Gold Standard for the Global Goals

TEMPLATE

- Key Project Information & VPA Design Document (PDD)

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VERSION **v. 2.0**

RELATED SUPPORT - Programme of Activity requirements

This document contains the following Sections

KEY PROJECT INFORMATION

Type of VPA	☐ Real case VPA ☒ Regular VPA
Scale of VPA Note that a VPA can be of one scale. Please select applicable scale accordingly.	☐Microscale ☐Small scale ☒Large scale
Title of corresponding real case VPA (if applicable)	
GS ID of real case VPA (if applicable)	
GS ID of VPA	GS11551
Title of VPA	TASC Clean Cooking PoA – VPA 2 (Zimbabwe)
Time of First Submission Date	29/04/2022
Date of Design Certification	
Version number of the VPA-DD	1.4
Completion date of version	14/09/2022
Coordinating/managing entity	The African Stove Company Ltd. (TASC)
VPA Implementer (s)	MyTrees Trust
Project Participants and any communities involved	The African Stove Company Ltd. (TASC) Cicada Carbon Ltd. (Cicada)
Host Country (ies)	Zimbabwe
GS ID and Title of applicable Design Certified VPA	N/A
GS ID and Title of applicable Performance Certified VPA	
Activity Requirements applied	☒ Community Services Activities ☐ Renewable Energy Activities ☐ Land Use and Forestry Activities/Risks & Capacities ☐ N/A
Other Requirements applied	
Methodology (ies) applied and version number	Technologies and Practices to Displace Decentralized Thermal

	Energy Consumption (TPDDTEC), version 3.1
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
VPA Cycle:	☐ Regular ☒ Retroactive

Land-use & Forest and Agriculture - Key Project Information[1]

N/A

Table 1 – Estimated Sustainable Development Contributions

Sustainable Development Goals Targeted	SDG Impact (defined in B.6.)	Estimated Annual Average	Units or Products
1 No Poverty	Installation of ICS Financial Savings	25,000 282	ICS USD/Local Currency
3 Good Health and Well-Being	Households reporting reduction in smoke/ PM emissions while cooking on project ICS	100%	Households
5 Gender Equality	Female households reporting time saving from fuel collection & cooking time	100%	Households
7 Affordable and Clean Energy	ICS installed that are in operation	25,000	ICS
8 Decent Work and Economic Growth	Number of person (male and female) hired under Project	29	Contracted Staff
12 Responsible Consumption and Production	Reduced deforestation attributed to wood fuel savings on project ICS	4.79	Tonnes per stove per annum
13 Climate Action	Average annual reduction of CO2 emissions	230,988	tCO_2e

[1] Please refer to Appendix 3 for detailed information on LUF projects

SECTION A. DESCRIPTION OF PROJECT

A.1. Purpose and general description of project

The goal of the proposed project is to distribute improved cookstoves (ICS) to households in Zimbabwe.

The African Stove Company Ltd. (TASC)[2] is the coordinating/managing entity (CME) of the PoA, Cicada Carbon Ltd. (Cicada) is a Project Participant and the MyTrees Trust (MyTrees) is the Implementer of the VPA (VPAI).

TASC's mission is financing and developing high-impact climate mitigation projects.

Cicada is a Mauritian registered company whose principle objective is to generate carbon credits and revenue from carbon sequestration projects and associated activities that are accredited carbon credit projects.

MyTrees is a Zimbabwean non-profit organisation whose principle activity is reforestation in protected areas as well as other conservation field work.

The VPA is retroactive in nature, as the first ICS was distributed in Zimbabwe on the 23/09/2021 and the stakeholder consultation has not been carried out thus far due to Covid 19. As the GS COVID-19 interim guidance expired at the end of June 2022, the LSC and SFR will be conducted during the first monitoring period.

1. The location of the project activity:

The VPA is implemented in rural and peri-urban communities in Zimbabwe where woodfuel is the primary source of energy for cooking and open, 3-stone fires are commonplace.

[2] https://tasc.je/

The Project Implementer will capture data from each household about the baseline appliance and fuel source that is being used, to ensure that households using woodfuel on open fires are targeted by the VPA.

2. The technologies/measures to be employed and/or implemented by the project activity:

The project ICS combust biomass fuels more efficiently, reducing the greenhouse gas (GHG) emissions and particulate emissions (PM), thus improving the indoor air quality in project households. Due to the higher thermal efficiency of the ICS relative to the 3-stone fires, the ICS reduce the amount of non-renewable biomass (NRB) fuel required for meeting similar thermal energy needs.

The ICS will be distributed by MyTrees in rural or peri-urban Zimbabwe to individual households, which have been identified as using wood fuel on open fires for day-to-day cooking purposes. Sensitization meetings will inform communities of the project, the technology and the agreement between the end users and the Project Participants. MyTrees will manage the logistics of the ICS distribution process and collect all the required data from ICS end users via a bespoke app that connects automatically to the project monitoring database.

3. The project boundary

Zimbabwe

4. The baseline scenario

In the absence of the proposed VPA, inefficient 3-stone fires are used for cooking and their replacement with project ICS reduces non-renewable biomass fuel consumption, saving greenhouse gas emissions.

At the time of VPA inclusion, there are 25,000 ICS planned for distribution under the VPA, 16,821 of which have been distributed and logged in the monitoring database at the time of the writing this VPA-DD.

A.1.1. Eligibility of the VPA under approved PoA

Table 2 Eligibility for VPA inclusion as per PoA requirements

No.	Eligibility Criterion	Description/ Required condition	Means of Verification/ Supporting evidence for VPA inclusion
1	Geographic Boundary and target area	Each VPA shall involve installation of ICS within the geographical boundary of PoA.	Monitoring database, listing the location of ICS distributed under the VPA and GPS location (where possible) of each End User household
2	Double Counting	Each VPA shall be added to the monitoring database with a unique set of distribution data.	All ICS distributed in the VPA shall have: • a unique ID serial number • a GPS tag (if possible) • End user data (name/address/physical location/phone number/govt. ID number - where possible) • Records of baseline stove type and fuel type used This data uniquely identifies each ICS, avoiding any double counting and trace its user for future monitoring and verification. Duplicate End User data will be identified in the monitoring database and resolved by the VPA Implementer. This distribution data will be held securely in the monitoring database.
3	Exclusiveness of VPA	The VPA was not previously registered as a project activity or included as a VPA in any other registered PoA or deregistered as a VPA of a PoA.	Confirmation by CME
4	Specifications of Technology/ Measure	1. **Type -** The VPA will promote dissemination of improved biomass ICS in PoA. 2. **Capacity -** The rated annual thermal energy savings of ICS included under the VPAs shall not be more than 1.8GWhth.	Technical details of the ICS (including thermal efficiency and energy/power rating) will be provided in the baseline emissions calculations of the specific VPA.

			As specific VPAs may have ongoing distribution of ICS, and new stove models may be introduced during the crediting period of the VPA, this may be checked at the time of subsequent verification.
5	Start Date	Date on which first ICS was installed under the VPA. The start date of any proposed VPA will be on or after the start date of the PoA	23/09/2021 The date of the End User Agreement for the first ICS distributed in the VPA, as entered in the Monitoring Database (see Section C.1).
6	Applicability of the methodologies	VPA must follow TPDDTEC version 3.1. The applicability criteria of the methodology are listed in section B.2 of the PoA-DD. Technology related requirements stipulated by the methodology have been specified in criteria #4 above.	Applicability of the methodology is described in Section B of the VPA-DD.
7	Additionality	VPAs will apply the Positive List justifications (see Section C of PoA-DD): 1. ICS shall be distributed to households 2. The annual thermal energy savings of ICS included under the VPAs shall not be more than 1.8GWh$_{th}$	ICS shall be distributed to households substantiated via the monitoring database. The energy savings will be provided in the VPA-DD
8	Official Development Assistance (ODA)	Affirmation that funding from Annex I Parties, if any, does not result in a diversion of ODA	A Declaration from CME and VPA Implementer will be made that no funds for official development assistance will be used for program implementation
9	Target Group and Distribution Mechanism	Target Group: Households Distribution Mechanism: Via VPAI / local partners	The ICS by virtue of their size, output and design are usable only in households. The monitoring database will confirm distribution to households. A bespoke distribution mechanism is defined in Section A1 of this VPA-DD.

10	Sampling	VPAs under the program will adhere to all sampling requirements in TPDDTEC, version 3.1	The VPA will follow monitoring plan in line with the requirements of the TPDDTEC methodology. The monitoring and sampling plan is described in section B.7. of the VPA-DD.
11	SSC Threshold	Not applicable as per section B.1 below	N/A
12	Eligibility of Technologies	As per TPDDTEC, version 3.1: "Examples of these technologies include the introduction of improved biomass or fossil fuel cookstoves, ovens, dryers, space and water heaters (solar and otherwise), heat retention cookers, solar cookers, bio-digesters, safe water supply and treatment technologies that displace the boiling of water, thermal insulation in cold climates, etc."	The VPA has included improved biomass cookstoves as defined by being >20% thermal efficiency in the manufacturer's specifications
13	Conditions to be met by each VPA regarding SDG outcomes assessment	N/A As SDG assessment is done at VPA level	The VPA has included the SDG outcomes in the monitoring parameters and report on these in each monitoring report. The SDG outcome assessment is done at VPA level.
14	Conditions to be met by each VPA regarding safeguarding principles	Safeguarding Principles, and the methods of monitoring these principles, are defined in the PoA-DD Section E	The VPA has included the Safeguarding Principles in the monitoring parameters and report on these in each monitoring report. The safeguards assessment is done at the VPA level.
15	Conditions to be met for retroactive VPAs	Retroactive projects shall submit for Preliminary Review within one year of the project start date.	The start date of the project was 23/09/2021 and the VPA-DD was submitted for Preliminary Review on 20/04/2022. This is within 1 year of the project start date.
16	Conditions to be met for CER Labelling	N/A	N/A
17	Conditions to be met in multi-country PoAs	Conditions that might apply for a single country PoA will apply to each country that is	The VPA applied the applicability and eligibility criteria to the project boundary of Zimbabwe,

	included in the PoA including which is a host country included in *inter alia* baseline parameter the PoA-DD. assessments, LSC etc.

