Gold Standard
for the Global Goals

TEMPLATE

KEY PROJECT INFORMATION & VPA DESIGN DOCUMENT (VPA DD)

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VERSION **v.2.3**

RELATED SUPPORT

- Programme of Activity requirements
- TEMPLATE GUIDE VPA Design Document

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)	GS12118 VPA-1 Protect the Environment, Use Clean Cookstoves
GS ID of real case VPA (if applicable)	GS12138
GS ID of VPA	GS12389
Title of VPA	GS12118 GS12138 VPA-2 Improve the Environment, Use Clean Cookstoves
Time of First Submission Date	TBC
Date of Design Certification	TBC
Version number of the VPA-DD	2.0
Completion date of version	12/05/2025
Coordinating/managing entity	OffgridSun S.r.l.
VPA Implementer (s)	Action for Community Care (ACC) CAST NGO
Project Participants and any communities involved	N/A
Host Country (ies)	United Republic of Tanzania
GS ID and Title of applicable Design Certified VPA	N/A
GS ID and Title of applicable Performance Certified VPA	**N/A**
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	Reduced Emissions from Cooking and Heating: TPDDTEC V 4.0
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
VPA Cycle:	☒ Regular ☐ Retroactive

Table 1 – Estimated Sustainable Development Contributions

SUSTAINABLE DEVELOPMENT GOALS TARGETED	SDG IMPACT (DEFINED IN B.6.)	ESTIMATED ANNUAL AVERAGE	UNITS OR PRODUCTS
13 Climate Action (mandatory)	Amount of GHG emissions avoided or sequestrated.	40,307	tCO2e
15 Life on Land	Total non-renewable wood fuel saved.	24,613	ton
3 Good Health and Well-being	Number of households that observed reduction in PM2.5and CO concentration reductions	21,850	Number
5 Gender Equality	Average time saving associated with cooking time and fuel collection	30	Mins/hh
8 Decent Work and Economic Growth	Total number of jobs	60	Number
1 No Poverty	Average household savings in expenditure on cooking	55,198	TZS/hh-year

SECTION A. DESCRIPTION OF PROJECT

A.1. Purpose and general description of project

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OffgridSun Srl (hereinafter referred to as OffgridSun), CAST NGO and Action for Community Care (ACC)will distribute improved cookstoves (ICS) to reduce the use of fuelwood or charcoal in rural Tanzania. The project aims at reaching a total number of 23,000 households living in Dodoma Region, Chamwino District, within 8 wards Idifu, Mvumi Mission, Iringa Mvumi, Makang'wa, Mlowa Bwawani, Fufu, Manzase and Mlowa Barabarani. Total of 23 villages targeted as follow:

1. Mvumi Mission ward: Mvumi Mission , Chihembe, Mita, Ndebwe
2. Mlowa Barabarani ward: Mlowa Barabarani, Mlowa B, Mloda
3. Makang'gwa ward: Makang'wa and Chiwona
4. Iringa Mvumi ward: Iringa Mvumi Zamani, Iringa Mvumi Mpya, Chita
5. Idifu ward: Idifu and Miganga
6. Mlowa Bwawani: Wiliko, Bwawani
7. Fufu: Fufu, Sli
8. Manzase: Kazaroho, Ilewelo, Manzase, Lugalo, Sasajilo

By the implementation of the project, traditional stoves will be replaced with the project stoves that have higher efficiency and the fuelwood consumption and related carbon emissions will be lessened.

The national penetration of ICS in Tanzania is only 9% that is even lower in rural regions of the country[1]. Barriers to using clean cooking solutions are[2]:

- Limited awareness among citizens and institutions regarding clean cooking solutions
- Limited access to clean, affordable, sustainable and reliable cooking solutions
- Costs of clean cooking fuel, appliances and efficient cookstoves

[1] https://trackingsdg7.esmap.org/country/united-republic-tanzania
[2] https://www.nishati.go.tz/uploads/documents/en-1717485663-NATIONAL%20CLEAN%20COOKING%20STRATEGY%20%282024-2034%29....pdf?utm_source=chatgpt.com

- Lack of alignment in policies, laws, regulations and guidelines regarding cooking solutions
- Low investment in the clean cooking initiatives
- Insufficient research, innovation and invention in clean cooking technologies
- Limited capacity of implementers in clean cooking projects

In order to overcome those challenges, the proposed project will distribute cookstoves in rural Tanzania. The cookstoves will be given free to facilitate the access of the poorest families. Sensitization campaigns on clean cooking, tree planting and environmental conservation will be also provided to the targeted communities. Local youth and women will be trained to become village facilitators to promote the continued use of project stoves.

The Environmental Management (Control and Management of Carbon Trading) Regulations, 2022[3] provides the legal framework for carbon trading projects in Tanzania. As per the clause 24-1: A person shall not operate carbon trading project without being registered by the Registrar. All carbon trading projects have to be registered to the national registry managed by National Carbon Monitoring Center[4]. By this way, double counting or claiming risks have been minimized. Emission reductions from the registered projects are not accounted for within Tanzania's National Determined Contributions and are tradable in the carbon markets. The PoA is registered as 34th activity in the list.

The CME confirms that the emission reductions/removals generated under the project are subject to robust accounting to ensure transparency, environmental integrity, and the avoidance of double counting. The CME further declares that:

- The emission reductions or removals from this project activity have not been, and will not be, claimed or issued under any other carbon crediting scheme or mechanism.

[3] https://www.ncmc.sua.ac.tz/wp-content/uploads//2022/11/the-Environmental-Management-Control-and-Management-of-Carbon-Trading-Regulations-2022-i.pdf
[4] https://www.ncmc.sua.ac.tz/application-of-projects

- The VPA will be listed exclusively under the Gold Standard registry and will not be registered with or seeking registration under any other standard for the same emissions reductions.
- The host country, United Republic of Tanzania, has been notified of the project and its intention to generate Gold Standard Verified Emission Reductions (GS-VERs).

A.1.1. Eligibility of the VPA under approved PoA

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Table 2 Eligibility for VPA inclusion as per PoA requirements

NO.	ELIGIBILITY CRITERION	DESCRIPTION/ REQUIRED CONDITION	DESCRIPTION OF THE VPA IN RELATION TO THE CRITERIA, MEANS OF VERIFICATION AND SUPPORTING EVIDENCE FOR INCLUSION
1	Geographic boundary	Each VPA shall be located within the boundaries of the PoA.	The VPA is located in Dodoma region of United Republic of Tanzania
2	Double Counting	A unique numbering system will be adopted for each VPA. All ICS installed shall receive a unique number identifying to which VPA it belongs.	Each ICS included in the VPA has a unique combination of customer name and geographical location linked with a unique serial number.
3	Exclusiveness of VPA	VPA shall not be previously: 1. Registered as a project activity with other offset schemes 2. Included as a VPA in any other registered PoA, or deregistered as a VPA of a PoA.	Confirmation by CME
4	Specification of Technology/ Measure	VPAs under the PoA shall distribute efficient ICS using firewood and charcoal. The capacity per unit is limited by 150kW as per the applied TPDDTEC methodology.	The type of stoves replaced and ICS implemented is described in Section B.4 below. Baseline and project Kitchen Performance Tests will be carried out.

5	Start date and crediting period	The start date of any proposed VPA will be on or after the start date of PoA. The start date of each VPA will be clearly stated and is directly linked to the start of the crediting period. Each VPA will adhere to the chosen crediting period option: renewable period.	The date on which first ICS distributed is recorded as 10/04/2025.End-user agreement will be provided as a proof.
6	Applicability of methodologies	VPAs shall apply TPDDTEC (v 4.0).	The applicability of the methodology is demonstrated in Section B.2
7	Scale	VPAs shall comply with the small-scale thresholds for Type 2 end use-energy efficiency projects as per paragraph 9.1.2 (b) of GHG Emissions Reductions Sequestration Product Requirements version 3	Annual thermal energy savings is 152.85 GWh_{th} remains within 180 GWh_{th} threshold. This is demonstrated in ER calculation sheet.
8	Additionality	The additionality PoA is demonstrated as per GS4GG Community services activity requirements, Version 1.2 and GHG Emissions Reduction & Sequestration Product Requirements, Version 1.2.	The VPA is automatically additional. Please see Section B.5.
9	Public funding	Affirmation that there is no diversion of Official Development Assistance (ODA).	ODA declaration is provided.
10	Target group& Distribution Mechanism	Households will be the target group for VPAs. ICSs will be installed by local VPA Implementers on a non-commercial basis.	User registration.

11	Sampling requirements	All requirements as mentioned in TPDDEC, version 4.0 or the Standard: Sampling and surveys for CDM project activities and programme of activities are applicable to VPAs.	Specifications of the sampling methods is defined in Section B.7.2. VPA Implementers will follow the management system described at the PoA-DD.
12	Compliance of the technology implemented	The capacity of each ICS will comply with the requirements of TPDDTEC methodology; including • Approved stove models and performance benchmarks • Demonstration of thermal efficiency improvements compared to baseline stoves.	The VPA complies with applicability requirements of TPDDTEC (v4.0) (Section B.2)
13	SDG Outcomes	Each VPA shall conduct SDG outcomes assessment and comply with the SDG targets identified in the PoA-DD.	Please see SDG outcomes assessment in Section B.6
14	Stakeholder Consultation	A local stakeholders' consultation meeting will be organized for Real Case VPA and for group of regular VPAs in each region	Local Stakeholder Consultation Meeting is conducted for Dodoma region on 01/02/2023 and a refresher meeting was organized on 05/02/2025.

15	VER Ownership	End users receiving ICSs under the specific VPA contractually cede their rights to claim and own emission reductions to the CME of the PoA.	End-user contract between CME and the user.

The eligibility criteria identified in GS4GG Principles and Requirements (v2.1)are met as follows:

Eligibility criteria	Justification
3.1.1 (a) Types of Project: Eligible projects shall include physical action/implementation on the ground. Pre-identified eligible project types are identified in the Eligibility Principles and Requirements section.	The project plans to install improved cookstoves to the households in rural regions of Tanzania and Gold Standard approved Community Services Activity Requirements is applicable for the project. The project type is, therefore; automatically eligible as per section 4.1.3 of GS4GG Principles & Requirements.
3.1.1 (b) Location of Project: Projects may be located in any part of the world.	Location of the project is Chamwino District in Dodoma Region in Tanzania and specified in Section A.2.
3.1.1 (c) Project Area, Project Boundary and Scale: The Project Area and Project Boundary shall be defined. Projects may be developed at any scale although certain rules, requirements and limitations may apply under specific Activity Requirements, Impact Quantification Methodologies and Products Requirements.	The project is located in Chamwino District in Dodoma Region, Tanzania and the project boundary and scale are defined based on the GS Methodology: Reduced Emissions from Cooking and Heating: TPDDTEC V 4.0 The project boundary is the physical, geographical site of the efficient devices that utilize biomass.

In order to avoid double counting the Project shall not be included in any other voluntary or compliance standards programme unless approved by Gold Standard (for example through dual certification). Also, if the Project Area overlaps with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature, the project shall demonstrate that there is no double counting of impacts at design and performance certification (for example use of similar technology or practices through which the potential arises for double counting or misestimation of impacts amongst projects).	Project is small scale as per 9.1.2 b Type-2 End-use energy efficiency project improvement in GHG Emission Reductions and Sequestration Product Requirements. 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. The annual energy savings is estimated as 152.85 GWh; therefore the project remains within the limits of small scale. The project does not seek certification under any other voluntary or compliance standards programme. The host country, Tanzania does not have an emission reduction cap enforced OR have the possibility to trade emissions that include the scope of the proposed project. If a risk of double counting exists, the project developer commits to retire eligible units equal to the quantity of Gold Standard VERs.
3.1.1 (d) Host Country Requirements: Projects shall be in compliance with applicable Host Country's legal, environmental, ecological and social regulations.	The project is in compliance with all related legal, environmental, ecological and social regulations. Please see safeguarding principles assessment in Appendix.1.
3.1.1 (e) **Contact Details:** As part of the Project Documentation the Project Developer	Contact details can be found in Appendix.2

shall provide (i) name and (ii) contact details of all Project Participants; AND in case of an organisation (iii) the legal registration details and (iv) documentation by the governing jurisdiction that proves that the entity is in good standing (defined as being a legal or other appropriate entity registered in or allowed to operate within the required jurisdiction and with no evidence of insolvency or legal/criminal notices placed against it or any of its Directors). Gold Standard retains the right (at its own discretion) to refuse use of the Standard where reputational concerns are highlighted.	
3.1.1.(f) Legal Ownership: Full and uncontested legal ownership of any Products that are generated under Gold Standard Certification, (for example carbon credits) shall be demonstrated. Where such ownership is transferred from project beneficiaries this must be demonstrated transparently and with full, prior and informed consent (FPIC). Note that for certain Project types there is a requirement for full and uncontested legal land title/tenure to be demonstrated. These are contained within specific Activity or Product Requirements. All projects shall immediately report to Gold Standard any land title/tenure disputes arising.	Legal ownership of the Products generated by the project will be transferred from end-users to the project owner that is National Carbon Monitoring Center as indicated in Section A.1.2 below. This is explained in detail to the stakeholders in the consultation meeting and included in the project design. As apart of the monitoring activities, the carbon transfer forms are developed and it is signed by each household who received the cookstove.

3.1.1 (g) Other Rights: As well as legal title and ownership, the Project Developer shall also demonstrate where required uncontested legal rights and/or permissions concerning changes in use of other resources required to service the Project (f*or example, access rights, water rights etc.)*. Any known disputes or contested rights must be declared immediately to Gold Standard by the Project Developer and resolved prior to further project implementation in affected areas.	The project will provide improved cookstoves to households. Each household will sign a carbon rights waiver for the stoves they have received. A memorandum of understanding will also be signed with project stove manufacturer that is Tango Energy Limited.
3.1.1 (h) Official Development Assistance (ODA) Declaration: All Project Developers applying for project activities located in a country named by the OECD Development Assistance Committee's ODA recipient list and seeking Gold Standard Certification for carbon credits shall declare the Official Development Assistance (ODA) support. The Project Developer shall follow the GHG Emissions Reduction & Sequestration Product Requirements and submit the declaration at the time of Design Certification.	ODA declaration has been submitted to GS registry.

The eligibility criteria identified in Community Services Activity Requirements (version 1.2) are met as follows:

Eligibility criteria	Justification
2.1.2 All CSA Projects shall lead to climate change mitigation and/or adaptation by providing or improving access to services/resources at household or community or institution level. Eligible services include electricity and energy, water and sanitation, waste management, housing, etc.	The project will decrease the wood based fuel consumption in households by installing improved cookstoves; therefore reduce the GHG emissions.

