in dd/mm/yyyy. This can be start of project operation or two years prior to the date of Project Design Certification, whichever is later.)
01/01/2018 (the start date of project operation) or two years prior to the date of Project Design Cerification, which ever is later

C.2.2. Total length of crediting period

>> (Specify the total length of crediting period sought in line with GS4GG Principles & Requirements or relevant activity requirements.)
15 years (two Design Certification Renewal Cycles)

SECTION D. Safeguarding principles assessment

D.1. Analysis of social, economic and environmental impacts

>> (Refer the GS4GG Safeguarding Principles and Requirements document for detailed guidance on carrying out this assessment.)

Safeguarding principles	Assessment questions	Assessment of relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)
Social and Economic Impacts				
1 Human Right	a. b. c.	No	The Project Developer and the Project respect internationally proclaimed human rights and are not complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights. The Project does not discriminate with regards to participation and inclusion.	Not required
2 Gender Equality and Women's Rights	a. Is there a possibility that the Project might reduce or put at risk women's access to or	Yes	For the justifications of the gender assessment questions, please refer to	Not required

	control of resources, entitlements and benefits? b. Is there a possibility that the Project can adversely affect men and women in marginaised or vulnerable communities? c. Is there a possibility that the Project might not take into account gender roles and the abilities of women or men to participate in the decisions/designs of the project's activities? d. Does the Project take into account gender roles and the abilities of women or men to benefit from the Project's activities? e. Does the Project design contribute to an increase in women's workload that		the responses to Question 3 in Section A.8.	

	adds to their care responsibilities or that prevents them from engaging in other activities? f. Would the Project potentially reproduce or further deepen discrimination against women based on gender, for instance, regarding their full participation in design and implementation or access to opportunities and benefits? g. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and priorities of women and men in accessing and managing environmental			

	goods and services? h. Is there a likelihood that the proposed Project would expose women and girls to further risks or hazards?			
3 Community Health, Safety and Working Conditions		Yes	The Project reduces firewood and charcoal consumptions by introducting improved and clean cookstoves to local communities, so that chances of end users exposuring to indoor air pollution can be greatly reduced.	Not required
4 Cultural Heritage, Indigenous Peoples, Displacement and Resettlement	a. Does the Project Area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge,	No	There is no cultural heritage, or displacement and resettlement of indigenous peoples.	Not required

	innovations, or practices)? b. Does the Project require or cause the physical or economic relocation of peoples (temporary or permanent, full or partial)? c. Does the Project require any change to land tenure arrangements and/or other rights? d. For Projects involving land-use tenure, are there any uncertainties with regards land tenure, access rights, usage rights or land ownership? e. Are indigenous peoples present in or within the area of influence of the Project and/or is the Project located on land/territory claimed by			

	indigenous peoples?			
5 Corruption		No	The project does not involve and is not complicit in corruption.	Not required
6 Economic Impacts		Yes	The project activity is voluntary action by the project owner (local NGO) and provides trainings to the volunteer villagers for producing and distributing the improved cookstoves. Therefore, the project doesn't involve and complicit in any form of forced or compulsory labour or child labour at any stage.	Not required
Enviornmental and Ecological Impacts				
1 Climate and Energy	a. Will the Project increase greenhouse gas emissions over the Baseline Scenario? b. Will the Project use	Yes	The project activity distributes improved cookstoves to households, which would reduce the	Not required

	energy from a local grid or power supply or fuel resources that provides for other local users?		firewood and charcoal consumptions compared to baseline scenario, so that greenhouse gas emissions would be reduced. The project does not use energy from a local grid or power supply that provides for other local users; households under the project still use fuel resource (such as wood, charcoal) for cooking, just like what they do in the baseline scenario.	
2 Water	a. Will the Project affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of	No	The project will not affect the natural water patterns/flows, and the project will not directly or indirectly cause additional erosion. Because the improved stoves would reduce	Not required