A.1.2. Legal ownership of products generated by the VPA and legal rights to alter use of resources required to service the project

The legal ownership of products generated by the VPA are retained by the Project Participants. This is confirmed via each end user signing a confirmation that they have understood the 'End User Agreement' at the point of distribution. This agreement confirms that the legal ownership of the products resides with the Project Participants. The ICS manufacturer has also provided a letter confirming that they do not claim any rights to the emissions reductions.

The End User Agreement is provided by the CME as a written statement on project documentation provided to beneficiaries in their local language.

The signed confirmation that this has been understood and agreed to is collected via the monitoring app at the point of distribution.

A.2. Location of VPA

The project is located in Zimbabwe:

Zimbabwe map and provinces

The VPA is implemented across Zimbabwe and not limited to any specific provinces. The GPS coordinates of Zimbabwe are 19.0154° S, 29.1549° E

A.3. Technologies and/or measures

The VPA will implement ICS technologies which are based on the principle of improving heat transfer from combustion chamber to the cooking pot, saving cooking fuel and time.

The ICS design optimizes the combustion chamber shape, fuel amount, and air flow through the stove. To maximize thermal energy, the thermal mass of the ICS is reduced minimizing heat loss through the sides and bottom of the stove and the cooking surface is positioned at the optimal distance from the fire. This is essential to establishing a correct gas flow path needed for efficient heat transfer.

Wood fuel models may have a grate provided at the base of the stove for placing wood fuel on. The clearance between the grate and the floor provides for natural draft of air into the combustion chamber resulting in improved combustion as compared to traditional cook stoves where such natural draft is absent resulting in incomplete combustion of fuel. The combustion chamber may also have a refractory lining that reduces heat loss from the walls of the stove.

The stoves distributed under this VPA shall have a thermal efficiency of at least 20%.

As an example, this VPA has commenced the distribution of the Kuniokoa wood fuel cookstoves manufactured by Burn Manufacturing LLC. This cookstove delivers a thermal efficiency of 41.6% according to an independent lab report from the Kenya Industrial Research and Development Institute (KIRDI) of 19th November 2017.

Burn Kuniokoa model cookstove

Sustainable Development Goals Targeted	How the project contributes to the identified SDG
13 Climate Action (mandatory)	ICS emissions are lower than those of the baseline appliance thereby reducing CO_2 emissions
1 No Poverty	The ICS provide improved access to basic services; i.e. a more efficient and less polluting form of cooking, thus money savings from a reduction in fuel costs
3 Good Health and Wellbeing	The ICS result in lower emissions of indoor air pollutants (CO/PM2.5), which cause respiratory diseases, therefore improving the health of the end-users
5 Gender Equality	ICS use reduces time required for fuel collection and cooking, predominantly for women, freeing up time for them to utilize.
7 Affordable and Clean Energy	Providing access to affordable (stove is free of cost) and cleaner technology for cooking
8 Decent Work and Economic Growth	Local employment is generated in logistics, ICS distribution, monitoring and project management
12 Responsible Consumption and Production	Biomass fuel savings are generated via ICS use

A.4. Scale of the VPA

The VPA is a large scale VPA.

A.5. Funding sources of VPA

The project is funded from private sources.

No public funding from any Annex 1 party is involved.

SECTION B. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS

B.1. Reference of approved methodology (ies)

Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC), version 3.1

B.2. Applicability of methodology (ies)

Applied methodology: Technologies and Practices to Displace Decentralized Thermal Energy Consumption, version 3.1, August 2017

Applicability Criteria	**Justification**
This methodology is applicable to programmes or activities introducing technologies and/or practices that reduce or displace greenhouse gas (GHG) emissions from the thermal energy consumption of households and non-domestic premises. Examples of these technologies include the introduction of improved biomass or fossil fuel cookstoves.	The VPA involves distribution of fuel-efficient improved biomass cookstoves ("ICS") to households in Zimbabwe.
The project boundary needs to be clearly identified, and the technologies counted in the project are not included in any other voluntary market or CDM project activity (i.e., no double counting takes place). In some cases, there may be another similar activity within the same target area. Project proponents must therefore have a survey mechanism in place together with appropriate mitigation measures so as to prevent any possibility of double counting.	Section A.1.1 Eligibility Criteria 1 and 2 outline the VPA's compliance with this applicability criteria.
The technologies each have continuous useful energy outputs of less than 150kW per unit (defined as the total useful energy delivered from start to end of operation of a unit divided by time of operation). For technologies or practices that do not deliver thermal	Section A.1.1 Eligibility Criteria 7 confirms distributed ICS capacity is limited to 1.8 GWh_{th} energy

energy in the project scenario but only displace thermal energy supplied in the baseline scenario, the 150kW threshold applies to the displaced baseline technology.	savings per annum - less than 150kW equivalent.
Using the baseline technology as a backup or auxiliary technology in parallel with the improved technology introduced by the project activity is permitted as long as a mechanism is put into place to encourage the removal of the old technology (e.g. discounted price for the improved technology) and the definitive discontinuity of its use. The project documentation must provide a clear description of the approach chosen and the monitoring plan must allow for a good understanding of the extent to which the baseline technology is still in use after the introduction of the improved technology.	The VPA provides subsidized ICS technology that offers a 'step-change' in the efficiency of cooking in end user households. Training will be provided to end users at the point of distribution to encourage them to move away from their traditional inefficient appliances. Use of the baseline appliance will be monitored via the habit survey (parameter $U_{p,y}$) and any residual use will be captured in the kitchen performance tests (parameter $B_{p,y,i}$) which records all wood use. If the baseline appliance is still in use, higher wood usage will be recorded in the KPTs, resulting in lower ER's.
The project proponent must clearly communicate to all project participants the entity that is claiming ownership rights of and selling the emission reductions resulting from the project activity. For technology producers and the retailers of the improved technology or the renewable fuel in use,	The End User Agreement with transfer the rights of ownership of VERs from the ICS beneficiary to CME. The VPA Stove Manufacturer, Burn, has

this must be communicated by contract or clear written assertions in the transaction paperwork. If the claimants are not the project technology end users, the end users will need to be informed and notified that they cannot claim for emission reductions from the project.	provided a waiver letter to confirm that they have no claim over the ERs generated by the stoves. Any subsequent manufacturers will provide the same.
Project activities making use of a new biomass feedstock in the project situation (e.g., shift from non-renewable to green charcoal, plant oil or renewable biomass briquettes) must comply with relevant Gold Standard specific requirements for biomass related project activities, as defined in the latest version of the Gold Standard rules. If the biomass feedstock is sourced from a dedicated plantation, the criteria must apply to both plantations established for the project activity AND existing plantations that were established in the context of other activities but will supply biomass feedstock.	No new biomass feedstock usage is envisaged in the project activity.
Adequate evidence is supplied to demonstrate that indoor air pollution (IAP) levels are not worsened compared to the baseline, and greenhouse gases emitted by the project fuel/stove combination are estimated with adequate precision. The project fuel/stove combination may include instances in which the project stove is a baseline stove.	The test reports of one of the initial stove models to be distributed under the PoA, Burn Kuniokoa are provided, as per which the IAP parameters CO and PM2.5 are tested. The value of CO = 8.27 g/MJ and PM 2.5 = 275.5 mg/MJ. This is significantly less than 3-stone fires.
Records of renewable fuel sales may not be used as sole parameters for emission reduction calculation, but may be used as data informing the equations in section 2.0 of this methodology. These records need to be correlated to data on distribution and results of	Renewable fuels are not used in the project scenario. The fuel used in the project is non-renewable and is harvested by end-users.

field tests and surveys confirming (a) actual use of the renewable fuel and usage patterns (such as average fraction of non-renewable fuels used in mixed combustion or seasonal variation of fuel types), (b) GHG emissions, (c) evidence of CO levels not deteriorating (d) any further factors effecting emission reductions significantly.	Further, any renewable component is considered in the fNRB and ERs are discounted accordingly.

B.3. VPA boundary

Source		GHGs	Included?	Justification/Explanation
Baseline scenario	Combustion of woody biomass	CO_2	Yes	Important source of emissions
		CH_4	Yes	Important source of emissions
		N_2O	Yes	Important source of emissions
Project scenario	Combustion of woody biomass	CO_2	Yes	Important source of emissions
		CH_4	Yes	Important source of emissions
		N_2O	Yes	Important source of emissions

B.4. Establishment and description of baseline scenario

The use of three stone/open fires or conventional inefficient stoves for cooking by the project stove users is the applicable pre-project scenario. Traditional biomass remains the main energy source for cooking in rural areas and poor urban (peri-urban) clusters in Zimbabwe.

