

TEMPLATE

KEY PROJECT INFORMATION & PROJECT DESIGN DOCUMENT (PDD)

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VERSION **v.1.5**

RELATED SUPPORT

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KEY PROJECT INFORMATION

GS ID of Project	GS 12957
Title of Project	iRise Africa Limited Cookstove Project
Time of First Submission Date	11/07/2024
Date of Design Certification	
Version number of the PDD	V5
Completion date of version	27/02/2026
Project Developer	iRise Africa Limited
Project Representative	iRise Africa Limited
Project Participants and any communities involved	iRise Affordable Housing and Agriculture Limited iRise O81 Limited iRise WW1 Limited iRise QC1 Limited iRise IC1 Limited
Host Country (ies)	MALAWI
Activity Requirements applied	☒ Community Service Activity ☐ Renewable Energy ☐ Land-Use and Forests Activity Requirements /Risks & Capacities ☐ N/A
Scale of the project activity	☐ Micro scale ☐ Small Scale ☒ Large Scale
Other Requirements applied	N/A
Methodology (ies) applied and version number	TPDDTEC version 4.0 methodology
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
Project Cycle:	☒ Regular ☐ Retroactive

Table 1 – Estimated Sustainable Development Contributions

SUSTAINABLE DEVELOPMENT GOALS TARGETED			SDG IMPACT (DEFINED IN B.6)	ESTIMATED ANNUAL AVERAGE	UNITS OR PRODUCTS
13	Climate	Action	Emissions Reductions	250,298	VERS
15	Life on Land		Amount of total non-renewable fuel savings	125,461	Tonnes
8	Decent Economic Growth	Work and	Number of jobs created	156	Number
7	Affordable Energy	and Clean	Number of ICS and distributed active	80,000	Number
5	Gender equality		Average time saving	50,735	Minutes
3	Good Health and being	Well-	Reduction of air pollution	8.46%	Percentage
1	No Poverty		Average household savings	235,744	MWK

SECTION A. DESCRIPTION OF PROJECT

A.1 Purpose and general description of project

Presently, biomass currently accounts for 88.5% of Malawi's energy portfolio.¹ At least 90% of Malawians rely on firewood or charcoal to meet their basic household energy needs whereas rural households rely solely on firewood and charcoal for cooking.² This energy situation has resulted in several environmental and socio-economic consequences. According to the 2024 national forest reference submitted under UNFCCC / REDD+, Malawi's forested land is about 25% of total land area.³ This loss is equivalent to 50,000 acres of woodland each year.¹⁰ The forest loss is mainly the result of agricultural expansion and biomass for cooking and heating.¹¹

On the social aspect, searching for wood to burn fuel for cooking takes a lot of time resulting in significant time wastage of time that could have been used on productive economic opportunities. Furthermore, women and girls, who are at the forefront of searching for wood for fuel burning are disproportionately affected. There is also a health impact of poisoning resulting from burning of biomass.

In response to this, iRise is implementing a project that distributes, for free, fuel efficient cookstoves built using locally available resources. The iRise high energy efficient firewood cookstoves aim at reducing the amount of greenhouse gas emissions and indoor air pollution caused by the above traditional cooking methods. The iRise cookstove has high thermal efficiency, thereby emitting fewer carbon emissions than the combustion of firewood in a three-stone open fire. iRise established that at present, households in the target population principally use three stone wood fires which roughly consume 10 to 15 kgs firewood daily.

The usage of the stoves will significantly reduce greenhouse gas emissions whilst also generating other accompanying benefits such as:

¹ Ngwira, S., & Watanabe, T. (2019). An analysis of the causes of deforestation in Malawi: a case of Mwazisi. *Land*, 8(3), 48.

² Center for Environmental Policy and Advocacy. *Charcoal – A brief factsheet*.

³ Republic of Malawi, Malawi's Second National REDD+ Forest Reference Level (August 2024).

1. Reducing the consumption of wood to allow natural recovery of forests and/or promote reforestation.
2. Reducing the health risk associated with traditional cooking methods.
3. Reducing fuel wood collection time and saving firewood expense for households.
4. Creation of local jobs, including for stove production, distribution, and maintenance.

iRise intends to distribute these cookstoves in 80,000 households. The project activity is in rural communities in Kasungu District in Malawi.

