

KEY PROJECT INFORMATION & PROJECT DESIGN DOCUMENT (PDD)

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VERSION **v.1.5**

RELATED SUPPORT

[- TEMPLATE GUIDE Key Project Information & Project Design Document](#)

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KEY PROJECT INFORMATION

GS ID of Project	GS 879
Title of Project	Energy Efficient Cook Stoves for Siaya and Busia Communities, Kenya
Time of First Submission Date	10/07/2012
Date of Design Certification	1 st CP 03/07/2012
Version number of the PDD	3.5
Completion date of version	16/02/2026
Project Developer	Tembea Youth Centre for Sustainable Development
Project Representative	Foundation myclimate
Project Participants and any communities involved	Tembea Youth Centre for Sustainable Development
Host Country (ies)	Kenya
Activity Requirements applied	<input checked="" type="checkbox"/> Community Service Activity <input type="checkbox"/> Renewable Energy <input type="checkbox"/> Land-Use and Forests Activity Requirements/Risks & Capacities <input type="checkbox"/> N/A
Scale of the project activity	<input type="checkbox"/> Micro scale <input type="checkbox"/> Small Scale <input checked="" type="checkbox"/> Large Scale
Other Requirements applied	
Methodology (ies) applied and version number	REDUCED EMISSIONS FROM COOKING AND HEATING: Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC), Version: 4.0, - 07/10/2021
Product Requirements applied	<input checked="" type="checkbox"/> GHG Emissions Reduction & Sequestration <input type="checkbox"/> Renewable Energy Label <input type="checkbox"/> N/A
Project Cycle:	<input checked="" type="checkbox"/> Regular <input type="checkbox"/> Retroactive

Table 1 – Estimated Sustainable Development Contributions

Sustainable Development Goals Targeted	SDG Impact (defined in B.6.)	Estimated Annual Average	Units or Products
SDG 13 Climate Action (mandatory)	Amount of GHGs emissions avoided or sequestered	142,863	tCO ₂ e
SDG1 No Poverty	Average household savings i.e., decrease in expenditure service such as cooking.	3,543	Money Savings in KES
SDG 4: Quality education	Number of employees provided skill development training.	30	Number
SDG 5: Gender equality	Number of women serving in managerial/leadership/ownership role.	5	Number
SDG 7: Affordable and clean energy	Number of beneficiaries:households	133,184	Number
SDG 8: Decent work and economic growth	Total number of jobs.	50	Number

SECTION A. DESCRIPTION OF PROJECT

A.1 Purpose and general description of project

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The project aims to construct energy efficient cook stoves for rural communities in Siaya and Busia Counties, situated in the Western part of Kenya. Siaya and Busia Counties neighbour each other and are respectively within the former Nyanza and Western provinces. Siaya County with a land surface area of approximately 2,530 square kilometers (km²) lies between latitude 0°26' South to 0°18' North and longitude 33°58' and 34°33' East¹. Busia County, on the other hand, covers 1,694.5 square kilometers (km²) at latitudes 0° and 0°45' North and longitude 34°25' East².

As in many rural regions in developing countries the supply of modern energy carriers such as electricity and fossil fuels remains very limited and expensive in Kenya. To meet their basic energy needs, households in rural parts of Kenya largely rely on locally available biomass fuels such as firewood and occasionally charcoal. Biomass based energy resources remain Kenya’s main sources of

¹ Siaya County Integrated Development Plan, 2023-2027, page 1: <https://siaya.go.ke/download/county-government-of-siaya-cidp-2023-2027/>

² Busia County Integrated Development Plan, 2023-2027, page 1: <https://www.busiacyounty.go.ke/assets/documents/uploads/DRAFT%20BUSIA%20C.I.D.P%202023-2027-RPnQM.pdf>

energy supply³ constituting the largest share of the Country’s energy supply accounting for about 68% of the energy utilized⁴. Firewood is the dominant biomass energy used by over 80% of the Kenyan rural households⁵. Notably, the local usage rates vary from this national average.

According to the Siaya County Integrated Development Plan for 2018-2022, the households predominately use firewood (84.2%) as the main source of the households’ cooking fuel, mainly used on three stone open fire by 71.4% of the households⁶. Similarly, households in Busia County predominantly use 3-stone open fire with the main fuel being firewood with 95% of the households of the rural population relying on it for cooking and heating⁷. From the baseline survey, 95% of the households use three stone open fire with firewood used by 97% of of the survey respondents in Busia and 100% of respondents in Siaya use three stone open fire with firewood used by 100% of the households. Against this backdrop, it suffices to conclude that most of the households in Siaya and Busia Counties traditionally cook on open fires consisting of 3 stones, using firewood. This has severe impacts at the social (e.g. health) and environmental (e.g. deforestation, CO₂- emissions) levels. This project aims to mitigate these impacts by introducing energy efficient cook stoves to the Siaya and Busia communities in Kenya.



Fig1: Children collecting fuel wood



Fig2: Baseline stove – three stone open fire

The efficient cook stove is a biomass rocket stove designed for burning wood and consisting of two cooking units that can be separately fired. The stove is fixed and installed in households. This efficient cook stove brings multiple benefits to the stove users: From the FT results, it reduces firewood consumption by averagely 57.67% (2025) thus reducing the burden of firewood collection on women and children or relieving the household’s budget for fuel purchase. Moreover, through the cleaner and more efficient combustion, harmful smoke emissions are reduced and indoor air quality is considerably improved. The reduction of firewood consumption helps to conserve forest vegetation and to reduce CO₂ emissions, which are responsible for climate change. The efficient cook stoves are constructed using locally available materials, such as mud, bricks and sawdust. Local artisans are identified in the villages and trained in stove construction and household mobilisation.

³ Takase et al., 2021, biomass energy resources constituting supply about 10,771 kilotons of energy (ktoe) per annum in Kenya.

⁴ Mbaka et al., 2019, biomass energy resources account for about 68% of the energy utilized in Kenya.

⁵ EA-Kenya, 2018, firewood is the dominant biomass energy used by over 80% of the Kenyan rural households.

⁶ Siaya County Integrated Development Plan, 2018-2022, page 19:
https://www.cog.go.ke/phocadownload/2nd_Gen_CIDPs/Siaya%20County%20Integrated%20Development%20plan%202018-2022.pdf

⁷ Busia County Integrated Development Plan, 2018-2022, page 13:
<https://devolution.go.ke/sites/default/files/2024-03/Busia-CIDP-2018-2022.pdf>



Figure 3 The energy efficient cook stove being installed in a household kitchen by a female Artisan.

Table 2: Annual projected stoves dissemination and their respective emission reduction

The table below shows annual projected stoves dissemination and their respective emission reduction.

Project Year	Dates	New Stoves Disseminated	Stoves in Operation	Emission Reduction
	Stove from 2 nd CP	135372 ⁸	135372	
1	1-Jan 2025- 31 Dec 2025	6000	136710	27,352
2	1-Jan 2026- 31 Dec 2026	6000	137571	164,992
3	1-Jan 2027- 31 Dec 2027	6000	138384	166,009
4	1-Jan 2028- 31 Dec 2028	6000	137544	166,810
5	1-Jan 2029- 31 Dec 2029	6000	129358	165,087
6	1-Jan 2030- 31 Dec 2030	6000	127539	156,002
7	1-Jan 2031- 31 Dec 2031	6000	125179	153,790

The project will not claim emission reduction for the period 01/01/2025 to 10/11/2025 (due to delay in certification renewal). The start date of the 3rd crediting period is 11/11/2025.

An innovative village based community savings and loaning (CS&L) mechanism will be integrated to enhance affordability and access to efficient cook stoves through soft loans. This scheme involves local capital mobilization methodology that seeks to address the unmet needs of the poor brought about by the existing gap in the major financial services providers like the banks and insurance companies.

A CSL group brings together people who save and take small loans from those savings on flexible terms for investment, consumption and emergency purposes. This allows small amounts of savings to form a pool of capital large enough to provide loans for the group members which is critical for enhancing household incomes and asset creation in order to build resilience. The targeted community members will be mobilized, trained and formed into regular saving-led micro-finance CSL groups. In this way, the target communities will be provided the opportunity to not only collectively solve their local problems but also improve their governance skills through their uptake and participation in the CSL approach. The CSL groups are especially attractive to women who are largely excluded from formal financial services that require collateral. This savings-led microfinance groups will lead to

⁸ This represents all stoves installed and still in use by end of 2024.

financial and social empowerment of individuals, households and communities, creating a platform for holistic community development on which community-based problem solving flourishes.

It is expected the scheme will:

- Provide very poor households with effective, low cost means of improving livelihood security. The financial, social and human capital that locals especially women develop through regular saving-led micro-finance group meetings is transferred to an amazing array of actions that result in behaviour change.
- Provide a platform for community members to embrace e-banking innovations enhancing financial deepening & stabilizing rural financial markets.
- Provide an opportunity for the poor to acquire essential but costly household assets such as the energy efficient cook stoves out of their long term savings under the ASSET BASED FUND component that the community members are trained and closely monitored to operationalize among the self selected group members.



Fig 4 & 5: Community Saving and Loaning Groups during their weekly meetings counting funds and doing their transactions.

The project is developed as a carbon offset project by Tembea Youth Centre for Sustainable Development (Ugunja, Kenya). The project is financed through the mechanism of carbon credits and will be certified under the Gold Standard Foundation. Foundation myclimate is the project representative supporting certification. The first crediting period started from 01/01/2011 to 31/12/2017 the second crediting period ran from 01/01/2018 to 31/12/2024, and the third crediting period starts from 11/11/2025 until 31/12/2031.

Energy Efficient Cookstoves for Siaya and Busia Communities – Project Set-Up

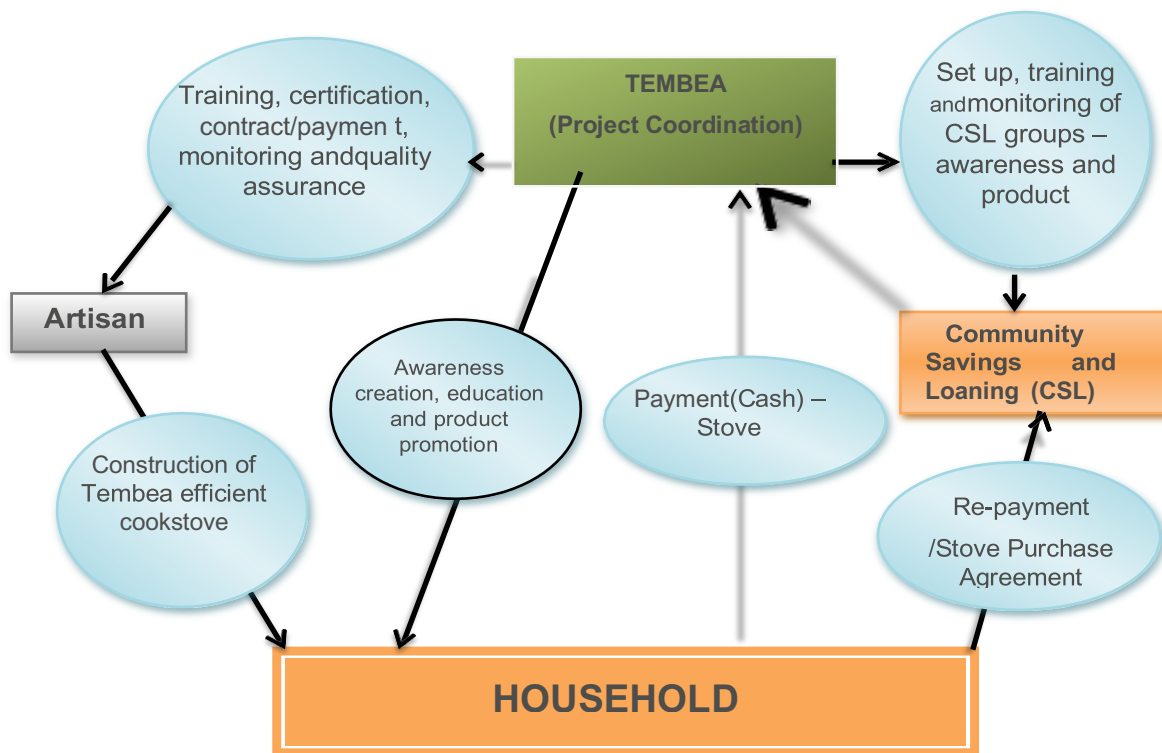


Figure 6: Energy Efficient Cookstoves for Siaya and Busia Communities Project Set-Up

A.1.1. Eligibility of the project under Gold Standard

As per section 3.1.1 of GS4GG Principles & Requirements Version 2.1 dated October 2019, compliance with relevant Eligibility criteria is demonstrated below:

Eligibility Criteria Category	Eligibility criterion - Required condition	Justification
<p>1. Types of Project</p>	<p>Eligible projects shall include physical action/implementation on the ground. Pre-identified eligible project types are identified in the Eligibility Principles and Requirements section.</p>	<p>The project involves dissemination of improved cook stoves (ICS). The project applies GS approved “Technologies and Practices to Displace Decentralized Thermal Energy Consumption”, ver 4.0. Hence as per the GS4GG Principles and Requirements version 2.1 section 4.1.3, the project becomes automatically eligible.</p>
<p>2. Location of Project</p>	<p>Projects may be located in any part of the world.</p>	<p>The project is located in Kenya in Siaya and Busia counties.</p>
<p>3. Project Area, Project Boundary and Scale</p>	<p>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. In order to avoid double counting the Project shall not be included in any other</p>	<p>The project is located in Kenya siaya and Busia counties the boundaries of the counties form the project boundary. The project is not included in any other voluntary or compliance standards programme.</p>

	<p>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)</p>	<p>The project is a large scale project activity.</p> <p>To avoid inclusion of any ICS which is a part of another registered carbon project/ programme, all units under this programme shall be associated with a unique logo/brand/ product ID number / unique household or institutional ID number / Tag number / invoice number / receipt number etc. to uniquely identify each unit distributed/installed to avoid any double counting of ICS. Only households with no fixed rocket stoves in their kitchen shall be considered eligible to purchase Tembea stove. This to be confirmed by artisans, lead artisans and project field officer during mapping exercise.</p>
<p>4. Host Country Requirements</p>	<p>Projects shall be in compliance with applicable Host Country’s legal, environmental, ecological and social regulations.</p>	<p>The PA complies with the legal, environmental and ecological, and social regulations of the host country, Kenya.</p> <p>Kenya does not have an emission reduction cap enforced OR have the possibility to trade emissions that include the scope of the proposed project. If in future the risk of double counting exists, the project developer shall commit to retiring eligible units equal to the quantity of Gold Standard VERs.</p>
<p>5. Contact Details</p>	<p>As part of the Project Documentation the Project Developer shall provide (i) name and (ii) contact details of all Project Participants; AND in case of an organisation (iii) the legal registration details (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.</p>	<p>The name and contact details of project developer is provided in the Appendix 2.</p>
<p>6. Legal Ownership</p>	<p>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</p>	<p>Criteria for transfer full and uncontested legal ownership of carbon credit from project beneficiaries to TYCSD and subsequently to Myclimate foundation.</p>

	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.	The full and uncontested legal ownership of GS VERs that are generated under Gold Standard Certification, shall be transferred from project beneficiaries to the TYCSD via sales receipt/beneficiary agreement.
7. 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 (for 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.	Not applicable
8. 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.	No ODA is involved in the project A declaration has been submitted by the project developer on the same.