3.1.1 Types of project – (b) End-use energy efficiency: Project activities that reduce energy requirements as compared to baseline scenario without affecting the level and quality of services or products, where the end-user of the products and services are clearly identified and when the physical intervention is required at the user end. For example, efficient cooking, heating, lighting, etc.	The users will switch to efficient cooking technology which reduces energy requirements as compared to baseline scenario.
3.1.2 Project Area, Boundary and Scale: Project Area and Boundary shall be defined in line with the applicable Methodologies or Product Requirements	The project is located in Dodoma Region, Tanzania and the project boundary and scale are defined based on the GS Methodology: Reduced Emissions from Cooking and Heating: TPDDTEC V 4.0 The project boundary is the physical, geographical site of the efficient devices that utilize biomass. The aggregate energy savings of the project activity does not exceed the equivalent of 180 GWh thermal per year in fuel input. Each ICS installed saves 0.007 GWh_{th}; that is 0.004% of the threshold. The project is small scale and total energy savings is lower than 180GWh thermal per year.
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 baseline is limited to Small Scale and	The project does not apply Suppressed Demand baseline. The current emissions are not artificially low due to poverty, lack of access to resources, or insufficient infrastructure.

Microscale Projects. Where a Suppressed Demand baseline is applied, it is not possible to 'stack' Gold Standard Certified Impact Statements or Products as the definition of the baseline may be contradictory.	Consumption level predicted by baseline KPT is cross-checked by UN official data.
3.1.4 Legal Ownership: (a) 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.	Each stove installed will be registered by assigning a unique serial number along with name, contact details, address/GPS coordinates and date of installation. All users will be informed about the transfer of the rights of carbon credits to the project developer. The purchase agreement entered between the stove user and the stove producers includes terms transferring the ownership of VERs from user to the producers. By the purchase of the stove, the user accepts to waive the carbon rights.
3.1.4 (b) The transfer of Product ownership shall be discussed during local stakeholder consultations for projects.	The transfer of rights of carbon credits were discussed during the explanation of how carbon finance would be used to support project implementation at the level of local stakeholder consultation.

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

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The Verified Carbon Reductions (VER) generated by each stove belongs to the individual stove user. The purchase agreement entered between the stove user and

the OffgridSun includes terms transferring the ownership of VERs from user to the Coordinating Managing Entity (CME). By the purchase of the stove, the user accepts to waive the carbon rights.

A.2. Location of VPA

Tan Dodoma Region, Chamwino District, within 8 wards: Idifu, Mvumi Mission, Iringa Mvumi, Makang'wa, Mlowa Bwwani, Fufu, Manzase and Mlowa Barabarani.

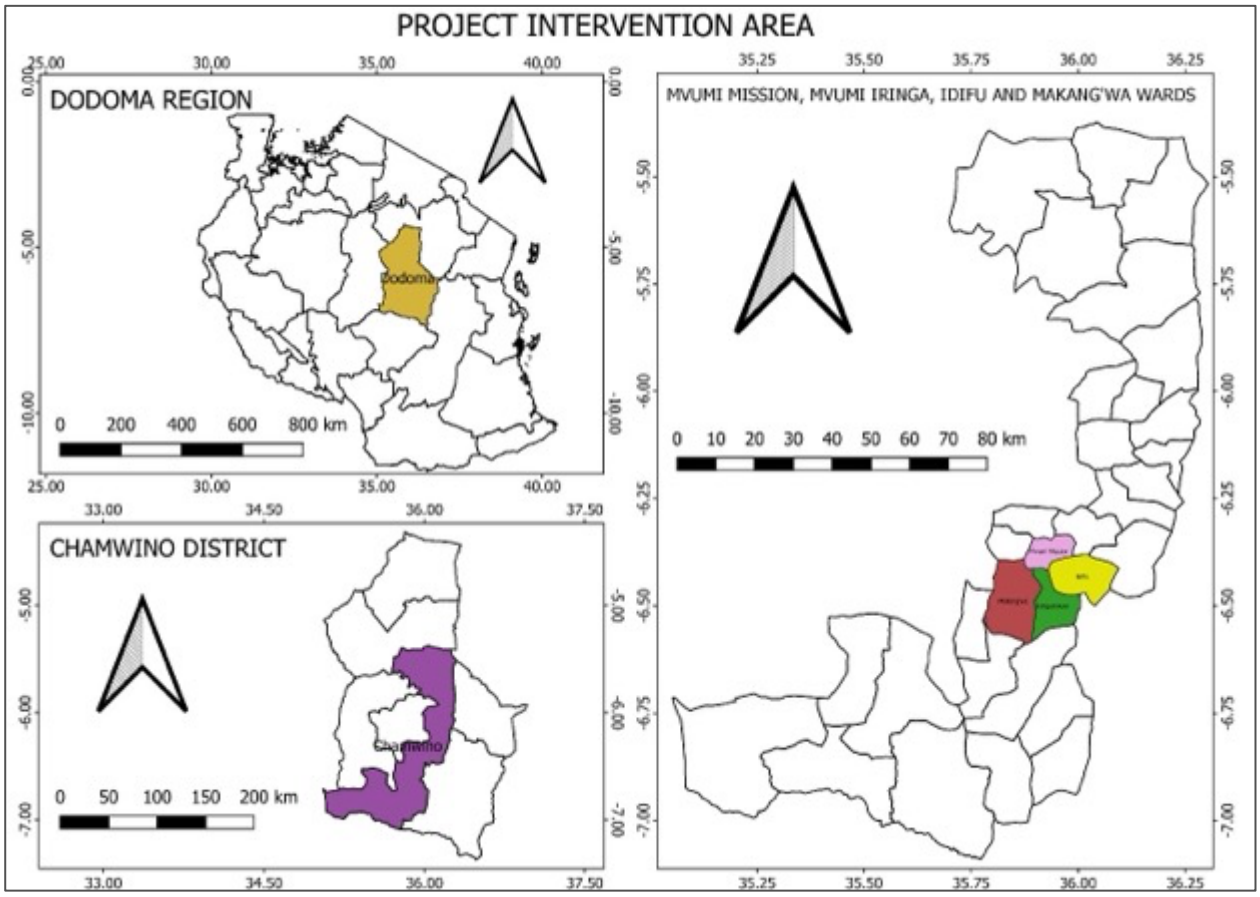

Table 3. Coordinates of the wards targeted

Ward	Latitude (°)	Longitude (°)
Idifu	-6.499095	35.847814
Mvumi Mission	-6.381115	35.908542
Iringa Mvumi	-6.499095	35.847814
Makang'wa	-6.431880	35.859534
Mlowa Bwawani	-6.597406	35.918635

Fufu	-6.597406	35.918635
Manzase	-6.608200	35.928400
Mlowa Barabarani	-6.499095	35.847814

A.3. Technologies and/or measures

Jiko Rafiki stove is a biomass stove designed for household use and made of metal with a ceramic liner inside. There are two handles on two sides and a metal top cover for the pot rest. A layer of sawdust and pumice mixture between the ceramic liner and metal outer surface provides high thermal efficiency. There is firewood intake door in the front and air intake at the back of the stove. The stove can be used by both firewood and charcoal. Thermal efficiencies are given for both fuel types in table below.

Table 4. Stove specification

Technical Specifications – Jiko Rafiki Stove	
Thermal efficiency (firewood)	42 %
Thermal efficiency (charcoal)	35%
Portability	Portable
Design	Single Pot
Stove Life	5 years
Size (stove)	Width: 26 cm Height: 36.4 cm

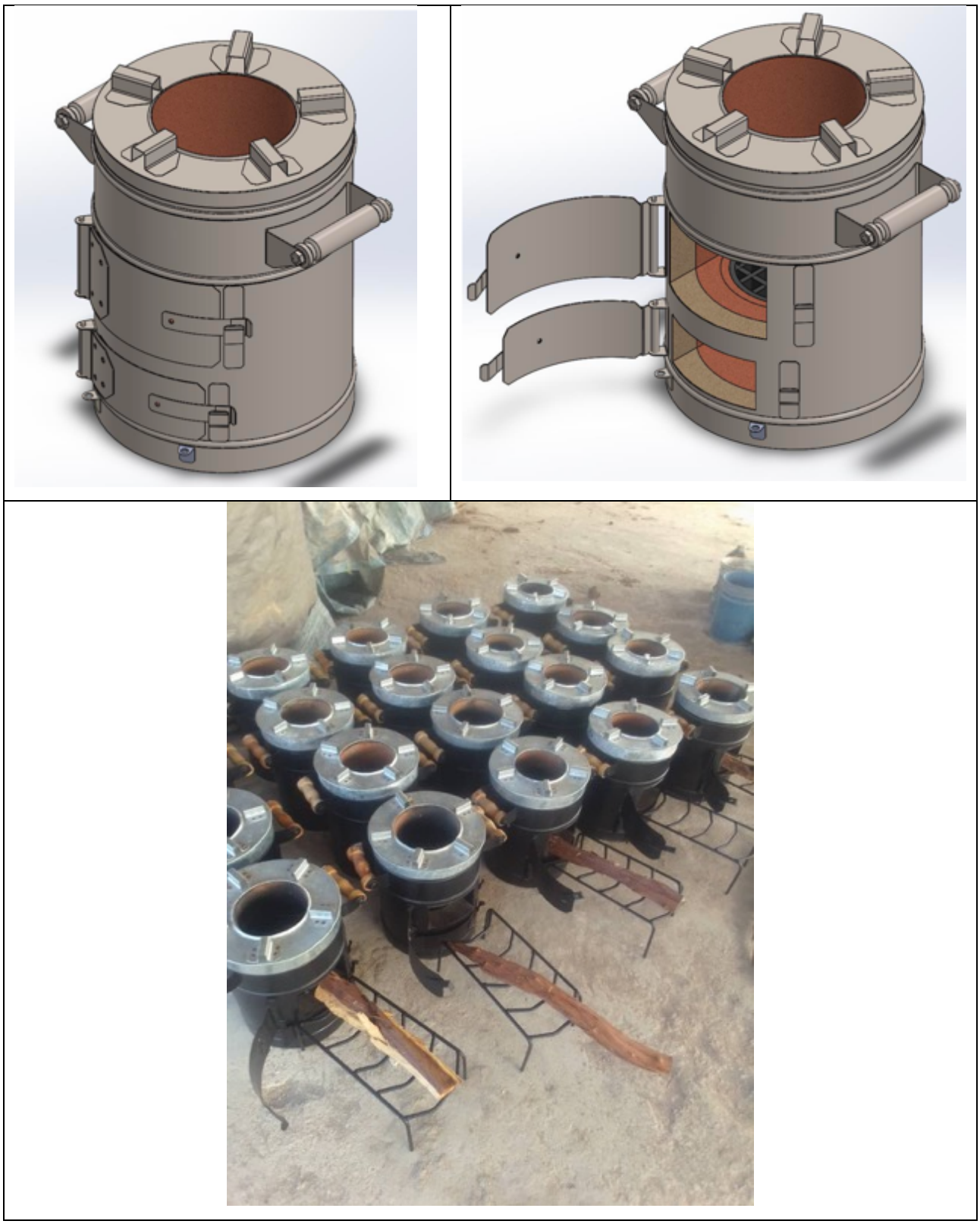

Figure 1 Jiko Rafiki Stove

The manufacturer is the Tanzanian company Tango Energy Limited, legally registered in Tanzania, which has experience in the production of cookstoves.

A.4. Scale of the VPA

>> The project is small scale based on project scale defined under GS4GG Product Requirements. The aggregate energy savings of the project activity does not exceed the limit of small scale, equivalent of 180 GWh thermal per year in fuel input. Each ICS installed saves 0.007 GWh and 23,000 stoves are planned to be distributed; which is 152.85 GWh thermal energy savings per year. Thermal efficiency savings per stove is calculated by the following formula:

$$TE_{savings,i,j} = B_{old,i,j} \times \left(1 - \frac{n_{old}}{n_{new}}\right) \times NCV_{biomass} \times f_{GWh}$$

A.5. Funding sources of VPA

The project will be implemented by the CME, OffgridSun; in cooperation with the local partners CAST NGO and Action for Community Care (ACC). The funding for the production of stoves will be provided by OffgridSun that will be legal owner of the VERs. No public funding or Official Development Assistance is involved.