More than 700 million Africans (82%) use solid fuels, such as wood, charcoal, dung, crop waste, and coal, for their primary cooking needs. This high level of solid-fuel use, combined with household reliance on inefficient and unsafe traditional cookstoves, constitutes a first-order public health crisis: household air pollution (HAP) from solid-fuel cooking emissions kills nearly 600,000 Africans annually and is now recognized as the second-largest health risk factor in terms of death and disability in the region. Solid-fuel cooking in SSA accounts for up to 1% of global greenhouse gas emissions and 6% of global black carbon, an important additional driver of climate change because it both absorbs solar radiation in the atmosphere and deposits soot on snow

and ice surfaces. Solid-fuel cooking also imposes significant costs on African households and economies, with a mid-range estimated opportunity cost of 3% of regional annual gross domestic product (GDP)—including avoidable spending on solid fuels, time losses due to firewood collection, the economic costs of increased mortality and morbidity burdens, and the environmental and climate costs of deforestation and carbon dioxide emissions.[3]

Only 11% of Africans use "clean" cookstoves that run on modern fuels, such as liquefied petroleum gas (LPG) (5%) and electric stoves (6%), as their primary cooking appliances. Many of these households continue to use traditional biomass-burning stoves as their secondary cooking device due to the common phenomenon of fuel and stove "stacking" (simultaneous usage of multiple fuels and stove technologies). Kerosene, which is used by 7% of Africans, likely does not qualify as a clean cooking solution in many instances, given the increasing evidence of harm from typical kerosene stoves in Africa. Stoves that run on such renewable fuels as biogas, ethanol, and solar are uncommon (less than 1%), and the penetration of "advanced" biomass gasifier cookstoves (less than 0.1%) that can come near the International Organization for Standardization's (ISO's) Tier 4 emission performance is still at a pilot stage. A growing number of SSA households (about 3.5%) use intermediate improved cookstoves (ICS) (e.g., rocket stoves), which are substantially more fuel efficient but do not achieve the emission reductions needed to realize the full health and environmental benefits of clean cooking. Another 9–10% of SSA households have access to both basic ICS (less than 5%) and legacy cookstoves (less than 5%) that offer only moderate improvements in fuel efficiency and emissions over traditional cooking technologies. In aggregate, Africa has a significantly lower rate of access to clean and improved solutions (25%, excluding legacy stoves) than any other region globally.[4]

Baseline scenario for this VPA:

[3] https://openknowledge.worldbank.org/bitstream/handle/10986/22521/Clean0and0impr000a0landscape0report.pdf?sequence=1&isAllowed=y

[4] https://openknowledge.worldbank.org/bitstream/handle/10986/22521/Clean0and0impr000a0landscape0report.pdf?sequence=1&isAllowed=y

Zimbabwe's Inter-Censal Demographic Survey[5] indicates that overall 68% of the households in the country used wood as the main source of fuel for cooking, but that 92% percent of households in rural areas use wood for cooking. In urban areas most households use electricity and there is little use of charcoal.

Households collect as well as purchase solid fuel for their cooking energy requirement. Only 30% of population has access to clean cooking, meaning most households still cook their food on open 3-stone fires. This cooking method is inefficient and leads the unsustainable use of NRB resources in Zimbabwe.

Baseline establishment:

Step 1: Identify target population
The baseline for this VPA is established by identifying fuelwood use in Zimbabwe, which is the baseline fuel for all end users (the "target population") in the VPA. As per the methodology, the VPA is establishing one baseline scenario which "represent(s) rural end users predominantly using inefficient wood stoves", which may also include peri-urban areas where wood is used as the prevalent fuel source by households.

In line with the requirements of the methodology (page 8), as a first step the target population is identified i.e. peri-urban/rural households in Zimbabwe. The VPA will also focus distribution of ICS on households and communities that predominantly rely on woodfuel in Zimbabwe.

Step 2: In-person surveys
The methodology states: "the baseline survey requires in-person interviews with a robust sample of end users without project technologies that are representative of end users targeted in the project activity". For this VPA, baseline surveys have been completed in the target population.

[5] https://zimbabwe.unfpa.org/sites/default/files/pub-pdf/Inter%20Censal%20Demography%20Survey%202017%20Report.pdf

A random sample of non-project households was conducted in the project area, the sample size was established according to the TPDDTEC Version 3.1 document which states that for a group size > 1000 a minimum sample size of 100 is required. A sample of 127 baseline surveys were conducted across various regions within the geographical boundary of the project. Baseline surveys were then conducted on each sampled household between 01/02/2022 and 21/03/2022.

The baseline survey results showed that the average household consisted of 6.03 members and split up in the following age demographics:

- 2.4 Children under the age of 14;
- 1.5 Females older than 14;
- 1.5 males between ages 15 and 59;
- And 0.6 males 60 and over.

It was established from these surveys that all participants used wood as a fuel source with 100% of participants indicating as such. All the participants indicated that they make use of a traditional 3-stone fire for cooking.

Image of a traditional 3-stone fire captured during the baseline survey.

Using fires for other reasons than cooking is also common with 47% of participants indicating such use. Common other uses for the fires were boiling water and some users indicated using fires for space heating and tobacco burning/curing
Fires are predominantly made indoors (56%) compared to 39% of fires just being made outdoors. A further 5% of participants indicated that they make fires both indoors and outdoors. Even though most cooking takes place indoors, 99% of participants indicated that their kitchen is separate from the main house. Daily fires are common practice with 98% indicating such and only 2% stated use of several times a week. On average 2.4 fires are made per day by the households and 38% of households keep their fires burning throughout the day.

Wood is mostly collected by participants (84%) followed by both buying/collecting (14%) and only buying wood (2%). The average distance travelled to collect wood is 4.2 km per trip and the majority indicated that distance travelled has increased over the last year. For the participants buying wood, the average spend is 37.3 U.S. dollars per month, which was also indicated to have increased over the last year. Wood collection is mostly done by females (74%) and the average age of the collectors are 41 years old.

When asked if they are interested in receiving a new improved cookstove, all the participants indicated that they would like to receive one.

The VPAI will monitor via KPT the usage of fuelwood in general and account for any residual usage of fuelwood that is not utilized on the ICS, hence accounting for total fuelwood usage.

The VPAI also reviewed published data from reputable sources to establish an indicative level of baseline fuel use at the household level in the project area:

Data Label	Description	Data	Unit	Source	Year

A	Household fuelwood consumption	21,252,000	m^3	UN data	2019[6]
B	Density of fuelwood	0.725	t/m^3	FAO	2017[7]
C	Household fuelwood consumption	15,407,700	t	calculated (AxB)	
D	Population of Zimbabwe	15,092,171		World Bank	2021[8]
E	% using wood fuel	68%		UNFPA/ZimStat	2015[9]
F	Population using wood	10,262,676		calculated (DxE)	
G	Average annual consumption per capita	1.50	t	calculated (C/F)	
H	Average household size in Zimbabwe	4.2		UN data	2017[10]
	$B_{b,y}$	6.31	t	calculated (GxH)	

To establish the quantum of baseline fuel usage for the VPA, baseline KPTs will be conducted during the first monitoring period and reported in the first monitoring report for VVB verification.

B.5. Demonstration of additionality

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).	According to GS4GG Community Services Activity Requirements version 1.2, Para 4.1.9: *Projects that meet any of the following criteria are considered as deemed additional and therefore are not required to prove*

[6] http://data.un.org/Data.aspx?d=EDATA&f=cmID%3aFW%3btrID%3a1231#f_1

[7] http://www.fao.org/3/a-i6935e.pdf

[8] https://data.worldbank.org/country/zimbabwe

[9] https://zimbabwe.unfpa.org/sites/default/files/pub-pdf/Inter%20Censal%20Demography%20Survey%202017%20Report.pdf

[10] https://zimbabwe.unfpa.org/sites/default/files/pub-pdf/Inter%20Censal%20Demography%20Survey%202017%20Report.pdf

	Financial Additionality at the time of design certification: *(a) Positive list (Annex B of this document)* *(b) Projects located in LDC, SIDS, LLDC* *(c) Microscale projects*
Describe how the proposed project meets the criteria for deemed additionality.	The VPA meet the Positive List criteria of: *Project activities solely composed of isolated units where the users of the technology/ measure are households or communities or institutions and where each unit results in <= 600 MWh of energy savings per year or <=600 tonnes of emission reductions per year* Each unit included in the VPA will result in approximately 19.96MWh energy savings (calculation in the ER calculation sheet) and is therefore deemed additional.

The VPA meets the requirements of the Community Services Activity Requirements, as follows –

No.	Community Services Activity Requirements	Justification
1	Para 3.1.1: All CSA Projects shall lead to climate change mitigation and/or adaptation by providing or improving access to services/resources at the household or community or institution level. Eligible services include electricity and energy, water and sanitation, waste management, housing, etc.	This VPA includes distribution of efficient improved cookstoves (ICS) reducing greenhouse gas (GHG) emissions from thermal energy consumption due to burning of non-renewable woody biomass for cooking in Zimbabwe for residential users. Therefore, the project falls under Type b (End-use energy efficiency) of Pre-identified CSA project types.
2	Para 3.1.2: Project Area and Boundary shall be defined in line with the applicable Impact Quantification Methodologies and Product Requirements	The geographical project boundary of this VPA is defined as the country of Zimbabwe (also detailed in Section A.2 of this document).
3	Para 3.1.3: Certain Impact Quantification methodologies allow projects to account Suppressed Demand scenario when establishing a baseline. In such cases, the application of Suppressed Demand	This VPA does not apply suppressed demand scenario.

	baseline is limited to Small Scale and Microscale Projects.	
4	Para 3.1.4: Projects involving the distribution of a large number of devices for services such as heating, cooking, lighting, electricity generation, water treatment technology such as water filter, etc. shall provide a clear description of the ownership of the Products that are generated under Gold Standard Certification all along the investment chain. In line with the FPIC requirement, the proofs that end-users are aware of and willing to give up their rights on Products shall be provided. The transfer of Product ownership shall be discussed during local stakeholder consultations for projects.	The Project Participants retain the ownership rights to the carbon credits from this VPA. This is communicated clearly to end users though the community sensitization process and documented clearly through an End User Agreement signed by the ICS recipients.

B.5.1. Prior Consideration

The project start date is the date when the first ICS was distributed under the VPA: 23rd September 2021 (see Section C.1).

B.5.2. Ongoing Financial Need

Not relevant as OFN is required only at time of renewal of crediting period.

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the three SDGs

Sustainable Development Goals Targeted	Most relevant SDG Target	SDG Impact Indicator (Proposed or SDG Indicator)
SDG 1: No Poverty	1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural	Via distribution of ICS, the VPA avoids cooking on traditional stoves. This results in increased access to basic services (efficient cooking), new technology (improved stoves) and reduces poverty by reducing purchased fuel

	resources, appropriate new technology and financial services, including microfinance	consumption, or time taken to collect fuel. 1.4.1 Proportion of population living in households with access to basic services
SDG 3: Good Health and Well Being	3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.	Via distribution of ICS, the PoA results in reduction in exposure to indoor air pollutants associated with biomass fuel based traditional cooking. 3.9.1 Mortality rate attributed to household and ambient air pollution
SDG 5: Gender Equality	5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	In the poorest communities, the burden of collecting and/or purchasing fuel for cooking often falls on women and children. By reducing fuel collection and cooking time, the PoA provides women in project households with more time to invest in other productive economic development activities. 5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age and location
SDG 7: Affordable and Clean Energy	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	The PoA involves dissemination of efficient, modern technology for cooking and helps in using

		available energy sources more efficiently. 7.1.2 Proportion of population with primary reliance on clean fuels and technology
SDG 8: Decent Work and Economic Growth	8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	The PoA will generate employment in the Host Country in distribution, logistics, management and monitoring activities. 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities
SDG 12: Responsible Consumption and Production	12.2 By 2030, achieve the sustainable management and efficient use of natural resources	Via distribution of ICS, the PoA will reduce the consumption of non-renewable biomass in participant households by as much as 50%, depending on stove model. 12.2.2 – Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP
SDG 13: Climate Action	13.2 Integrate climate change measures into national policies, strategies and planning	The PoA contributes towards avoidance of GHG emissions by reducing the use of non-renewable biomass in cooking. Amount of CO_2e emissions reduced by the project per year.