Eligibility under Gold Standard Community Services Activity (CSA) Requirements

As per section 2 of GS4GG COMMUNITY SERVICES ACTIVITY REQUIREMENTS Version 1.2 dated October 2019, project type eligibility criteria as defined below:

Eligibility Criteria Category	Eligibility criterion - Required condition	Justification
1. Eligible Project Types	All CSA Projects shall lead to climate change mitigation and/or adaptation by providing or improving access to services/resources at the household or community or institution level. Eligible services include electricity and energy, water and sanitation, waste management, housing, etc.	The goal of the project is to construct improved cookstoves.
2. GENERAL ELIGIBILITY	(b) End-use energy efficiency: Project activities that reduce energy	The project involves the distribution/installation of ICS which

<p>CRITERIA - Type of project</p>	<p>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.</p>	<p>reduce energy requirements as compared to the baseline scenario without affecting the level and quality of services or products.</p>
<p>3. GENERAL ELIGIBILITY CRITERIA - Project Area, Boundary and scale</p>	<p>Project Area and Boundary shall be defined in line with the applicable Impact Quantification Methodologies and Product Requirements.</p>	<p>The project area is the point location of ICS beneficiaries in Siaya and Busia counties.</p> <p>The project boundary will be limited to the geographical boundary of Siaya and Busia counties in Kenya.</p> <p>The project being developed is large scale.</p>
<p>4. GENERAL ELIGIBILITY CRITERIA - Legal Ownership</p>	<p>(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.</p> <p>(b) The transfer of Product ownership shall be discussed during local stakeholder consultations for projects.</p>	<p>a) The ICS owners transfer their rights on ownership of carbon credits to TYCSD via sales receipts.</p> <p>b) The transfer of Carbon Credits is discussed during local stakeholder consultations for project</p>

Eligibility under Gold Standard GHG EMISSIONS REDUCTION & SEQUESTRATION PRODUCT REQUIREMENTS (Optional Requirement)

As per section 2 of GS4GG GHG EMISSIONS REDUCTION & SEQUESTRATION PRODUCT REQUIREMENTS Version 3.1 dated 24/04/2025 general eligibility criteria as defined below:

Eligibility Criteria Category	Eligibility criterion - Required condition	Justification
<p>1. GENERAL ELIGIBILITY CRITERIA#1</p>	<p>Unless otherwise stated elsewhere in the Principles & Requirements, Projects involving a mix of eligible and ineligible components can only claim credits for the Emission Reductions and/or sequestration</p>	<p>The project involves distribution of improved cook stoves (ICS).</p> <p>The project applies GS approved "Technologies and Practices to Displace Decentralized Thermal</p>

	associated with the eligible component of the project.	Energy Consumption impact quantification methodology, ver 4.0. Hence as per the GS4GG Principles and Requirements version 2.1 section 4.1.3 (a), the project becomes automatically eligible. The project does not involve any ineligible component.
2. GENERAL ELIGIBILITY CRITERIA#2	Bundled Projects: Where Projects are submitted together for certification within a bundle, each Project within the bundle shall individually conform to all GS4GG Requirements. Eligibility criteria with regards to the scale of the Project shall apply to the bundle as a whole and not to the individual Projects.	Not Applicable. The project is an individual project activity.
3. GENERAL ELIGIBILITY CRITERIA#3	Programme of Activities (PoA): (LUF – N/A) Where a group of Projects are submitted together for Gold Standard Design Certification within a Programme of Activities, each of these Projects shall conform to all Requirements including the Programme of Activity Requirements. A microscale VPA can only be part of a Microscale PoA and shall conform to all requirements including those listed in Annex A of the Programme of Activity Requirements.	Not applicable as the project is a standalone large scale project.

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

- I. Tembea youth centre for Sustainable Development has uncontested legal ownership of all carbon credits that are generated under Gold Standard Certification.
- II. The ownership is transferred from stove owners willingly and is transparently indicated. The transfer was discussed during stakeholder consultation and is communicated in project documents(Stove purchase agreement).
- III. Tembea Youth center for sustainable development has signed an Emission Purchase agreement with myclimate foundation. This agreement is the basis for transferring the carbon credits achieved by project GS 879 to myclimate foundation.
- IV. The project doesn't affect changes in resource use.
- V. The project doesn't involve use of community land hence no land title or tenure issues involved.

A.2 Location of project

The project location is Siaya and Busia Counties, situated in the Western part of Kenya. Siaya and Busia Counties neighbour each other and are respectively within the former Nyanza and Western provinces. Siaya County with a land surface area of approximately 2,530 square kilometers (km²) lies between latitude 0°26' South to 0°18' North and longitude 33°58' and 34°33' East and

neighbours other Counties including Vihiga and Kakamega to the North-East, Kisumu to the South-East, Busia to the North west and Homa Bay across the Winam Gulf to the South.

County	coordinates
Siaya	0.0617° S, 34.2422° E
Busia	0.4347° N, 34.2422° E

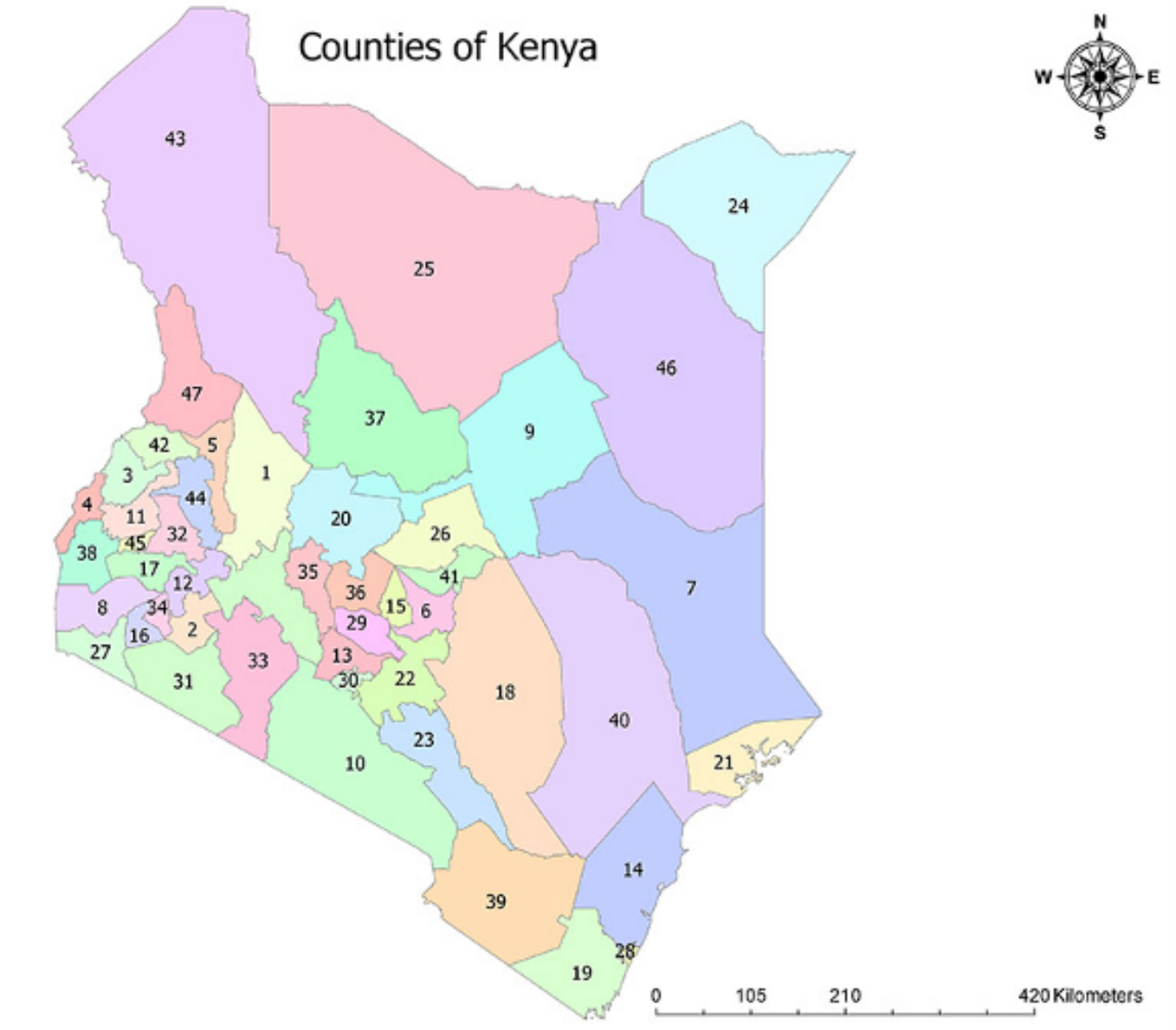


Figure 7: Map of Kenya (Busia is no 4 and Siaya is 38)

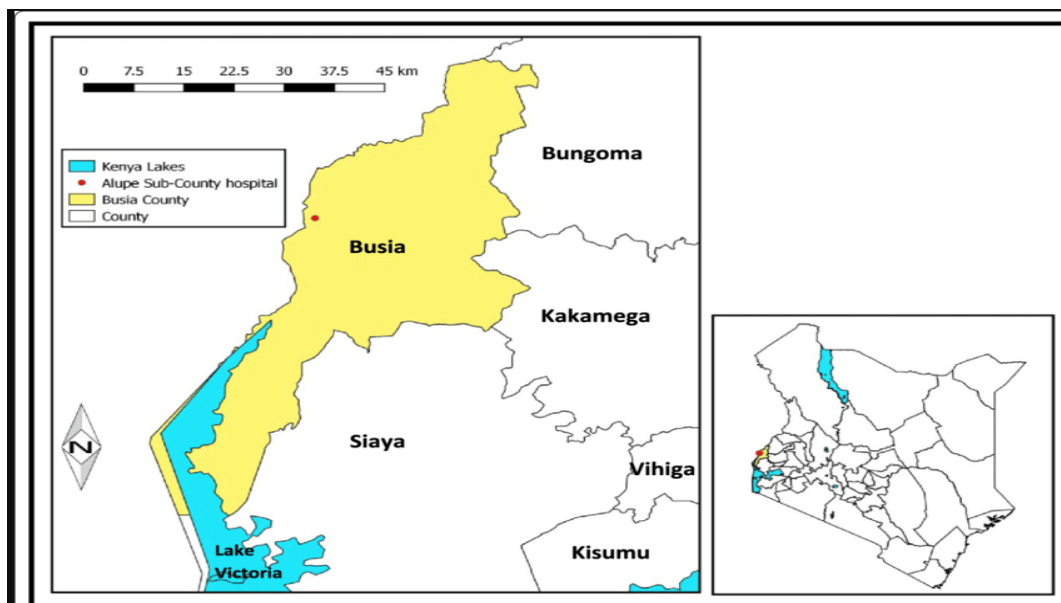


Figure 8: Map showing Busia and Siaya

A.3 Technologies and/or measures

The project disseminates a rocket-type improved cook stove to replace the 3-stone open fire for cooking in kitchens within Siaya and Busia Counties. Prior to implementing this project, the households in the project area used to cook mostly on 3-stone open fire thereby burning large amounts of the non-renewable biomass in a very inefficient way. The project stove (“Tembea stove”) is a fixed biomass rocket stove designed for burning wood and has got two cooking units that can be separately fired. The stove disseminated is environmentally sound and less smoke and reducing GHG emissions associated with burning non-renewable biomass during cooking, and has less fire accidents compared to the three stone open fire (baseline cooking scenario). Whereas the same fuel (non-renewable biomass) is used for cooking both in the baseline and in the project scenarios, the project scenario is more efficient compared to the baseline.

The Tembea stove targets households using three stone fire. Eligible households will provide or be supplied with the required materials at agreed fees. The project targets to recruit and train women and youths as stove artisans who shall be used to construct stoves, train end users on stove use and maintenance as well as support monitoring efforts. From ongoing monitoring and aging surveys the Tembea stove has an average lifespan of 10 years and is made from locally available materials, namely mud, bricks and sawdust.



Fig 10: Installed, ready for use, project rocket stoves with two cooking units.

In the absence of the project activity, households in Busia/Siaya County would continue to cook with open fire thus resulting in continued emission of greenhouse gases into the environment. The process of stove Installation is outlined below from material preparation until construction and completion.

Construction process of the project stove:



Fig 11: Mixing materials (mud and sawdust) Fig 12: Preparing stove location



Fig 13: & 14: Arranging brick for the combustion chamber using measuring tapes and pots



Fig 15 & 16: Adding bricks and mud to give the stove its final shape

It is projected that an average of 500 Tembea stoves will be installed every month giving an average of 6000 stoves per year. In total up to 42000 stoves are projected to be built during the seven years crediting period of the project. The baseline scenario is the same as the scenario existing prior to the start of the implementation of the project activity. Annually stoves will be excluded from the sale record taking into consideration aging (after 10 years age limit) as shown in Table 3.

Table 3: Stoves annually excluded from the sale record

Project Year	Dates	Annual installation targets	Cummulative Stoves in Operation(excluding eliminated stoves due to aging)
1	1-Jan 2025- 31 Dec 2025	6000	136710
2	1-Jan 2026- 31 Dec 2026	6000	137571
3	1-Jan 2027- 31 Dec 2027	6000	138384
4	1-Jan 2028- 31 Dec 2028	6000	137544
5	1-Jan 2029- 31 Dec 2029	6000	129358
6	1-Jan 2030- 31 Dec 2030	6000	127539
7	1-Jan 2031- 31 Dec 2031	6000	125179

For more information on the calculation of the values in table 3 refer to GS 879 _3CP_exante _Tembea_Cook Stove _ER Spreadsheet_V1.0.xlsx-summary sheet B18-B29.

A.4 Scale of the project

In accordance with the applicable methodology version 4.0, this project is classified as a large-scale project. The project surpasses the threshold of energy savings of 60GWh or 180GWh_{th} per year and thus classifies as a large-scale project. The annual average emission exceeds 60,000CO₂e tonnes , making it a large-scale activity.

A.5 Funding sources of project

The project is not using any ODA funds. The Project is funded by private funding from Project sponsor. As required the project has signed an ODA declaration form.

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

B.1. Reference of approved methodology (ies)

Gold Standard Methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption – v4.0”. <https://globalgoals.goldstandard.org/407-ee-ics-technologies-and-practices-to-displace-decentralized-thermal-energy-tpddtec-consumption/>

Usage rate requirements-Technologies and Practices To Displace Decentralized Thermal Energy Consumption v2.0 <https://globalgoals.goldstandard.org/ru-2020-usage-rate-requirements-technologies-and-practices-to-displace-decentralized-thermal-energy-consumption/>

Activity requirement: Community Services Activity Requirements v1.2

All the version of the methodology and tool applied were the latest versions at the time of submission of project to GS for preliminary review.

B.2. Applicability of methodology (ies)

The methodology is applicable under the following conditions:

No.	Methodology requirement	Project 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 project is eligible as similar fixed models have shown thermal efficiency of 39% ⁹ . Project to submit water boiling test by 1 st verification.
b.	The technology shall have continuous useful energy output of less than 150kW per unit,	The project is eligible as the calculated continuous useful energy output 6.41MWh output ¹⁰ . As per the definition in the methodology section 1 (1.1.1) and 2.2.1.b this is below 150kW per unit.
c.	The project activity is implemented by a project developer and can include additional project participants listed in Appendix 2 of the PDD template. The individual households and institutions may be represented collectively by community organizations, etc but not individually act as project participants	Project is eligible as no individuals are acting as project participants. Tembea youth centre for sustainable development is the project developer/participant
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	The fixed stoves will be installed in kitchens whereby the old baseline stove will be demolished. In some cases, this is to be gradually achieved as there could be cultural issues

⁹ GS 1167-Fixed Rocket Cookstove Water Boiling Test 2025.PDF

¹⁰ GS 879 _3CP_exante _Tembea_Cook Stove _ER Spreadsheet_V1.0.xlsx

	<p>validation. The project as designed an incentive mechanism that combines users, artisans, and support groups</p>	<p>with traditional stoves. In some cultures three stones are demolished upon death of the household owner.</p> <p>Additionally, during sale, the users are informed on the fuel saving potential of the stove and this will make them not use the old stove which consumes more fuel thereby increasing their expenses on fuel. Surveys will be carried out to determine if the baseline stove is being used and discounts will be applied during ER calculations.</p> <p>Incentive schemes will also be employed to encourage households to shift from baseline technologies including rewards and gifts for households observed to have fully transitioned to project technologies and use of pupils through clubs to boost adoption at their respective homes which are subsequently visited and the pupils rewarded. The scheme includes providing households that transition to use of fixed rocket stoves with annual calendars, Tembea branded tshirts and airtime. The criteria is based on monitoring and usage surveys conducted by field officers. Households that demolish their three stone stoves become eligible for this incentive.</p>
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<p>e.</p>	<p>To avoid double counting or double claiming, the project developer must:</p> <ul style="list-style-type: none"> i. 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 ii. inform and notify the end users that they cannot claim emission reductions from the project, and iii. 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. See data and parameters not monitored, Avoidance of double counting or double claiming with other mitigation actions, for details on this demonstration 	<ul style="list-style-type: none"> i. The project is eligible as this information is included in the sales receipts shared to households and beneficiaries willing transfers their carbon rights to TYCSD ii. The owners shall be informed in the project receipts that the project is claiming carbon and they cannot claim emission reductions from the project individually. iii. Only project stoves in the database and with serial numbers of the project will be counted by the project and be included in its database for VER claims.
<p>f.</p>	<p>Project activities making use of solid fossil fuel in the project scenario or other improved fossil fuel cookstoves meeting certain conditions described in the footnote to Table 1 (e.g. switch from three-stone fire biomass stoves to LPG stoves) may only claim emission reductions for energy efficiency improvement aspect and shall assume the same baseline and project fuel for emission reduction calculations</p>	<p>Not applicable. The project does not make use of fossil fuels</p>
<p>g.</p>	<p>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</p>	<p>Not applicable as the project does not involve fuel switch.</p>
<p>h.</p>	<p>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 precision². Furthermore, for projects where cooking will move from outdoor to indoor or where the project technology reduces ventilation (for example, changing from a stove with chimney to improved stove with no chimney), indoor air pollution (IAP) levels shall</p>	<p>The project doesn't involve fuel switch or change. The fuels used in Project and baseline situation are the same, as such there are no additional harmful gases released in the project scenario.</p> <p>Stoves are distributed in households that previously used a traditional inefficient device. As such, both the volume of</p>

<p>not worsen in the project compared to the baseline, including PM 2.5 and carbon monoxide (CO) emissions. This may be demonstrated before project Design Certification or during project operation using the certification resulting from a manufacturer’s test, report of field testing of the technology’s PM 2.5 and carbon monoxide (CO) emissions, report of lab testing of the technology, or results of modelling of the technology’s operation under field conditions. If none of these are available, reference from published literature or report by independent agencies may be used as evidence, provided it is not more than 5 years old.</p> <p>To make claims on SDG 3.9.1 contributions, the project developer may apply the Gold Standard Methodology to Estimate and Verify ADALYS from Clean Household Air</p>	<p>greenhouse gases and volume of harmful gases are reduced in the project scenario.</p> <p>Results of surveys to determine end users responses (qualitative) on reduction of smoke and particulates will be applied to show that there has been a reduction of IAP. Additionally, the project stoves are not moving the cooking from outdoor to indoor and stoves do not have chimneys, which will necessitate IAP measurement.</p> <p>The project does not make claims on SDG 3.9.1</p>
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B.3. Project boundary

The project boundary has been defined in terms of the target area, fuel collection area and the included GHGs. The boundary of this project is the individual households/kitchens which have installed a Tembea Stove. The project target area includes all locations within Siaya and Busia Counties which also constitute the fuel collection area.