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

B.1. Reference of approved methodology (ies)

>> GS Methodology: Technologies and Practices to Displace Decentralized Thermal Energy Consumption" (TPDDTEC) Version 4.0 (07/10/2021)

B.2. Applicability of methodology (ies)

>> TPDDTEC (V4.0) methodology defines the following applicability criteria:

2.2.1. Applicability Criteria	**Justification**
a. Project shall choose a technology design that has predictable performance in that it is proven to be efficient and durable under field conditions; for cookstoves, the rated thermal efficiency shall be at least 20%.	The VPAs will include Jiko Rafiki stove that has 42% and 35% thermal efficiency for fuelwood and charcoal respectively. The rated efficiency is over 20%.
b. The technology shall have continuous useful energy output of less than 150kW per unit.	The capacity of each stove will be below the 150kW limit. Please see the calculation below.
c. The project activity is implemented by a project developer and can include additional project participants. The individual households and institutions may be represented collectively by community organizations, etc., but do not individually act as project participants.	Individual households and institutions are included collectively through VPAs and no household act as project participants.
d. The project developer must design incentive mechanism(s), which should be effective as fast as possible, for the elimination of inefficient baseline stoves that are replaced by the project cooking devices and describe the incentive mechanism(s) in the PDD/VPA-DD at the time of validation.	The project cookstoves are given free to promote the adoption of clean cooking technologies. The users can cook with either firewood or charcoal. Continued use of three stone fire will be monitored during annual/biennial surveys and the emissions related with the use will be accounted in the overall emission

	reduction amount. VPA Implementer will organize campaigns to make end-user aware about the benefits of continuous use of project technology and key product attributes.
e. To avoid double counting or double claiming, the project developer must: 1) clearly communicate its ownership rights and intention of claiming the emission reductions resulting from the project activity to the following parties by contract or clear written assertions in the transaction paperwork: all other project participants; project technology manufacturers; and retailers of the project technology or the renewable fuel in use; and; 2) inform and notify the end users that they cannot claim emission reductions from the project, and; 3) exclude from the project activity, cooking devices included in any other voluntary market or CDM project activity/PoA, and strive not to displace the cooking devices of another CDM or voluntary project/PoA.	1. Each user will be informed about the transfer of carbon rights and a carbon credit waiver agreement will be signed between CME and the user. 2. How the project generates carbon credits and what kind of project activities will be financed by the revenue from carbon credits are discussed in detail during the Stakeholder Consultation Meeting as well. 3. The users who have already an operating ICS will not be included in the programme.
f. Project activities making use of solid fossil fuel in the project scenario or other improved fossil fuel cookstoves meeting certain conditions may only claim emission reductions for energy efficiency improvement aspect and shall assume the same baseline and project fuel for emission reduction calculations.	Not Applicable

g. Project activities making use of a new solid biomass feedstock in the project situation (e.g. switch to green charcoal or renewable biomass briquettes) must comply with relevant specific requirements for biomass related project activities, as defined in the latest version of the Community Services Activity Requirements. The specific requirements apply to both plantations established for the project activity and/or existing plantations that will supply biomass feedstock.	Not Applicable
h. 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.	Efficient cookstoves distributed by the Project lead to reduced indoor emissions and personal exposure to carbon monoxide (CO) and particles matter (PM2.5). The cookstove specifications provided by the manufacturer confirms that the stove is designed to achieve full combustion reducing toxic pollutants.
2.3. Safeguards	**Justification**
1. The project shall not undermine or conflict with any national, sub-national or local regulations or guidance for thermal energy supply or fuel supply or use. The project shall document the national, regional and local regulatory framework for provision of thermal energy services of the type the project provides in the project boundary.	The VPA complies with countries legal, environmental, ecological and social regulations of United Republic of Tanzania.
2. If the expected technical life of the project technology is shorter that the	The project cook stoves has an average of 5 years of technical life.

crediting period, the project developer shall describe measures to ensure that end users are provided replacement technology of comparable or better technology or retrofitting essential parts with performance guarantee. If neither of the prior conditions can be demonstrated, no emission reductions can be claimed for the technology after its technical life has ended.	The Project Proponents will check and replace the cookstoves that are end of their technical life or retrofit essential parts. If no replacement or repair occurs, those stoves will be deemed as ineligible for emission reductions.

Demonstration of thermal capacity for each stove to confirm criteria 2.2.1 (b) is as follows:

Step 1: Estimate the energy consumption in kWh[5] $B_{new} = B_{old,i,j} \times \left(\frac{n_{old}}{n_{new}}\right) =$

$6.54 \frac{\text{kg}}{\text{day}} \times \left(\frac{0.15}{0.42}\right) = 2.33 \frac{kg}{day}$

B_{old}	=	Annual quantity of woody biomass that would have been used in the absence of the project activity to generate thermal energy equivalent to that provided by the project device (tonnes/year)- taken 0.15 as per CDM Tool 33[6].
B_{new}	=	Annual quantity of woody biomass used in tonnes per project device (tonnes/year)
η_{old}	=	Efficiency of the old devices being replaced by project devices (fraction)
$\eta_{new,}$	=	Efficiency of the project device (fraction)

Energy consumption (in kWh/stove/day) = Stove fuel consumption * Energy in one tonne of wood (in kWh) is calculated as follows: $TE = 0.00233 \frac{\text{ton}}{\text{d}} \times 0.0156 \frac{\text{TJ}}{\text{ton}} \times$

$277{,}778 \frac{\text{kWh}}{\text{TJ}} = 6.74 \text{ kWh/d}$

Step 2: Estimate energy output:

[5] The calculation steps are taken from the Guidebook to GoldStandard and CDM Methoodlogies for improved cooktoves: https://goldstandard.org/sites/default/files/documents/ics_methodology_guidebook.pdf
[6] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-33-v2.0.pdf

Average time spent by gender in Tanzania[7] as total hours spent daily that is 2.13 hrs. Accounting that all cooking is done with the project stove and by women, the capacity of stove is 6.74 kWh/2.13h= 3.17 kW.

Step 3: Estimate the useful thermal energy output:

Assuming the thermal efficiency of the stove is 42%; the useful output will be 3.17 kW *0.42= 1.33 kW for firewood. Same has calculated as 0.5 kW for charcoal by using the dafult value for charcoal/firewood conversion from CDM Tool 33.

B.3. VPA boundary

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The project boundary is the physical, geographical sites of the project technologies/practices including the fuel collection and production area.
Since the baseline fuel is woody biomass (including charcoal), the project boundary also includes the area within which this woody biomass is grown and collected.
There are no fuel production within the scope of the project. All emission sources are summarized in the table below.

	Source	GHGs	Included?	Justification/Explanation
Baseline scenario	Delivery of thermal energy	CO_2	**Yes**	Major source of emissions
		CH_4	**Yes**	Important source of emissions
		N_2O	**Yes**	Can be significant source of emissions for some fuels
		CO_2	**No**	Neglected for simplification
		CH_4	**No**	Neglected for simplification

[7] (A2EI Mini-grid Cooking Diaries Data Analysis Bezi & Mavota (Tanzania))

	Production of fuel, transport of fuel	N_2O	**No**	Neglected for simplification
Project scenario	Delivery of thermal energy	CO_2	**Yes**	Major source of emissions
		CH_4	**Yes**	Important source of emissions
		N_2O	**Yes**	Can be significant source of emissions for some fuels
	Production of fuel, transport of fuel	CO_2	**No**	Neglected for simplification
		CH_4	**No**	Neglected for simplification
		N_2O	**No**	Neglected for simplification

B.4. Establishment and description of baseline scenario

>>As per the applied methodology, the project proponent must conduct the following baseline studies for each baseline scenario:

- Baseline non-renewable biomass (NRB) assessment, if biomass is one of the baseline fuels
- Baseline survey (BS) of target population characteristics
- Baseline performance field test (BFT) of fuel consumption (e.g. kitchen performance test (KPT) in case of cook stoves.

Findings of the performance field tests will be submitted pre-registration. A project estimation of expected baseline emissions is provided for listing of the project using available sources of information.

National and/or sectoral policies, regulations and circumstances are taken into account in the establishment of the baseline scenario. Tanzania's updated Nationally Determined Contributions (NDC) includes targets related to the penetration of improved cookstoves and clean cooking solutions. The specific targets related to clean cooking technologies, including improved cookstoves (ICS), are primarily part of Tanzania's conditional commitments. This means:

- The clean cooking goals—such as transitioning 80% of the population to clean cooking solutions by 2034—**are dependent on international financial, technical, and capacity-building support.**

- The government has stated that achieving the full scale of its mitigation goals, including wide-scale dissemination of ICS and other clean technologies, requires external assistance.

Therefore, the project activities will not create perverse incentives that may impact host Parties' contributions to the ultimate objective of Paris agreement.

Baseline non-renewable biomass (NRB) assessment

In accordance with the recent Gold Standard rule update titled "fNRB Application for GS4GG Certification", dated 24 April 2025 (Section 2.3.1(a)), values derived from the MoFUSS tool are considered eligible for use. Figure 3 below presents a screenshot from the MoFUSS webpage, displaying the fNRB value calculated for the Tanga region (accessed on 14/05/2025) . Given that the project's crediting period extends until 2029, the applicable fNRB value for the 2020–2030 period—71% for Tanga Region—will be adopted for emissions reduction calculations.

Baseline survey (BS) of target population characteristics

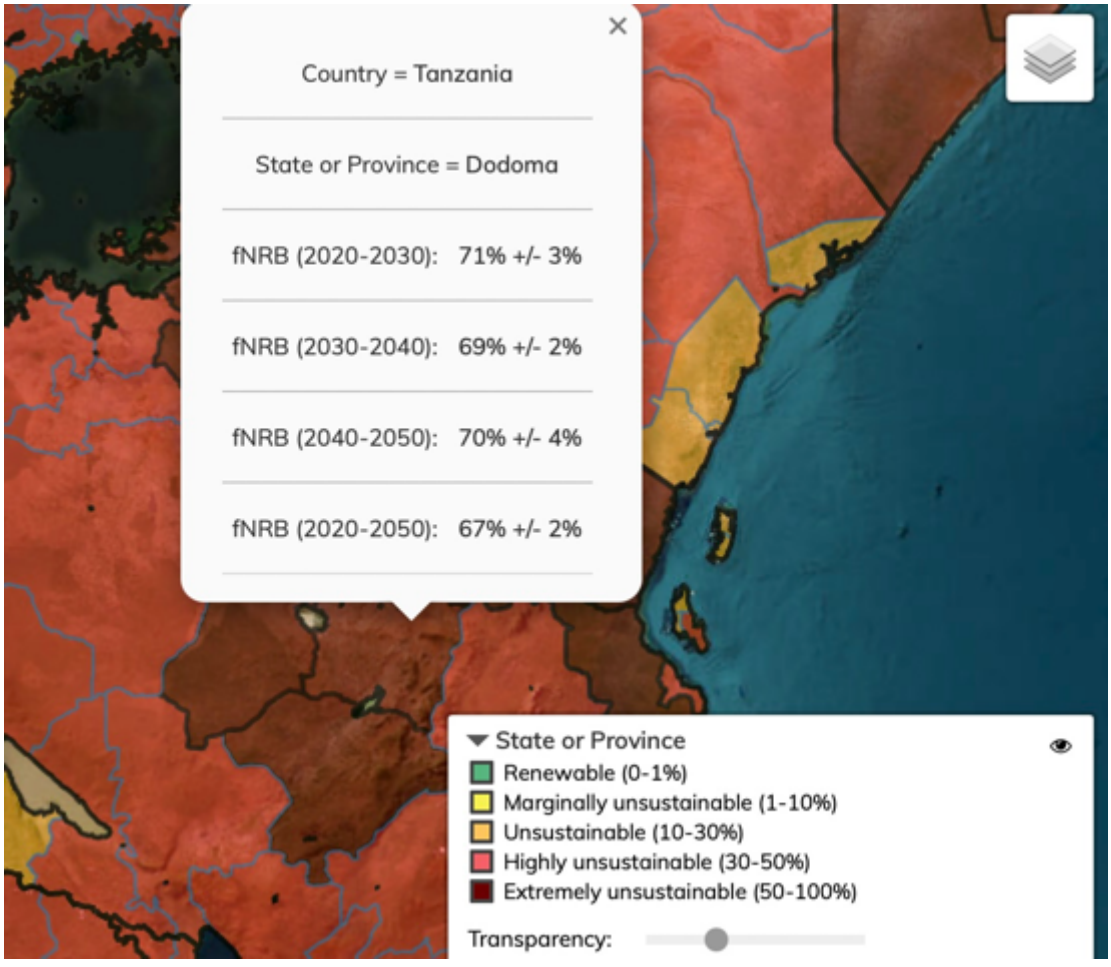

Figure 2. fNRB for Tanga Region

The baseline survey provides critical information on target population characteristics, baseline technology use, fuel consumption, leakage, and sustainable development indicators.

Baseline Survey Representativeness

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.

Baseline Survey Sample Sizing

The baseline survey should be carried out for each baseline scenario using representative and random sampling, following these guidelines for minimum sample size:

• Group size <300: Minimum sample size 30 or population size, whichever is smaller
• Group size 300 to 1000: Minimum sample size 10% of group size
• Group size > 1000: Minimum sample size 100

127 households were interviewed during the survey.

Data to be collected

The data collected is specific to the characteristics of each baseline scenario and should be tailored accordingly. Information on the following needs to be gathered:

1. User follow up
a. Address or location
b. Mobile telephone number and/or landline telephone number (when possible)
2. End user characteristics
a. Number of people served by baseline technology
b. Typical baseline technology usage patterns and tasks (commercial, institutional, domestic, etc.)
3. Baseline technology and fuels
a. Types of baseline technologies used and estimated frequency
b. Types of fuels used and estimated quantities

c. Seasonal variations in baseline technology and fuel use
d. Sources of fuels; (purchased or hand-collected, etc) and prices paid or effort made (e.g. walking distances, persons collecting, opportunity cost)

The survey included questions about basic household characteristics including the number of people living in the household, source of income, purpose of cooking, the place of cooking, stove and fuel use before the project stove, and season variations of stove and fuel use patterns. Contact details of the participants are also recorded.

Results:
The data collection for the baseline survey of the project "Boresha Mazingira" has been performed from the 26th to the 29th of January 2023 by Action for Community Care (ACC) and OffgridSun staff.

The baseline survey team received trainings on 25 January 2023 by the attendance of 3 participants from ACC and CAST and 2 employees from OffgridSun. The training aimed to equip participants with the foundational skills and knowledge necessary to conduct a baseline survey effectively, ensuring accurate and meaningful data collection. Key components of the training are:

- Equip participants with engagement skills
- To strenghten self-introduction abilities
- To enhance understanding of baseline survey
- Clear understanding of data collection tools.

The data was collected within 5 wards in Chamwino district, Dodoma region: Idifu, Mvumi Mission, Iringa Mvumi, Makang'wa and Mlowa Barabarani. The following villages are visited in 5 wards:

Idifu ward: Miganga, Idifu
Iringa Mvumi: Iringa Mvumi Mpya, Iringa Mvumi Zamani, Chita

Mvumi mission: Mvumi mission, Mita, Chihembe, Ndebwe
Makang'wa: Makang'wa, Chiwona
Mlowa Barabarani: Mlowa barabarani, Mlowa B, Mloda

Almost all the respondents (126) were female and primary cook in the family. The main source of income is farming and live livestock with an average monthly income of Tsh.95,000. All the households cook for the household and only 4.7% said they do it for commercial purposes as well. The average family size is 5.07 persons and average of 3 children in each house. Almost all houses are made of mud with iron sheets roofing.

Figure 3 Baseline Survey

All of the families interviewed used the three stone fire as primary stove to cooking dry season (100%) and in rainy season (94.5%). Only 4.7% of the respondents were also using traditional charcoal cookstoves as secondary stoves. Two types have been identified; one has ceramic liner and another

made of metal (Figure 5 below) and their use is limited to rainy season when limited amount of firewood could be collected.

Figure 4 Charcoal stove found to be used in the baseline.

Metal charcoal stoves or Dodoma Stoves were sold in Dodoma, Tanga, Arusha and Dar es Salaam regions. Being rather bulky and heavy, the stoves have a high cost and production complications. The thermal efficiency is estimated to be 36%[8].

Half of the respondents cook their food outside, mostly on verandah or outside porch. Those who cook inside have a separate kitchen; 10% is said to cook in the main room of the house.