A.1.1. Eligibility of the project under Gold Standard

The project is pre-identified as eligible for Gold Standard Certification as a project that achieves end use energy efficiency achieved through efficient cooking. It contributes positively to Climate Security and Sustainable Development by reducing wood fuel consumption and correlative greenhouse gas emissions, health and wellbeing, affordable and clean energy, decent work and economic growth, gender equality, reduction of poverty and life on land.

The project is solely implemented by iRise in Kasungu district in Malawi. There are no overlaps with other Gold Standard or any other standard programmes of similar nature. The project has never been and is not presently registered with any other voluntary or compliance schemes. Malawi has no emission reduction cap enforced and there is no possibility of the scope of the proposed project being subject to trade emissions.

The project complies with all of Malawi's legal, environmental, ecological and social regulations. iRise retains legal Counsel that have conducted all due diligence and certified the project as legally compliant. Furthermore, the project is in direct partnership with the Government of Malawi, a precondition of which was the ascertainment of the project's compliance with all legal, environmental, ecological and social regulations.

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

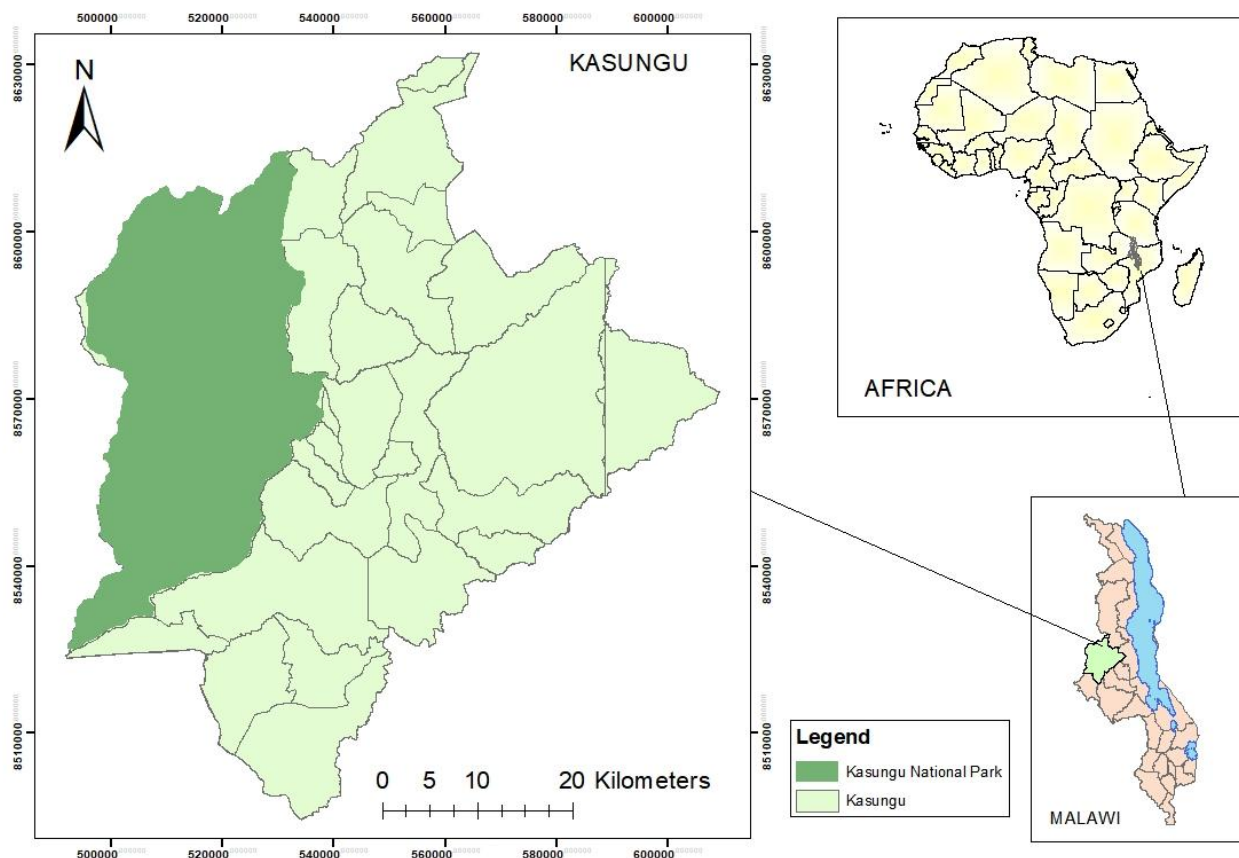
iRise signed a Direct Carbon Agreement with the Government of the Republic of Malawi. The Agreement vests all carbon rights over carbon sequestered from usage of the improved cookstoves in iRise. Further to this, all participant beneficiaries of the projects freely and willingly, with free and prior informed consent, signed carbon waiver contracts reinforcing iRise's ownership of all carbon rights arising pursuant to the project.