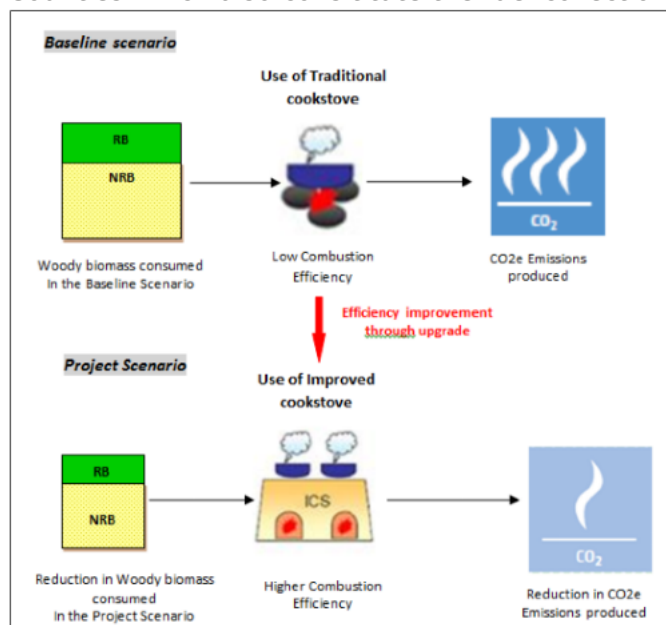


Figure 1. Flow diagram: baseline and project scenarios

Table 4 describes the emission sources and GHGs included in the project boundary for the purpose of calculating project and baseline emissions.

Table 4: The emission sources and GHGs included in the project boundary

Source	GHGs	Included?	Justification/Explanation
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Baseline	Delivery of thermal energy	CO2	Yes	Important source of emissions
		CH4	Yes	Important source of emissions
		N2O	Yes	Important source of emissions
Project scenario	Delivery of thermal energy	CO2	Yes	Important source of emissions
		CH4	Yes	Important source of emissions
		N2O	Yes	Important source of emissions

B.4. Establishment and description of baseline scenario

According to the applied TPDDTEC methodology, the baseline scenario is defined by the typical baseline fuel consumption patterns. A project activity may have multiple baseline scenarios that are applicable in relation to the different project technologies in the project activity depending on local fuel and technology use patterns. Furthermore, additional baseline scenarios can be added to a project activity at any time during the crediting period through a design change as per Gold Standard rules or alternatively, adjustment factors can be applied to existing baseline scenario to account for less significant variability in fuel consumption or technology, without the need to create a new baseline scenario. The project identified 2 baseline scenarios i.e. wood and charcoal baseline.

A. Baseline and Project non-renewable biomass (NRB) assessment

The value of f_{NRB} value has been adopted from CDM Tool 33 default values and it is fixed ex-ante for entire crediting period.

Country	f_{NRB}
Kenya	29%

B. Baseline Surveys on target population characteristics

The project carried out a baseline survey to determine the cooking characteristics of the target population. The survey was done through in person interviews with a robust samples of targeted end-users who have not started using the project technologies and who were representative of end-users targeted in the project activity. The baseline survey aimed to collect information on target population characteristics, baseline technology use, fuel consumption, leakage and sustainable development indicators.

The sample size of the baseline survey adopted was 281¹¹ households. The sample size was chosen in line with paragraph 4.3.3 of the applied methodology which recommends 100 samples if the targeted population is more than 1000. The survey was carried out in the month of July 2024, whereby all information about the baseline was collected.

Households were randomly identified and representing the various cooking scenarios in project region. The project team randomly selected villages/towns within the counties, in the villages the 1st house was randomly picked and there after 3 households was picked. The exercises was supported by local project agents with locality know-how. The following was considered:

- a) The sole kitchen regime is the domestic cooking
- b) Household using open fire with firewood

¹¹ Additional 54 households were surveyed in siaya county.

i) Baseline survey

In order to collect data on baseline trends and determine the baseline scenario, the survey gathered information about each household surveyed on the following:

1. Address or location
2. Number of people served by baseline and project technology
3. Typical baseline technology usage patterns and tasks
4. 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 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)

ii) Summary of results

Baseline scenario:

2 baseline scenarios were identified and have been defined for households using traditional cook stoves in the project region.

1. Baseline scenarios: firewood

This scenario includes households using firewood on three stone stoves. They are predominantly located in the rural parts of the project region. As per the baseline survey 96% of the respondents use firewood on 3 stone fire(268 households , 4 using fixed improved stove) 2% charcoal (7 households) and 1% LPG (2 households). Therefore firewood is the predominant baseline fuel. Additional 53 surveys were conducted in siaya county. only busia results are analyzed below.

2. baseline scenario 2

There is a second baseline scenario of households that use charcoal for cooking. As per the baseline survey 2% (7 households) indicated to use charcoal for daily use. It’s a minority group but is worth to observe its presence.

The project will only construct fixed rocket stoves in homes with no fixed stove to eliminate stove stacking. Only households using three stone stoves are eligible under the project.

Project scenario:

1. Project scenario: Firewood

This will include households that use fixed rocket firewood for cooking.

Summary of findings from surveys:

Parameter	Results
Baseline scenario	1 baseline scenarios identified Baseline scenario: Firewood users on three stone stove
Average size served by stove	6.9
Stove usage tasks	domestic
Stove usage frequency	1.4% (4 households) cook once per day

	21.4%(60 households) cook twice per day 77.5%(217 households) cook thrice per day
Type of fuel used	97% firewood. (272 user) 2 % Charcoal (7 users) 1% LPG. (2 users)
Possession of alternative fuels (stove)	Have alternative fuel- 29% (82 households) No alternative fuel -71% (199 households) Types of alternative fuels Charcoal 90% (74 users) Biogas 1% (1 user) LPG 5% (4 Users) Firewood 2% (2 users) Kerosene 1% (1 users)
Quantity of fuel used	Average 3.5 bundle heads (each bundle appr.15kg)
Seasonal variation in stove use (this question sought information on baseline and project technology use across seasons and if any is observed households were asked to quantify it in fuel usage).	11% Indicate seasonal variability. 89% indicate no seasonal variability
Sources of fuel	67% collect firewood. 33% buy firewood.
time spent on collection	70 spend less than 5 hrs weekly to collect firewood. 24% spend 5-10 hrs weekly for fuel collection. 6% spend over 10 hrs weekly for fuel collection.
Average cost of fuel	Average KES 152 per week
Leakage	No leakage
Survey sample size	281 households- busia and 53 households in siaya county.

Kitchen Test

i) Sampling procedure

Samples were randomly identified through scouting and used to participate in the KPT. 114 households were scouted. The sample size is based on guidance of the methodology recommending minimum size of 30. Only 84 results were considered eligible for analysis others were dropped due to 1. Using fuel other than provided stock, and 2. Having guests/cooking more than normal pattern. The COV achieved is below 1.2 makes the samples adequate.

ii) Measuring procedure

Fuel consumption was measured during five days for baseline technologies. For baseline fuel test, households using the baseline technologies without efficient technologies were sampled. The project

contacted the households about their willingness to participate in the exercise and shared the instructions to be followed. The baseline survey was conducted between the 10th to 20th September 2024. The september period was considered ideal for baseline fuel tests as it was dry no rains, no school holidays and the exercise were conducted only during week days.

At the beginning of the 5-days test period, households were provided with a measured quantity of fuel to be used during the next 5 days for cooking. The measuring was done with digital weighing scales. The digital weighing scales were calibrated using known weights using the PD calibration protocol. After the test period, the remaining quantity of fuel was measured. Fuel consumption for 5 days was then calculated by subtracting remaining fuels from the amount measured at the beginning of the test period. The teams visited households on daily basis to ensure compliance with BFT rules and add fuel stocks where needed.

iii) Results

The results from the KPTs are shown in the following sections below and the excel file "GS 879-3CP baseline fuel test_v1.xlsx".

iv) Analysis of results

The data was analyzed using statistical methods and tests (mean, standard deviation,) as per guidelines in the applied methodology. The end users were scouted randomly using local enumerators who were hired to identify the end users since they know them personally. The standard errors and precision of the samples was calculated.

Mean values can only be applied for emission reduction calculation if the sample satisfies the 90/30 rule as defined in the applied methodology. The results fulfill the 90/30 rule, thus the mean value of fuel consumption can be applied.

v) Results

The KPT revealed the following fuel consumption per household.

Results	Consumption per year t/year/stove	Consumption per day t/day/stove
Baseline mean wood Consumption in tons	3.6782	0.0101
Check for 90/30 rule		
Standard deviation	7.65	1.53
Coefficient of variation	0.15	0.15
Sample size	84	84
Precision attained	0.05%	0.05%

Does the sample satisfy the 90/30 rule	Yes	Yes
What fuel consumption may be claimed	Use mean	Use mean

Table.1: results of BFT

The Project fuel consumption was performed in August-September 2025.

i) Sampling procedure

All households sampled for the baseline fuel tests with the project stove were considered for the project fuel tests. A total of 80 household were considered for the Project fuel test. The sample size is based on guidance of the methodology recommending minimum size of 30. Only 58 results were considered eligible for analysis others were dropped due to inconsistent use of provided fuel. The COV achieved is below 1.2 makes the samples adequate.

ii) Measuring procedure

Fuel consumption was measured during five days for project technologies. For project fuel test, households that had adopted the project stoves were considered. The project contacted the households about their willingness to participate in the exercise and shared the instructions to be followed. The project fuel test was conducted between the 20th August to 2nd September 2025. The August period was considered ideal for project fuel tests as it was partly school holidays, and modest rain season. Households were instructed to cook as normal and report any changes.

At the beginning of the 5-days test period, households were provided with a measured quantity of fuel to be used during the next 5 days for cooking. The measuring was done with digital weighing scales. The digital weighing scales were calibrated using known weights using the PD calibration protocol. After the test period, the remaining quantity of fuel was measured. Fuel consumption for 5 days was then calculated by subtracting remaining fuels from the amount measured at the beginning of the test period. The teams visited households on daily basis to ensure compliance with PFT rules and add fuel stocks where needed.

iii) Results

The results from the KPTs are shown in the following sections below and the excel file "GS 879-3CP Project fuel test_v1.xlsx".

iv) Analysis of results

The data was analyzed using statistical methods and tests (mean, standard deviation,) as per guidelines in the applied methodology. The end users were scouted randomly using local enumerators who were hired to identify the end users since they know them personally. The standard errors and precision of the samples was calculated.

Mean values can only be applied for emission reduction calculation if the sample satisfies the 90/30 rule as defined in the applied methodology. The results fulfill the 90/30 rule, thus the mean value of fuel consumption can be applied.

v) Results

The KPT revealed the following fuel consumption per household.

Results	Consumption per year t/year/stove	Consumption per day t/day/stove
Project mean wood Consumption in tons	1.5568	0.0043
Check for 90/30 rule		
Standard deviation	3.19	0.64
Coefficient of variation	0.15	0.15
Sample size	58	58
Precision attained	1.16%	1.16%
Does the sample satisfy the 90/30 rule	Yes	Yes
What fuel consumption may be claimed	Use mean	Use mean

Project scenario

The project scenario is defined by the fuel consumption of end users within a target population that adopt a project technology. Emission reductions are credited by comparing fuel consumption in the project scenario to the corresponding baseline scenario.

The project has identified 2 baseline scenario, i.e. firewood and charcoal baseline. In the project scenario, there is 1 scenario, i.e. firewood scenario. The project will only target households using firewood as their baseline fuel.

Leakage

Leakage emissions, $LE_{p,y}$, for the project shall be determined using option 1 i.e. by applying a default adjustment factor of 0.95 to the emission reductions to approximate leakage emissions. In this case, the term “ $\sum LE_{p,y}$ ” in equations 1 changes to “* 95%”. By applying option 1, leakage monitoring will therefore not be required.

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).

The project is in compliance with item 1.1.3 of Annex B – positive list mentioned in the 'GS4GG Community Services Activity Requirements Version 1.2, October 2019.

This is a large-scale project which is deemed additional under Annex B-Positive List. The project meets the criteria given in 1.1.3 Project activities solely composed of isolated units (improved cookstove) where the users of the technology/measure are households and where each unit results in ≤ 1.8 GWh_{th} of energy savings per year.

Describe how the proposed project meets the criteria for deemed additionality.

As per the ex-ante ER calculation sheet, each cookstove within the project save 6.41 MWh year of energy which is much less than the threshold of 1.8 GWh_{th}/year/unit.

Hence, the technology is auto additional. Therefore, the project can be deemed additional through ex-ante calculations.

B.5.1 Prior Consideration

The project is regular and prior consideration is not required for regular projects.

B.5.2 Ongoing Financial Need

The GS certificate revenues contributes 70% of GS 879 project budget. 70% of the revenues is from the sale of the GS certificates generated by the project and 18% being revenues from stove purchase/construction and donations. Tembea applies 38% of the revenues for direct stove construction costs, 25% for staff costs, 22% for administration, 2% for certification related costs, and 12% for project delivery related costs. This is based on vintage 2023 issuance revenues. Since a huge component of the budget is supported by revenues from trading GS certificates (70%) its evident the project will not continue to operate in absense of these revenues from GS certificates.

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the three SDGs

		SDG IMPACT
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SUSTAINABLE DEVELOPMENT GOALS TARGETED	MOST RELEVANT SDG TARGET	INDICATOR (PROPOSED OR SDG INDICATOR)
13 Climate Action (mandatory)	13.2 Integrate climate change measures into national policies, strategies and planning.	Amount of GHGs emissions avoided or sequestered
SDG 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 i.e., decrease in expenditure service such as cooking.
SDG 4: Quality of education	4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	Number of employees provided skill development training.
SDG 5: Gender equality	5.5 Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.	Number of women serving in managerial/leadership/ownership role.
SDG 7: Affordable and clean energy	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	Number of beneficiaries:households
SDG 8: Decent Work and Economic Growth	8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Total number of jobs.

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

SDG 1 No Poverty.

SDG 1-No Poverty		
HHsExpenditure _{baseline}	Household expenditure on fuel in baseline per year	KES 7885

HHsExpenditures _{smoke} _{project}	Household expenditure on fuel in project scenario per year	KES 4342
Average household savings	(HHexp _{baseline} - HHexp _{project})	KES 3542

The estimation is based on baseline survey values and project value from the verified results of vintage 2023. The project value shall be update with results from the 1st MP data.