B.6.1. Explanation of methodological choices/approaches for estimating the SDG Impact

SDG 1: No Poverty

Applied methodology/approach	Equation/calculation
1.4.1 Proportion of population living in households with access to basic services Approach: 1. Monitor the number of ICS distributed under the project as an indicator of providing access to basic services for households 2. Monitor the money savings due to reduced fuel consumption from using ICS	1. ICS distribution records: Net Benefit (SDG 1) = $BSA_{Project} - BSA_{Baseline}$ Where: $BSA_{Baseline}$ Number of ICS distributed in baseline = 0 $BSA_{Project}$ Number of ICS distributed in Project = 25,000 2. Ex-post Monitoring Survey Records measuring money savings due to reduced fuel consumption in households (HHS): Net Benefit (SDG 1) = $HHS_{Project} - HHS_{Baseline}$ Where: $HHS_{Baseline}$ HHS reporting money saving due to reduced fuel consumption in baseline = 0 $HHS_{Project}$ HHS reporting money saving due to reduced fuel consumption in project = 100%

SDG 3: Good Health and Well Being

Applied methodology/approach	Equation/calculation
3.9.1Mortality rate attributed to household and ambient air pollution Approach:	Ex-post Monitoring Surveys to check change in health issues like reduction in smoke levels or particulate matter etc. Net Benefit (SDG 3) =

Monitoring Surveys conducted to capture information on users' perception on reduction in health issues after shifting to project ICS	$SPM_{HH,Project}$ – $SPM_{HH,Baseline}$ Where: $SPM_{HH,Baseline}$ % HH reporting reduction in smoke/PM emissions while cooking on improved stove in baseline = 0 $SPM_{HH,Project}$ % HH reporting reduction in smoke/PM emissions while cooking on improved stove in project = 100%

SDG 5: Gender Equality

Applied methodology/approach	**Equation/calculation**
5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age and location Approach: Monitoring Surveys conducted to capture information on time savings due to reduced fuel collection needs after shifting to project ICS	Ex-post Monitoring Survey Records measuring time savings from reduced fuel collection or cooking time with ICS use Net Benefit (SDG 5) = $HHTS_{Project}$ – $HHTS_{Baseline}$ Where: $HHTS_{Baseline}$ % HH reporting time saving from fuel collection due to reduced fuel consumption in baseline = 0 $HHTS_{Project}$ % HH reporting time saving from fuel collection due to reduced fuel consumption in project = 100%

SDG 7: Affordable and Clean Energy

Applied methodology/approach	**Equation/calculation**
7.1.2 Proportion of population with primary reliance on clean fuels and technology Approach:	ICS distribution records Net Benefit (SDG 7) = $ACS_{Project}$ - $ACS_{Baseline}$ Where:

Monitor the number of ICS distributed under the project as an indicator of providing clean technology (relative to baseline stoves).	$ACS_{Baseline}$	Access to affordable and clean energy (Number of operating ICS units under Baseline) = 0
	$ACS_{Project}$	Access to affordable and clean energy (Number of operating ICS units under Project) = 25,000

SDG 8: Decent Work and Economic Growth

Applied methodology/approach	**Equation/calculation**	
8.5.1Average hourly earnings of female and male employees, by occupation, age and persons with disabilities Approach: Recording the number of contracted employees (male / female) in the project under administrative, sales, production and management positions	Employment records Net Benefit (SDG 8) = $QE\ IG_{Project}$ - $QE\ IG_{Baseline}$ Where:	
	$QE\ IG_{Baseline}$	Quantitative Employment and income generation (Number of person (male and female) hired under Baseline) = 0
	$QE\ IG_{Project}$	Quantitative Employment and income generation (Number of person (male and female) hired under Project) =29

SDG 12: Responsible Consumption and Production

Applied methodology/approach	**Equation/calculation**
Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with the obligations under the international agreements Approach:	Refer SDG 13 for determination of fuel savings due to project activity

Reduction in domestic fuel consumption after shifting to ICS	

SDG 13: Climate Action

Applied methodology/approach	**Equation/calculation**
13.2.1 Amount of CO_2e emissions reduced by the project per year Approach: TPDDTEC, version 3.1	Baseline emissions are calculated as follows: BEb,y = Bb,y * ((*f*NRB, y * EFb,fuel, CO2) + EFb,fuel, nonCO2) * NCV b, fuel Where: – Bb,y = Quantity of fuel consumed in baseline scenario b during year y, in tons, calculated as 7.02t in Zimbabwe[11] to be confirmed by baseline KPTs in first monitoring report – *f*NRB,y = A fixed non-renewable biomass fraction value has been calculated as 0.89 for Zimbabwe[12] – NCV b, fuel = Net calorific value of the fuel that is substituted or reduced (IPCC default value for Wood/Wood Waste) – EFb,fuel,CO2 = CO2 emission factor of the fuel that is substituted or reduced. (IPCC default value for Wood/Wood Waste) – EFb,fuel,nonCO2 = Non-CO2 emission factor of the fuel that is substituted or reduced. (IPCC default value for Wood/Wood Waste) Project non-renewable biomass assessment may be deemed same as baseline, albeit should be updated for project fuel mix. Project fuel consumption will be established via project field test KPTs and will be conducted at-least biennially. The project field test KPTs will be determined using either paired / independent or single sample tests. 90/30 rule for sample size determination will be applied in case of paired or independent sampling. 90/10 rule will be applied in case of single sampling. In case desired

[11] See Section B.4

[12] See C4 EcoSolutions report

	precision is not achieved, lower bound value of the 90% confidence interval should be applied. GHG reductions achieved by the VPA will be calculated as follows: $ER_y = \sum BE_{b,y} - \sum PE_{p,y} - \sum LE_{p,y}$ Where: ER_y Emission reduction for total project activity in year y (tCO_2e/yr) $BE_{b,y}$ Baseline emissions for baseline scenario b in year y (tCO_2e/yr) $PE_{p,y}$ Project emissions for project scenario p in year y (tCO_2e/yr) $LE_{p,y}$ Leakage for project scenario p in year y (tCO_2e/yr) As per the methodology the governing equation for the emission reduction calculations is as follows[13] with ($\sum BE_{b,y} - \sum PE_{p,y}$) is directly merged in to the following equation: $ER_y = \sum_{b,p} N_{p,y} * U_{p,y} * (ER_{b,p,y,CO2} + ER_{b,p,y,nonCO2})) - \sum LE_{p,y}$ Where: $N_{p,y}$ Cumulative number of project technology-days included in the Monitoring Database for project scenario p against baseline scenario b in year y $U_{p,y}$ Cumulative usage rate for technologies in project scenario p in year y, based on cumulative adoption rate and drop off rate revealed by usage surveys (fraction). A separate usage factor is determined for each technology in the project.

[13] Although the project does not envisage a fuel type shift from baseline to project scenario however, there is a possibility of a change in the fuel mix ratio over the years, hence the ERs are being determined based on equation (2) of the methodology, page 20.

	$ER_{b,p,y,CO2}$	Specific CO_2 emission savings for an individual technology of Project pagainst an individual technology of Baseline b in year y, in tCO_2/day as derived from the statistical analysis of the data collected from the field tests
	$ER_{b,p,y,nonCO2}$	Specific non-CO_2 emission savings for an individual technology of Project pagainst an individual technology of Baseline b in year y, in tCO_2/day as derived from the statistical analysis of the data collected from the field tests
	$LE_{p,y}$ (tCO_2e/yr)	Leakage for project scenario p in year y
	$ER_{b,p,y,CO2} = \sum_i \{ f_{NRB,b,i,y} * B_{b,y,i} * NCV_{b,i} * EF_{b,i,CO2} \} - \sum_i \{ f_{NRB,b,i,y} * B_{p,y,i} * NCV_{p,i} * EF_{p,i,CO2} \}$	
	Where:	
	$f_{NRB,b,i,y}$	Fraction of woody biomass used in year y for fuel type *i* that can be established as non-renewable biomass (NRB) (drop this term from the equation when using a fossil fuel baseline scenario)
	$B_{b,y,i}$	Fuel consumption for fuel type *i* used in baseline b in year y, in tonnes/day, as derived from the default factor for the quantity of fuel consumed in baseline scenario ($B_{b,y}$)
	$B_{p,y,i}$	Fuel consumption for fuel type *i* used in project *p* in year y, in tonnes/day, as derived from the statistical analysis of the data collected from the field tests
	$NCV_{b,i}$	Net calorific value of the fuel type i used in baseline b (TJ/tonnes)
	$NCV_{p,i}$	Net calorific value of the fuel type *i* used in project p (TJ/tonnes)
	$EF_{b,i,CO2}$	CO_2 emission factor of the fuel type *i* used in the baseline (tCO_2/TJ)
	$EF_{p,i,CO2}$	CO_2 emission factor of the fuel type *i* used in the project (tCO_2/TJ)
	$ER_{b,p,y,nonCO2} = \sum_i \{ B_{b,y,i} * NCV_{b,i} * EF_{b,i,nonCO2} \} - \sum_i \{ B_{p,y,i} * NCV_{p,i} * EF_{p,i,nonCO2} \}$	

	Where: $EF_{b,i,nonCO2}$ non-CO_2 emission factor of the fuel type *i* used in the baseline (tCO_2/TJ) $EF_{p,i,nonCO2}$ non-CO_2 emission factor of the fuel type *i* used in the project (tCO_2/TJ) Leakage, if applicable, will be assessed on the following points: a. The displaced baseline technologies are reused outside the project boundary in place of lower emitting technology or in a manner suggesting more usage than would have occurred in the absence of the project. b. The NRB or fossil fuels saved under the project activity are used by non-project users who previously used lower emitting energy sources. c. The project significantly impacts the NRB fraction within an area where other CDM or VER project activities account for NRB fraction in their baseline scenario. d. The project population compensates for loss of the space heating effect of inefficient technology by adopting some other form of heating or by retaining some use of inefficient technology. By virtue of promotion and marketing of a new technology with high efficiency, the project stimulates substitution within households who commonly used a technology with relatively lower emissions, in cases where such a trend is not eligible as an evolving baseline.