A.2 Location of project

The project is implemented in Kasungu district which is in the central region of Malawi. The geographic coordinates and the relevant areas are indicated in the table and map below, respectively:

Area	Latitudes	Longitudes
Kasungu	-13.040884	33.481204

Kasungu is shown in the map below:



A.3 Technologies and/or measures

The ICS incorporates a combination of clay and rice husks to increase the thermal efficiency and physical strength of the stove. The durability of the stove is reinforced through extremely high temperature firing in a kiln. All the resources are sourced ethically and locally. The specific shape of the insulated firebox forces convection to use heat more efficiently. Similarly, the front firebox has been designed to allow larger pieces of firewood into the stove without sacrificing thermal efficiency and increasing usability. This ICS does not have any doors, hinges, or additional parts that necessitate replacement or repair. The exterior handles are molded into the sides of the stove for easy handling and portability.

The ICS is shown below:



The cookstove has a thermal efficiency of 30.5%. The height and weight of the stove have been carefully analyzed and taken into consideration from a design point of view.

The height of the stove has been designed with safety primarily in mind, especially for meals that require rigorous activity, such as Nsima (Maize porridge or pap) which is the staple food in the district.

This specific design minimizes any safety issues that could create a barrier for users in terms of switching from cooking on a three-stone fire to an efficient cookstove. Further, when cooking on a three-stone fire, the fire and the pot are near the ground. In this case, the height of the stove is designed to be approximately 40 cm. The weight of the stove also played a critical role in the decision-making process. Firstly, women in rural settings have kitchens and prefer to have a heavy, durable stove that can be used for many years. Secondly, the design of the stove allows households to fix the stove on the ground or in the kitchen if it is preferred.

With little to no maintenance required, these stoves are resistant to the usual weather in this region (Very hot and dry in summer months and very wet and humid in the rainy season) and any potential insect damage and can up to 5 years. In the event of any cracking, a thin layer of clay mixed with animal dung can be applied to restore the ICS to its original condition.

The ICS will contribute to climate action by reducing fuel wood consumption and therefore GHG emissions. The ICS will reduce exposure to hazardous chemicals from fuelwood combustion thereby reducing risks to health. It also contributes to access to efficient, convenient and reliable sources of energy therefore contributing to SDG 7. The implementation of the project will also impact several other SDGs.

A.4 Scale of the project

The project is a large-scale project intending to provide cookstoves for each household totaling 80,000 households in the project area.⁴

⁴ Fuel savings per year (t/hh/year) = 2.555
 NCV (T/tj) = 0.0156
 Total number of ICS = 80000
 Conversion = 3.6
 Energy savings (Tj/year) = 2.555*0.0156 = 0.039858
 Energy savings (GWh (th)/year) = 0.039858/3.6 = 0.011071667
 Maximum energy savings (GWh (th)/year) = 885.7

A.5 Funding sources of project

The project involves distribution of cookstoves and other related activities which are all financed by iRise and its partners.