For improved cookstove, the net monthly fuel cost savings may be estimated using the net fuel savings per month and the difference of cost/unit of fuel used in an ICS and the cost/unit of fuel used in a traditional stove. In cases where households do not use their ICS exclusively, PD must weight the fuel savings by the ICS usage rate. The fuel savings cost shall only be reported for household buying fuel from market place.

The PD will consider fuel cost variation at different times of the year:annual average price shall be calculated and adjustments to reflect inflation shall be incorporated. Household will be asked to indicate annual maintenance cost which will be subtracted from the annual savings to get the net annual savings.

SDG 4 Quality of education

SDG 4-Quality of education		
QE _{baseline}	Number of employees provided skill development training	0
QE _{project}	Number of employees provided skill development training	30
N _{qe}	Number of employees provided skill development training (QE _{project} - QE _{baseline})	30

Refers to the number of employees (full-time, part time or temporary),by gender received training services of any type via project during the reporting period. The PD should footnote details on the trainings provided, including the types. Training registers shall be used to provide number of employees provided skill development.

SDG 5 (Gender Equality)

SDG 5-Gender Equality		
W _{baseline}	Number of women serving in managerial/leadership/ownership role in baseline scenario.	0
W _{project}	Number of women serving in managerial/leadership/ownership role in project scenario scenario.	5
T _{we}	Number of women serving in managerial/leadership/ownership role (W _{project} - W _{baseline})	5

Refers to number of female management employees (managers)(full-time) at the organization as of the end of the reporting period. Managers can be considered as those responsible for setting objectives,for organizing, for motivating and communicating, for measuring and developing people. The project shall provide its employment register to count number of women managers.The register shall be maintained to include roles for transparent reporting on this parameter.

SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Number of beneficiaries.

The contribution to SDG 7 is measured by the number of beneficiaries (households) served by stoves disseminated. The number of cookstoves disseminated is taken from the sales record.

s_{dg7} =number of beneficiaries; households

s_{dg7} =133,184

Refers to the number of unique households that were provided access to clean fuels and technologies for domestic cooking. The project database shall be used to calculate number of households.

SDG 8: Decent Work and Economic Growth by providing work, training, and sales opportunities.

Employment, decent work and pay is provided by the project by creating new jobs for the local population to implement the project such as local stove manufacturers and field officers.

s_{dg8} =total number of jobs

s_{dg8} =50

Refers to total jobs generated as a result of the project. This is broken into total number of employees by employment contract (permanent and temporary), by gender and total number of employees by employment type (full-time and part-time),by gender. This data will be available in the employment records.

SDG 13. Climate Action

The project includes distribution/sales of efficient Improved Cookstoves (ICS) with the aim to reduce greenhouse gas (GHG) emissions from the burning of non-renewable woody biomass and/or charcoal for cooking in Kenya. The outcome of the SDG 13 (Climate Action) will be measured as reduced greenhouse gas emissions measured as tonnes of CO₂e applying the GS methodology TPDDTEC, version 4.0. The SDG 13 outcome will be certified as "Certified SDG 13 Impacts" allowing the generation of carbon credits (GS VERs).

Applying method 1 as per the methodology, when the baseline fuel and the project fuel are the same and the baseline emission factor and project emission factor are same, the overall GHG reductions achieved by the project activity in year y are calculated as follows:

$$ER_y = \sum_{b,p} (N_{b,p,y} \times U_{p,y} \times SFS_{p,b,y} \times NCV_{b,fuel} \times (f_{NRB,b,y} \times EF_{b,f,CO2} + EF_{b,f,nonCO2})) - \sum LE_{p,y} \tag{Eq. 1}$$

Where:

ER_y	Emission reduction for total project activity in year y (tCO ₂ e/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 b/project 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(s) that is substituted or reduced in baseline b (TJ/mass)
$f_{NRB,b,y}$	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
$EF_{b,f,CO2}$	CO ₂ emission factor from use of fuel f (tCO ₂ /TJ)
$EF_{b,fuel,nonCO2}$	Non-CO ₂ emission factor arising from use of fuel f, when the baseline fuel f is biomass or charcoal (tCO ₂ e/TJ)
$LE_{p,y}$	Leakage for project scenario p in year y (tCO ₂ e/yr)

B.6.2 Data and parameters fixed ex ante

SDG13

Data/parameter ID	ICS 1
Data/parameter	Baseline scenario survey results

Unit	N/A
Description	Report of the results of the baseline scenario survey
Source of data	The report presents the results of the Baseline Scenario Survey, described in section B.4 above, relevant for the baseline scenario definition.
Value(s) applied	-
Choice of data or Measurement methods and procedures	-
Purpose of data	Used in the calculation of baseline emissions
Additional comment	Undertake at the start of the first crediting period, or more frequently if the project activity targets industrial applications (see 3.4, Baseline Scenario).

Data/parameter ID	ICS 2
Data/parameter	Project technology description
Unit	N/A
Description	The detailed description of the project technology has been provided in section A.3 above.
Source of data	<ul style="list-style-type: none"> ○ - Manufacturer specifications ○ - For stoves built on-site at the end user location, reports of Standard WBT by stove manufacturer or installer
Value(s) applied	-
Choice of data or Measurement methods and procedures	-
Purpose of data	Calculation of baseline emissions

Additional comment	-The Water boiling test results will be provided prior to the first verification of 3 RD CP including the details.
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Data/parameter ID	ICS 3
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	- The project technologies have been adopted from GS registered projects where lifetime has been set. The projects are (GS 879) and (GS 10970)
Value(s) applied	10 years for fixed rocket stoves
Choice of data or Measurement methods and procedures	-
Purpose of data	Calculation of emission reductions
Additional comment	The expected technical life of project technology is more than the crediting period. The project has standardized training manuals, production checklist and quality control to ensure consistency in production. In additional monitoring surveys will be employed to indicate aging and drop off rates will be applied.

Data/parameter ID	ICS 4
Data/parameter	Indoor air pollution (IAP) levels of the project technology
Unit	N/A
Description	For projects where cooking will move from outdoor to indoor or where the project technology reduces ventilation (for example, changing from a stove with chimney to improved stove with no chimney), demonstration that Indoor air pollution (IAP) levels are

	not worsened in the project scenario compared to the baseline, including PM 2.5 and carbon monoxide (CO) emissions.
Source of data	<p>For the description of IAP level of the project technology, any of the following sources shall be used:</p> <ul style="list-style-type: none"> - certification resulting from of a manufacturer’s test, - report of field testing of the technology, - report of lab testing of the technology, or - results of modelling of the technology’s operation under field conditions. - For stoves built on-site at the end user location,existing reports of lab or field testing of similar technology. <p>For the IAP level of the baseline scenario, the following sources shall be used:</p> <ul style="list-style-type: none"> - certification resulting fro m of a manufacturer’s test, - report of field testing of the technology, - report of lab testing of the technology, - results of modelling of the technology’s operation under field conditions, or - Expert opinion <p>For both project and baseline technologies, if none of these are available, reference from published literature or report by independent agencies may be used as evidence, provided it is not more than 5 years old.</p>
Value(s) applied	n/a
Choice of data or Measurement methods and procedures	n/a
Purpose of data	n/a
Additional comment	The project technology will not move cooking from outdoor to indoor nor reduce ventilation by replacing chimney stove with improved cookstove with no chimney. Paramater not applicable.

Data/parameter ID	ICS 5
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

	<p>the project activity directed at or signed with all the applicable parties of the following:</p> <ul style="list-style-type: none"> • - all other project participants; • - project technology producers; and • - retailers of the project technology or the renewable fuel.
Value(s) applied	TYCSD is the only PP. There will be emission waiver agreements with households.
Choice of data or Measurement methods and procedures	Written assertions
Purpose of data	Calculation of baseline scenario
Additional comment	The project has emission waiver signed by households. There is no other third party involved in the project.

Data/parameter ID	ICS 6
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	<p>Using 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- design a method to discount emission reductions in case the programme or project activity is found to displace or operate alongside another mitigation action.</p> <p>Only households with 3 stones fire stoves will be included in the project for emission reduction.</p>
Value(s) applied	-
Choice of data or Measurement methods and procedures	n/a
Purpose of data	Calculation of baseline scenario
Additional comment	<p>Undertaken at the time of project design review.</p> <p>The project will modify tool for monitoring usage survey to collect data on other cookstoves existing in household and document their</p>

usage patterns. Project stoves used in parallel with stoves from other registered projects will be considered non-use. The tools will be continuously revised to represent the existing situations.

Data/parameter ID	ICS 7
Data/parameter	Regulatory framework for provision of thermal energy services
Unit	N/A
Description	<p>The Kenya National cooking transition strategy identifies 5 key agenda points-Bridging the supply gap,bridging the affordability gap for deman side, promote local manufacturing and production, reframe and raise awareness and Institute accountability planning and tracking. The GS 879 project is in line with the identified strategy agenda points as it seeks to serve the rural poor households ensuring access therefore bridging the supply gap. The project stoves are locally produced, with competitive local prices and includes education and awareness creation hence in line with the strategy.</p> <p>The Draft National Energy Policy of 2025 (2025-2034) identifies the following kenya objective-universal access to affordable, reliable and sustainable energy, universal electricity access and clean cooking transition,expansion of renewable energy and energy security, energy efficiency,innovation and emerging technologies, and just,inclusive and climate-resilient energy transition. The policy also identifies the need to promote clean cooking technologies and reduce reliance on biomass fuels. The PA activity is in line with the government strategy-it seeks to promote access to improved cookstoves for rural communities in Siaya and Busia.</p> <p>Kenya’s Second Nationally Determined contribution (2031-2035) under section 3.1 on Mitigation identifies the need to promote adoption of clean and efficient energy use for the transport,industry,agriculture and domestic sectors including clean cooking. PA is there aligned with the 2nd NDC of kenya.</p>
Source of data	Kenya National cook transition strategy 2024-2024 by Ministry of Energy & Petroleum.

	https://www.energy.go.ke/sites/default/files/KAWI/Publication/Kenya%20National%20Cooking%20Transition%20Strategy_Signed.pdf
Value(s) applied	The project doesn't not undermine any policy or legislation on provision of thermal energy services/products.
Choice of data or Measurement methods and procedures	n/a
Purpose of data	Calculation of baseline scenario
Additional comment	N/A

Data/parameter ID	ICS 8
Data/parameter	EF_{b,f,CO_2}
Unit	tCO ₂ /TJ
Description	CO ₂ emission factor arising from use of fuels in baseline scenario
Source of data	Methodology default values
Value(s) applied	Wood: Methodology default, 112 tCO ₂ /TJ
Choice of data or Measurement methods and procedures	Methodology default value
Purpose of data	Calculation of baseline scenario
Additional comment	n/a

Data/parameter ID	ICS 9
Data/parameter	$EF_{b,f,nonCO_2}$
Unit	tCO ₂ /TJ

Description	Non-CO ₂ emission factor arising from use of fuels in baseline scenario
Source of data	Methodology default values
Value(s) applied	Wood: 9.46 tCO ₂ e/TJ (AR5 GWP)
Choice of data or Measurement methods and procedures	Methodology default value
Purpose of data	Calculation of baseline scenario
Additional comment	-

Data/parameter ID	ICS 10
Data/parameter	EF _{p,f,CO2}
Unit	tCO ₂ /TJ
Description	CO ₂ emission factor arising from use of fuels in project scenario
Source of data	Methodology default value.
Value(s) applied	Wood: Methodology default, 112 tCO ₂ /TJ
Choice of data or Measurement methods and procedures	Methodology default value
Purpose of data	Calculation of baseline scenario
Additional comment	-

Data/parameter ID	ICS 11
Data/parameter	EF _{p,f,nonCO2}
Unit	tCO ₂ /TJ
Description	Non-CO ₂ emission factor arising from use of fuels in project scenario

Source of data	Methodology default value cap are not permitted. If emissions of this nature are included in the baseline emission factor, then they shall also be included in the project emission factor.
Value(s) applied	Wood: Methodology default: <ul style="list-style-type: none"> - 9.46 tCO2e/TJ (AR5 GWP)
Choice of data or Measurement methods and procedures	Methodology default value
Purpose of data	Calculation of baseline scenario
Additional comment	-

Data/parameter ID	ICS 12
Data/parameter	<i>NCV b,fuel</i>
Unit	TJ/ton
Description	Net calorific value of the fuels used in the baseline
Source of data	IPCC default values
Value(s) applied	0.0156 TJ/ton for wood
Choice of data or Measurement methods and procedures	Deemed valid by TPDDTEC methodology.
Purpose of data	Calculation of baseline scenario
Additional comment	N/A

Data/parameter ID	ICS 13
Data/parameter	<i>NCV p,fuel</i>
Unit	TJ/ton

Description	Net calorific value of the fuels used in the project
Source of data	IPCC default value
Value(s) applied	0.0156TJ/ton for wood
Choice of data or Measurement methods and procedures	Deemed valid by TPDDTEC methodology.
Purpose of data	Calculation of baseline scenario
Additional comment	This has same values as $NCV_{baseline}$ in projects which reduce the same fuel.

Data/parameter ID	ICS 17
Data / Parameter	$f_{NRB,i,y}$
Unit	percentage
Description	Fractional non-renewability status of woody biomass fuel during year y .
Source of data	Determined by following the CDM TOOL33, default country values. https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-33-v3.pdf
Value(s) applied	29%
Measurement methods and procedures	Calculated
Monitoring frequency	Fixed at project design certification stage: Determined ex-ante and fixed for a given crediting period (if it is fixed ex-ante, then include $f_{NRB,i,y}$ in the "data and parameters fixed ex ante" section of the PDD),
QA/QC procedures	Requirements of the CDM TOOL33

Purpose of data	Calculation of baseline scenario
Additional comment	-

B.6.3 Ex ante estimation of SDG Impact

Because the type of the fuel used and the respective fuel emission factors is the same for both the baseline and the project scenario, emission reductions are calculated based on the mean fuel savings per stove (household). The following equation from page 13 of the applied methodology is used:

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

Eq. 1

Substituting the following figures into the equation provides the following emission reduction per stove per year:

Variable	Description	Value-Wood	Unit
ER _y	Emission reduction for total project activity in year y (tCO ₂ e/yr) per unit	1.19	tCO ₂ e
N _{p,y}	Project technology-days in the project database for project scenario p through year y	365	days
U _{p,y}	Cumulative usage rate for technologies in project scenario j during year y, based on cumulative distribution rate and drop-off rate. As a conservative approach, 90% usage rate was applied.	90%	%
SFS _{b,p,y}	Fuel savings due to project technology	0.0058	t/day/hh
P _{b,y}	Fuel consumed in the baseline	0.0101	t/day/hh
P _{p,y}	Fuel consumed by project technology	0.0043	t/day/hh
NCV _{b,fuel}	Net calorific value of the fuel that is substituted or reduced (IPCC default for wood fuel, 0.0156 TJ/ton)	0.0156	TJ/ton
f _{NRB,b,y}	Fraction of biomass used during year y for the considered scenario that can	29%	%

	be established as non-renewable biomass (drop this term from the equation when using a fossil fuel baseline scenario)		
EF _{b,fuel,CO2}	CO ₂ emission factor of the fuel that is substituted or reduced. 112 tCO ₂ /TJ for Wood/Wood Waste, or the IPCC default value of other relevant fuel	112	tCO ₂ /TJ
EF _{b,fuel,nonCO2}	Non-CO ₂ emission factor of the fuel that is substituted or reduced	9.46	Number/year
LE _{p,y}	Leakage in project scenario p during year y	0.95	tCO _{2e} per year

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

SDG 1

Year	Baseline estimate	Project estimate	Net benefit (KES
2025	7885	4342	3543
2026	7885	4342	3543
2027	7885	4342	3543
2028	7885	4342	3543
2029	7885	4342	3543
2030	7885	4342	3543
2031	7885	4342	3543
Total	N/A	N/A	N/A
Annual average over the crediting period	0	4342	3543

SDG 4 Year	Baseline estimate	Project estimate	Net benefit (Number/year)
2025	0	30	30
2026	0	30	30

2027	0	30	30
2028	0	30	30
2029	0	30	30
2030	0	30	30
2031	0	30	30
Total	N/A	N/A	N/A
Total number of crediting years	7		
Annual average over the crediting period	0	30	30