B.6.2. Data and parameters fixed ex ante

SDG13

Data/parameter	$B_{b,y}$
Unit	Tonnes per household per annum
Description	Quantity of fuel consumed in baseline scenario b during year y, in tonnes
Source of data	Ex-ante calculated estimation
Value(s) applied	6.31 tonnes
Choice of data or Measurement methods and procedures	See VPA-DD Section B.4
Purpose of data	Calculation of baseline scenario

Additional comment	This value will be confirmed via KPTs conducted during the first monitoring period and reported in the first monitoring report

SDG 13

Data/parameter	$EF_{b,i,CO2}$
Unit	tCO_2/t_{fuel}
Description	CO_2 emission factor arising from use of fuel type *i* in baseline scenario
Source of data	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 2: Stationary Combustion, Table 2.5 - Default emission factors for stationary combustion in the residential and agriculture/forestry/fishing/fishing farms categories
Value(s) applied	Fuelwood / wood chips: $1.68tCO_2/t_{fuel}$
Choice of data or Measurement methods and procedures	Mean value of the range of default IPCC values has been applied
Purpose of data	Calculation of baseline scenario
Additional comment	-

SDG 13

Data/parameter	$EF_{b,i,nonCO2}$
Unit	tCO_2/t_{fuel}
Description	Non-CO_2 emission factor arising from use of fuel type *i* in baseline scenario
Source of data	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 2: Stationary Combustion, Table 2.9 - Residential Source Emission Factors, The Gold Standard Simplified Methodology for Efficient Cookstoves, February 2013, ER_Calculation_Tool_Cookstove_Meth_V2.00Summary of the Methodology
Value(s) applied	Fuelwood / wood chips: 0.51 tCO_2/t_{fuel}
Choice of data or Measurement methods and procedures	Mean value of the range of default IPCC values has been applied
Purpose of data	Calculation of baseline scenario
Additional comment	-

SDG 13

Data/parameter	$EF_{p,i,CO2}$
Unit	tCO_2/t_{fuel}
Description	CO_2 emission factor arising from use of fuel type *i* in project scenario
Source of data	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 2: Stationary Combustion, Table 2.5 - Default emission factors for stationary combustion in the residential and agriculture/forestry/fishing/fishing farms categories
Value(s) applied	Fuelwood / wood chips: 1.68 tCO_2/t_{fuel}
Choice of data or Measurement methods and procedures	Mean value of the range of default IPCC values has been applied
Purpose of data	Calculation of baseline scenario
Additional comment	-

SDG 13

Data/parameter	$EF_{p,i,nonCO2}$
Unit	tCO_2/t_{fuel}
Description	Non-CO_2 emission factor arising from use of fuel type *i* used in project scenario
Source of data	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 2: Stationary Combustion, Table 2.9 - Residential Source Emission Factors., The Gold Standard Simplified Methodology for Efficient Cookstoves, February 2013, ER_Calculation_Tool_Cookstove_Meth_V2.00Summary of the Methodology
Value(s) applied	Fuelwood / wood chips: 0.51 tCO_2/t_{fuel}
Choice of data or Measurement methods and procedures	Mean value of the range of default IPCC values has been applied
Purpose of data	Calculation of baseline scenario
Additional comment	-

SDG 13

Data/parameter	$NCV_{b,i}$
Unit	TJ/tonne
Description	Net calorific value of the fuel type *i* used in the baseline
Source of data	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 1: Introduction, Table 1.2 - Default net calorific values
Value(s) applied	Fuelwood / wood chips: 0.015 TJ/tonnes
Choice of data or Measurement methods and procedures	Default IPCC values have been applied
Purpose of data	Calculation of baseline scenario
Additional comment	-

SDG 13

Data/parameter	$NCV_{p,i}$
Unit	TJ/tonne
Description	Net calorific value of the fuel type *i* used in the project scenario
Source of data	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 1: Introduction, Table 1.2 - Default net calorific values
Value(s) applied	Fuelwood / wood chips: 0.015 TJ/tonnes
Choice of data or Measurement methods and procedures	Default IPCC values have been applied.
Purpose of data	Calculation of baseline scenario
Additional comment	If EF is in units of tCO_2/t_{fuel}, remove NCV term from emission calculations.

SDG 13

Data/parameter	$f_{NRB,b,i,y}$
Unit	Fractional of non-renewable biomass used in the baseline
Description	Fraction of biomass used in year y for baseline scenario b that can be established as non-renewable biomass
Source of data	C4 EcoSolutions study dated: 25/03/2022
Value(s) applied	Fuelwood / wood chips / woody charcoal: 0.89

	Renewable solid biomass fuels (Crop residues / cow dung): 0.0000 Fossil fuels: 1
Choice of data or Measurement methods and procedures	N.A.
Purpose of data	Calculation of baseline scenario
Additional comment	Value once established in the first VPA of a country may be used for subsequent VPAs in that country

B.6.3. Ex ante estimation of SDG Impact

SDG 1: No Poverty

Net Benefit (SDG 1) = $BSA_{Project}$ – $BSA_{Baseline}$

= 25,000

Where:

$BSA_{Baseline}$ Number of ICS distributed in baseline = 0

$BSA_{Project}$ Number of ICS distributed in Project = 25,000

Net Benefit (SDG 1) = HHSProject – HHSBaseline

= 100%

Where:

$HHS_{Baseline}$ % HH reporting money saving due to reduced fuel consumption in baseline = 0

$HHS_{Project}$ % HH reporting money saving due to reduced fuel consumption in project = 100%

Net Benefit (SDG 1) = HHSProject – HHSBaseline

= 282

Where:

$HHS_{Baseline}$ Average monthly fuel cost baseline = 372

$HHS_{Project}$ Average monthly fuel cost in project = 90

SDG 3: Good Health and Well Being

Net Benefit (SDG 3) = $SPM_{HH,Project}$ – $SPM_{HH,Baseline}$
= 100%

Where:

$SPM_{HH,Baseline}$ % HH reporting reduction in smoke/PM emissions while cooking on improved stove in baseline = 0

$SPM_{HH,Project}$ % HH reporting reduction in smoke/PM emissions while cooking on improved stove in project = 100%

SDG 5: Gender Equality

Net Benefit (SDG 5) = $HHTS_{Project}$ – $HHTS_{Baseline}$
= 100%

Where:

$HHTS_{Baseline}$ % HH reporting time saving from fuel collection due to reduced fuel consumption in baseline
= 0

$HHTS_{Project}$ % HH reporting time saving from fuel collection due to reduced fuel consumption in project
= 100%

SDG 7: Affordable and Clean Energy

Net Benefit (SDG 7) = $ACS_{Project}$ - $ACS_{Baseline}$
= 25,000

Where:

$ACS_{Baseline}$ Access to affordable and clean energy (Number of operating ICS units under Baseline)
= 0

$ACS_{Project}$ Access to affordable and clean energy (Number of operating ICS units under Project)
= 25,000

SDG 8: Decent Work and Economic Growth

Net Benefit (SDG 8) = $QE\ IG_{Project}$ - $QE\ IG_{Baseline}$
= 29

Where:

$QE\ IG_{Baseline}$ Quantitative Employment and income generation (Number of person (male and female) hired under Baseline)
= 0

$QE\ IG_{Project}$ Quantitative Employment and income generation (Number of person (male and female) hired under Project)
= 29

SDG 12: Responsible Consumption and Production

Refer SDG 13 for determination of fuel saving while cooking on project ICS. Ex-ante estimated calculation = 4.79 tonnes per stove per annum

SDG 13: Climate Action

For a complete overview of the ex-ante and ex-post CO_2 equivalent emissions reductions calculations please refer to the VPA Emissions Reductions Calculation Sheet.

The overall GHG reductions achieved by the project activity will be calculated as follows:

$ER_y = \sum BE_{b,y} - \sum PE_{p,y} - \sum LE_{p,y}$

Where:

ER_y Emission reduction for total project activity in year y (tCO_2e/yr)
= 230,988 (average)

$BE_{b,y}$ Baseline emissions for baseline scenario b in year y (tCO_2e/yr)
= 233,321 (average)

$PE_{p,y}$ Project emissions for project scenario p in year y (tCO_2e/yr)
= 0

$LE_{p,y}$ Leakage for project scenario p in year y (tCO_2e/yr)
= 2,333(average)

As per the methodology the governing equation for the emission reduction calculations is as follows with ($\sum BE_{b,y} - \sum PE_{p,y}$) is directly merged in to the following equation.