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

B.1. Reference of approved methodology (ies)

The project applied the approved Gold Standard Methodology [TPDDTEC] version 4.0

B.2. Applicability of methodology (ies)

The project meets all the conditions under which the methodology is applicable

No.	Condition	Project Description
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 will involve distribution of ICS that have thermal efficiency of 30.5% based on manufacturer's specifications. The ICS has a durability estimation of 5 years.
b.	The technology shall have continuous useful energy output of less than 150kW per unit	The continuous useful energy output of ICS below the threshold of 150Kw per unit. ⁵

*The energy savings anticipated is >180GWh exceeds the small scale threshold for Type 2 projects hence it is a large scale project activity

⁵ ICS Fuel usage (t/day) = 0.0038
 NCV of fuel (T/tj) = 0.0156
 Thermal Efficiency (percent) = 30.5
 Daily cooking time (h/day) = 2.3
 Daily thermal energy input (TJ/day) = 0.0038*0.0156 = 0.00005928
 kWh conversion = 0.00005928*277778 = 16.47 kWh
 Useful energy delivered (kWh) = 16.47*0.305 = 5.02
 Continuous useful energy output = 5.02* 2.3 = **2.18** kW 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 project is implemented by iRise which is the project developer. The end users are the individual households who have waived carbon rights and vested them in iRise.
d.	The project developer must design incentive mechanism(s), which should be effective as fast as possible, for the elimination of inefficient baseline stoves that are replaced by the project cooking devices and describe the incentive mechanism(s) in the PDD/VPA-DD at the time of validation.	iRise has created several incentives for elimination of inefficient baseline stoves namely: 1. The project is implemented in collaboration within relevant health, environmental and community officers of Kasungu District Council. These officers spearhead a theory of change encouraging communities to shift from using three stone fires. 2. Chiefs are key players. They have a commanding role in their communities, setting the stage, agenda and practices. Their position is important for encouraging communities to shift to using the cookstoves. 3. The cookstoves are provided to communities for free. 4. The benefit of the cookstoves is well publicized to enable communities to make the weighed choice to shift from expensive, high wood consumption three stone fires

		to cheaper, less wood consuming cookstoves.
e.	To avoid double counting or double claiming, the project developer must: - 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 - inform and notify the end users that they cannot claim emission reductions from the project, and - 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.	iRise is the sole beneficiary of all carbon rights generated under the project pursuant to the Direct Carbon Agreement signed with the Government of Malawi and carbon waivers signed by the project participants and individual household end users. The Direct Carbon Agreement and carbon waiver agreements clearly communicate iRise's intention to own all carbon rights and claim emission reductions resulting from the project activities. iRise duly informs and notifies the end users that there will be emissions reductions and that they cannot claim these emission reductions once they sign the carbon waiver. The project is not included in any other voluntary or compliance markets nor does it displace any other technologies. Before distributing cookstoves to households, the households are screened to ensure that they have not received any other technologies.

		To avoid double counting, each distributed ICS will be geo-tagged, recorded and tracked under an ICS management system. DESCRIPTION OF IVERIFY iRise has adopted and customized iVerify as its main monitoring and management system. It is a mobile cookstove management system which operates with both online and offline technology that uses geo-location data to understand the location of each cookstove. This allows the monitoring team to understand the exact location of the cookstove when a monitoring event is undertaken. The application runs on Android enabled devices. The management system allows for the identification of an area for the cookstove to be distributed and has predetermined training questions for the training team as well as a series of questions for the proposed HH user as it requires that every beneficiary is registered. On registration, the system generates a form on which the details of each beneficiary is entered including the National ID. This specifically asks questions to ensure that FPIC is fully followed as well as ensures that a HH
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		is inspected prior to the cookstove being deployed in order to ensure that there is no other cookstove present, as it ensures that the carbon credit generated from the specific cookstove, and specific household is not counted or claimed twice. The system is designed in 5 core components; a) Identification – This allows for areas to be identified at a high level with the local village/ community chiefs. It gives the proposed training points for the distribution of the cookstoves and a guide number of community members interested in and requiring a cookstove. b) Training – The system is designed as a step by step guide to deliver training to the community members that would like a cookstove. It provides the trainer with a step by step guide as to how to train the communities on the use of a cookstove as well as explaining the benefits of clean cooking.
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		c) Deployment – This part of the system undertakes the deployment of a cookstove, it requests National ID numbers, pictures of the community member and explains the FPIC process. To accommodate every individual, the FPIC process is translated into the local language on the system and two options are available, to read yourself or to be read to. This is then signed by the community member. Once the cookstove has been deployed to the HH a physical check and phot is taken at the HH to ensure no other clean cooking device is there and to ensure double counting does not take place. d) Monitoring – The system allows for tasks to be generated to monitor the cookstoves at certain times. This asks a series of questions including any issues, usage etc, and then a series of other questions aligned to the SDG's. e) Auditing – The company then is undertaking to use an
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		auditor to audit the monitoring team. The system is generating checks on random cookstoves to ensure local compliance is maintained. It is scheduled that the system is to be further develop over the coming years to add more functionality to it.
f.	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 precision⁶. 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 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 of a	The cookstove reduces fuel wood consumption and cooking time thereby lowering air pollution as against established baselines. This is notwithstanding that the cookstove does not require a change in cooking habits i.e. it does not require households that cook outdoors to begin cooking indoors and vice versa. Before households are provided with the cookstoves, they are provided with information on safer and healthier cooking practices.