[8] https://www.compete-bioafrica.net/events/events2/hamburg/Session%202/S2-5-COMPETE-REImpact-Hamburg-Sawe-090630.pdf

Figure 5 Cooking places found during the survey.

87% of the households use firewood for cooking in dry season while its share drops to 78% in rainy season. The share of both firewood and charcoal users increases from 13% in dry season to 22% in rainy season. The only charcoal users remain as low as 2.4% in rainy season while none of the respondents use charcoal in dry season.

75% of the users collect firewood in dry season when it is abundant while this drops to 47% in rainy season. Still 68% of the respondents said that they are not able to buy or collect fuel for their cooking needs.

Figure 6 Fuelwood collection and storage

Baseline performance field test (BFT) of fuel consumption

As per the methodology, the baseline Kitchen Performance Test (KPT) should include a sample of end-users without project technologies that are representative of the end users targeted in the project activity. The baseline survey and baseline KPT can be conducted concurrently with the same end users. Any sampling methods can be used.

In cases of paired and independent sampling, there are two valid options for the statistical analysis:

- 90/30 rule: When the sample size is large enough to satisfy the 90/30 rule, i.e. the endpoints of the 90% confidence interval lie within +/- 30% of the estimated mean, overall emission reductions can be calculated on the basis of the estimated MEAN annual emission reduction per unit or MEAN fuel annual savings per unit.
- 90% confidence rule (Lower bound of the one-sided 90% confidence interval). When the result obtained does not satisfy 90/30 precision, the emission or fuel saving result is not the mean (or average) test result, but a lower value, i.e. the LOWER BOUND of the one-sided 90% confidence interval.

Paired sampling for KPT – sampling the same users before and after beginning use of a new cookstove – will be performed. Among the over 100 end users in the baseline survey, 30 households with similar socioeconomic and demographic characteristics with targeted population will be selected to perform baseline KPTs.

The households did not use the project stove prior to the tests. Each will be provided a stove afterwards.

Baseline KPT has been carried out during 13-24 November 2023 in two regions, namely Dodoma and Tanga. A one-day training has been carried out to enumerators in order to familiarize them with the KPT template (data and calculation form) in both regions. 60 tests have been carried out in total and the results are analyzed[9]. Baseline fuelwood consumption per capita is calculated as 1.52 kg/cap-day.

[9] DNV- Kitchen Performance Test- Field Work Report dated 09/02/2024

Figure 7. Picture from KPT Field work

B.5. Demonstration of additionality

>>

Specify the methodology, activity requirement or product requirement that establishes deemed additionality for the proposed project (including the version number and the specific paragraph, if applicable).	As per 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 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 VPA meets the criteria for deemed additionality.	The proposed VPA is located in Tanzania; that fall under the category of LDC. The project also complies with the requirement 1.1.3 of Annex B: 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 (1.8 GWh_{th})of energy savings per year or <=600 tonnes of emission reductions per year. This will be demonstrated for each VPA separately.

B.5.1. Prior Consideration

The project is applying under regular project cycle and demonstration of prior consideration is not required.

B.5.2. Ongoing Financial Need

N/A

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)**

13 Climate Action (mandatory)	13.2 Integrate climate change measures into national policies, strategies and planning	Amount of GHG emissions avoided or sequestrated.
15 Life on Land	15.1. By 2020, 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 obligations under international agreements	Total non-renewable wood fuel saved.
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	Number of households that observed reduction in PM2.5 & carbon monoxide (CO) concentration reductions
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	Average time saving associated with cooking time and fuel collection
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	Total number of jobs
1 No Poverty	1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day.	Average household savings on cooking.

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

SDG 13: Take urgent action to combat climate change and its impacts

Parameter: Emission reductions achieved by fuelwood savings at household level

As per TPDDTEC (V4.0) methodology, when the baseline fuel and the project fuel are the same, the overall GHG reductions achieved by the project activity in year y are calculated by **Method 1** as follows:

$$ER_y = \sum_{b,p} (N_{b,p,y} * U_{p,y} * SFS_{p,b,y} * NCV_{b,fuel} * (f_{NRB,b,y} * EF_{b,f,CO2} + EF_{b,f,nonCO2})) - \sum LE_{p,y}$$

Where;

ER_y	Emission reduction for total project activity in year y (tCO_2e/yr)
$\sum_{b,p}$	Sum over all relevant baseline b/project p pairs
$N_{b,p,y}$	Number of project technology-days included in the project database for baseline scenario/ project scenario p pair in year y (days)
$U_{p,y}$	Cumulative usage rate for technologies in project scenario p in year y (fraction)
$SFS_{p,b,y}$	Specific fuel savings for an individual project technology of baseline b/project p pair in year y (mass or volume units/ technology*day)
$NCV_{b,fuel}$	Net calorific value of the fuel that is substituted or reduced in baseline b (TJ/mass or volume units)
$f_{NRB,b,y}$	Fractional non-renewability status of woody biomass fuel during year y (fraction). For biomass, it is the fraction of woody biomass that can be established as non-renewable. This parameter is omitted when *f* is a fossil fuel.
$EF_{b,f,CO2}$	CO_2 emission factor from use of fuel f (tCO_2/TJ)
$EF_{b,f,nonCO2}$	Non-CO_2 emission factor arising from use of fuel f, when the baseline fuel *f* is biomass or charcoal (tCO_2e/TJ). This parameter is omitted when *f* is a fossil fuel.
$\sum LE_{p,y}$	Leakage for project scenario p in year y (tCO_2e/yr)

Number of project devices commissioned (N_y) will be monitored through database and monitoring surveys. The project-technology days ($N_{b,p,y}$) will be calculated as multiplying the number of project devices with number of operational days.

Annual usage surveys will be conducted to determine the usage rate of project devices ($U_{p,y}$). Sampling will be done for each age group of project population and weighted average will be calculated.

Quantity of fuel consumed in baseline scenario and project scenario will be determined by Kitchen Performance Tests (KPT). Specific fuel savings for a single stove ($SFS_{p,b,y}$) will be calculated based on the results. The project scenario assumes that firewood will be used during the dry season and a mixture of firewood and charcoal will be used in wet season.

Fraction of non-renewable biomass ($f_{NRB,b,y}$) is determined as using ex-ante option at the validation stage and will be fixed as 0.71 for the crediting period.

For emission factors for fossil fuels displaced by the project stoves ($EF_{b,f,CO2}$ and $EF_{b,f,nonCO2}$) and net calorific value of the non-renewable woody biomass ($NCV_{b,fuel}$), default values will be applied; i.e. 112 tCO2/TJ, 8.692tCO2/TJ and 0.0156 TJ/tonne respectively.

Leakage ($\sum LE_{p,y}$)

The project proponent should investigate the following potential sources of leakage:

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.

   The project aims to displace traditional three stones stove that is already widely used in rural Tanzania. It is unlikely that the households using more efficient stoves outside the project boundaries would switch back to the old and inefficient way of cooking.

b. Members of the population who do not participate in the project, and previously used lower emitting energy sources, instead use the non- renewable biomass or fossil fuels saved under the project activity.

   79.1% of the households rely on fuelwood in rural Tanzania as per 2019/2020 Energy Access and Use Situation Survey II Report issued by National Bureau of

Statistics and Rural Energy Agency. Only 4% of the population has been reported to have access to clean cooking services in the country 2020[10]. No possible leakage is foreseen due to this case.

c. The project significantly reduces the NRB fraction within an area where other GHG mitigation project activities account for NRB fraction in their baseline scenario.

   Firewood is collected from forest by the majority of rural population. No significant impact is expected in NRB fraction in other areas. On the other hand, forest cover in Tanzania has been constantly dropping during the last 20 years. Due to the increasing demand on fuelwood, Tanzania lost 2.86 Mha of tree cover between 2001 to 2020, equivalent to a 11% decrease in tree cover and 970Mt of CO_2e emissions since 2000[11].

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.

   Because of the nature of traditional baseline stoves in Tanzania – including three stone fires and traditional charcoal stoves – it is not possible to ensure that these are disposed of. 32% of the respondents stated they use their cookstoves for space heating in rainy season. Project surveys will account this potential for leakage.

e. By virtue of promotion and marketing of a new technology with high efficiency, the project stimulates substitution with this technology by households who commonly used a technology with relatively lower emissions.

   This option is not considered as a potential source of leakage as the majority of targeted households use fuelwood and three stone fire for cooking.

[10] https://trackingsdg7.esmap.org/country/united-republic-tanzania
[11] Global Forest Watch Web page (https://www.globalforestwatch.org/dashboards/country/TZA/)

SDG 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Parameter: Total non-renewable fuelwood saved

Project database and monitoring survey will be used to calculate total quantity of wood fuel saved by the project compared to baseline scenario.

SDG 3. Ensure healthy lives and promote well-being for all at all ages

Parameter: Percentage of households that observed reduction in PM2.5and CO concentration reductions

The beneficiaries of project stoves will be asked to evaluate any improvement in their health conditions compared to baseline situation during the household survey. By reduction of smoke due to the usage of project stoves, respiratory diseases such as itchy eyes or coughing are expected to lessen.

SDG 5. Achieve gender equality and empower all women and girls

Parameter: Time saving associated with cooking time and fuel collection

Average time spent by females in Tanzania is 2.41hrs[12] daily. During the household survey, questions about time spent on cooking and fuelwood collection will be asked to women in order to understand whether using project stoves saves time. It will be also asked that how the saved time was spent by the household. If the saved time is spent on the activities other than household chores, then the response will be accounted to contribute to the SDG. The households who reported time savings equal to or more than 30 minutes and spent the saved time on activities other than household chores will be accounted for the calculation of average savings per household.

[12] The cooking time has been taken from Worldbank Report https://openknowledge.worldbank.org/bitstream/handle/10986/22521/Clean0and0impr000a0landscape0report.pdf?sequence=1&isAllowed=y (Figure 9)
Although the referred study was published in 2014, cooking habits of households have not changed much. The time needed to cook a multi dish meal with only charcoal is over 2 hours as per a recent study dated 2021. However, the value provide by Worldbank report has a gender aspect and cover fuelwood collection as well; therefore applied here.

SDG 8. Promote inclusive and sustainable economic growth, employment and decent work for all

Parameter: Total number of jobs

Number and type of jobs created will be recorded with employment status and duration. . The Project Owner will ensure equal opportunities for all workers, regardless of gender or disability, and provide equal pay to individuals holding the same position.

SDG 1. Zero Poverty

Parameter: Average household savings at cooking

Total non-renewable wood fuel saved will be multiplied by the kg price in the market. On average, one headload (24 kg) of firewood was sold at a price of TZS 881 in rural areas; which is TZS 36.71 per kilo[13].

B.6.2. Data and parameters fixed ex ante

SDG13

Data/parameter	Baseline scenario survey results
Unit	N/A
Description	Report of the results of the baseline scenario survey
Source of data	Baseline Survey raw data and analysis provided as a separate excel sheet.
Value(s) applied	Baseline scenario has been described in B.4. Establishment and description of baseline scenario as per the survey results
Choice of data or Measurement methods and procedures	The survey was undertaken as per the GS guidelines (TPDDTEC Survey Questionnaires)

[13] https://www.cfwt.sua.ac.tz/ecosystems/tanzania-forestry-sector

Purpose of data	Calculation of emission reductions
Additional comment	Undertaken at the start of the first crediting period.

Data/parameter	Project Technology Description
Unit	N/A
Description	The detailed description of the project technology shall include as a minimum: • Manufacturer name, • product name (if applicable), • technology type, • capacity characteristics, • continuous useful energy output demonstration, • rated thermal efficiency • Any performance certifications from National Standards body or certification body recognised by national standards body also shall be provided
Source of data	Technical Specifications provided by the Manufacturer
Value(s) applied	Please see Section A.3. above.
Choice of data or Measurement methods and procedures	Manufacturer Specification as per the applied methodology
Purpose of data	Calculation of emission reductions
Additional comment	No issuance shall be requested for project technologies for which the project technology details are not verified by the verifying VVB prior to completion of verification report.

Data/parameter	Expected technical life of project technology
Unit	years
Description	The expected technical life of an individual project technology shall be defined in the PDD.
Source of data	Technical Specifications provided by the Manufacturer

Value(s) applied	5 years
Choice of data or Measurement methods and procedures	Manufacturer Specification as per the applied methodology
Purpose of data	Calculation of emission reductions
Additional comment	Any written assertions not available at validation shall be included as a FAR and be provided and verified at the time of first verification.

Data/parameter	Avoidance of double counting or double claiming among project participants
Unit	N/A
Description	Evidence of avoidance of double counting or double claiming with other parties directly involved with the project or programme.
Source of data	Written assertions with the project developer of the ownership rights and intention of selling the emission reductions resulting from the project activity directed at or signed with all the applicable parties of the following: • all other project participants; • project technology producers; and • retailers of the project technology or the renewable fuel.
Value(s) applied	N/A
Choice of data or Measurement methods and procedures	Memorandum of Understanding will be signed with the Project Participants.
Purpose of data	Avoidance of double-counting
Additional comment	Undertake at the time of project design review.

Data/parameter	Avoidance of double counting or double claiming with other mitigation actions

Unit	N/A
Description	Review and analysis of mitigation actions in other voluntary market or UNFCCC/compliance mechanisms
Source of data	Publicly available information from Gold Standard and other voluntary standards, at a minimum Verra and any recognized national or regional standards in the project location, and UNFCCC CDM project & PoA database.
Value(s) applied	N/A
Choice of data or Measurement methods and procedures	Official data The project is registered to national carbon registry and acquired Letter of No Objection by the government. The project complies with countries legal, environmental, ecological and social regulations of United Republic of Tanzania.
Purpose of data	Avoidance of double-counting
Additional comment	Undertake at the start of each crediting period.

Data / Parameter	fNRB
Unit	Percentage
Description	Fractional non-renewability status of woody biomass fuel during year *y*, in case the baseline fuel is biomass or charcoal
Source of data	MoFUSS derived value for Tanga region
Value(s) applied	71%
Choice of data or Measurement methods and procedures	MoFUSS derived value deemed eligible as per GS rule Update: fNRB Application for GS4GG certification v 1.0
Monitoring frequency	Fixed by the MoFUSS model for the period 2020-2030
Purpose of data	Calculation of baseline emissions
Additional comment	N/A

Data/parameter	Regulatory framework for provision of thermal energy services
Unit	N/A
Description	Evidence that the project does not undermine or conflict with any national, sub-national or local regulations or guidance for thermal energy supply/devices or fuel supply or use.
Source of data	National, sub-national and local regulations or guidance for provision of thermal energy services/devices of the type the project provides in the project boundary, including any tariff requirements.
Value(s) applied	N/A
Choice of data or Measurement methods and procedures	Official data
Purpose of data	Compliance with national regulatory framework
Additional comment	

Data/parameter	$EF_{b,f,,CO2}$
Unit	tCO2/TJ
Description	CO2 emission factor arising from use of fuels in baseline scenario
Source of data	Technologies and Practices to Displace Decentralized Thermal Energy Consumption" version 4.0
Value(s) applied	112
Choice of data or Measurement methods and procedures	Default value
Purpose of data	Calculation of emission reductions

Additional comment	If the emission factor is expressed in tonnes of CH4 or N2O, it shall be converted to tCO_2e using the applicable GWP and this shall be documented in the PDD.