$ER_y = \sum_{b,p} N_{p,y} * U_{p,y} * (ER_{b,p,y,CO2} + ER_{b,p,y,nonCO2})) - \sum LE_{p,y}$

Where:

$\sum_{b,p}$	Sum over all relevant (baseline b/project p) couples = 25,000 ICS
$N_{p,y}$	Cumulative number of project technology-days included in the sales/distribution database for project scenario p against baseline scenario b in year y = 25,000 * 365 = 9,125,000 days
$U_{p,y}$	Cumulative usage rate for technologies in project scenario p in year y, based on cumulative adoption rate and drop off rate revealed by usage surveys (fraction) = 90%
$ER_{b,p,y,CO2}$	Specific CO_2 emission savings for an individual technology of Project against an individual technology of Baseline b in year y, in tCO_2/day as derived from the statistical analysis of the data collected from the field tests = 7.16t per annum (see below) = 0.01962 tCO_2e/day
$ER_{b,p,y,nonCO2}$	Specific non-CO_2 emission savings for an individual technology of Project against an individual technology of Baseline b in year y, in tCO_2/day as derived from the statistical analysis of the data collected from the field tests = 2.17t per annum (see below) = 0.00595 tCO_2e/day
$LE_{p,y}$	Leakage for project scenario p in year y = 1% = 2,333tCO_2e/yr

$ER_{b,p,y,CO2} = \sum_i \{ f_{NRB,b,i,y} * B_{b,y,i} * NCV_{b,i} * EF_{b,i,CO2} \} - \sum_i \{ f_{NRB,b,i,y} * B_{p,y,i} * NCV_{p,i} * EF_{p,i,CO2} \}$

Where:

$f_{NRB,b,i,y}$	Fraction of woody biomass used in year y for fuel type *i* that can be established as non-renewable biomass (NRB)

= 0.89

$B_{b,y,i}$ Fuel consumption for fuel type *i* used in baseline b in year y in tonnes, as per the baseline default factors
= 6.31t

$B_{p,y,i}$ Fuel consumption for fuel type *i* used in project p in year y in tonnes, as derived from the statistical analysis of the data collected from the field tests
= 1.52t (*Estimated ex-ante from VPA1*)

$NCV_{b,i}$ Net calorific value of the fuel type *i* used in baseline b (TJ/tonnes)
= 0.015

$NCV_{p,i}$ Net calorific value of the fuel type *i* used in project p (TJ/tonnes)
= 0.015

$EF_{b,i,CO2}$ CO_2 emission factor of the fuel type *i* used in the baseline
= 112 tCO_2/TJ
= 1.68 tCO_2/tonne of wood

$EF_{p,i,CO2}$ CO_2 emission factor of the fuel type *i* used in the project
= 112 tCO_2/TJ
= 1.68 tCO_2/tonne of wood

i Fuel Type

$$ER_{b,p,y,nonCO2} = \Sigma_i \{ B_{b,y,i} * NCV_{b,i} * EF_{b,i,nonCO2} \} - \Sigma_i \{ B_{p,y,i} * NCV_{p,i} * EF_{p,i,nonCO2} \}$$

Where:

$EF_{b,i,nonCO2}$ non-CO_2 emission factor of the fuel type *i* used in the baseline
= 30.6 (CH_4), 3.35 (N_2O) tCO_2/TJ
= 0.51 tCO_2/tonne of wood

$EF_{p,i,nonCO2}$ non-CO_2 emission factor of the fuel type *i* used in the project
= 30.6 (CH_4), 3.35 (N_2O) tCO_2/TJ
= 0.51 tCO_2/tonne of wood

LEy Leakage for project scenario p in year y
= 1% (baseline estimate)

B.6.4. Summary of ex ante estimates of each SDG outcome

SDG 13: Climate Action

Year	Baseline estimate	Project estimate	Net benefit
23/09/2021-22/09/2022	233,321	0	230,988
23/09/2022-22/09/2023	233,321	0	230,988
23/09/2023-22/09/2024	233,321	0	230,988
23/09/2024-22/09/2025	233,321	0	230,988

23/09/2025-22/09/2026	233,321	0	230,988
Total	1,166,603	0	1,154,938
Total number of crediting years	5		
Annual average over the crediting period	**233,321**	**0**	**230,988**

SDG 1: No Poverty - Access to basic technology

Year	Baseline estimate	Project estimate	Net benefit
23/09/2021-22/09/2022	0	25,000	25,000
23/09/2022-22/09/2023	0	25,000	25,000
23/09/2023-22/09/2024	0	25,000	25,000
23/09/2024-22/09/2025	0	25,000	25,000
23/09/2025-22/09/2026	0	25,000	25,000
Total	0	25,000	25,000
Total number of crediting years	5		
Annual average over the crediting period	0	**25,000**	**25,000**

SDG 1: No Poverty - Financial Savings

Year	Baseline estimate	Project estimate	Net benefit
23/09/2021-22/09/2022	372	90	282
23/09/2022-22/09/2023	372	90	282
23/09/2023-22/09/2024	372	90	282
23/09/2024-22/09/2025	372	90	282
23/09/2025-22/09/2026	372	90	282
Total	1,860	450	1,410
Total number of crediting years	5		
Annual average over the crediting period	372	**90**	**282**

SDG 3: Good Health and well-being – indoor air quality

Year	Baseline estimate	Project estimate	Net benefit
23/09/2021-22/09/2022	0	100%	100%
23/09/2022-22/09/2023	0	100%	100%
23/09/2023-22/09/2024	0	100%	100%
23/09/2024-22/09/2025	0	100%	100%
23/09/2025-22/09/2026	0	100%	100%
Total	0	100%	100%
Total number of crediting years	5		
Annual average over the crediting period	0	100%	100%

SDG 5: Gender Equality – time savings

Year	Baseline estimate	Project estimate	Net benefit
23/09/2021-22/09/2022	0	100%	100%
23/09/2022-22/09/2023	0	100%	100%
23/09/2023-22/09/2024	0	100%	100%
23/09/2024-22/09/2025	0	100%	100%
23/09/2025-22/09/2026	0	100%	100%
Total	0	100%	100%
Total number of crediting years	5		
Annual average over the crediting period	0	**100%**	**100%**

SDG 7: Affordable and Clean Energy - Access to basic technology

Year	Baseline estimate	Project estimate	Net benefit
23/09/2021-22/09/2022	0	25,000	25,000
23/09/2022-22/09/2023	0	25,000	25,000
23/09/2023-22/09/2024	0	25,000	25,000
23/09/2024-22/09/2025	0	25,000	25,000
23/09/2025-22/09/2026	0	25,000	25,000
Total	0	25,000	25,000
Total number of crediting years	5		
Annual average over the crediting period	0	**25,000**	**25,000**

SDG 8: Decent Work and Economic Growth – Jobs created

Year	Baseline estimate	Project estimate	Net benefit
23/09/2021-22/09/2022	0	29	29
23/09/2022-22/09/2023	0	29	29
23/09/2023-22/09/2024	0	29	29
23/09/2024-22/09/2025	0	29	29
23/09/2025-22/09/2026	0	29	29
Total	0	29	29
Total number of crediting years	5		
Annual average over the crediting period	0	29	29

SDG 12: Responsible Consumption and Production – Fuel reduced

Year	Baseline estimate	Project estimate	Net benefit
23/09/2021-22/09/2022	6.31	1.52	4.79
23/09/2022-22/09/2023	6.31	1.52	4.79
23/09/2023-22/09/2024	6.31	1.52	4.79
23/09/2024-22/09/2025	6.31	1.52	4.79
23/09/2025-22/09/2026	6.31	1.52	4.79
Total	6.31	1.52	4.79
Total number of crediting years	5		
Annual average over the crediting period	**6.31**	**1.52**	**4.79**

B.7. Monitoring plan

B.7.1. Data and parameters to be monitored

SDG 13

Data / Parameter	$B_{p,y,i}$
Unit	Tonnes per household per annum
Description	Quantity of fuel consumed in project scenario p during year y, in tonnes, and as derived from the statistical analysis conducted on the data collected during the project performance field tests (cases when no baseline performance field test are performed, e.g. by-default baseline factors)
Source of data	Field Performance Tests (FPTs)
Value(s) applied	1.52 tonnes *(estimation calculated ex-ante)*
Measurement methods and procedures	Kitchen Performance Test (KPT)
Monitoring frequency	Updated every two years
QA/QC procedures	The equipment used for testing, if any either will be externally calibrated or newly purchased at the time of use so measurements are done with the necessary guarantees.
Purpose of data	For emission reduction calculations
Additional comment	A 'Case of a Single Sample Test' shall be applied with a minimum sample size of 20 and the '90/10 rule' or '90% confidence rule' applied. KPT protocol shall be used for PFT (for e.g.: PCIA KPT protocol may be used)

Data / Parameter	$U_{p,y}$
Unit	Fraction (or %)
Description	Usage rate in project scenario p during year y determined on a sampling basis
Source of data	Annual usage survey
Value(s) applied	90%
Measurement methods and procedures	Sampling surveys (telephonic / physical) may be conducted to record the continued operation of project devices. The usage rate shall be calculated for each age (simple random / stratified random sampling to be applied as applicable)
Monitoring frequency	Annual
QA/QC procedures	CME will provide guidance and training to enumerators for conducting surveys to meet specific requirement of the methodology, if any. The value obtained will be tested to determine if the desired precision was met.
Purpose of data	For emission reduction calculations
Additional comment	-

Data / Parameter	$N_{p,y}$
Unit	number
Description	Technologies in the Monitoring Database for project scenario p through year y
Source of data	Total sales record
Value(s) applied	25,000
Measurement methods and procedures	One ICS is distributed per household and the total number of ICS is listed in the Monitoring Database
Monitoring frequency	Continuous
QA/QC procedures	Transparent data analysis and reporting
Purpose of data	For emission reduction calculations
Additional comment	ICS included in the VPA will be registered in the monitoring database via the data collection app and the emissions reductions will be calculated from the day immediately following the installation date.