⁶ The project developer must provide protocols for comparative field tests, which credibly reflect (to similar level of precision as required in this methodology otherwise) the baseline and project scenarios in respect of IAP and GHG levels.

	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.	

B.3. Project boundary

Source	GHGs	Included?	Justification/Explanation
Baseline scenario	CO ₂	YES	Important source of emissions
	CH ₄	YES	Important source of emissions
	N ₂ O	YES	Can be significant for some fuels
Project scenario	CO ₂	YES	Important source of emissions
	CH ₄	YES	Important source of emissions
	N ₂ O	YES	Can be significant for some fuels

B.4. Establishment and description of baseline scenario

Access to reliable electricity in Malawi is extremely low and confined to urban areas. As a result, many people only have access to wood or charcoal powered cookstoves to satisfy their cooking needs. Approximately over 90% of the households in Malawi rely on biomass for cooking with 69% relying on three stone fires as their primary stove.⁷

Reliance on firewood has accelerated deforestation. Reports estimate that only 26.8% of Malawi is forested, and that the country experienced a 1.6% aggregated loss of tree cover between 1990-2010.⁹ This loss is equivalent to 50,000 acres of woodland each year.¹⁰

Furthermore, the smoke from cooking fires can make individuals sick by increasing household air pollution (HAP). HAP contributes to the increased likelihood of developing ischemic heart disease, stroke, lower respiratory infections, chronic obstructive pulmonary disease, and lung cancer. In 2021 an estimated 3.2 million people worldwide died prematurely because of HAP, with deaths concentrated in low- and middle-income countries.⁸ In Malawi, it is estimated that 14,000 deaths were caused by household air pollution from cooking with biomass.⁹ Those affected by HAP are typically women and children, as they principally perform household duties that require them to be inside the house while the cookstoves are burning firewood or charcoal.¹⁰

Further, burn injuries due to traditional cooking methods remain one of the most prominent and preventable injuries to children.¹¹ Burns are quite common in homes that use three stone fires because the stoves are pits of open fire that reside on the floor. While women prepare the food, it is not uncommon for their children to play near them in the kitchen and fall into the fire. Sixty percent of households consulted by Ripple

⁷ Ministry of Energy, *Malawi: Beyond Connections – Energy Access Diagnostic Report Based on Multi-Tier Framework* (5 June 2024).

⁸ Health Effects Institute / Institute for Health Metrics and Evaluation, *State of Global Air: Household Air Pollution (HAP)*(State of Global Air).

⁹ Health Effects Institute / Institute for Health Metrics and Evaluation, *State of Global Air: Household Air Pollution (HAP)*(State of Global Air)

¹⁰ Ipsita Das, Pamela Jagger and Karin Yeatts. Biomass Cooking Fuels and Health Outcomes for Women in Malawi. (2016) 14(1), 7-19.

¹¹ Marcia Tusiime et al., *Prevalence, risk factors and perceptions of caregivers on burns among children under 5 years in Kisenyi slum, Kampala, Uganda*, Injury Epidemiology, (2022).