Data/parameter	$EF_{b,f,non\text{-}CO2}$
Unit	tCO2/TJ
Description	Non-CO2 emission factor arising from use of fuels in baseline scenario
Source of data	Technologies and Practices to Displace Decentralized Thermal Energy Consumption" version 4.0
Value(s) applied	9.46
Choice of data or Measurement methods and procedures	Default value
Purpose of data	Calculation of emission reductions
Additional comment	If the emission factor is expressed in tonnes of CH4 or N2O, it shall be converted to tCO_2e using the applicable GWP and this shall be documented in the PDD.

Data/parameter	$NCV_{b,fuel}$
Unit	TJ/tonne
Description	Net calorific value of fuels used in the baseline
Source of data	Technologies and Practices to Displace Decentralized Thermal Energy Consumption" version 4.0
Value(s) applied	0.0156
Choice of data or Measurement methods and procedures	Default value
Purpose of data	Calculation of emission reductions
Additional comment	N/A

Data/parameter	$EF_{p,f,CO2}$
Unit	tCO2/TJ
Description	CO2 emission factor arising from use of fuels in baseline scenario
Source of data	Technologies and Practices to Displace Decentralized Thermal Energy Consumption" version 4.0
Value(s) applied	Fuelwood/Charcoal 112
Choice of data or Measurement methods and procedures	Default value
Purpose of data	Calculation of emission reductions
Additional comment	

SDG 13

Data/parameter	$EF_{p,f,non\text{-}CO2}$
Unit	tCO2/TJ
Description	Non-CO2 emission factor arising from use of fuels in project scenario
Source of data	Technologies and Practices to Displace Decentralized Thermal Energy Consumption" version 4.0
Value(s) applied	Wood: 9.46 Charcoal: 5.865
Choice of data or Measurement methods and procedures	Default value
Purpose of data	Calculation of emission reductions
Additional comment	If the emission factor is expressed in tonnes of CH4 or N2O, it shall be converted to tCO_2e using the applicable GWP and this shall be documented in the PDD.

SDG 13

Data/parameter	$NCV_{p,fuel}$
Unit	TJ/tonne
Description	Net calorific value of fuels used in the baseline
Source of data	Technologies and Practices to Displace Decentralized Thermal Energy Consumption" version 4.0
Value(s) applied	Wood: 0.0156 Charcoal: 0.0295
Choice of data or Measurement methods and procedures	Default value
Purpose of data	Calculation of emission reductions
Additional comment	N/A

B.6.3. Ex ante estimation of SDG Impact

SDG 13: Take urgent action to combat climate change and its impacts

Parameter: Emission reductions achieved by fuelwood savings at household level

Ex-ante calculation for a project stove by using the parameter values fixed ex-ante and the preliminary values defined for monitored parameters in B.7.1 is demonstrated as follows:

Parameter	Unit	Data Source	Value
$N_{b,p,y}$	Days	Project database	365
$U_{p,y}$	Fraction	Estimated	0.9
$SFS_{p,b,y}$	kg/hh/day	Ex-ante estimation for fuelwood Field perfomance test results (KPT)	4.20
$NCV_{b,fuel}$	TJ/t	Default value for firewood	0.0156

Parameter	Unit	Data Source	Value
$f_{NRB,b,y}$	Fraction	NRB Report	0.71
$EF_{b,f,CO2}$	tCO2e/TJ	Default value for firewood	112
$EF_{b,f,nonCO2}$	tCO2e/TJ	Default value for firewood	9.46
$\Sigma LE_{p,y}$	tCO2e	Assumed to be zero as per the methodology	0
ER	tCO2e	Calculated	1.92

$ER_y = \sum_{b,p} (N_{b,p,y} * U_{p,y} * SFS_{p,b,y} * NCV_{b,fuel} * (f_{NRB,b,y} * EF_{b,f,CO2} + EF_{b,f,nonCO2})) - \sum LE_{p,y}$

Emission reductions achieved per project stove is calculated as **1.92 tCO2**e per year.

SDG 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Parameter: Total non-renewable fuelwood saved

Project database and usage survey will be used to calculate total quantity of wood fuel saved by the project compared to baseline scenario. This value will be multiplied by fNRB to calculate the non-renewable portion of the fuelwood saved.

Total non-renewable fuelwood saved = Total fuelwood saved x fNRB

SDG 3. Ensure healthy lives and promote well-being for all at all ages

Parameter: Number of households that observed reduction in PM2.5and CO concentration reductions

Although most of the households cooks outside, exposure to smoke during cooking is still major problem causing 33,000 deaths annually in Tanzania[14]. No calculation is applicable, the results of the household survey will be used.

[14] https://www.thecitizen.co.tz/tanzania/news/national/dirty-cooking-kills-at-least-33-000-yearly--3998522

SDG 5. Achieve gender equality and empower all women and girls

Parameter: Average time saving associated with cooking time and fuel collection

No calculation is applicable, the results of the household survey will be used.

SDG 8. Promote inclusive and sustainable economic growth, employment and decent work for all

Parameter: Total number of jobs

Training records, payslips and contracts will used to predict the number of employment by gender..

SDG 1. Zero Poverty

Parameter: Average household savings at cooking

Total fuelwood saved will be calculated based on the cookstove usage rates and multiplied by the average fuelwood price in the market.

Total fuelwood saved by hh= Number of operational days x Fuelwood saved by each hh per day (SFSp,b,y)

One household saves 1,504 kg fuelwood annually on average multiplied by TZS 36.71 , equals TZS 55,198 savings per year.

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

SDG 13

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
10/04/2025-31/12/2025	22,725	8,116	14,608
2026	68,423	24,437	43,986
2027	68,548	24,481	44,066
2028	68,548	24,481	44,066
2029	68,548	24,481	44,066
01/01/2030-09/04/2030	16,714	5,969	10,744

Total	**313,506**	**111,966**	**201,536**
Total number of crediting years	5		
Annual average over the crediting period	**62,701**	**22,393**	**40,307**

SDG 15

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
10/04/2025-31/12/2025	25,407	9,074	16,333
2026	38,958	13,913	25,044
2027	38,958	13,913	25,044
2028	38,958	13,913	25,044
2029	38,958	13,913	25,044
01/01/2030-09/04/2030	9,739	3,478	6,261
Total	**190,976**	**68,206**	**122,771**
Total number of crediting years	5		
Annual average over the crediting period	**38,195**	**13,641**	**24,554**

The total number of project stoves operational is assumed to be 20,700 as per the assumed usage rate.

SDG 3

95% of the households are expected to experience less indoor air pollution due to reduced PM2.5and CO concentrations; that is 21,850 users

SDG 5

95% of all users of the project stoves are expected to save at least half an hour from cooking activities.

SDG 8

At least 60 jobs will be created for manufacturing, distribution and sale support of the project cookstoves. The project is going to involve 30 distributors (local businesses) who will sell the cookstoves. These people will get a commission on the sale of the cookstoves.
About 20 people will be involved for the production of stoves. Another 10 employees will be assigned for monitoring and management of the project.

SDG 1

Each household will save TZS 55,198 per year on average over the crediting period; each household will save TZS 275,989 in total during the 5 years of crediting period.

B.7. Monitoring plan

B.7.1. Data and parameters to be monitored

SDG 13

Data / Parameter	Avoidance of double counting or double claiming among project technology end users
Unit	NA
Description	Evidence of avoidance of double counting or double claiming with project technology end users
Source of data	Carbon title waiver forms signed by end users
Value(s) applied	NA
Measurement methods and procedures	Each user will be asked to sign the carbon title waiver before receiving the cookstove
Monitoring frequency	Monitored whenever project technology is sold or otherwise disseminated
QA/QC procedures	Cross check using general internet search and search of public records of Gold Standard and other voluntary market and UNFCCC mechanisms
Purpose of data	
Additional comment	N/A

Data / Parameter	Presence of stove stacking

Unit	NA
Description	Descriptive statistics of the presence and usage practices of baseline- and other non-project-technology by project technology end users
Source of data	Usage survey
Value(s) applied	NA
Measurement methods and procedures	Usage Survey- use of other stoves, to capture 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, or monitoring surveys to capture the number of meals cooked. The surveys may be integrated with the usage survey
Monitoring frequency	Annual
QA/QC procedures	The calculation of $SFS_{p,b,y}$, $SFC_{p,y}$, $SE_{b,y,CO2}$ and/or $SE_{b,y,non-\ CO2}$ shall be cross-checked with the observed presence of stove stacking. Ensure any stove stacking is considered so that emission reductions are calculated only from real reduction of, or replacement of, baseline fuel use. Cross-check results of this survey with independent studies that are specific to the project region (or to the project country, if regional studies are not available), including but not limited to National publications, peer-reviewed literature, third party assessments (for example – WISDOM, FAO, UN and similar organizations) and/or official data or statistics about cooking technologies, not older than 5 years old.
Purpose of data	
Additional comment	Whether or not the existing baseline technology is surrendered, when an old technology remains in use in parallel with the improved technology, or another technology is put in use in parallel, the corresponding emissions must be accounted for so that emission reductions are not overestimated. For example: - if the baseline fuel consumption was defined based on the total fuel used for cooking by the user, determine the percentage of meals or cooking performed on the project technology and multiply the baseline fuel usage by this percentage;

	- adjust the baseline fuel consumption to be defined based only on the use of the cooking technology that is directly replaced by the project technology.

Data / Parameter	$P_{b,y}$
Unit	kg/hh/day
Description	Quantity of fuel that is consumed in baseline scenario b during year y
Source of data	DNV- Kitchen Performance Test- Field Work Report dated 09/02/2024
Value(s) applied	6.54 kg/hh/day
Measurement methods and procedures	Determined by the baseline KPT carried out sampling the households without the project stove from targeted population. The fuelwood consumption per capita per day is 1.52 kg/cap-day. The value has been cross-checked by UN data. Please see ER calculation sheet for details. This is multiplied by the average family size of 4.3 predicted during the KPT test to get the value per household. Household size is cross-checked with the baseline survey and found conservative. For paired sampling, the sample size of stove users shall be chosen for a 90/30 precision (90% confidence interval+ and 30% margin of error). In cases where the result indicates that 90/30 precision is not achieved, the lower limit of 30% confidence interval of the parameter value will be chosen as an alternative to repeating the survey efforts to achieve the 90/30 precision.
Monitoring frequency	At least once every two years (biennial)

QA/QC procedures	Compliance with the general requirements for sampling (Section 4.4), general requirements for QA/QC (Section 4.5) and Annex 2 Kitchen performance test. If the values resulting from the baseline KPTs are higher than the following **threshold value** (on equivalent terms), then the results shall be further substantiated by independent third-party studies that are specific to the project region, including but not limited to government publications, peer-reviewed literature, third party assessments (for example – WISDOM, FAO, UN and similar organizations) and/or official data or statistics about cooking technologies and fuel use. In any case, the value applied shall not be higher than the **cap value** (on equivalent terms). **Threshold value**: 0.75 tonnes/person*year of fuelwood **Cap value**: 0.95 tonnes/person*year of fuelwood
Purpose of data	Calculation of emission reductions
Additional comment	Used to calculate SFS under method 1 Applicable adjustment factors may be applied.

Data / Parameter	$P_{p,y}$
Unit	kg/hh/day
Description	Quantity of fuel that is consumed in project scenario p during year y
Source of data	Project performance filed tests
Value(s) applied	1.56 kg/hh/day (assumed)
Measurement methods and procedures	The latest protocol for Kitchen Performance Test[15] will be applied. The sample size of stove users shall be chosen for a 90/30 precision (90% confidence interval+ and 30% margin of error). In cases where the result indicates that 90/30 precision is not achieved, the lower

[15] https://www.cleancookingalliance.org/binary-data/DOCUMENT/file/000/000/604-1.pdf

	limit of 30% confidence interval of the parameter value will be chosen as an alternative to repeating the survey efforts to achieve the 90/30 precision.
Monitoring frequency	Updated every two years, or more frequently The KPT values are valid for two years and may be applied for before or after period, however the gap between start date of first KPTs and second KPTs shall not be more than two years.
QA/QC procedures	Compliance with the general requirements for sampling (Section 4.4), general requirements for QA/QC (Section 4.5) and Annex 2 Kitchen performance test.
Purpose of data	Calculation of emission reductions
Additional comment	A single project fuel consumption parameter is weighted to be representative of the quantity of project technologies of each age being credited in a given project scenario Used to calculate SFS under method 1. Applicable adjustment factors may be applied. In cases where charcoal is used, the project will apply the charcoal-to-firewood conversion factor in accordance with the most recent default values published by the Clean Development Mechanism (CDM)- TOOL 33.

SDG 13 and SDG 15

Data / Parameter	$SFS_{b,p,y}$
Unit	Kg/stove*day
Description	Specific fuel savings for an individual project technology of baseline b/project p pair in year y
Source of data	Calculated from $P_{b,y}$, $P_{p,y}$ and other information to obtain the savings in the required units

Value(s) applied	4.98 (assumed)
Measurement methods and procedures	Calculated
Monitoring frequency	Updated every two years, or more frequently
QA/QC procedures	The calculation method, inputs and their sources shall be described in detail in the PDD and monitoring report. Cross-check with proportional efficiency of baseline and project technology. For example, if the baseline stove efficiency is 10% and the project rated efficiency is 25%, the savings should reflect a factor of 2.5 approximately in the first year of the crediting year and not more. If it is more, then the value is capped based on the proportional efficiency.
Purpose of data	Calculation of emission reductions
Additional comment	Applies when using Method 1 The baseline and project field test data must be analysed in combination to estimate the average fuel savings per technology unit. Whenever the baseline fuel and project fuel are the same, the statistical analysis can be conducted with respect to fuel savings per technology unit. The project distributes one stove per household.