Data / Parameter	$LE_{p,y}$

Unit	Tonnes of CO_2 equivalent per year
Description	Leakage in project scenario p during year y
Source of data	Leakage assessment
Value(s) applied	2,333 (*ex-ante estimation*)
Measurement methods and procedures	Qualitative / quantitative assessment
Monitoring frequency	Aggregate leakage can be assessed for multiple project scenarios, if appropriate, every two years
QA/QC procedures	N.A.
Purpose of data	For leakage emissions
Additional comment	Applicable only if relevant

SDG 1

Data / Parameter	BSA / HHS
Unit	Number Currency
Description	Proportion of population living in households with access to basic services Financial Savings
Source of data	1. ICS distribution records 2. Ex-post Monitoring Survey Records
Value(s) applied	25,000 ICS in use USD/Local Currency
Measurement methods and procedures	1. Records of number of VPA ICS distributed in Monitoring Database 2. Ex-post monitoring survey to assess the proportion of population with ICS still in operation and/or amount of money spent less monthly
Monitoring frequency	Annually
QA/QC procedures	-
Purpose of data	SDG 1 contribution
Additional comment	-

SDG 3

Data / Parameter	SPM_{HH}
Unit	%
Description	Air Quality in project households

Source of data	Ex-post monitoring survey records
Value(s) applied	100%
Measurement methods and procedures	Ex-post monitoring survey assessing on a sampled basis the percentage of VPA households reporting reduction in smoke/PM emissions/indoor air pollution while cooking on the project ICS vs. baseline
Monitoring frequency	Annually
QA/QC procedures	-
Purpose of data	SDG 3 contribution
Additional comment	-

SDG 5

Data / Parameter	HHTS
Unit	% Hr per household
Description	% of household reporting time savings Hours saved daily from reduced fuel collection
Source of data	Ex-post Monitoring Survey Records
Value(s) applied	100% 1 hour
Measurement methods and procedures	Ex-post monitoring survey assessing on a sampled basis the percentage of VPA households reporting reduced fuel collection need while cooking on the project ICS vs. Baseline and/or the average daily time savings due to reduced fuel collection
Monitoring frequency	Annual
QA/QC procedures	-
Purpose of data	SDG 5 contribution
Additional comment	-

SDG 7

Data / Parameter	$AACS_{HH}$
Unit	Number
Description	Number of households and institutions having access to affordable, reliable and modern energy services.
Source of data	ICS Monitoring Database
Value(s) applied	25,000 ICS

Measurement methods and procedures	Monitoring the number of ICS distributed under the project as an indicator of providing affordable, reliable and modern energy services.
Monitoring frequency	Continuous
QA/QC procedures	-
Purpose of data	SDG 7 contribution
Additional comment	-

SDG 8

Data / Parameter	QE IG
Unit	Number
Description	Quantitative Employment and income generation
Source of data	Employment records
Value(s) applied	29
Measurement methods and procedures	Recording the number of employees (male / female) in the VPA for ICS distribution, logistics, monitoring & management
Monitoring frequency	Annually
QA/QC procedures	It will be ensured that the minimum wages as per host country requirements are provided.
Purpose of data	SDG 8 contribution
Additional comment	-

SDG 12

Data / Parameter	$B_{y,savings}$
Unit	Tonnes/year
Description	Reduction in domestic fuel consumption
Source of data	Ex-post monitoring survey records
Value(s) applied	4.79 tonnes *(estimation calculated ex-ante)*
Measurement methods and procedures	Ex-post monitoring ($B_{p,y,i}$) via KPTs to determine fuel savings
Monitoring frequency	Annually / biennially
QA/QC procedures	-
Purpose of data	SDG 12 contribution
Additional comment	This value is indicative and will be updated prior to first issuance.

Sampling plan

All monitored parameters will be assessed using simple random sampling, at the required precision/confidence level, which shall be applied for determining parameter values based on age batches as project technologies age over time and/or are replaced. The ICS in the sampled population shall be categorized based on age and sample size shall be determined based on expected parameter values in each age category using stratified random sampling approach as per the CDM Standard: "Sampling and surveys for CDM project activities and programmes of activities".

The overall sample size determined for monitored parameters via surveys shall be distributed within each age category based on percentage of stoves in corresponding age category. For example, if only technologies in the first year of use (age 0-1) are being credited, a usage parameter must be established through a usage survey for technologies age 0-1. If technologies in the first year of use (age 0-1) and second year of use (age 1-2) are credited, a usage parameter is required that is weighted to be representative of drop off rates for technologies age 0-1 and age 1-2.

For determining the fuel consumption in the project scenarios, the KPT sample size determination shall be based on the guidance given in the methodology.

The sampling approach and sample size calculations will be presented transparently and accurately in each monitoring report.

B.7.2. Other elements of monitoring plan

The other elements of the monitoring plan include:

- Operational and management structure

The PoA CME has overall responsibility for implementation, control and review of the monitoring plan. All monitored data will be submitted to the CME for review.

The VPA Implementer (VPAI) has responsibility for the actual implementation of the monitoring plan at VPA level and will employ and train staff to undertake monitoring activities accordingly.

- Provisions for data archiving

All monitoring data will be collected in the first instance via the VPAI and submitted to the CME for QA/QC.

Data will be archived by the CME electronically and securely on its own server for future auditing purposes.

- Responsibilities and arrangements for data collection

The CME will provide the format and means for the VPAI to collect monitoring data – this may be electronically collected or via a paper-based system.

The VPAI will collect monitoring data in the first instance by appointing by trained field-based monitoring teams, which may also be an appointed 3rd party agency. All data collected in the field will be retained securely by the VPAI for future audit purposes.

Once collected data will be collated and screened for QA/QC purposes by the VPAI prior to submission to the CME for further QA/QC.

Cross-VPA monitoring may be carried out and in doing so the requirements of CDM Standard for Programme of Activities will be followed.

B.7.3. Other elements of monitoring plan

n/a

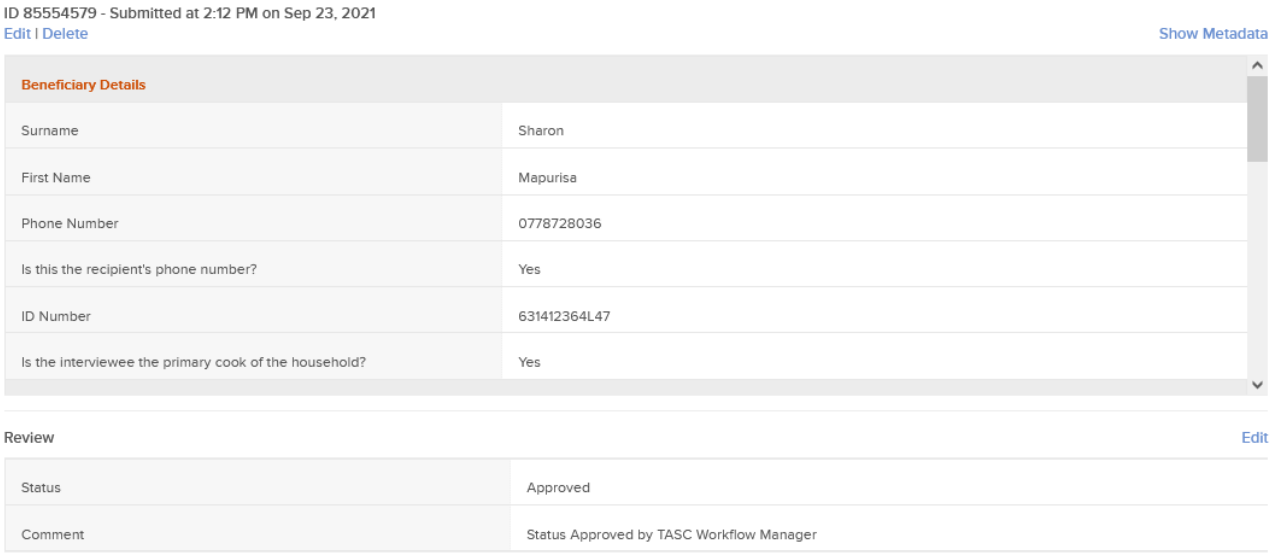
SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1. Start date of VPA

23/09/2021

This is the date of distribution of first ICS under the VPA, as evidenced by the first entry in the Monitoring Database records:



ID 85554579 - Submitted at 2:12 PM on Sep 23, 2021
Edit | Delete — Show Metadata

Beneficiary Details	
Surname	Sharon
First Name	Mapurisa
Phone Number	0778728036
Is this the recipient's phone number?	Yes
ID Number	631412364L47
Is the interviewee the primary cook of the household?	Yes

Review	Edit
Status	Approved
Comment	Status Approved by TASC Workflow Manager

C.1.2. Expected operational lifetime of VPA

15 years 0 months

C.2. Crediting period of project

C.2.1. Start date of crediting period

23/09/2021

C.2.2. Total length of crediting period

5 years, renewable twice

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1. Safeguarding Principles that will be monitored

A completed Safeguarding Principles Assessment is in Appendix 1, ongoing monitoring is summarised below.

Principles	Mitigation Measures added to the Monitoring Plan
Principle 6. Labour Rights	VPAI employment contracts will be made available. Stove manufacturers will be required to show a suitable, up-to-date OHS policy

D.2. Assessment that project complies with GS4GG Gender Sensitive requirements

Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?	The VPA lists SDG 5 as a key impact area for the project and provides the means to monitor this within the monitoring plan. The VPAI ensures that gender-sensitive approaches are taken during stakeholder consultations.
Question 2 - Explain how the project aligns with existing country policies, strategies and best practices	The VPA aligns with the Zimbabwe National Gender Policy and directly addresses the issues raised in Section 5.7. Gender, Environment and Climate Change [14]
Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?	Not required. Improved cookstove projects not following Gender responsive approach do not require to contract an expert as per Gender Equality Requirements & Guidelines. The project will have a positive impact on women included under the programme by providing them with cleaner cooking solutions.
Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?	Not required. ICS projects not following Gender responsive approach do not require to contract an expert as per Gender Equality Requirements & Guidelines. The local stakeholder consultation will include

[14] http://www.unesco.org/education/edurights/media/docs/43bd848326f7d0235674ad9ffcb9ec101dba2673.pdf

	interactions with potential beneficiaries including women and their feedback shall be considered appropriately.

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

The below is a summary of the 2 step GS4GG Consultation for monitoring purposes. Please refer to the separate Stakeholder Consultation Report for a complete report on the initial consultation and stakeholder feedback round.

A Local Stakeholder Consultation has not been possible to date owing to COVID-19 restrictions and the CME is applying the GS COVID-19 Interim Measures, which are valid until 30th June 2022.

The below is a summary of the 2 step GS4GG Consultation for monitoring purposes. Please refer to the separate Stakeholder Consultation Report for a complete report on the initial consultation and stakeholder feedback round.