Africa reported that a member of their family had sustained serious burns from a traditional three-stone cooking fire.¹²

Improved cookstoves replace inefficient open three-stone fires. They combust firewood more efficiently, concentrating the heat to where it is needed most such that while the improved cookstoves often rely on the same fuels as more traditional cookstoves, they use less wood and therefore produce significantly less smoke and toxic emissions.¹³

In establishing the baseline, a total of 156 households were randomly chosen and sampled during the baseline survey conducted in Kasungu District in June 2024. The target population was rural households dependent on traditional biomass fuels, primarily firewood, and cooking on three-stone fires. Sampling captured demographic characteristics, cooking practices, fuel acquisition patterns, time-use data, and health outcomes.

The survey collected information through structured household questionnaires. Key questions focused on household composition, income sources, primary cooks, fuel types used, cooking locations, time spent preparing meals, number of wood collection and purchasing trips, fuel expenditures, health issues such as respiratory disease and eye infections, and seasonal variations in fuel availability and costs.

The results indicated that firewood was used by 93.6 percent of households, and 92.95 percent relied on three-stone fires. Most cooking occurred outdoors, and daily cooking time averaged 159 minutes. Households made an average of 9.78 wood collection trips per month, and time spent collecting per trip averaged 2.57 hours. Monthly fuel expenditure averaged MWK 29,913.94. Fuel acquisition was split across purchasing, collection, or mixed approaches, with seasonal fuel scarcity affecting costs.

Seasonal and daily variations influenced fuel consumption patterns. Larger households spent more total time cooking and often required more wood, resulting in higher expected baseline fuel consumption. Fuel costs and collection times also increased

¹² Ripple Africa, *Training the family: Fuel-efficient cookstoves in Malawi* (RippleAfricaUSA, 10 September 2021)

¹³ Tawina Kapusa Mlowa, Maxon Chitawo and Victor Kasulo. Policy Analysis on Clean Cooking in Malawi: Case of Improved Cookstoves. (2024) E3W Web of Conferences 487.

during the dry season due to higher demand and reduced availability. These variations are critical for estimating expected average fuel consumption savings once improved cookstoves are introduced, as reductions will depend on baseline seasonal fuel use, cooking frequency, and household size.

Overall, the survey provides a detailed baseline for forecasting potential fuel savings, reduced collection burdens, and improved health outcomes following clean cooking interventions.

B.5. Demonstration of additionality

Use this table for Automatic Additionality Only – delete if N/A

	The project is pre-identified as having deemed additionality under the Community Services Activity Requirements, Version 1.2 as defined under section 3.1.1 (b) and Annex B: Positive List.
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).	“End-use efficiency: Project activities that reduce energy requirements as compared to baseline scenario without affecting the level and quality of services or products, where the end user of the products and services are clearly identified and when the physical intervention is required at the user end.” The project, implemented in Malawi [an LDC] distributes cookstoves which reduce wood consumption.

Describe how the proposed project meets the criteria for deemed additionality.	The project meets criteria provided under Section 1.1.3 of Annex B of the Community Services Activity Requirements v 1.2: “Project activities solely composed of isolated units where the users of the technology/measure are households or communities or institutions and where each unit results in ≤ 600 MWh of energy savings per year or ≤ 600 tonnes of emission reductions per year”.¹⁴ It is not required to show financial additionality at the time of Design Certification as provided under Section 4.1.9 (a) and (b) of the Community Services Activity Requirements. (a) Positive List. (b) Projects located in LDC, SIDS, LLDC.
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B.5.1 Prior Consideration

Not Applicable, deliberately left blank

B.5.2 Ongoing Financial Need

¹⁴ 32Where:

Baseline fuel use per household: 10.8 kg/day

Project fuel use per household: 3.8 kg/day

Fuel saved per household: $10.8 - 3.8 = 7$ kg/day

Annual fuel saved per household: $7 \times 365 = 2,555$ kg/year = 2.555 tonnes/year