Data / Parameter	$U_{p,y}$
Unit	Percentage
Description	Weighted average usage rate in project scenario p during year y
Source of data	Usage Survey
Value(s) applied	90% (assumed)
Measurement methods and procedures	The proportion of sampled ICS found to be in operation during each monitoring period will be applied to the total number of stoves accounted for emission reductions. Minimum 100 samples will be surveyed. Separate samples of at least 30 shall be taken for each age group

	of project population and weighted average factor for overall project population shall be used.
Monitoring frequency	Annually
QA/QC procedures	Compliance with the general requirements for sampling (Section 4.4) and general requirements for QA/QC (Section 4.5) of the methodology. The unique reference number of each stove shall be logged in the monitoring database showing the total number of stoves. Data from the sampling plan will be collected in each monitoring period by trained project staff and applied in the emissions reduction calculations. Internal cross-checks by the project developer or project implementer will be undertaken as QC
Purpose of data	Calculation of emission reductions
Additional comment	Requirement and Guidelines: Usage Rate Monitoring shall be followed.

Data / Parameter	$N_{b,p,y}$
Unit	days
Description	Number of project technology-days included in the project database for baseline b/project p pair in year y
Source of data	Calculated from the Project database as the sum of the number of project technology units times the calendar days during the year y that they were present at the end user locations
Value(s) applied	365
Measurement methods and procedures	Calculated
Monitoring frequency	Annually
QA/QC procedures	Cross check the results of the usage survey with the contents of the project database to confirm whether the project technology units surveyed are present at end

	user locations as expected, or not. If there is discrepancy, this must be explained or corrected.
Purpose of data	
Additional comment	N/A

Data / Parameter	$LE_{p,y}$
Unit	tCO_2e per year
Description	Leakage in project scenario p during year y
Source of data	Baseline and monitoring surveys
Value(s) applied	0
Measurement methods and procedures	Measured through baseline surveys and monitoring surveys
Monitoring frequency	Every two years, or default discount value of 0.95 applied to emission reductions
QA/QC procedures	Compliance with the general requirements for sampling (Section 3.1) and general requirements for QA/QC (Section 3.2) of the methodology.k
Purpose of data	Calculation of leakage emissions
Additional comment	Following data will be collected to assess the leakage due to the space heating: • Technologies deployed for space heating during rainy season Frequency and duration of heating during the rainy season with each technology

SDG 3

Data / Parameter	Number of households that observed reduction in PM2.5and CO concentration reductions
Unit	Number

Description	Number of households who perceived reduced indoor air pollution
Source of data	Household Survey
Value(s) applied	21,850
Measurement methods and procedures	The households will be asked questions about their perception of reduced smoke during cooking in the project survey
Monitoring frequency	At least once every two years (biennial)
QA/QC procedures	The data will be stored at least two years after the end of crediting period or last issuance of carbon credits, whichever is later.
Purpose of data	Demonstration of contribution to SDG 3
Additional comment	

SDG 5

Data / Parameter	Average time saving associated with cooking time and fuel collection
Unit	Minutes
Description	Number of minutes saved from cooking activities.
Source of data	Household Survey
Value(s) applied	30
Measurement methods and procedures	The households will be asked questions about their perception of reduced time spent for cooking in the project survey The questions regarding how the saved time being used will be asked. Those who has spent saved time to activities other than household chore would be accounted.
Monitoring frequency	At least once every two years (biennial)

QA/QC procedures	The data will be stored at least two years after the end of crediting period or last issuance of carbon credits, whichever is later.
Purpose of data	Demonstration of contribution to SDG 5
Additional comment	

SDG 8

Data / Parameter	Total number of jobs
Unit	Number
Description	Total number of jobs created by the project
Source of data	Training records and Project Database
Value(s) applied	80
Measurement methods and procedures	The project aims to employ at least 60 people for the production, distribution and sales of stoves. Measured by training records and project database will
Monitoring frequency	At least once every two years (biennial)
QA/QC procedures	Each village facilitator will receive trainings about the stoveuse.
Purpose of data	Demonstration of contribution to SDG 8
Additional comment	The Project Owner will ensure equal opportunities for all workers, regardless of gender or disability, and provide equal pay to individuals holding the same position.

SDG 1

Data / Parameter	Average household savings at cooking
Unit	TZS/hh-yr
Description	Average household savings at cooking due to the use of less fuelwood.
Source of data	Project Database

Value(s) applied	TZS 55,198
Measurement methods and procedures	Measured by project database on the basis of number of stoves distributed. The number of operational stoves will be adjusted as per the usage rate determined during usage survey.
Monitoring frequency	At least once every two years (biennial)
QA/QC procedures	The data will be stored at least two years after the end of crediting period or last issuance of carbon credits, whichever is later.
Purpose of data	Demonstration of contribution to SDG 1
Additional comment	

B.7.2. Sampling plan

The sampling frame is the project boundaries, including the houses where the stoves have been installed. The target population are the households in rural Tanzania. The end users who received the Project stoves will be recorded to the sales database.

To ensure a random selection of ICS, random number generators shall be applied. Each ICS in the target population is uniquely identifiable by its unique ID number. Each ICS can thus be allocated a Sample Selection Number in each monitoring period, starting at 1 and increasing up to the total number of ICS in the Database for that pre-defined sampling frame. Applying the random number generators, the ICS can then be randomly chosen from the defined population up to the required sample size.

Baseline Survey:

For baseline survey, samples will be randomly selected among households without the project technology. The minimum sample size required by the methodology is 100 for population over 1000.

Kitchen Performance Test:

The sampling method for $P_{b,y}$ and $P_{p,y}$ is Paired Sampling or sampling the same users before and after beginning use of the project stove. Sample size must be sufficient to ensure the confidence/precision level of 90/30 for quantity of fuelwood consumed in

baseline and project scenario. The minimum sample size recommended by the methodology is 20 for KPTs.

The baseline KPT will be performed with 30 samples that will be randomly selected among the over 100 end users in baseline survey. The KPT will be performed on houses with similar socioeconomic characteristics as the target population. After baseline KPT is finalized, the households will be provided with the project stoves for the purpose of the test. The project KPT will be run after allowing sufficient time to the subjects to get used to the project stoves.

Subsequent sampling for updating Pp,y will be done by stratified sampling method per stove ages. The registered stoves will be grouped by age and location from the project database. The sample size updating KPT will comply with 90/30 confidence/precision required by the methodology.

Usage Rate:

For $U_{p,y}$, stratified random sampling method per stove ages will be followed. Sample size for usage rate is minimum 100 for group sizes larger than 1,000 with at least 30 samples for the stoves of each age being credited. This will require a sample size ranging from 100 to 150 (30 samples for each vintage out of 5 ages) throughout the crediting period.

In order to ensure conservativeness, participants in a usage survey with stoves in the first year of use (age0-1) will have stoves that have been in use on average longer than 0.5 years. For stoves in the second year of use (age1-2), the usage survey will be conducted with stoves that have been in use on average at least 1.5 years, and so on.

Household Surveys:

The monitoring survey investigates changes over time in the project scenario by surveying end-users with project technology on an annual basis. Annual trends in end user characteristics such as stove use, fuel consumption and seasonal variations are predicted during the survey. Whether the baseline technology is still in use will be checked and recorded as well.

Contributions to SDGs: 3 and 5 will be determined during the household surveys by asking questions regarding the improved health of individuals due to less exposure to smoke and time savings from cooking.

B.7.3. Other elements of monitoring plan

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Monitoring plan will be in line with the applied methodology. Please see an indicative timeline attached from Annex.3 of the methodology below.

Project preparation and monitoring schedule	Prior to validation	Prior to first verification [18]	Annual	Every two years
ER estimation for PDD	✔			
Baseline studies				
Indoor air pollution levels	✔			
NRB assessment	✔			
Baseline scenario survey	✔			
Baseline Field Tests (*except where default values applied)		✔		✔*
Project studies				
Usage survey			✔	
Usage survey -use of other stoves			✔	
Project Field Tests (PFT)		✔		✔
Ongoing monitoring tasks				
Maintenance of total sales record and project database	Continuous			
Leakage assessment				✔
Updating NRB assessments (*except where ex-ante value applied)				✔*

Figure 8. Annex.3 of the applied methodology demonstrating an indicative timeline for monitoring events.

The Monitoring Plan applied involves a number of key elements that ensure high-quality, unbiased and reliable information regarding the performance of the project in terms of implementation and outcomes, and for the purposes of calculating Verified Emission Reductions (VERs) on the basis of the amount of non-renewable biomass saved by the ICS in the project activity. The key elements are the following:
- Data collection procedures
- Distribution and Monitoring Database
- Spot Checking of ICS (ongoing)
- Sample Plan for the Monitoring Survey
- Data Quality, Consistency and Duplication Checks
- Monitoring Reporting

Below is the description of the steps in monitoring plan.

1. **Registration of stove:** Project Implementer will collect/receive the necessary information requested in the Registration process from the user. Means of collecting this information may be through a hard copy form or ICTs by project implementer's staff, retailers, end-users or partner organization's staff, or through the use of SMS. Project Implementers' staff shall double check the accuracy of information provided, and request for field staff additional clarifications if needed. Following information will be recorded:
    - Serial Number
    - Contact details of the user
    - Date of installation
    - GPS Coordinates
    - Number of stoves

Project Implementer plans to apply a distribution system which will perform door to door sale rather than selling stoves in shops in order to record GPS coordinates of users. Every beneficiary of an ICS will sign a user agreement (paper and/or electronic version) with Project Developer. A unique serial number will be allocated to each stove and the number is indicated on the user agreement.

2. **Data logged into database:** Project Implementer's trained staff will input the data in the database either manually (if data collected using hard copy form) or this will be automatically input if data was collected using ICTs or SMS. Project

Implementer staff shall double check the information included on the database and check for duplications. Any duplicate information shall be investigated and errors corrected or excluded from the database if it is a true duplicate entry.

3. **Spot- checking (continuously):** Project Implementer field staff will randomly select households included in the database and visit them to cross-check the information on the database with the factual evidence in the field. Any inconsistencies found (eg. Change in the address of a user) will be updated on the database, and in the case ICS are found to be no longer in use, they will be clearly marked as such and excluded from emission reductions calculations.
4. **Monitoring:** Project Implementer will follow the requirements as per methodology requirements to collect the necessary information for a monitoring report.
5. **Preparation of monitoring report:** Project Implementers or Project Developer will prepare the final monitoring report to be provided to the verifier VVB for verification of emission reductions.

Project Developer will coordinate and manage Project Implementer and assist them in implementing each element of the monitoring plan.

Biennial Project FT Update:

The PFT update is an extension of the project KPT and done biennially. The test provides a fuel consumption assessment representative of project technologies currently in use and predicts any changes in the project scenario over time as project stove age and new customers are added.

Annual Household and Usage Surveys:

According to the methodology, end users can be surveyed at any time(s) throughout the year with care taken to collect information pertaining to seasonal variations in stove and fuel use patterns. Household surveys can be conducted with usage survey participants that are currently using the project stove. Visual inspection of the premises to see if the project stoves are operational and in use and interview with end user will be done during the survey.

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1. Start date of VPA

10/04/2025 (distribution of first stove)

C.1.2. Expected operational lifetime of VPA

15 years

C.2. Crediting period of project

C.2.1. Start date of crediting period

C.2.2. 10/04/2025 (First batch of stoves delivered to beneficiaries)Total length of crediting period

Total crediting period is 15 years. First crediting period: 10/04/2025- 09/04/2030

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 x.y	

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 project is gender sensitive and considers gender aspect in all phases. Women and young girls are responsible for cooking and fetching firewood in rural Tanzania. The project will lessen time spent for cooking activities for women and girls.

Question 2 - Explain how the project aligns with existing country policies, strategies and best practices	National Strategy for Gender Development- Tanzania (2000) states poverty and work overload for girls and women at household level continue to be major obstacles which cause drop-out of both girls and boys in school and training institutions. The women also has limited participation to economic activities due to work overload particularly in rural areas[16]. Women and girls being the main energy producers in a family; they are burdened with the responsibility to source energy options for the daily needs of their families. The project cookstoves will save time for women to join educational or economic activities.
Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?	Gender issues raised by Gold Standard Safeguarding principles are all addressed under the Safeguarding Principles Assessment in Appendix.1. No risks have been foreseen by the stakeholders and project developer.

[16] https://www.tanzania.go.tz/egov_uploads/documents/Tanzania_-_National_Strategy_for_Gender_Development_sw.pdf

Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?	As per Stakeholder Consultation Requirements, the project developer invites all stakeholders to give feedback on the design and the implementation of the project. During the consultation process, particular importance is given to the equal participation of women. Gender related organizations who actively work in rural areas have been invited to the meeting.

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

The below is a summary of the 2 step GS4GG Consultation for monitoring purposes. The first live stakeholder meeting was held on 20/01/2023 for the real case VPA1: GS 12118 Protect the Environment, Use Clean Cookstoves VPA-1.

A second stakeholder consultation meeting was organized on 01/02/2023 at Saint Gaspar Conference Center, Dodoma. 62 participants from the villages within the project boundary and local government representatives attended to the meeting. All presentations and discussion were made in local language.

Figure.7. Dodoma Stakeholder Consultation Meeting.

Following questions regarding the project implementation were asked during the meeting:

1) Question: In the Kitchen performance test that you will perform before the project implementation, will you take in consideration the fact that different types of food are cooked and the number of household members?

Answer: The selected households will be monitored for at least three consecutive days and the consumption of firewood will be measured through specific tools and measurements that will allow to understand the average firewood consumption per person per day, which is the key indicator to then understand how much CO2 is currently produced by households for cooking practices.

2) Question: Which will be the topics that the distributors will be taught during the training?

Answer: The distributors will be trained on environment conservation, climate change, clean cooking practices benefits, communication skills. Once trained they will then sensitize the population to plant trees and use Jiko Makini.

3) Question: How many tree plants will be distributed and which kind of trees?

Answer: currently the project is under the design phase therefore it is not defined yet the number and type of tree plants that will be distributed, also depends on the budget available. According to the Regional Environment Officer presented at the meeting, who intervened on this point, the Government of Tanzania is advertising a program to sensitize the citizens to plant at least 5 trees for household.

Then the stakeholders were informed about Gold Standard certification and transfer of carbon rights to the project proponent. The finances from the sale of the carbon credits will be used to:

- Recover the initial investment used in executing the project.
- Conducting project monitoring activities.
- Expanding the project to a wider geographic area and reach more people.
- Reducing the price of the improved cook stove significantly to ensure every household within the target area can afford.
- Conducting other development projects within the area that the project is being executed thanks to the profit generated by the project

Following questions were asked regarding the carbon finance:

4) Question: How much will be the price that the cookstoves will be sold?