TASC will be conducting a complete LSC/SFR process during the first monitoring period, as the COVID-19 situation eases in Zimbabwe and the Gold Standard Interim Measures expire.

E.1. Summary of stakeholder mitigation measures

Local stakeholders in Zimbabwe have not yet been fully consulted as per the GS Interim COVID-19 Guidance.
An electronic LSC accompanied the PoA Design Consultation between 04/02/2021 and 04/03/2021, where local stakeholders were requested to respond via email. No comments were received at that stage requiring changes to the proposed VPA design. Once COVID restrictions allow, a full LSC Stakeholder Feedback Round (SFR) will be conducted (possibly during 2022) with the intention of holding a physical meeting (if required).

E.2. Final continuous input / grievance mechanism

Method	Include all details of Chosen Method (s) so that they may be understood and, where relevant, used by readers.
Continuous Input / Grievance Expression	The CME invites continuous input to the PoA via a dedicated email address.

Process Book (mandatory)	The Grievance process books are kept in the following physical locations: • Northern Tobacco Head Office, 4-12 Paisly Road, Southernton, Harare • Karoi-Northern Tobacco, Karoi, 516 River road In addition to the grievance books, emails with feedback/grievances can also be reported through email to grievance@mytreestrust.org and admin@mytreestrust.org
GS Contact (mandatory)	help@goldstandard.org
CME Contact	cookstoves@tasc.je
VPAI Contact	grievance@mytreestrust.org admin@mytreestrust.org

SECTION F. **Eligibility and inclusion criteria for VPAs inclusion**

The below table shall be completed for all VPAs.

The CME shall provide clear description on how eligibility criteria set at real case VPAs are complied with for each real case and regular VPAs submitted for inclusion.

The CME shall not change the eligibility criteria and required condition set at real case VPAs. At the time of inclusion of regular VPAs, the CME shall only describe how the regular VPAs comply with the eligibility criterion.

No.	Eligibility Criterion	Description/ Required condition	Description of the VPA in relation to the criteria, means of Verification/Supporting evidence for inclusion
1			
2			
3			
…			

APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

Complete the Assessment below and copy all Mitigation Measures for each Principle into SECTION D above. Please refer to the instructions in the Guide to Completing this Form below.

Assessment Questions/ Requirements	Justification of Relevance (Yes/ potentially/ no)	How Project will achieve Requirements through design, management or risk mitigation.	Mitigation Measures added to the Monitoring Plan (if required)
Principle 1. Human Rights			
The Project Developer and the Project shall respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights	No	The VPA will respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Right. The project will not discriminate with regards to participation and inclusion	Not required
The Project shall not discriminate with regards to participation and inclusion	No	The VPA does not discriminate with regards to participation and inclusion	Not required
Principle 2. Gender Equality			

1. The Project shall not directly or indirectly lead to/contribute to adverse impacts on gender equality and/or the situation of women 2. Projects shall apply the principles of non-discrimination, equal treatment, and equal pay for equal work 3. The Project shall refer to the country's national gender strategy or equivalent national commitment to aid in assessing gender risks 4. (where required) Summary of opinions and recommendations of an Expert Stakeholder(s)	No	The VPA activity does not endorse any form of discrimination based on gender. ICS will be distributed to all willing customers within the project boundary. The project will have a positive impact on women considering that they will spend less time on cooking or fuel procurement and will be able to cook in cleaner environment.	Not required
Principle 3. Community Health, Safety and Working Conditions			
The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community	No	ICS distributed under the VPA reduce exposure to harmful indoor air pollutants and smoke levels. This can lead to a reduction of respiratory illness compared to cooking on traditional biomass stoves using solid biomass fuel.	Not required
Principle 4.1 Sites of Cultural and Historical Heritage			
Does the Project Area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture?	No	Not relevant	Not required
Principle 4.2 Forced Eviction and Displacement			

Does the Project require or cause the physical or economic relocation of peoples (temporary or permanent, full or partial)?	No	Not relevant	Not required
Principle 4.3 Land Tenure and Other Rights			
Does the Project require any change, or have any uncertainties related to land tenure arrangements and/or access rights, usage rights or land ownership?	No	Not relevant	Not required
Principle 5. Corruption			
The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects	No	Neither the CME not VPAI is complicit in any form of direct or indirect corruption.	Not required
Principle 6.1 Labour Rights			
The Project Developer shall ensure that all employment is in compliance with national labour occupational health and safety laws and with the principles and standards embodied in the ILO fundamental conventions	No	The VPA does not involve any forced labour and the CME & VPAI will ensure that all employment is in compliance with local labour regulations and laws.	VPAI employment contracts will be made available.
Workers shall be able to establish and join labour organisations	No	The CME puts no constraints / limitation on employees to form a union.	Not required

Working agreements with all individual workers shall be documented and implemented and include: a. Working hours (must not exceed 48 hours per week on a regular basis), AND b. Duties and tasks, AND c. Remuneration (must include provision for payment of overtime), AND d. Modalities on health insurance, AND e. Modalities on termination of the contract with provision for voluntary resignation by employee, AND f. Provision for annual leave of not less than 10 days per year, not including sick and casual leave.	No	The CME's policies and employment contracts are compliant with the requirement	VPAI employment contracts will be made available.
No child labour is allowed (Exceptions for children working on their families' property requires an Expert Stakeholder opinion)	No	The CME and VPAI do not promote and are not complicit in child labour	Not required
The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation and reporting of accidents and incidents, and emergency preparedness and response measures	No	Not relevant	Not required
Principle 6.2 Negative Economic Consequences			
Does the project cause negative economic consequences during and after project implementation?	No	No negative economic consequences are deemed applicable	Not required
Principle 7.1 Emissions			

Will the Project increase greenhouse gas emissions over the Baseline Scenario?	No	The VPA reduces GHG emissions relative to baseline scenario	Not required
Principle 7.2 Energy Supply			
Will the Project use energy from a local grid or power supply (i.e., not connected to a national or regional grid) or fuel resource (such as wood, biomass) that provides for other local users?	No	The project will reduce fuel resource consumption instead	Not required
Principle 8.1 Impact on Natural Water Patterns/Flows			
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 aquatic connectivity or water scarcity?	No	Not applicable	Not required
Principle 8.2 Erosion and/or Water Body Instability			
Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion?	No	The VPA shall result in reduction in demand of biomass fuel in the region putting less pressure of forests for deforestation and will hence indirectly avoid erosion associated with tree cutting/ felling.	Not required
Principle 9.1 Landscape Modification and Soil			
Does the Project involve the use of land and soil for production of crops or other products?	No	Not applicable	Not required

Principle 9.2 Vulnerability to Natural Disaster			
Will the Project be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?	No	Not applicable	Not required
Principle 9.3 Genetic Resources			
Could the Project be negatively impacted by or involve genetically modified organisms or GMOs (e.g., contamination, collection and/or harvesting, commercial development, or take place in facilities or farms that include GMOs in their processes and production)?	No	Not applicable	Not required
Principle 9.4 Release of pollutants			
Could the Project potentially result in the release of pollutants to the environment?	No	Not applicable	Not required
Principle 9.5 Hazardous and Non-hazardous Waste			
Will the Project involve the manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials?	No	Not applicable	Not required
Principle 9.6 Pesticides & Fertilisers			
Will the Project involve the application of pesticides and/or fertilisers?	No	Not applicable	Not required
Principle 9.7 Harvesting of Forests			
Will the Project involve the harvesting of forests?	No	The VPA does not involve harvesting of forests. The VPA	Not required

		shall result in reduction in demand of biomass fuel in the region putting less pressure of forests for deforestation and will hence indirectly avoid erosion associated with tree cutting/ felling.	
Principle 9.8 Food			
Does the Project modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	No	Not applicable	Not required
Principle 9.9 Animal husbandry			
Will the Project involve animal husbandry?	No	Not applicable	Not required
Principle 9.10 High Conservation Value Areas and Critical Habitats			
Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified?	No	Not applicable	Not required
Principle 9.11 Endangered Species			

Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)? AND/OR Does the Project potentially impact other areas where endangered species may be present through transboundary affects?	No	Not applicable	Not required

APPENDIX 2- CONTACT INFORMATION OF VPA IMPLEMENTER

Organization name	My Trees Trust
Registration number with relevant authority	Notarial Deed of Donation and Trust No: MA0000177/2020
Street/P.O. Box	17 Garlands Way, Mount Pleasant
Building	
City	Harare
State/Region	
Postcode	
Country	Zimbabwe
Telephone	+263 772 683967
E-mail	info@mytreestrust.org
Website	www.mytreestrust.org
Contact person	Nick de Swardt
Title	Mr
Salutation	
Last name	De Swardt
Middle name	
First name	Nicholas
Department	
Mobile	
Direct tel.	
Personal e-mail	ndeswardt@mytreestrust.org

APPENDIX 3- LUF ADDITIONAL INFORMATION

Risk of change to the Project Area during Project Certification Period:	
Risk of change to the Project activities during Project Certification Period:	
Land-use history and current status of Project Area:	
Socio-Economic history:	
Forest management applied (past and future)	
Forest characteristics (including main tree species planted)	
Main social impacts (risks and benefits)	
Main environmental impacts (risks and benefits)	
Financial structure	
Infrastructure (roads/houses etc):	
Water bodies:	
Sites with special significance for indigenous people and local communities - resulting from the Stakeholder Consultation:	
Where indigenous people and local communities are situated:	
Where indigenous people and local communities have legal rights, customary rights or sites with special cultural, ecological, economic, religious or spiritual significance:	

APPENDIX 4-SUMMARY OF APPROVED DESIGN CHANGES

Please refer to Design Changes Requirements for more information on procedures governing Design Changes

Revision History

Version	Date	Remarks
2.0	4 May 2022	
1.1	7 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Inclusion criteria table added Gender sensitive requirements added Prior consideration (1 yr rule) and Ongoing Financial Need added Safeguard Principles Assessment as annex and a new section to include applicable safeguards for clarity Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on Stakeholder Consultation information required Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.0	10 July 2017	Initial adoption