	aquatic connectivity or water scarcity? b. Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion?		the consumption of wood fuel, which would reduce cutting trees and save the forest, so that the natural water could be conserved by the forest coverage.	
3 Environment, ecology and land use	a. Does the Project involve the use of land and soil for production of crops or other products? b. Will the Project be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions? c. Could the Project be negatively impacted by the use of genetically modified	Yes	a. The project does not involve the use of land and soil for production of crops, but the project involves the use of soil for extracting clay to produce the improved stoves. b. The project will not be susceptible to or lead to extreme climatic conditions. c. The project does not use GMOs. d. The project does not release pollutants to the environment.	Not required

	organisms or GMOs? d. Could the Project potentially result in the release of pollutants to the environment? e. Will the Project involve the manufacture, trade, release, and/or use of hazardous and non-hazardous chemicals and/or materials? f. Will the Project involve the application of pesticides and/or fertilisers? g. Will the Project involve the harvesting of forests? h. Does the Project modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?		e. The project does not involve the manufacture, trade, release, and/or use of hazardous and non-hazardous chemicals and/or materials. f. The project does not involve the application of pesticides and/or fertilisers. g. The project reduces the consumption of fuelwood such as firewood and charcoal, so the harvesting activities of forests for fuelwood would be reduced. h. The project doesn't modify the quantity or nutritional quality of food available, as the project does not involve any crop regime alteration or export or	

	i. Will the Project involve animal husbandry? j. Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified? k. Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)? l. Does the Project potentially impact other areas where endangered species may be present through transboundary affects?		economic incentives. i. The project doesn't involve animal husbandry. j. The project doesn't physically affect or alter largely intact or HCV ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified. k&l. The project is implemented inside the households, it doesn't involve any impact on endangered species identified as potentially being present within the project boundary.	

SECTION E. Local stakeholder consultation

E.1. Solicitation of comments from stakeholders

>> (Describe how stakeholder consultation was conducted in accordance with GS4GG Stakeholder Procedure Requirements and Guidelines.)

According to the GS4GG Stakeholder Procedure Requirements and Guidelines, Stakeholder Consultation process shall comprise of a minimum two rounds of consultation. The first round of Stakeholder Consultation shall include a physical meeting.

As per requirement, the Stakeholder Consultation process has been conducted during the period from May to July 2018. In May 2018, email invitation letter has been sent out to stakeholders from categories D, E and F and invited them to attend the stakeholder consultation meetings which would be held by the project owner in Malawi. Project documents such as the Key Project Information, the introduction of the continuous input & grievance mechanism, and the sustainable development assessment questionnaire have also been attached, so that stakeholders can learn about the project and provide their feedbacks or comments if they can't show up at the meeting. Project documents has also been public on project developer's website and stakeholders can also provide their feedbacks or comments through the webpage.

The project owner has also invited stakeholders from categories A, B and C to participate in the meetings through phone calls and verbal notifications during May and June 2018.

Four physical meetings have been organized by the project owner in July 2018:

Time	Location	Number of Stakeholder participated	Category of Stakeholders
July 12, 2018	Limbani Lodge, Mulanje, Malawi	19	18 from category A and 1 from category C
July 13, 2018	Limbani Lodge, Mulanje, Malawi	19	17 from category A and 2 from category B
July 18, 2018	Limbani Lodge, Mulanje, Malawi	20	20 from category B
July 26, 2018	G1Z Hall, Mulanje, Malawi	37	37 from category C

In the opening of each meeting, the project owner explained the goal of the meeting and introduced the project by using the key project information; then stakeholders can ask questions and project owner can make further clarification so that stakeholders can further understand he project. Then, the 'Input & Grievance Mechanism' form and the 'Sustainable Development Assessment 'questionnaires were distributed to each participant, with the Input & Grievance Mechanism being introduced firstly and with the questions of social and environmental impacts being illustrated subsequently, and participants were asked to respond to all questions from the form and the questionnaire. Finally the project owner invited the stakeholders to fill out the 'Stakeholder Consultation Meeting Evaluation Form'. After the meeting, forms and questionnaires have been collected, with the most responses indicating that the project would have positive impacts on environment and society.