Answer: The price for each cookstove will be 10,000 TZS (around 4 USD), this is the subsidized price to make sure that all the interested people, also the poorer ones, will have the possibility to buy the cookstoves. The cookstoves are produced at much higher price, but thanks to the carbon credit framework it will be possible for the people to access the cookstoves at lower price.

5) Question: What if a person changes his/her place of living in the meantime? Can a cookstove be moved?

Answer: Once the cookstoves are distributed to the targeted households, the cookstove will be registered with the address or GPS coordinates of the owner. If the entire family moves to another place, the registry data would be invalid. Therefore, the new address should be reported to the project management through village leaders.

6) Question: The project looks like it will negatively impact the charcoal producers since they will have less buyers, how does the project address this issue?

Answer: The demand to charcoal is expected to decline due to the project implementation. We will consider to include them as distributors of the cookstoves to provide them another income source.
7) Question: How do you calculate the carbon credits generated by the project?
Answer: There are specific methodologies set up by Gold Standard to calculate the carbon credits generated by the project, all the documents are accessible on the website of the institution. The most important factor is to demonstrate the reduction of firewood used by the targeted households thanks to the introduction of the Jiko Makini.
Contact information and location on where the audience can channel their inputs or grievances was shared and a meeting evaluation form distributed the audience. 50 forms have been filled down and handed back the organizers.

E.1. Summary of stakeholder mitigation measures

The first live stakeholder meeting was held on 20/01/2023 for the real case VPA1: GS 12118 Protect the Environment, Use Clean Cookstoves VPA-1. A second stakeholder consultation meeting was organized on 01/02/2023 at Saint Gaspar Conference Center, Dodoma.
No negative comments which require alteration of project activity were received during both meetings. Some of the respondents stated that the cookstoves in bigger sizes should be offered to the users. This has already been discussed and will be considered at later stages of implementation. The respondents were keen to support the project and would like to see it expanded in other areas.

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 Process Book (mandatory)	The process books will be available at offices of village leaders. Alternatively, a comment box can be placed at the same locations.
GS Contact (mandatory)	help@goldstandard.org

	Tel (Tanzania): +255 788 36 30 36
Other	Tel (Italy): +39 351 614 2230
	projects@offgridsun.com

SECTION F. Eligibility and inclusion criteria for VPAs inclusion

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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	Geographic boundary	Each VPA shall be located within the boundaries of the PoA.	The VPA is located in Tanga region of United Republic of Tanzania
2	Double Counting	A unique numbering system will be adopted for each VPA. All ICS installed shall receive a unique number identifying to which VPA it belongs.	Each ICS included in the VPA has a unique combination of customer name and geographical location linked with a unique serial number.
3	Exclusiveness of VPA	VPA shall not be previously: 1. Registered as a project activity with other offset schemes 2. Included as a VPA in any other registered PoA, or deregistered as a VPA of a PoA.	Confirmation by CME
4	Specification of Technology/ Measure	VPAs under the PoA shall distribute efficient ICS using firewood and charcoal. The capacity per unit is limited by 150kW as per the applied TPDDTEC methodology.	The type of stoves replaced and ICS implemented is described in Section B.4 below. Baseline and project Kitchen Performance Tests will be carried out.

5	Start date	The start date of any proposed VPA will be on or after the start date of PoA.	The date on which first ICS distributed will be recorded. Sales invoice or end-user agreement will be provided as a proof.
6	Applicability of methodologies	VPAs shall apply TPDDTEC (v 4.0).	The applicability of the methodology is demonstrated in Section B.2
7	Additionality	The additionality PoA is demonstrated as per GS4GG Community services activity requirements, Version 1.2 and GHG Emissions Reduction & Sequestration Product Requirements, Version 1.2.	The VPA is automatically additional. Please see Section B.5.
8	Public funding	Affirmation that there is no diversion of Official Development Assistance (ODA).	ODA declaration is provided.
9	Target group& Distribution Mechanism	Households will be the target group for VPAs. ICSs will be installed by local VPA Implementers on a non-commercial basis.	User registration.
10	Sampling requirements	All requirements as mentioned in TPDDEC, version 4.0 or the Standard: Sampling and surveys for CDM project activities and programme of activities are applicable to VPAs.	Specifications of the sampling methods is defined in Section B.7.2. VPA Implementers will follow the management system described at the PoA-DD.
11	Compliance of the technology implemented	The capacity of each ICS will comply with the requirements of TPDDTEC methodology.	The VPA applies TPDDTEC (v4.0) (Section B.2)
12	SDG Outcomes	Each VPA shall conduct SDG outcomes assessment and comply with the SDG targets identified in the PoA-DD.	Please see SDG outcomes assessment in Section B.6

13	Stakeholder Consultation	A local stakeholders' consultation meeting will be organized for Real Case VPA.	Local Stakeholder Consultation Meeting is conducted for the first VPA on 20/01/2023
14	VER Ownership	End users receiving ICSs under the specific VPA contractually cede their rights to claim and own emission reductions to the CME of the PoA.	End-user contract between CME and the user.

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.

SOCIAL SAFEGUARDING PRINCIPLES		
Reference requirement	Question	Response
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project developer, its representatives and the Project disrespect internationally proclaimed human rights?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Is the project involved or complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Have local communities or individuals raised human rights concerns regarding the project (e.g., during the stakeholder engagement process, grievance processes, public statements)?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Is there a risk that rights-holders (e.g., Project-affected stakeholders) do not have the capacity to claim their rights?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does this project undermine national or regional measures for the realisation of the right to development?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.		
Please add text here…		
Would the project potentially involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalised groups?	☐ YES ☐ POTENTIALLY ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalised or excluded individuals or groups, including persons with disabilities?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalised individuals or groups, including persons with disabilities?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project incorporates a human rights-based approach.
For example, by describing how the project design:

- is informed by human rights analysis, including from UN human rights mechanisms (human rights treaty bodies, universal periodic review, special procedures)
- includes measures to assist the government to realise (respect, protect and fulfil) human rights under international law and to implement human rights-related standards in national law (whichever is higher)
- enhances the availability, accessibility and quality of benefits and services for potentially marginalised individuals and groups, and to increase their inclusion in decision-making processes that may impact them (consistent with the non-discrimination and equality human rights principle)
- provides reasonable accommodations to strengthen inclusivity and accessibility of project benefits and services to persons with disabilities.

The United Republic of Tanzania is a member of the United Nations and the African Union. It has ratified many UN Human Rights Conventions and thus has made binding international commitments to adhere to the standards laid down in these universal human rights documents.[17] The project will be implemented under the national laws and will not lead to violations of human rights in any kind. There is no limitation to the participation to the project.

ERROR! REFERENCE SOURCE NOT FOUND.**ERROR! REFERENCE SOURCE NOT FOUND.**

ERROR! REFERENCE SOURCE NOT FOUND.	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g., during the stakeholder engagement process, grievance processes, public statements)?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?	☐ YES ☒ NO

[17] http://www.claiminghumanrights.org/urtanzania.html?&L=ofefghqitmbv%2F%25

NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project prevent men and women from having equal opportunities to participate in identified tasks and activities, whether through paid work, volunteer work, or community contributions, as appropriate?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Is information about project objectives being communicated in a way that is inappropriate for the local context and not tailored to the methods of understanding of both women and men, which could hinder their participation?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Has the project assessed gender risks without referencing the country's gender strategy or equivalent national commitment?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Has expert stakeholder(s) been involved, and has their input been requested for the project design on gender equality and women's empowerment?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.		
Please add text here….		
Would the project potentially involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts on gender equality and/or the situation of women and girls?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	☐ YES ☐ POTENTIALLY ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well-being.	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project is addressing any identified risk to gender equality and women's empowerment.

The project aims to decrease the burden on women in the most vulnerable communities by reducing fuel wood consumption. The time spending for fuel wood collection and cooking will reduce. The women will have more time for other activities. The risk of being exposed to gender-based violence will decrease as well.

Both women and men will have equal access to the project stoves and other benefits. The project will provide job opportunities. Principles of equal treatment, equal pay for equal work will be strictly followed.

The Project respects the country's gender policy. The project addresses gender issues related with energy by installing improved cookstove technologies for households. Women and girls, being the main beneficiaries of the project are actively involved in all phases of the project and participating stakeholder consultation.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve potential risks to the health and safety of affected communities during its life cycle?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any potential risks to the workers' safety and health?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	construction and/or infrastructure development (e.g., roads, buildings, dams)?	☐ YES ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	risks of water-borne or other vector-borne diseases (e.g., temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g., explosives, fuel and other chemicals during construction and operation)?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g., food, surface water purification, natural buffers from flooding)?	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project is addressing any identified risk related to community health and safety.

The cookstoves will be produced by EnvoTec Services Limited, established in 1998 and has been working on stove technologies to date. The company works in collaboration with various institutions, including Ministry of Energy and Minerals, Rural Energy Agency, Tanzania Bureau of Standards, ISO and Global Alliance for Clean Cookstoves.

The company follows the requirements in The Occupational Health and Safety Act 2003[18] and assures safe workplace during manufacturing of the stoves.

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ERROR! REFERENCE SOURCE	Does the project involve altering, damaging, or removing sites, objects, or structures of significant cultural heritage?	☐ YES ☒ NO

[18] https://procedures.tic.go.tz/media/OSHA%20ACT,%202003.pdf

NOT FOUND.		

If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	activities adjacent to or within a cultural heritage site?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	alterations to landscapes and natural features with cultural significance?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	utilisation of tangible and/or intangible forms (e.g., practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" or "POTENTIALLY" - are the communities made aware of their right under the law, scope and nature of proposed development and its potential consequences?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" - does the project provide equitable sharing of benefits from commercialisation of such knowledge, innovation, or practice, consistent with their customs and traditions?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", has project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
The project does not involve and is not complicit in the alteration, damage or removal of any critical cultural heritage.		
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any risks related to involuntary relocation of people?	☐ YES ☒ NO
If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.		
Please add text here….		
Would the project potentially involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	risk of forced evictions or involuntary relocation of people?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	temporary or permanent and full or partial physical displacement (including people without legally recognisable claims to land)?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	economic displacement (e.g., loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" or "POTENTIALLY", - has the project developed Resettlement Action Plan or Livelihood Action Plan in consultation and agreement with affected individual, group or community? - has the project integrated Resettlement Action Plan or Livelihood Action Plan into the Project design?	☐ YES ☐ NO ☒ NA

ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

Please add text here….

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any risks related to identifying and managing legitimate tenure rights that may be affected by the project?	☐ YES ☐ NO

If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	uncertainties with regards to land tenure, access rights, usage rights or land ownership? Examples include, but are not limited to water access rights, community-based property rights and customary rights.	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Changes in legal arrangements, if yes, are the changes done in line with relevant laws and regulations?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Changes in legal arrangements, if yes, are these changes agree with free, prior and informed consent of the involved stakeholders?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE	Does some other entity (other than the project developer) hold uncontested land title for the entire Project Boundary?	☐ YES ☐ NO ☒ NA

NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Have project developer in consultation with stakeholders established a functioning mechanism to receive, process, resolve, communicate and record grievances?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project does not require any change to land tenure arrangements and/or other rights such as resource access rights, community-based property rights and customary rights.

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve Indigenous People within the Project area of influence who may be affected directly or indirectly by the Project?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	affect areas where indigenous peoples are present (including project area of influence)	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	affect areas, land and territory claimed by indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE	If answer to above questions is ''YES'' or "POTENTIALLY",	☐ YES

SOURCE NOT FOUND.	- Is it determined that the proposed project may affect the rights, lands, resources, or territories of indigenous people? - Has an "Indigenous People Plan" (IPP) or "Indigenous People Plan Framework" been elaborated and included in the project documentation? - Was the plan developed in accordance with the effective and meaningful participation of indigenous peoples and in accordance with UNDP Guidelines?	☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	risk of forcibly removing indigenous people from their lands and territories?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	utilisation and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? Consider, and where appropriate ensure, consistency with the answers under Principle 4.1 above	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND. **ERROR! REFERENCE SOURCE NOT FOUND.**	If answer to question above is "YES" or "POTENTIALLY" - Did the project obtain free, prior and informed consent from indigenous people before taking their cultural, intellectual, religious, and/or spiritual property? - Does the project ensure that the indigenous people receive an equitable sharing of benefits resulting from the use of their traditional knowledge and practices? ? - Does the project ensure that the sharing of benefits resulting from the use of indigenous peoples' traditional knowledge and practices is culturally appropriate and inclusive? - Does the project ensure that the provision of equitable sharing of benefits does not impede land rights or equal access to basic services including health services, clean water, energy, education, safe and decent working conditions, and housing?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE	Has a grievance mechanism not been established at the beginning of programme or project implementation with	☐ YES ☐ NO

NOT FOUND.	due consideration given to customary dispute settlement mechanisms among the Indigenous Peoples concerned and will it remain operational throughout the project cycle?	☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

No indigenous people will be affected by the project implementation.

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of encouraging bribery, kickbacks, or other unethical behavior?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The Prevention and Combating of Corruption Act [19] describes corruption and related offences. The project participants will act in line with the provisions and not be involved, complicit or contribute towards corruption.