SDG 5

Year	Baseline estimate	Project estimate	Net benefit (number)
2025	0	5	5
2026	0	5	5
2027	0	5	5
2028	0	5	5
2029	0	5	5
2030	0	5	5
2031	0	5	5
Total	N/A	N/A	N/A
Total number of crediting years	7		
Annual average over the crediting period	0	5	5

SDG 7

Year	Baseline estimate	Project estimate	Net benefit (number)
2025	0	136710	136710
2026	0	137571	137571
2027	0	138384	138384
2028	0	137544	137544

2029	0	129358	129358
2030	0	127539	127539
2031	0	125179	125179
Total	N/A		N/A
Total number of crediting years	7		
Annual average over the crediting period	0	133,184	133,184

SDG 8

Year	Baseline estimate	Project estimate	Net benefit (number)
2025	0	50	50
2026	0	50	50
2027	0	50	50
2028	0	50	50
2029	0	50	50
2030	0	50	50
2031	0	50	50
Total	N/A	N/A	N/A
Total number of crediting years	7		
Annual average over the crediting period	0	50	50

SDG 13

Year	Baseline estimate	Project estimate	Net benefit (VER tCO ₂ e)
2025	27,352	0.00	27,352
2026	164,992	0.00	164,992
2027	166,009	0.00	166,009
2028	166,810	0.00	166,810
2029	165,087	0.00	165,087
2030	156,002	0.00	156,002
2031	153,790	0.00	153,790

Total	1,000042	0.00	1,000042
Total number of crediting years	7		
Annual average over the crediting period	142,863	0.00	142,863

B.7. Monitoring plan

B.7.1 Data and parameters to be monitored

SDG 13

Data/parameter ID	ICS 18
Data / Parameter	Pb,y
Unit	tonnes /household-day
Description	Quantity of fuel that is consumed in baseline scenario b during year y
Source of data	BFT 2024 GS 879-3CP baseline fuel test_v1.xlsx
Value(s) applied	0.0101 t/household/day
Measurement methods and procedures	Measured
Monitoring frequency	At the start of crediting period (fixed for one crediting period)

<p>QA/QC procedures</p>	<p>Compliance with the general requirements for sampling (Section 4.4), general requirements for QA/QC (Section 4.5) and Annex 2 Kitchen performance test.</p> <p>As per the baseline survey average household size is 5.5 persons. Considering value of 3.6782 t/household/year, translates to 0.6630 tonnes/person/year which is below the methodology default of 0.75 tonnes/person/year.</p> <p>During the baseline fuel test the PD calibrated the weighing machines and recorded the process as per the calibration guideline. 4 digital weighing machines were used for the activity (TYC/01/EEC/024,TYC/02/EEC/024,TYC/03/EEC/024,TYC/04/EEC/024).The machines were supplied on 14th May 2024. During enumerator planning meeting new batteries and calibration with known mass was undertake on 13/08/2024. Additional calibrations checks were performed on 17 and 20th of August 2024. To check on accuracy and precision the PD ensures scales are adjusted to start at 0, there is weighing of known mass, repeated weighing to confirm if same results are achieved, combined known weight objects weighing. The gadgets produced consistent results hence considered accurate and precise. The gadgets calibration is valid for the period covering the fuel tests, its recalibrated for the PFT. The calibration is valid for the period of the exercises (baseline fuel test).</p>
<p>Purpose of data</p>	<p>Calculation of baseline emissions</p>
<p>Additional comment</p>	<p>Used to calculate SFS under method 1 Applicable adjustment factors may be applied.</p>

<p>Data/parameter ID</p>	<p>ICS 15</p>
<p>Data / Parameter</p>	<p>Avoidance of double counting or double claiming among project technology end users</p>
<p>Unit</p>	<p>NA</p>
<p>Description</p>	<p>Evidence of avoidance of double counting or double claiming with project technology end users</p>
<p>Source of data</p>	<p>Project sales receipts and signed carbon waiver by end users.</p>
<p>Value(s) applied</p>	<p>-</p>

Measurement methods and procedures	-
Monitoring frequency	Continuous during stove sale/installation
QA/QC procedures	Cross check using general internet search and search of public records of Gold Standard and other voluntary market and UNFCCC mechanisms. Ensuring all project technologies have unique identity numbers that are traceable from production to households.
Purpose of data	Methodology ad GS compliance
Additional comment	-

Data/parameter ID	ICS 16
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	Use one of the following methods: <ul style="list-style-type: none"> - 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
Value(s) applied	1
Measurement methods and procedures	Project surveys
Monitoring frequency	Annual
QA/QC procedures	The calculation of $SFS_{p,b,y}$, 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	Calculation of project scenario
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.

Data/parameter ID	ICS 19
Data / Parameter	P _{p,y}
Unit	tonnes/household-day.
Description	Quantity of fuel that is consumed in project scenario p during year y
Source of data	Project fuel test was conducted between 20 th August to 2 September 2025. GS 879-3CP Project fuel test_v1.xlsx
Value(s) applied	Wood: 0.0043
Measurement methods and procedures	Measured
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 project emissions
Additional comment	Used to calculate SFS under method 1 Applicable adjustment factors may be applied.

Data/parameter ID	ICS 20
Data / Parameter	$SFS_{b,p,y}$
Unit	mass /technology*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	Wood: 0.0058
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.
Purpose of data	Calculation of emission reductions
Additional comment	Applies when using Method 1.

Data/parameter ID	ICS 26
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Data / Parameter	$U_{p,y}$
Unit	Percentage
Description	Weighted average usage rate in project scenario p during year y
Source of data	Estimated
Value(s) applied	90% (estimated)
Measurement methods and procedures	Calculated
Monitoring frequency	Annual
QA/QC procedures	Compliance with the general requirements for sampling (Section 4.4) and general requirements for QA/QC (Section 4.5)
Purpose of data	Calculation of emission reductions
Additional comment	Please refer to the Requirements and Guidelines: Usage Rate Monitoring for carrying out usage surveys for projects implementing improved cooking devices. The project shall apply the Good practice monitoring requirement guideline to conduct surveys and determine project usage rate.

Data/parameter ID	ICS 27
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	Project database
Value(s) applied	365
Measurement methods and procedures	Calculated

Monitoring frequency	Calculated 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	Calculation of emission reductions
Additional comment	-

Data/parameter ID	ICS 28
Data / Parameter	LE _{p,y}
Unit	tCO ₂ e per year
Description	Leakage in project scenario p during year y
Source of data	Sources established by following section 2.4.A Leakage emissions
Value(s) applied	0.95
Measurement methods and procedures	-
Monitoring frequency	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)
Purpose of data	-
Additional comment	Monitoring is not required.

SDG 1

Data / Parameter	Average household savings.
Unit	Money savings in KES

Description	Refers to the average household savings/reduced expenditure on basic services due to the adoption of project technologies (improved cookstove). Data disaggregation as per end-user's residence settings i.e., rural, urban,peri-urban; income level, where possible.
Source of data	Annual Monitoring surveys.
Value(s) applied	KES 3,543 (estimate)
Measurement methods and procedures	The project will conduct annual surveys to collect data on SDG 1. This is based on project proposed calculation and sampling approach.
Monitoring frequency	Annual
QA/QC procedures	-
Purpose of data	To calculate SDG 1
Additional comment	-

SDG 4

Data / Parameter	N_{qe}
Unit	Number
Description	Refers to the number of employees (full-time,part-time, or temporary),by gender who received training services of any type via project during the reporting period.
Source of data	training register.
Value(s) applied	30 persons per year (estimate)
Measurement methods and procedures	The project will collect and maintain data on number of employees provided skill development training per year.
Monitoring frequency	Annual
QA/QC procedures	-
Purpose of data	To calculate SDG 4

Additional comment	-
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SDG 5

Data / Parameter	T _{we}
Unit	Number
Description	Refers to number of female management employees(managers)full-time) at the organization as of the end of the reporting period.
Source of data	TYCSD Employment records
Value(s) applied	5 estimate
Measurement methods and procedures	refers to number of female management employees (managers)(full-time) at the organization as of the end of the reporting period.Employment records shall be maintained to include roles of staff to allow for transparent reporting.
Monitoring frequency	Annual
QA/QC procedures	-
Purpose of data	To calculate SDG 5
Additional comment	-

SDG 7

Data/parameter	S _{households}
Unit	Number
Description	Refers to number of unique households that were provided access to clean technologies for domestic cooking that they were unable to access prior to project activity.
Source of data	Project database/sales record.
Value(s) applied	133,184(estimated)

Measurement methods and procedures	Refers to the number of unique households that were provided access to clean fuels and technologies for domestic cooking. The project database shall be used to calculate number of households.
Monitoring frequency	Continuously
QA/QC procedures	Each stove and beneficiary will have a unique ID number that will be recorded in the project database, this ensures that the stoves distributed are not double counted.
Purpose of data	To calculate SDG 7
Additional comment	-

SDG 8

Data/parameter	TJp
Unit	Number
Description	Refers to number of total jobs generated as a result of the project.
Source of data	TYCSD report on the project including total number of people employed by the project.
Value(s) applied	50 (estimated)
Measurement methods and procedures	employment records
Monitoring frequency	Annually
QA/QC procedures	All employees hired must sign contracts outlining the roles and obligations and rights.
Purpose of data	To calculate SDG 8
Additional comment	Refers to total jobs generated as a result of the project

B.7.2 Sampling plan

The following are the continuous and periodic monitoring activities:

A. Total sales record

The following data shall be recorded for all sold stoves;

1. Date of sale
2. Geographic area of sale
3. Model/type of project technology sold
4. Quantity of project technologies sold
5. Name and telephone number (if available) and address of all end users
6. Mode of use: domestic
7. Stove identification number - Each project stove has a unique identification number inscribed on it.

B. Project database

Under this monitoring protocol, project database will be derived from the total dissemination record with project technologies differentiated by different project scenarios. Because one project scenario is available for this project, one database based on the result of the applicable monitoring survey for this project scenario shall be maintained in for ER calculations.

C. Ongoing Monitoring Studies

The following ongoing monitoring studies will be conducted for the project scenario following verification of the associated initial project studies. These monitoring studies will investigate and define parameters that could not be determined at the time of the initial project studies or that change with time.

- I. **Monitoring Survey** – This shall be completed annually, beginning one year after project registration. The monitoring survey shall investigate changes over time in the project scenario by surveying end users of the project technology on an annual basis. It will provide critical information on year-to-year trends in end user characteristics such as technology use, fuel consumption and seasonal variations.

Monitoring Survey Representativeness:

End users from the project scenario will be selected using representative sampling techniques to ensure adequate representation of users with technologies of different ages. Common sampling approaches such as clustered random sampling will be used. End users will be surveyed once a year with care taken to collect information pertaining to seasonal variations in technology and fuel use patterns. As the project

expands to other areas, monitoring surveys will guarantee that noticeable differences are detected and if needed new scenarios or appropriate adjustment factors defined.

Monitoring Survey sample sizing and data collection:

The monitoring survey has the same sample sizing and data collection guidelines as the baseline survey, but in this case, the monitoring survey will only be conducted with end users representative of the project scenario and who will be using the project technology at the time of the survey.

- II. **Usage Survey** – completed annually, the usage survey provides a single usage parameter that is weighted based on drop off rates that are representative of the age distribution for project technologies in the total sales record. A usage parameter must be established to account for drop off rates as project technologies age and are replaced. Prior to a verification (also prior to first verification), a usage parameter is required that is weighted to be representative of the quantity of project technologies of each age being credited will be given project scenario. The number of days the stoves are in use will also be determined through usage surveys and considered for emission reduction calculation.

The minimum total sample size will be 100, with at least 30 samples for project technologies of each age being credited. The majority of interviews in a usage survey must be conducted in person and include expert observation by the interviewer within the kitchen in question. The usage survey will establish a useful lifetime for technologies after which they are removed from the project database and no longer credited

- III. **Project FT Update** – completed every other year (every two years)

The PFT update is an extension of the project PFT and provides a fuel consumption assessment representative of project technologies currently in use every two years. Hence the PFT update shall account for changes in the project scenario over time as the project technology age and new customers are added.

IV. Baseline FT Update - A fixed baseline is adopted in this project hence baseline FT update is not required.

V. Leakage Assessment – The project applies a default discount rate hence no monitoring required.

VI. Management of monitoring activities - Monitoring will occur through a Monitoring/Research Coordinator at Tembea Youth Centre for Sustainable Development. This person and staff will receive oversight and guidance from the Director. This person and staff will coordinate all data collection specifically regarding continuous measures (e.g. total sales records) and periodic measures (e.g. usage surveys, monitoring surveys, PFT).

VII. Quality Assurance and Quality Control of monitoring activities

Tembea Youth Centre for Sustainable Development shall be responsible for accurate and transparent record keeping, monitoring and evaluation. All supporting documentation and records for the project will be easily accessible for spot checking and cross referencing by a third party.

Contact information in the total sales record must allow a project auditor to easily contact and visit end users. Tembea Youth Centre for Sustainable Development will ensure quality control for the monitoring activities in order to guarantee for the validity of Sales Records and to confirm the absence of double-counting in any form. Tembea Youth Centre for Sustainable Development will ensure that the Detailed Customer Database and the Project Database are up to date and that the latter is representative of the most recent definitions of clusters. Total Sales Records will be cross-checked with the construction artisans' data sheets and lead artisans' summary sheets as well as with production records (materials purchases, staff numbers), and internal accounting records.

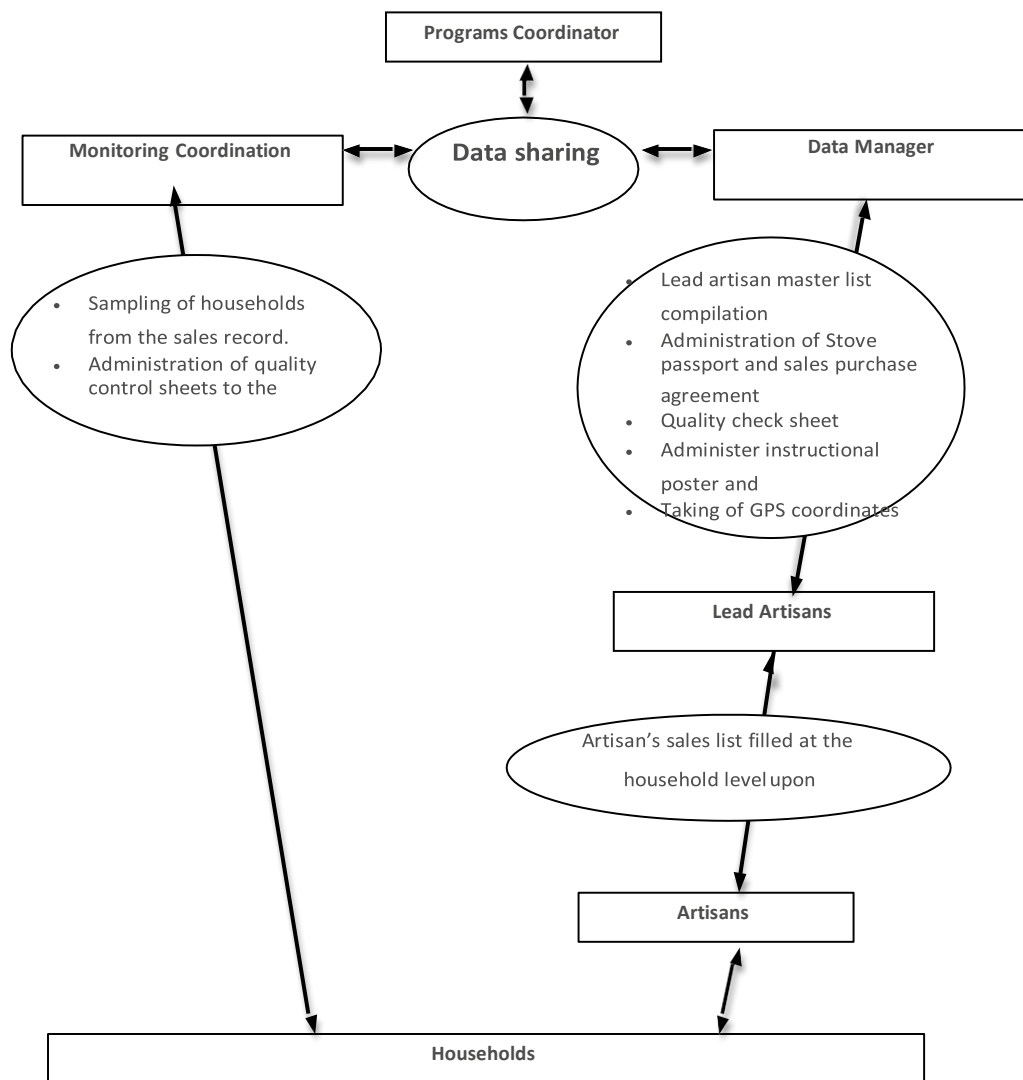
Each artisan will be required to be accessible for the households for which he/she installed the Tembea stove. The individual households will be required to have the contacts of the artisan to easily reach out in the event an issue

about the stove arises. The artisan shall review the case and if the case qualifies maintenance and repair services by Tembea, the same will be passed to the lead artisan immediately by the artisan who did the stove. The lead artisan shall communicate the same to the project officer in charge of stove construction who in conjunction with the Director of Tembea Youth for Sustainable Development will guarantee the availability of funds for repair within a month from the date the attention of the case was received. Once the funds for repair are available, the same shall be handed over to the lead artisan who together with the individual artisan will immediately organize for a repair. The lead artisans will be required on a monthly basis to sample representative stoves in a location and pay them a visit, specifically to check on any maintenance issue affecting the stoves.