E.2. Summary of comments received

>> (Provide a summary of key comments received during the consultation process.)

All stakeholders participating in the meetings are like the project and think the meetings are very good, inspiring, educative and impressive.

Stakeholders think the project will reduce the amount of money spent on fuel and the savings can be spent on food, cloths, medical bills and school fees; the project can also reduce the time of women and girls for firewood collection so that the saved time can be put into productive and income generating activities as well as allowing them to participate in public life. Improved stoves are also good for health as the hazardous air inhalation is reduced due to the use of improved stoves. Stakeholders consider that the project would empower women as the stove producer groups are mainly composed of women, and leaders of the groups are elected amongst themselves, so that the project gives women and girls a platform to make decisions and manage stove relevant affairs. Moreover, local people getting involved in the activities of improved stove production and distribution can also earn extra income to improve their financial situation of their families. Besides, stakeholders thinks it is very good that the project will save the forest by reduced cutting trees for wood energy, so that the natural water can be conserved through forest coverage.

E.3. Report on consideration of comments received

>> (Describe how the comments have been addressed by providing a clarification to the stakeholder or by altering the design of the project or by proposing to monitor any anticipated negative impacts etc.)

Stakeholder comment	Was comment taken into account (Yes/No)?	Explanation (Why? How?)
The price of the improved stoves is still low, which is not adequate to benefit the producers.	Yes	With the support of carbon finance from the project, the project owner (the local NGO) could provide technical trainings on improve stove production technics so that stove producers can produce the improved stoves in good quality, which have stable high thermal efficiency and can last longer, which will lead to high reputation and returned customers; moreover the NGO provides supports for stoves marketing activities such as organising sales promotion events in different communities, and also helps to transport the stoves to other areas for sales, so that more people will know the stove and the sales volume would be greatly

		increased, so that the producers can gain more income and benefit from the small profits but large volume.
It takes long before cookstoves are sold out	Yes	With the carbon revenue generated from the project, the project owner (the local NGO) can: i) organize many trainings to make sure that the stove producer groups make stoves of good quality; ii) provide supports for marketing activities so that the improved stoves can be known by more people; iii) and provide supports for transporting the stoves so that the improved stoves can be sold in more regions to more people. Therefore, the cookstoves can be sold out much more fast.
Minimum supervisory visits from the office	Yes	Under the current carbon project development process, many site visits and field surveys will be conducted by third party entities. Door-to-door interviews will be needed to collect data and information from households, so that the data of stove and fuel usage pattern and feedbacks regarding the stove usage relevant issues can be collected and monitored.

Appendix 1. Contact information of project participants

Organization name	Mulanje Mountain Conservation Trust
Registration number with relevant authority	
Street/P.O. Box	Main Road, Mulanje Boma, PO Box 139
Building	
City	Mulanje
State/Region	Mulanje District
Postcode	
Country	Malawi
Telephone	+ 265 1 466 282 / 179
Fax	
E-mail	
Website	
Contact person	Arnold Kadziponye
Title	Project Coordinator
Salutation	Mr.
Last name	Kadziponye
Middle name	
First name	Arnold
Department	
Mobile	
Direct fax	
Direct tel.	
Personal e-mail	Arnold@mountmulanje.org.mw

Organization name	Swiss Carbon Value Ltd.
Registration number with relevant authority	
Street/P.O. Box	Technoparkstr. 1
Building	
City	Zurich
State/Region	
Postcode	8005
Country	Switzerland
Telephone	+41 43 501 35 50
Fax	
E-mail	
Website	
Contact person	Jane Duan

Title	Managing Consultant
Salutation	Ms.
Last name	Duan
Middle name	
First name	Jane
Department	
Mobile	
Direct fax	
Direct tel.	
Personal e-mail	j.duan@southpole.com

Appendix 2. Summary of post registration design changes

Revision History

Version	Date	Remarks
1.1	24 August 2017	Updated to include section A.8 on 'gender sensitive' requirements
1	10 July 2017	Initial adoption