ECONOMIC SAFEGUARDING PRINCIPLES

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[19] https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj8_Y-YtqL3AhXXSvEDHQNVCDQQFnoECAMQAQ&url=https%3A%2F%2Fwww.fiu.go.tz%2Fpcca.pdf&usg=AOvVaw0Udwcn7cTfFaLzQk7QsA4Z

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve, facilitate, or condone forced labor, or pose a potential risk of forced labor?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project violate any labor or health and safety laws, international obligations, or ILO conventions?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project violate the principles of equal opportunity and fair treatment in its employment decisions?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project violate national laws, if available regarding non-discrimination in employment?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND.	Does the project allow child labor?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have insufficient processes and measures in place to ensure the safety and health of project workers?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have insufficient measures to safeguard and support vulnerable project workers, such as women, people with disabilities, migrant workers, and young workers, and to prevent any kind of harassment, abuse, bullying, or exploitation, including gender-based violence (GBV)?	☐ YES ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have no grievance mechanism available for workers to voice workplace concerns? Is information about this mechanism not provided to workers at the time of recruitment, or is it not easily accessible?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
Please add text here….		
Would the project potentially involve or lead to: (NOTE: APPLIES TO BOTH PROJECT AND CONTRACTOR WORKERS)		
ERROR! REFERENCE SOURCE NOT FOUND.	use of forced labour?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	working conditions that do not meet national labour laws and international commitments?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	working conditions that may deny freedom of association and collective bargaining?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	absence of documented working agreements with all individual workers *if such agreements do not exist, or do not address working conditions and terms of employment, the project developer shall provide reasonable working conditions and terms of employment.*	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	use of migrant workers? *if engaged, the developer shall ensure that they are engaged substantially equivalent terms and conditions to non-migrant workers carrying out similar work.*	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	having no arrangements for basic services[20] for workers? *the project developer shall put in place and implement policies on the quality and management of the accommodation and provision of basic services in a manner*	☐ YES ☐ POTENTIALLY ☒ NO

[20] Basic services requirements refer to minimum space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, noise, fire, and disease-carrying animals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.

	consistent with the principles of non-discrimination and equal opportunity. Workers' accommodation arrangements should not restrict workers' freedom of movement or of association	
ERROR! REFERENCE SOURCE NOT FOUND.	any form of discrimination or harassment based on factors unrelated to job requirements, such as gender, race, nationality, ethnicity, social or indigenous origin, religion or belief, disability, age, or sexual orientation?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	any form of discrimination in any aspect of employment, such as recruitment, compensation, working conditions, training, job assignment, promotion, termination, or discipline?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	harassment, intimidation, and/or exploitation, especially in regard to women?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	discriminatory working conditions and/or lack of equal opportunity where national law provides provision to address non-discrimination in employment?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	use of child labour? (including third-party engaged workers)	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	inadequate and verifiable mechanisms for age verification?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	no processes and measures in place for the safety and health of project workers?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No provision of safety and health training provisions, including on the proper use and maintenance of personal protective equipment conducted by competent persons and the maintenance of training records?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	☐ YES ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	No measures to protect vulnerable project workers from harassment, exploitation, and gender-based violence (GBV)? This includes women, people with disabilities, migrant workers, and young workers.	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No grievance mechanism available for workers to voice workplace concerns.	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No measures for due diligence and the establishment of policies and procedures to manage and monitor the performance of third-party employees in the project?	☐ YES ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

Tanzania ratified ILO N°87 Freedom of Association and Protection of the Right to organize convention in 2000[21]. The project participants will employ all workers in accordance with all applicable national laws.

Tanzania ratified ILO N°98 Right to organise and collective bargaining convention in 1962. The project participants will not restrict any workers from establishing and joining labour organisations.

Tanzania ratified ILO N°29 Forced Labour Convention in 1962. All permanent workers will be provided with individual work agreements, including working hours, description of duties and tasks, remuneration, health insurance, termination of the contract, annual leave.

Tanzania ratified ILO N°182 Worst Form of Child Labour Convention in 2001 and ILO N°138 Minimum Age Convention in 1998. The project participants do not engage in any form of child labour.

The project participants will assure safe working environment, machinery and appropriate equipment used during the manufacturing.

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE	Is there a risk of project failure during implementation or after project certification due to a lack of financial resources?	☐ YES ☒ NO

[21] https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:103476

NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have potential negative impacts or pose a risk to the local economy?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Are there any potential risks or negative impacts this project may have on vulnerable or marginalised social groups, despite the benefits it may bring?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here…

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	economic impacts (negative/detrimental) to the local economy?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	negative economic consequences during and after project implementation, e.g., for vulnerable and marginalised social groups in targeted communities?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

No risks are foreseen in terms of negative consequences for local economy. The project will be financially sustainable through the sale of cookstoves and carbon finance. The project will also create jobs for local people.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of increasing greenhouse gas emissions over the Baseline Scenario?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	increase greenhouse gas emissions over the Baseline Scenario?	☐ YES ☐ POTENTIALLY ☒ NO
If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
The project will not lead to any increase in greenhouse gas emissions. The project stoves will rather reduce emissions due to the increased thermal efficiency compared to the baseline stoves.		
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project pose a risk to the availability and reliability of energy supply to other users?	☐ YES ☒ NO
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
Please add text here….		
Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	negative impact on the availability and reliability of energy supply to other users?	☐ YES ☐ POTENTIALLY ☒ NO
If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
The project does not utilize any form of energy supply that is also being used by other users.		
ERROR! REFERENCE SOURCE NOT FOUND.**ERROR! REFERENCE SOURCE NOT FOUND.**		
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE	Does the project increase water usage to a level that will not allow for the maintenance of environmental flows?	☐ YES ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project result in the discharge of wastewater that does not meet the required standard for beneficial reuse and could therefore negatively impact the environmental flow?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have the potential risk to exceed the rate of recharge for the groundwater source?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any processes or activities that could contaminate the groundwater and render it unsuitable for use?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project does not use any water.

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of negatively impacting the catchment and has it been assessed and addressed?	☐ YES ☒ NO
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
Please add text here….		
Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND. - ERROR! REFERENCE SOURCE NOT FOUND.	negatively impact on the catchment area? *If yes, Erosion prevention measures, including soil and slope protection measures, must be implemented before project commencement. These measures should involve natural terracing, infiltration strips, permanent ground cover, hedge and tree rows, and effective slope length assessment. Regular reassessment of these measures is necessary.*	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
The project will disseminate efficient cookstoves to households. No damage is foreseen for nature of soil or water bodies. No, the project's area of influence is limited to households and their cooking practices. No excessive erosion and/or water body instability expected.		
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Is there any risk of soil resource degradation or loss of ecosystem services provided by soils in the project?	☐ YES ☒ NO

- ERROR! REFERENCE SOURCE NOT FOUND.	*If yes, the project shall maintain healthy soils by minimising negative impacts on soil health, productivity, structure, and water retention. Steps to minimise soil degradation include crop rotation, composting, using N-fixing plants, and reducing tillage and ecologically harmful substances.*	

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project will disseminate efficient cookstoves to households. No use of land or soil is applicabl.

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have any risks associated with natural or man-made hazards that could result from land use changes due to the project?	☐ YES X NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	any potential risks that require emergency preparedness and response planning?	☐ YES ☐ POTENTIALLY X NO

ERROR! REFERENCE SOURCE NOT FOUND.	if answer to above question "yes" or "potentially", did the project developer disclose appropriate information about emergency preparedness and response to affected communities?	☐ YES ☐ NO X NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project will disseminate efficient cookstoves to households. No such risk is foreseen.

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the transfer, handling, and use of genetically modified organisms/living modified organisms that may result in adverse effects on biological diversity?	☐ YES ☐ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	the transfer, handling and use of genetically modified organisms/living modified organisms (GMOs/LMOs) that result from modern biotechnology	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes" has a risk assessment by a competent Expert stakeholder been carried out in accordance with Annex iii of the Cartagena protocol on biosafety to the convention on biological diversity?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes" has any risks identified in the risk assessment?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Forestry (for example Afforestation/Reforestation) involving GMO planting? *Note - Forestry projects (for example Afforestation/ Reforestation) involving GMO planting are not eligible for Certification under Gold Standard for the Global Goals.*	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

Not Relevant

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of releasing pollutants to air, water, and land in routine, non-routine, or accidental circumstances?	☐ YES ☐ NO
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
Please add text here….		
Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	any potential risk of pollutant release that cannot be avoided?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes" or "potentially", has the project identified all potential pollution sources that may degrade the quality of soil, air, surface, and groundwater in the project area?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes" or "potentially", do the pollution prevention and control technologies and practices applied during the project life cycle align with national regulations or international best practices?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes", is there a monitoring plan to ensure that mitigation measures are implemented, and resources are protected?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
The project will disseminate efficient cookstoves to households. Indoor air pollution in houses will be reduced compared to the baseline stoves.		
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the generation of waste materials (both hazardous and non-hazardous)?	☐ YES X NO
ERROR! REFERENCE SOURCE	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES X NO

ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the use of any chemicals or materials subject to international bans or phase-outs?	☐ YES X NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	the generation and management of waste materials?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	treatment, destruction, or disposal of waste material?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is “Yes”, does the project involve an environmentally friendly method that includes appropriate control of emissions and residues resulting from the handling and processing of waste material?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes”, does project has measures in place to address health risks?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Involve manufacture, trade, and use of chemicals and hazardous materials subject to international bans or phase-outs due to their high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

Not Relevant

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the use of chemical pesticides?	☐ YES X NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve purchase, store, manufacture, trade or use products that fall in Classes IA (extremely hazardous) and IB (highly hazardous)	☐ YES X NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project use fertilisers, and if so, are measures being taken to minimise their use and nutrient losses to the environment?	☐ YES X NO
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
Please add text here….		
Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	chemical pesticides use for pest management?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "yes" or "potentially", does project has documented Chemical Pesticides Policy in place?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	purchase, store, use, manufacture, or trade in Class II (moderately hazardous) pesticides?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "yes" or "potentially", does project has appropriate controls on manufacture, procurement, or distribution and/or use of these chemicals?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
Not Relevant		
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of unsustainable forest management, including timber harvesting?	☐ YES X NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project pose a risk of depleting biodiversity and ecosystem functionality in areas where improved forest management is undertaken?	☐ YES X NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project risk not meeting requirements for environment-friendly, socially beneficial, and economically viable plantations using native species whenever possible?	☐ YES X NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project aims to reduce firewood consumption by installing highly efficient cookstoves.

This will reduce the harvest rate of forests.

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the risk of negatively influencing access to and availability of food for people affected?	☐ YES X NO

If the answer to the question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	modification of the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

Not Relevant

ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE	Does the project involve any risks to animal welfare?	☐ YES X NO

SOURCE NOT FOUND.	Animal welfare shall be ensured by providing access to water and food, appropriate environment, humane treatment, and staff training. Evidence of mistreatment will be treated as an immediate non-conformity.	
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any potential risk of excessive or inadequate use of veterinary medicines?	☐ YES X NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the risk of administering synthetic growth promoters, including hormones?	☐ YES X NO
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
Please add text here….		
Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	animal husbandry or harvesting of fish populations or other aquatic species?[22]	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	limiting access for animals to basic needs like drinking water, adequate food, daylight, appropriate shelter etc.?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE	inadequate measures to ensure that animals are exposed to the least stress possible during transportation and slaughtering?	☐ YES ☐ NO

[22] 'Involve' means if the project mechanism and/or impact(s) are achieved via changing animal husbandry practices in some way.

SOURCE NOT FOUND.		☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	inappropriate spacing per animal and stocking rates per land unit?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	inadequate measures to address the specific needs of aquatic animals?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND.	primary production of living natural resources such as animal husbandry, aquaculture, and fisheries? If the answer is yes, implement industry-standard sustainable management practices in line with to one or more relevant and credible standards and utilise available technologies.	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

Not relevant

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have the risk of negatively impacting HCV areas and/or critical habitats?	☐ YES X NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project in the project area or area of downstream impacts have risks to the following: native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	☐ YES X NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	identified habitats as HCV areas and or Critical habitats?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes", does the project have any risks that could negatively impact the catchment, project success, and surrounding HCV and ecological assets, as well as any measurable adverse impacts on the criteria or biodiversity values for which the critical habitat was designated, and on the ecological processes supporting that biodiversity?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes", is a robust, appropriately designed, and long-term Habitats and Biodiversity Action Plan absent which will make the project unable to achieve net gains of those biodiversity values for which the critical habitat was designated?	☐ YES ☐ NO ☒ N/A
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project area or area of downstream impacts have native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If the answer to the above question is "yes", will the project have any adverse effects on these areas?	☐ YES ☐ No ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If the answer to above question is "yes", does the project has opportunities to minimise unwarranted conversion or degradation of the habitat and to enhance the habitat as part of its development?	☐ YES ☐ No ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Is the project applying Land Use & Forest Activity Requirements and managing a minimum 10% of the project area to protect or enhance the biological diversity of native ecosystems following HCV approach as per the given requirements?	☐ YES ☐ No ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

Implementation of the project will have a positive impact on forests; thus, to conservation of HCV ecosystems, critical habitats, landscapes, key biodiversity areas or other sites, by reducing the firewood harvesting.

The project also plans to distribute trees to the cookstove end users to promote tree-planting among the communities.

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project lead to the reduction or negative impact on any recognised Endangered, Vulnerable or Critically Endangered species?	☐ YES ☒ NO
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
Please add text here….		
Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	distortion of habitats of endangered species?	☐ YES ☐ POTENTIALLY ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to the above question is “yes”, does the project plan to protect and enhance them?	☐ YES ☐ POTENTIALLY ☐ NO ☒ N/A
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
Not Relevant		

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does project introduce any alien species (not currently established in the country or region of the project) into new environments?	☐ YES ☒ NO
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		

Please add text here….

Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	risk of introducing any alien species with a high risk of invasive behaviour regardless of whether such introductions are permitted under the existing regulatory framework?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	risk of potential accidental or unintended introductions including the transportation of substrates and vectors (such as soil, ballast, and plant materials) that may harbour alien species.	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	risk of spreading alien species into areas in which they have not already been established?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.
Not Relevant

APPENDIX 2- CONTACT INFORMATION OF VPA IMPLEMENTER

Organisation name	Lay Volunteers International Association
Registration number with relevant authority	
Street/P.O. Box	
Building	
City	
State/Region	
Postcode	
Country	Tanzania
Telephone	
E-mail	
Website	
Contact person	Alessia La Rosa
Title	Country Director
Salutation	Ms
Last name	La Rosa
Middle name	
First name	Alessia
Department	
Mobile	
Direct tel.	+255621023629
Personal e-mail	cr.tanzania@lvia.it

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 - DESIGN CHANGES

A4.1. Details of proposed or actual design change

>>

A4.2. Describe the Impacts of Design Change on the following

a. Additionality

>>

b. Applicability of methodology and other methodological regulatory documents with which the project activity has been certified

>>

c. Compliance with the monitoring plan of the applied methodology

>>

d. Level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the registered monitoring plan

>>

e. Scale of the project activity

>>

f. Stakeholder consultation

>>

g. Sustainable development criteria

>>

h. Safeguarding Assessment

>>

i. Compliance with applicable legislation

>>

Revision History

Version	Date	Remarks
2.3	Dd/mm/yyyy	Editorial changes in line with V2.1 of the Safeguarding Principles and Requirements
2.2	21 June 2023	Editorial changes in line with V2.0 of the Safeguarding Principles and Requirements
2.1	14 April 2023	Integrated the design change memo as annex of the document.
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