In case the case reported was due to negligence of the gross mistake of the household user, then Tembea will advise the user to consider self purchasers or contact the field officer coordinating their group for CSL purchasers. The same shall be reported to the project officer in charge of stove construction. Such cases of self purchaser or CSL purchasers, the repair should be taken within one week for villages that are having ongoing construction and at most 2 weeks for the rest.

VIII. **Data storage and archiving** - Tembea Youth for Sustainable Development is responsible for record keeping and storage. In the latest version of the Monitoring Manual the responsible persons for data storage and archiving are listed (see "data storage and archiving" in the latest version of the Monitoring Manual).

IX. **Monitoring coordination**



B.7.3 Other elements of monitoring plan

Implementation Plan:

TYCSD is responsible for the production of monitoring reports, following the criteria outlined in section B.7.2. above, sampling will be carried out following the Standard for Sampling and Surveys for CDM Project Activities and Programme of Activities in accordance with GS4GG requirements. A precision/confidence of 90/10 or 95/10 will be applied depending on the frequency of monitoring, in accordance with the requirements of the methodologies above.

Sampling efforts will be conducted by qualified personnel or those who have prior experience of sampling. The surveyors will have native language(s) competencies, allowing for full comprehension of any responses given by sampled users, and any questions therein.

Data collection and archiving:

The monitored data will be entered into the TYCSD database or Kobo toolkit. Original copies of monitoring documents will be kept and archived incases where Kobo toolkit is not utilised. The name of the surveyor will be specified on monitoring survey forms, therefore allowing for the follow-up of incomplete/unclear data in case any. Hard copies of all documents will be kept at the office TYCSD. The record keeping database will be used to record the results of all monitoring/total sales.

Responsibilities and institutional arrangements:

The responsibility for monitoring and reporting lies with TYCSD. Trained staff will be assigned to carry out the monitoring process including data recording, reporting, archiving and management.

Entities responsible for conducting monitoring

Role	Responsibility
Carbon certification coordinator	Receive monitoring issues and questions from Stoves Manager, clarify uncertainties in methodology, provide additional support from Project Development team if needed. Advises on monitoring issues.
Monitoring coordinator -	<ul style="list-style-type: none"> - Enlist and manage work of monitoring teams. - supply protocols, ensure timeframe is met, address issues, compile final reports, etc - Manages the Project Database, in which the results of monitoring shall be summarized - Oversees and drafts the production of annual monitoring reports - Coordinates communication with the verifier and Gold Standard. - Completes Monitoring Report and ER calculation. - Carries out sampling
Field personnel	<ul style="list-style-type: none"> - Collect monitoring data. - Sharing monitoring data with the monitoring coordinator. - Maintains proper and continuous records of project activities and disseminated stoves - Carries out sampling

Implementation Plan:

TYCSD is responsible for the production of monitoring reports, following the criteria outlined in section B.7.2. above, sampling will be carried out following the Standard for Sampling and Surveys for CDM Project Activities and Programme of Activities in accordance with GS4GG requirements. A precision/confidence of 90/10 or 95/10 will be applied depending on the frequency of monitoring, in accordance with the requirements of the methodologies above.

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Monitoring coordinator -	<ul style="list-style-type: none"> - Enlist and manage work of monitoring teams. - supply protocols, ensure timeframe is met, address issues, compile final reports, etc - Manages the Project Database, in which the results of monitoring shall be summarized - Oversees and drafts the production of annual monitoring reports - Coordinates communication with the verifier and Gold Standard. - Completes Monitoring Report and ER calculation. - Carries out sampling
Field personnel	<ul style="list-style-type: none"> - Collect monitoring data. - Sharing monitoring data with the monitoring coordinator. - Maintains proper and continuous records of project activities and disseminated stoves - Carries out sampling

Additional requirements as per Usage Rate Monitoring V2.

Fulfillment of updated requirements and guidelines for carrying out usage survey for projects implementing improved cooking devices.

The PP has undertaken measures to meet the update rules for conducting usage surveys for cook stove projects published on 27/10/2020.

A. Mandatory requirements

- I. Definition of stove user vs non-user-The project defines non-user as households that use the baseline stove at least once a day. To imply that any household that reports to use the baseline stove, once, twice, or thrice a day is considered not using the project stove. In addition the monitoring usage survey shall include questions on use of any other cooking devices available in the households. In this regards any household using either baseline or any other cooking device shall be considered 'Non use'. This shall be adopted in the analysis of monitoring and usage survey data. As required by the guidelines the PD through the team undertaking the Monitoring usage surveys shall seek household consent before taking household photos.
- II. Household observation
 - Kitchen observation- The enumerators shall be trained on stove use check and are expected to perform the same during the monitoring and usage surveys. The enumerators shall be trained on this inspection criteria and application.
 - Interview with primary cook- The enumerators shall interview the primary cook stove users. There must be an in-person usage survey.
 - Photos of the cooking area-The PD shall take photos of all the households visited for monitoring activity. The photos shall capture the kitchen and cooking area with date stamp.
 - GPS coordinates- GPS coordinates for all the households visited for the usage survey shall be collected.
- III. Verification checks- The PD must conduct after survey verification checks on the data collected by the monitoring teams by making follow up calls with to the survey households. Evidence of the checks must documented with minimum sample size of 5% of the successful surveys.

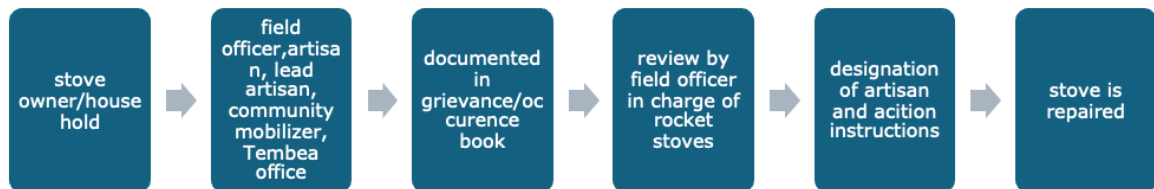
B. Good Practice Monitoring requirements

1. Field team Training and supervision- The PD must organize a training for the enumerators and maintain evidence of the same. The training should enable the the enumerators to understand the objective of the survey, troubleshooting and all applicable requirements. The PD shall make necessary arrangements for close supervision and regular review of collected data.
2. End user training and follow up- PD shall trained and recruited community mobilizers who train community on stove use, economic empowerment, and climate change. The PD shall also use the stove artisan as earliest contact to train household on stove use immediately after stove construction. Due to budgetary constraints these activities are conducted alongside awareness creation events. Evidence of the awareness activities shall include reports.
3. Awareness campaign- This requirement has been met alongside number 2 (End user training and follow up). The campaigns shall include climate change awareness creation and stove maintenance.

Best practice monitoring requirements- the project shall comply with this requirement.

Maintenance repair and replace process

Stove owners can contact Tembea directly through the office number or can contact the field officers, lead artisans, community mobilizer and artisans. Once they contact the Tembea team the complaint or request is documented in the project grievance/occurrence book and the field officer in charge of rocket stoves is notified. The field officer in charge of rocket stove reviews the request in consultation with artisan/lead artisan and defines appropriate action. A field artisan is then assigned to perform the maintenance, repair or replace. The time frame for maintenance, repair/replacement is 7 days however, depending on the nature repair it may take more time.



stove repair process (from the time the stove owner contacts Tembea or its agents it should take 7 days for repair to be undertaken. In some cases where stove is fully demolished this may take longer). |

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1 Start date of project

The starting date of the project activity is 04 October 2010, (date when the first project stove was constructed)

C.1.2 Expected operational lifetime of project

21 years 0 month

C.2. Crediting period of project

C.2.1 Start date of crediting period

>>

Third crediting period 11/11/2025¹²

C.2.2 Total length of crediting period

7 years

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.

No parameters picked for monitoring.

¹² The project will not claim credits covering the period 01/01/2025-10/11/2025 this is due to delay to conclude renewal of crediting period.

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

<p>Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?</p>	<p>The project complies with <i>Principle 2 – Gender Equality and Women's Empowerment requirements</i> of Safeguarding Principles & Requirements.</p> <p>The project follows the principles of non-discrimination. Access to the project activity is granted to all men and women. The project promotes equal rights for all groups, people from various parts and abilities. The project does not directly or indirectly negatively impact gender equality or women. Particularly, the main beneficiaries of the project are women and the project promotes their rights, with deliberate measures to:</p> <ul style="list-style-type: none"> • Improve their skills and participation. • Reduce their workload for collecting firewood. • Reduce the risks and hazards associated with unclean cooking practices including three stone open fire. • Foster women employment not only as artisans but project staff even at management positions. • Pay equal salaries for equal work for women and men <p>Women are adequately engaged during the project Stakeholder Consultation that are conducted following the Stakeholder Consultation Engagement Requirements.</p>
<p>Question 2 - Explain how the project aligns with existing country policies, strategies and best practices</p>	<p>The project complies with the national Strategy for Gender Development which is the official government document to promote gender mainstreaming in Kenya. The project adheres to corresponding national legislation labour including maternity leaves/paternity and others.</p>
<p>Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?</p>	<p>No</p>

<p>Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?</p>	<p>No. Government officials from departments/agencies concerned with gender issues participated in the stakeholder consultations and provided the required technical backstopping.</p>
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SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

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

E.1 Summary of stakeholder mitigation measures

Physical stakeholder consultation meetings were separately held in Busia and Siaya Counties. In Busia County, the meeting was held on 16.07.2024 at Farm View Hotel in Busia Town and attended by 42 participants (26 males and 16 females). In Siaya County, the physical stakeholder consultation meeting was held on 18.07.2024 at Distinction Gardens in Siaya Town with 41 participants (27 males and 14 females) in attendance. The participants comprised local community representatives, local and national government officials, non-governmental organization (NGO) representatives, faith-based organization (FBO) representatives, and people with disability (PWD). Prior to the meeting, the participants were provided with information on:

- Preliminary agenda for the meeting
- A non-technical summary of the project
- Contact details to get further technical detail and project information
- Summary of economic, social and environmental impacts of the Project
- Other relevant information to help stakeholders understand the project

Apart from giving comments and having their questions addressed during the plenary sessions, the participants filled the feedback forms which was analyzed to develop the LSC findings for this section of the report. The LSC physical meeting report was made available to the participants and further comments sought from the participants in preparation for the stakeholder feedback round. The feedback meetings were respectively held on 27.08.2024 and 29.08.2024 in Busia and Siaya Counties, at the same venues for the first LSC meetings.

Below is a summarisy of feedback received and actions taken for the respective LSC meetings.

Questions/Feedback from the Plenary Session in Busia County

Participants' Questions/Comments	Clarifications/Proposed Actions by Project Developer
<p>Can my stove be repaired if it gets damaged?</p>	<p>Yes, a damaged stove can be repaired. Within the first year, the stove will be covered under the warranty terms and conditions. After the warranty period expires the household will cover the stove repair</p>

	costs. Significantly, the stove construction artisan will orient the stove owners on the maintenance procedures and leave contact details behind for the households to reach out as need may be. Likewise contact details of the Lead Artisans, Field Officers and Project Developers will be made available to the households.
Can households without kitchen benefit from the project stove? Can the project support households without kitchen to have one?	Yes, the households without kitchen can benefit from the project stove. The stove can still be installed in the main house, in an area set aside for cooking activities. While it will be desirable for the households needing the stove to own a kitchen, the project will not be able to construct kitchen for households currently lacking kitchen.
Why is the stove called energy efficient cook stove? Where does the smoke go from the kitchen?	The stove is considered energy efficient because of its higher combustion efficiency. Through the cleaner and more efficient combustion, harmful smoke emissions are reduced and indoor air quality is considerably improved.
Can the stove be installed in an institution like a school, ECDE centre or by business premises like for fish mongers?	Yes, the stove can be installed in institutions or business premises. Based on the institution or business premise size and quantity of food to be prepared/ size of the pot to be used, the domestic or institutional version of the stove can be installed. For small business premises like frying fish for local market, the domestic version can be used.
There was a stove promotion initiative that failed in Marachi area, one of the Wards in Busia County. How is this project different?	The project is designed in such a manner to ensure its success. That is why stakeholder consultation in the entire project cycle management is a mandatory requirement. The multi-stakeholder approach to designing, planning and implementation of the project is the cornerstone for the project success.
How can the church be involved in promoting the project?	The participation of the church in the project is highly valued. Church leaders could help create climate change awareness and influence their congregants to adopt the energy efficient cook stoves as a measure towards climate change mitigation.

<p>How durable is the stove?</p>	<p>The stove can last for many years depending on its proper maintenance and usage. There are households that acquired the stove in 2010 in Siaya and are still using it to date (almost 14 years now), in good condition.</p>
<p>There are some cultural attachments to 3-stone open fire. How would you address the cultural issues/rites associated with 3-stone open fire? The 3-stone symbolizes the family pillars of father, mother and children.</p>	<p>The project appreciates the cultural attachments to the 3-stone open fire. However, the cultural events/rites are occasional so the household could adopt the energy efficient stove as the main cook stove, and only use the 3-stone in the instances when they have to. Coincidentally, the energy efficient has 3 pot rests which could still symbolize the family pillars. More, importantly, climate change awareness would help the communities make rational decisions.</p>
<p>How representative was the baseline survey sample size? Was data by Kenya Bureau of Statistics reviewed to compare with the baseline survey results?</p>	<p>The Baseline survey met the required standard in terms of its methodology. The random sampling followed the guidelines for minimum baseline sample size by GS4GG’s REDUCED EMISSIONS FROM COOKING AND HEATING: Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC), Version: 4.0, hence the sample size was representative. However, statistical data from government record were still reviewed to corroborate the survey findings.</p>
<p>Where and how will the project start? How will it be coordinated?</p>	<p>Once approved, the project will be rolled-out in the entire Busia County over the its lifespan. To effectively utilize the available human and financial resources, the work will be done from one Sub-County/Location to another but this may be reviewed from time to time to align the project to the prevailing circumstances/realities on the ground. The project will be coordinated by Tembea in close work relationship with all the relevant stakeholders and based on the assignment at hand.</p>

What are some of the risks associated with the project? What mitigation/safety measures are in place?	Generally, the project poses no serious risk to the communities' health, safety and working conditions. However, preparing mud from a mixture of anthill soil and sawdust could expose the artisan to body injuries, for example, if pricked on the leg by any sharp object (wood shavings, sticks, metallic objects, broken glasses, etc). The project will undertake to ensure that the artisan have personal protective equipment including gumboots when preparing the mud.
Can the stove be modified for large scale use or be made portable?	Changing the stove design to a portable version may not be possible at the moment. However, there is an institutional version of the stove which can be installed by special order.

Busia County Participants Comments Captured on the Evaluation Form and the Project Developer's Clarifications/Comments

Stakeholder Comment	Number of stakeholders commenting	Clarification Comments/Actions
What is your impression of the local stakeholders' consultation meeting?		
The meeting was informative/educative/factual/comprehensive	27	Important feedback from the participants
The deliberation process was participatory/engaging - allowed for free exchange of ideas	13	Important feedback from the participants
Good stakeholder representation/diversity/inclusivity	11	Important feedback from the participants
More statistical data from credible sources should have been incorporated/Baseline sample size of 367 household may not be representative of Busia households	2	The presentation focused more on the non-technical summary of the project with a lot of care to make it palatable to all categories of the participants. The Baseline survey met the required standard in terms of its methodology and the sample size was representative. The random sampling followed the guidelines for minimum baseline sample size by GS4GG's REDUCED EMISSIONS FROM COOKING AND HEATING:

		Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC), Version: 4.0. However, statistical data from government was further reviewed to enrich the consultations.
What do you like about the energy efficient cook stove project?		
<p>Its positive social, economic and environmental impacts as well as contributions to SDGs</p> <ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Saves time/cooks fast - 5 • Saves money for firewood purchase - 4 • Easy to use - 5 • Saves fuel/energy - 10 • Affordable/Cost effective - 16 • Deepened local economy from purchase of local materials - 5 • Employment opportunities - 13 • Environment friendly/Reduces emissions/Indoor air quality - 28 • Reduces deforestation/consumes less firewood - 19 • Health benefits/reduced eye irritation and respiratory problems - 11 • Durable - 6 • General positive comments - 4 	<p>The participants concurred with the project developer that the project had numerous positive social, economic and environmental impacts as well as contributions to SDGs 17, 3,5,7 and 8.</p>
Stakeholder inclusivity in designing the project	6	Important feedback from the participants
How it has been planned to take place	2	Important feedback from the participants
What do you not like about the energy efficient cook stove project?		

Nothing/No negative comment	15	Important feedback from the participants
Still uses firewood (non-renewable fuel) as the main fuel	2	Whereas the stove uses firewood as the main fuel it still had numerous positive impacts and contribution noting that from the baseline survey, 94.3% of the households used firewood as their main fuel and 92.1% of the households used it on 3-stone open fire thereby burning large amounts of fuel wood in a very inefficient way with severe impacts on health and environment (deforestation, CO ₂ -emissions).
The negative impacts however lowly ranked, should also be well articulated and mitigation measures considered/ Stove safety issues need to be better addressed	2	Generally, the project poses no serious risk to the communities' health, safety and working conditions. However, preparing mud from a mixture of anthill soil and sawdust could expose the artisan to injuries if pricked on the leg by any sharp object (wood shavings, sticks, metallic objects, broken glasses, etc). The project will undertake to ensure that the artisan have personal protective equipment including gumboots when preparing the mud.
The stove needs to be redesigned to fairly compete with current technology e.g fixed with chimney,	3	The stove technology allows for improved combustion with less smoke emission hence can still optimally operate without a chimney. Being a rocket stove, it has a tall combustion chamber that behaves like a chimney, creating more draught than a standard stove.
The stove is not portable/fixed in the kitchen hence may not be suitable for those without kitchen	4	Changing the stove design to a portable version may not be possible at the moment. While the stove should be installed in the kitchen, a household can still install in their main house given its capacity to reduce emission/smoke.
Still expensive to many households even with the subsidized costs of KES 1000	4	The project has integrated an innovative village-based group savings and loaning methodology to enhance affordability and

		access to efficient cook stoves through soft loans. Stove owners can pay for the stove by affordable weekly installments through the groups.
The project will be implemented from one Sub-County to another instead of the entire County at once. Some sections may not be reached by the end of the project	2	Whereas the project will be rolled out in this manner to enhance effective resources utilization, this will not in any way bar any section of the County from benefiting. Over the project period, every section of the County will be reached.
The project looks a bit technical, should be put in simple language	1	The project developer will further simplify the project information as much as possible to effectively communicate with all the stakeholders.

Questions/Feedback from the Plenary Session in Siaya County

Question/Comment	Clarification/Proposed Action
Are the target communities fully aware of the project and its benefits?	
How inclusive/gender sensitive is the community sensitization/entry and stove promotion efforts?	The project’s community sensitization is all-inclusive. We invite every community member to our project launching forums when entering a particular community. We also sensitize the communities through chiefs’ barazas and radio without any discriminations.
How transparent in the beneficiaries’ selection criteria?	After the all-inclusive sensitization to create demand, the details of any household interested in having the stove is taken, the household supplied with construction materials and artisan sent to do the construction. The community-based mobilizers and Field

	Officers ensures that all that have shown interest are constructed for.
What were the sources of the statistics/data shared?	The project conducted a baseline survey in accordance to the guidelines by GS4GG’s REDUCED EMISSIONS FROM COOKING AND HEATING: Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC), Version: 4.0. Also, statistical data from government records were reviewed to corroborate the survey findings.
What progress can be reported for the Artisans? What has been their growth during the previous project phases?	The project’s approach is that local artisans are recruited, trained and contracted to do the constructions within their localities and earn income from their work. The more experienced artisans are brought to help train the new local artisans. Also, the experienced artisans are promoted to the position of Lead Artisan to help supervise, monitor and map the stove construction. The artisans are also mobilized and trained to form the own savings and loaning groups as well as on business development skills to be able to meet their other financial needs. The project has and continue to recorded change stories from the Artisans.
What are some of the risks associated with the project? What mitigation measures are in place?	Generally, the project poses no serious risk to the communities’ health, safety and working conditions. However, preparing mud from a mixture of anthill soil and sawdust could expose the artisan to body injuries, for example, if pricked on the leg by any sharp object

	(wood shavings, sticks, metallic objects, broken glasses, etc). The project will undertake to ensure that the artisan have personal protective equipment including gumboots when preparing the mud.
Can the stove be modified? (for large scale use or portability)	Changing the stove design to a portable version may not be possible at the moment. However, there is an institutional version of the stove which can be installed by special order for large scale use.
Has the project impact assessment ever been done for the past phases?	The project conducts routine monitoring and usage surveys which establishes verifiable social, economic and environmental changes between the project and the baseline stove. However, the project has not conducted impact assessment in the past. The project will consider conducting the impact assessment for greater learning.
Going by the number of stoves so far constructed in Siaya, only about half of the households have been reached. What about the remaining 50%?	It is true that the project has reached some 50% of the Siaya households. The construction is done based on demand and this is probably the proportion of the households that has so far shown interest in adopting the stove. Whereas 5 out of the 6 Sub-Counties have been covered, the project is still open to construct more stoves in Siaya if there is demand.
How can the project build synergy with the other sector players?	The project is keen in working with all the stakeholders and that is why all the relevant stakeholders are consulted throughout the project's life cycle. While the project has been designed as a carbon-offset project, it is open to

	learn from the other sector players’ best practices, even those who are business-oriented, to increase demand among the target beneficiaries.
What are some of the key challenges the project has faced during its implementation in the past?	The main challenge the project has faced is the high community expectations which are many instances beyond the project scope. The project also faced serious challenges during the COVID-19 as no serious sensitization and stove construction could go on.

Siaya County Participants Comments on the Evaluation Form and the Project Developer’s Clarifications/Comments

Stakeholder Comment	Number of stakeholders commenting	Clarification Comments/Actions
What is your impression of the local stakeholders’ consultation meeting?		
The content/information shared was informative/educative/factual/comprehensive	27	Important feedback from the participants
The method of delivery was appropriate/interactive - allowed for free exchange of ideas	19	Important feedback from the participants
Good stakeholder representation/diversity/inclusivity	13	Important feedback from the participants
The meeting planning process – earlier communication and sharing of important documents with and regular reminders to participants	5	Important feedback from the participants

The presentation was good but should have included more diagrams/pictures for better understanding	1	Comment noted for action. More pictures/diagrams will be incorporated during the feedback round physical meeting.
The information shared was comprehensive but incorporating testimonies from previous beneficiaries could have added more value to the presentations	2	Comment noted for action. A past beneficiary will get an opportunity to share experiences with the stakeholders, particularly during the feedback round physical meeting.
More statistical data on the project target locations, demographics and past achievements should have been incorporated	1	The presentation focused more on the non-technical summary of the project with a lot of care not to make it too heavy but palatable to all categories of the participants. Nonetheless, the comment is noted for action and the statistical data would be made available to further enrich the consultations.
The project past achievements, best practices, challenges and recommendations should have been incorporated in the presentations	1	Comment noted for action. More efforts will be put to incorporate these during the feedback round physical meeting.
What do you like about the energy efficient cook stove project?		
Its positive social, economic and environmental impacts as well as contributions to SDGs	<ul style="list-style-type: none"> • Saves time - 7 • Saves fuel/energy - 6 • Affordable - 10 • Gender friendly/empowers women - 8 • Employment opportunities - 10 	The participants concurred with the project developer that the project had numerous positive social, economic and environmental impacts as well as contributions to SDGs 17, 3,5,7 and 8.

	<ul style="list-style-type: none"> • Environment friendly/Reduces emissions - 14 • Reduces deforestation/conserves less firewood - 13 • Health benefits/reduced eye irritation and respiratory problems - 9 • Durable - 4 • General positive comments - 4 	
Not leaving anyone or geographical location within its boundary behind/ A local initiative reaching the most deserving beneficiaries.	2	Important feedback from the participants
What do you not like about the energy efficient cook stove project?		
The aspects of how the youths are involved not clear to me	1	The project does not discriminate against anyone in the community but create opportunity for participation especially by the marginalized groups including youths. Most of the construction artisans the project has engaged in the past are mainly young people.
Nothing/No negative comment	13	Important feedback from the participants
Does not directly address issues of tree planting	2	While the project does not directly support tree planting campaigns, it enhances tree cover by reducing firewood consumption.
The negative impacts/associated risks	1	Generally, the project poses no serious risk to the communities'

<p>however lowly ranked, should also be well articulated and mitigation measures considered</p>		<p>health, safety and working conditions. However, preparing mud from a mixture of anthill soil and sawdust could expose the artisan to body injuries, for example, if pricked on the leg by any sharp object (wood shavings, sticks, metallic objects, broken glasses, etc). The project will undertake to ensure that the artisan have personal protective equipment including gumboots when preparing the mud.</p>
<p>The stove needs to be redesigned to fairly compete with current technology e.g fixed with chimney</p>	<p>5</p>	<p>The stove technology allows for improved combustion with less smoke emission hence can still optimally operate without a chimney. Being a rocket stove, it has a tall combustion chamber that behaves like a chimney, creating more draught than a standard stove.</p>
<p>The stove is not portable/fixed in the kitchen hence may not be suitable for urban dwellers who are using firewood</p>	<p>3</p>	<p>Changing the stove design to a portable version may not be possible at the moment. While the stove should be installed in the kitchen, a household can still install in their main house given its capacity to reduce emission/smoke.</p>
<p>Still expensive to many households even with the subsidized costs</p>	<p>1</p>	<p>The project has integrated an innovative village-based group savings and loaning methodology to enhance affordability and access to efficient cook stoves through soft loans. Stove owners can pay</p>

		for the stove by affordable weekly installments through the groups.
Needs to be socially marketed for improved adoption	1	This idea may be tested with stove to see how it works out.
Not sure of the stove’s durability/Are repairs guaranteed?	1	<p>The stove can last for many years depending on its proper maintenance and usage. There are households that acquired the stove in 2010 in Siaya and are still using it to date (almost 14 years now), in good condition.</p> <p>Yes, stove repairs are guaranteed. Within the first year, the stove will be covered under the warranty terms and conditions. After the warranty period expires the household will cover the stove repair costs. Significantly, the stove construction artisan will orient the stove owners on the maintenance procedures and leave contact details behind for the households to reach out as need may be. Likewise contact details of the Lead Artisans, Field Officers and Project Developers will be made available to the households.</p>
The stove cooks very fast so not suitable for use by children/Requires the presence of an adult when being used	1	It is true the stove cooks fairly fast and may need close supervision by the cook for the food not be overcooked. However, the fire chamber being enclosed the stove does not expose the cook to fire accidents. Nonetheless, care should be taken and only children who

		have become of age should be allowed to use the stove.
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E.2 Final continuous input / grievance mechanism

The stakeholders discussed various approaches for grievance resolution and giving feedback; they adopted the use of Continuous Input / Grievance Expression Process Book placed in open and accessible places within the Tembea offices. The mechanisms outlined below can be used by project stakeholders at any given time to raise grievances and to have them addressed.

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 meeting agreed that the Continuous Input / Grievance Expression Process Book be placed in open and easily accessible area within the Tembea Youth Centre for Sustainable Development offices.
GS Contact (mandatory)	help@goldstandard.org
Telephone	+254727649967
Email Address	info@tembea.or.ke

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.

SOCIAL SAFEGUARDING PRINCIPLES		
Reference requirement	Question	Response
P.1 Human Rights		
P.1.1.1 	Does the project developer, its representatives and the Project disrespect internationally proclaimed human rights?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.1.1.1 	Is the project involved or complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.1.1.2 	Have local communities or individuals raised human rights concerns regarding the project (e.g., during the stakeholder engagement process, grievance processes, public statements)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.1.1.3 	Is there a risk that rights-holders (e.g., Project-affected stakeholders) do not have the capacity to claim their rights?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.1.1.3 	Does this project undermine national or regional measures for the realisation of the right to development?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> 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.		
Would the project potentially involve or lead to:		
P.1.1.1 	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalised groups?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.1.1.2 	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalised or excluded individuals or groups, including persons with disabilities?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.1.1.3 	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalised individuals or groups, including persons with disabilities?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO

P.1.1.3	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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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 project incorporates a human right approaches by implementing a measure that assist the government to realise (respect,protect and fulfil) human rights under international law by aiming to reach all communities, targeting the poor, isolated and marginalized to access clean cooking which is fundamental human rights.

P.2 | GENDER EQUALITY AND WOMEN’S EMPOWERMENT

P.2.1.1	Have women’s groups/leaders raised gender equality concerns regarding the project, (e.g., during the stakeholder engagement process, grievance processes, public statements)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.2.1.2	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.2.1.2	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?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.2.1.2	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.2.1.2	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?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.2.1.3	Has the project assessed gender risks without referencing the country’s gender strategy or equivalent national commitment?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

P.2.1.4 	Has expert stakeholder(s) been involved, and has their input been requested for the project design on gender equality and women's empowerment?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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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.

Would the project potentially involve or lead to:

P.2.1.1 	adverse impacts on gender equality and/or the situation of women and girls?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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P.2.1.1 	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.	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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P.2.1.2 	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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P.2.1.2 	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.	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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Briefly describe below how the project is addressing any identified risk to gender equality and women’s empowerment.

The project promotes equal opportunity for men and women. It addresses energy poverty that adversely affects women. By providing access to clean cooking that reduces quantity of fuel and time of cooking gender and women empowerment is promoted. Jobs, skills development and business opportunities created by the project are available for men and women with discrimination. In addition the assesment in section P.2 of Appendix 1 indicates the project has no negative impact on gender equality and women’s empowerment.

P.3 | COMMUNITY HEALTH AND SAFETY

P.3.1.1 	Does the project involve potential risks to the health and safety of affected communities during its life cycle?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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P.3.1.2 	Does the project involve any potential risks to the workers' safety and health?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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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.

Would the project potentially involve or lead to:		
P.3.1.1 	construction and/or infrastructure development (e.g., roads, buildings, dams)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.3.1.2 	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.3.1.2 	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.3.1.2 	risks of water-borne or other vector-borne diseases (e.g., temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.3.1.2 	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g., explosives, fuel and other chemicals during construction and operation)?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.3.1.2 	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g., food, surface water purification, natural buffers from flooding)?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO

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

The project seeks to promote community health and safety. The project will contribute to reduced household air pollution due to reduced firewood consumption and due to its closed design it will reduce incidences of accidents associated with 3 stone open fire. This will have a positive impact on community health and safety.

P.4 | CULTURAL HERITAGE, INDIGENOUS PEOPLE, DISPLACEMENT AND RESETTLEMENT

P.4.1 | Sites of Cultural and Historical Heritage

P.4.1.1 	Does the project involve altering, damaging, or removing sites, objects, or structures of significant cultural heritage?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

Would the project potentially involve or lead to:

P.4.1.1 	activities adjacent to or within a cultural heritage site?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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P.4.1.1 	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.1.1 	alterations to landscapes and natural features with cultural significance?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.1.1 	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)	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.1.2 	utilisation of tangible and/or intangible forms (e.g., practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.1.2 	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?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.4.1.3 	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?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.4.1.4 	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?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.4.1.4 	If answer to question above is "YES", has project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

[P.4.2 |Forced Eviction and Displacement](#)

P.4.2.1 	Does the project involve any risks related to involuntary relocation of people?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

Would the project potentially involve or lead to:

P.4.2.1 	risk of forced evictions or involuntary relocation of people?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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P.4.2.2 	temporary or permanent and full or partial physical displacement (including people without legally recognisable claims to land)?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.2.2 	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)?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.2.2 	If answer to question above is “YES” or “POTENTIALLY”, <ul style="list-style-type: none"> - 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? 	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.4.2.3 	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?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.4.2.3 	If answer to question above is “YES”, have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

P.4.3 | LAND TENURE AND OTHER RIGHTS

P.4.3.1 	Does the project involve any risks related to identifying and managing legitimate tenure rights that may be affected by the project?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

Would the project potentially involve or lead to:

P.4.3.1 	impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.3.1 	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.	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.3.2 	Changes in legal arrangements, if yes, are the changes done in line with relevant laws and regulations?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

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P.4.3.2 	Changes in legal arrangements, if yes, are these changes agree with free, prior and informed consent of the involved stakeholders?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.4.3.3 	Does some other entity (other than the project developer) hold uncontested land title for the entire Project Boundary?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.4.3.4 	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA
P.4.3.4 	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.4.3.5 	Have project developer in consultation with stakeholders established a functioning mechanism to receive, process, resolve, communicate and record grievances?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

[P.4.4 | INDIGENOUS PEOPLES](#)

P.4.4.1 	Does the project involve Indigenous People within the Project area of influence who may be affected directly or indirectly by the Project?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Would the project potentially involve or lead to:

P.4.4.1 	affect areas where indigenous peoples are present (including project area of influence)	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.4.1 	affect areas, land and territory claimed by indigenous peoples?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.4.1 	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.4.7 	If answer to above questions is "YES" or "POTENTIALLY", <ul style="list-style-type: none"> - 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 	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

	<p>elaborated and included in the project documentation?</p> <ul style="list-style-type: none"> - Was the plan developed in accordance with the effective and meaningful participation of indigenous peoples and in accordance with UNDP Guidelines? 	
P.4.4.3 	<p>risk of forcibly removing indigenous people from their lands and territories?</p>	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.4.4 	<p>utilisation and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?</p> <p>Consider, and where appropriate ensure, consistency with the answers under Principle 4.1 above</p>	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.4.4.5 P.4.4.6 	<p>If answer to question above is "YES" or "POTENTIALLY"</p> <ul style="list-style-type: none"> - 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? 	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.4.4.8 	<p>Does the project lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives?</p>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.4.4.8 	<p>Has a grievance mechanism not been established at the beginning of programme or project implementation with due consideration given to customary dispute settlement mechanisms among the Indigenous Peoples concerned and will it remain operational throughout the project cycle?</p>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

P.4.4.9 	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.4.4.9 	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

P.5 | CORRUPTION

P.5.1.1 	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.5.1.1 	Does the project have a risk of encouraging bribery, kickbacks, or other unethical behavior?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> 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.

ECONOMIC SAFEGUARDING PRINCIPLES

P.6 | ECONOMIC IMPACTS

P.6.1 | LABOUR RIGHTS AND WORKING CONDITIONS

P.6.1.1 	Does the project involve, facilitate, or condone forced labor, or pose a potential risk of forced labor?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.1 	Does the project violate any labor or health and safety laws, international obligations, or ILO conventions?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.2 	Does the project violate the principles of equal opportunity and fair treatment in its employment decisions?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.3 	Does the project violate national laws, if available regarding non-discrimination in employment?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.4 P.6.1.5 	Does the project allow child labor?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.7 P.6.1.8 	Does the project have insufficient processes and measures in place to ensure the safety and health of project workers?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.9 	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)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

P.6.1.10 	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?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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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.

Would the project potentially involve or lead to:
 (NOTE: APPLIES TO BOTH PROJECT AND CONTRACTOR WORKERS)

P.6.1.1 	use of forced labour?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.6.1.1 	working conditions that do not meet national labour laws and international commitments?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.6.1.1 	working conditions that may deny freedom of association and collective bargaining?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.6.1.1 	absence of documented working agreements with all individual workers <i>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.</i>	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.6.1.1 	use of migrant workers? <i>if engaged, the developer shall ensure that they are engaged substantially equivalent terms and conditions to non-migrant workers carrying out similar work.</i>	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.6.1.1 	having no arrangements for basic services ¹³ for workers? <i>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 consistent with the principles of non-discrimination and equal opportunity. Workers' accommodation arrangements should not restrict workers' freedom of movement or of association</i>	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.6.1.2 	any form of discrimination or harassment based on factors unrelated to job requirements, such as gender, race,	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY

¹³ 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.

	nationality, ethnicity, social or indigenous origin, religion or belief, disability, age, or sexual orientation?	<input checked="" type="checkbox"/> NO
P.6.1.2 	any form of discrimination in any aspect of employment, such as recruitment, compensation, working conditions, training, job assignment, promotion, termination, or discipline?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.6.1.2 	harassment, intimidation, and/or exploitation, especially in regard to women?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.6.1.3 	discriminatory working conditions and/or lack of equal opportunity where national law provides provision to address non-discrimination in employment?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.6.1.4 	use of child labour? (including third-party engaged workers)	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.6.1.4 	inadequate and verifiable mechanisms for age verification?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.7 	no processes and measures in place for the safety and health of project workers?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.7 	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?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.7 	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.8 	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.9 	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.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.10 	No grievance mechanism available for workers to voice workplace concerns.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.1.11 	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?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> 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.

[P.6.2 |NEGATIVE ECONOMIC CONSEQUENCES](#)

P.6.2.1 	Is there a risk of the project failure during implementation or after project certification due to a lack of financial resources?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.2.2 	Does the project have potential negative impacts or pose a risk to the local economy?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.6.2.2 	Are there any potential risks or negative impacts this project may have on vulnerable or marginalised social groups, despite the benefits it may bring?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> 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.

Would the project involve or lead to:

P.6.2.2 	economic impacts (negative/detrimental) to the local economy?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.6.2.2 	negative economic consequences during and after project implementation, e.g., for vulnerable and marginalised social groups in targeted communities?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> 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.

P.7 | CLIMATE AND ENERGY

P.7.1 | GHG EMISSIONS

P.7.1.1 	Does the project have a risk of increasing greenhouse gas emissions over the Baseline Scenario?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Would the project involve or lead to:

P.7.1.1 	increase greenhouse gas emissions over the Baseline Scenario?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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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.

P.7.2 | ENERGY SUPPLY

P.7.2.1 	Does the project pose a risk to the availability and reliability of energy supply to other users?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Would the project involve or lead to:

P.7.2.1 	negative impact on the availability and reliability of energy supply to other users?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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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.

P.8 | WATER

P.8.1 | IMPACT ON NATURAL WATER PATTERNS/FLOWS

P.8.1.1 	Does the project increase water usage to a level that will not allow for the maintenance of environmental flows?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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P.8.1.1 	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?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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P.8.1.1 	Does the project have the potential risk to exceed the rate of recharge for the groundwater source?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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P.8.1.1 	Does the project involve any processes or activities that could contaminate the groundwater and render it unsuitable for use?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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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.

Would the project involve or lead to:

P.8.1.1 	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?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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P.8.1.1 	Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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P.8.1.1 	significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.8.1.2 	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

P.8.2 | EROSION AND/OR WATER BODY INSTABILITY

P.8.2.1 	Does the project have a risk of negatively impacting the catchment and has it been assessed and addressed?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Would the project involve or lead to:

P.8.2.2 	negatively impact on the catchment area?	
P.8.2.5 	<i>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.</i>	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.8.2.6 	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

P.9 | ENVIRONMENT, ECOLOGY AND LAND USE

P.9.1 | LANDSCAPE MODIFICATION AND SOIL

P.9.1.1 	Is there any risk of soil resource degradation or loss of ecosystem services provided by soils in the project?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.9.1.3 		

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

Would the project involve or lead to:

P.9.1.4 	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.9.1.4 	if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

[P.9.2 | VULNERABILITY TO NATURAL DISASTER](#)

P.9.2.1 	Does the project have any risks associated with natural or man-made hazards that could result from land use changes due to the project?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Would the project involve or lead to:

P.9.2.2 	any potential risks that require emergency preparedness and response planning?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.9.2.2 	if answer to above question "yes" or "potentially", did the project developer disclose appropriate information about emergency preparedness and response to affected communities?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

[P.9.3 | BIOSAFETY AND GENETIC RESOURCES](#)

TEMPLATE- V1.5-Project-Design-Document

P.9.3.1 	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?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Would the project involve or lead to:

P.9.3.1 	the transfer, handling and use of genetically modified organisms/living modified organisms (GMOs/LMOs) that result from modern biotechnology	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.9.3.1 	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?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.3.2 	If answer to above question is "yes" has any risks identified in the risk assessment?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.3.3 	Forestry (for example Afforestation/Reforestation) involving GMO planting? <i>Note - Forestry projects (for example Afforestation/Reforestation) involving GMO planting are not eligible for Certification under Gold Standard for the Global Goals.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

[P.9.4 | RELEASE OF POLLUTANTS](#)

P.9.4.1 	Does the project have a risk of releasing pollutants to air, water, and land in routine, non-routine, or accidental circumstances?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Would the project involve or lead to:

P.9.4.1 	any potential risk of pollutant release that cannot be avoided?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.9.4.3 	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?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

P.9.4.2 	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?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.4.3 	If answer to above question is "Yes", is there a monitoring plan to ensure that mitigation measures are implemented, and resources are protected?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

P.9.5 | HAZARDOUS AND NON-HAZARDOUS WASTE

P.9.5.1 	Does the project involve the generation of waste materials (both hazardous and non-hazardous)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.9.5.3 	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.9.5.5 	Does the project involve the use of any chemicals or materials subject to international bans or phase-outs?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> 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.

Would the project involve or lead to:

P.9.5.1 	the generation and management of waste materials?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.9.5.1 	treatment, destruction, or disposal of waste material?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.5.1 	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?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.5.3 	risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.5.3 	If answer to above question is "yes", does project has measures in place to address health risks?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.5.4 	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,	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY

	environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer	<input checked="" type="checkbox"/> NO
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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.

P.9.6 | PESTICIDES & FERTILISERS

P.9.6.1 	Does the project involve the use of chemical pesticides?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.9.6.5 	Does the project involve purchase, store, manufacture, trade or use products that fall in Classes IA (extremely hazardous) and IB (highly hazardous)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.9.6.6 	Does the project use fertilisers, and if so, are measures being taken to minimise their use and nutrient losses to the environment?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> 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.

Would the project involve or lead to:

P.9.6.1 	chemical pesticides use for pest management?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.9.6.4 	If answer to question above is "yes" or "potentially", does project has documented Chemical Pesticides Policy in place?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.6.5 	purchase, store, use, manufacture, or trade in Class II (moderately hazardous) pesticides?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.9.6.5 	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?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

P.9.7 | HARVESTING OF FORESTS

P.9.7.1 	Does the project have a risk of unsustainable forest management, including timber harvesting?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.9.7.1 	Does the project pose a risk of depleting biodiversity and ecosystem functionality in areas where improved forest management is undertaken?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.9.7.1 	Does the project risk not meeting requirements for environment-friendly, socially beneficial, and economically viable plantations using native species whenever possible?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> 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.

P.9.8 | FOOD SECURITY

P.9.8.1 	Does the project involve the risk of negatively influencing access to and availability of food for people affected?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to the question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Would the project involve or lead to:

P.9.8.1 	modification of the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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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.

P.9.9 | ANIMAL WELFARE

P.9.9.1 	Does the project involve any risks to animal welfare? 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.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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P.9.9.2 	Does the project involve any potential risk of excessive or inadequate use of veterinary medicines?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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P.9.9.4 	Does the project involve the risk of administering synthetic growth promoters, including hormones?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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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.

Would the project involve or lead to:

P.9.9.1 	animal husbandry or harvesting of fish populations or other aquatic species? ¹⁴	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
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P.9.9.1 	limiting access for animals to basic needs like drinking water, adequate food, daylight, appropriate shelter etc.?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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P.9.9.3 	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	<input type="checkbox"/> YES
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¹⁴ 'Involve' means if the project mechanism and/or impact(s) are achieved via changing animal husbandry practices in some way.

		<input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.9.5	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.9.6	inadequate measures to ensure that animals are exposed to the least stress possible during transportation and slaughtering?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.9.7	inappropriate spacing per animal and stocking rates per land unit?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.9.8	inadequate measures to address the specific needs of aquatic animals?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
P.9.9.9 P.9.9.10	<p>primary production of living natural resources such as animal husbandry, aquaculture, and fisheries?</p> <p>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.</p>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

[P.9.10](#) | HIGH CONSERVATION VALUE AREAS AND CRITICAL HABITATS

P.9.10.1	Does the project have the risk of negatively impacting HCV areas and/or critical habitats?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
P.9.10.2	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?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> 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.

Would the project involve or lead to:

P.9.10.1	identified habitats as HCV areas and or Critical habitats?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.9.10.1	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	<input type="checkbox"/> YES <input type="checkbox"/> NO

	or biodiversity values for which the critical habitat was designated, and on the ecological processes supporting that biodiversity?	<input checked="" type="checkbox"/> NA
P.9.10.1	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?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
P.9.10.2	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?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.9.10.2	If the answer to the above question is "yes", will the project have any adverse effects on these areas?	<input type="checkbox"/> YES <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
P.9.10.3	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?	<input type="checkbox"/> YES <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
P.9.10.4	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?	<input type="checkbox"/> YES <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
P.9.10.5	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> 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.

[P.9.11 | ENDANGERED SPECIES](#)

P.9.11.1	Does the project lead to the reduction or negative impact on any recognised Endangered, Vulnerable or Critically Endangered species?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Would the project involve or lead to:

P.9.11.2	distortion of habitats of endangered species?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NA
P.9.11.2	If answer to the above question is "yes", does the project plan to protect and enhance them?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A

P.9.11.2 	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
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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.

[P.9.12 | INVASIVE ALIEN SPECIES](#)

P.9.12.1 	Does project introduce any alien species (not currently established in the country or region of the project) into new environments?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Would the project involve or lead to:

P.9.12.1 	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?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.9.12.1 	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.	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
P.9.12.2 	risk of spreading alien species into areas in which they have not already been established?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> 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.

APPENDIX 2 - CONTACT INFORMATION OF PROJECT DEVELOPER(S)

Organization name	Tembea Youth Center for Sustainable Development (TYSCD)
Registration number with relevant authority	UG/1342006/2654
Street/P.O. Box	P.O BOX 313
Building	
City	UGUNJA
State/Region	
Postcode	40606
Country	KENYA
Telephone	
E-mail	info@tembea.org
Website	www.tembea.org
Contact person	
Title	Director
Salutation	Mr
Last name	Omondi
Middle name	
First name	Jared
Department	Administration
Mobile	+254722588675
Direct tel.	
Personal e-mail	buogager@gmail.com

Organization name	Foundation myclimate.
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Registration number with relevant authority	
Street/P.O. Box	Pfingstweidstrasse 10
Building	
City	Zurich
State/Region	
Postcode	8005
Country	Switzerland
Telephone	+41 44 500 43 50
E-mail	projects@myclimate.org
Website	www.myclimate.org
Contact person	
Title	Project Manager
Salutation	Mr.
Last name	orina
Middle name	nyangoka
First name	Job
Department	CPP
Mobile	+254725273573
Direct tel.	n/a
Personal e-mail	Job.orina@myclimate.org

APPENDIX 3 - LUF ADDITIONAL INFORMATION

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

APPENDIX 4 - DESIGN CHANGES

A4.1. Details of proposed or actual design change

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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

>>

j. Only for LUF Projects: Transparent summary of all approved changes in Project Area, Eligible Area and accompanying changes in ex-ante emissions removals.

DATE OF APPROVED DESIGN CHANGE (MM/DD/YYYY)	PROJECT AREA (HA)		ELIGIBLE AREA (HA)		EX-ANTE ESTIMATE (TCO2E)	
	INCREASE OR DECREASE ?	VALUE (HA)	INCREASE OR DECREASE?	VALUE (HA)	INCREASE OR DECREASE ?	PERCENTAGE (%)

DOCUMENT HISTORY

Version	Date	Remarks
1.5	29 June 2023	Editorial changes to match V2.1 of the Safeguarding Principles Requirements
1.4	21 June 2023	Editorial changes to match V2.0 of the Safeguarding Principles Requirements
1.3	14 April 2023	Integrated the design change memo as annex of the document. Editorial changes
1.2	14 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
1.1	24 August 2017	Updated to include section A.8 on 'gender sensitive' requirements
1.0	10 July 2017	Initial adoption