$EFCO_2 + EF_{nonCO_2} = 112 + 9.46 = 121.46$ tCO₂/TJ

LHV wood = 15 MJ/kg

EF per kg fuel: $121.46 \times 15 / 1,000,000 = 0.0018219$ tCO₂/kg = 1.8219 kg CO₂/kg

Counted EF with fNRB 0.62: $1.8219 \times 0.62 = 1.129578$ kg CO₂/kg

Annual ER per household: $2.555 \times 1.129578 = 2.88607179$ tCO₂/year ≤ 600 tCO₂/year

Not Applicable, deliberately left blank

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the SDGs

SUSTAINABLE DEVELOPMENT GOALS TARGETED	MOST RELEVANT SDG TARGET	SDG IMPACT INDICATOR (PROPOSED OR SDG INDICATOR)
13 Climate Action (mandatory)	13.b: Promote mechanisms for raising capacity for effective climate change related planning and management in least developed countries and small island developing States.	Emissions Reductions
15 Life on land	15.2 By 2020, ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular, forests, wetlands, mountains and drylands, in line with obligations under international agreements.	Reduced deforestation attributed to wood fuel savings
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.	Increased employment opportunities
7 Affordable and Clean Energy	7.1: By 2030, ensure universal access to affordable, reliable and modern energy services.	Increased access to energy

	5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	Women empowerment and gender equality
5 Gender equality		
3 Good Health and Well-being	3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.	Reduced incidence of disease caused by air pollutants
1 No Poverty	1.1: By 2030, eradicate extreme poverty for all people everywhere.	Financial savings

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

SDG 13

There is increasing recognition of the need to address the climate crisis. This will require transformative action to reduce GHG emissions in all sectors. Distribution of cookstoves is one of such mechanisms for climate change management in least developed countries where inefficient cooking methods contribute a significant amount of GHG emissions.

The SDG impact indicator is Emissions reductions. Emissions reductions will be calculated using Method 1 applicable to projects of all scales:

Method 1. Baseline and project fuel(s) are identical, and emission reductions are exclusively from improved efficiency

When the baseline fuel and the project fuel are the same, the GHG emissions reduction achieved by the project activity in year y shall be calculated as follows:

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

Where:

ER_y = Emissions reduction for total project activity in year y (tCO₂e/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 or volume units)

$fNRB_{b,y}$ = Fractional non-renewability status of woody biomass fuel during year y (fraction). For biomass, it is the fraction of woody biomass that can be established as non-renewable. This parameter is omitted when f is a fossil fuel.

$EF_{b,f,CO2}$ = CO₂ emission factor from use of fuel f (tCO₂/TJ)

$EF_{b,f,nonCO2}$ = Non-CO₂ emission factor arising from use of fuel f , when the baseline fuel f is biomass or charcoal (tCO₂e/TJ). This parameter is omitted when f is a fossil fuel.

$LE_{p,y}$ = Leakage for project scenario p in year y (tCO₂e/yr)

SDG 15

Usage of firewood for cooking contributes significantly to deforestation because wood is harvested at an unsustainable rate to meet the demand for firewood. Usage of less firewood translates into a reduction in the quantity of non-renewable wood that is utilized. The indicator will be calculated as follows:

$$\text{Biomass}_{\text{saving},p,y} = SFS_{p,b,y} * fNRB_{i,y} * N_{b,p,y} * ICS_{t,y} * U_{p,y}$$

Where:

$\text{Biomass}_{\text{saving},p,y}$ = Quantity of non-renewable biomass that is saved in project scenario p in year y (tonnes/year)

$SFS_{p,b,y}$ = Specific fuel savings for an individual project technology of baseline b /project p pair in year y (mass or volume units/technology*day)

$fNRB_{i,y}$ = Fractional non-renewability status of wood biomass fuel during year y

$N_{b,p,y}$ = Number of project technology-days included in the project database for baseline b /project p pair in year y (days)

$ICS_{t,y}$ = Project ICS distributed in year p in year y

$U_{p,y}$ = Cumulative usage rate for technologies in project scenario p in year y (fraction)

SDG 8

The project will create opportunities for employment. This SDG will be quantified by monitoring the indicator of number of individuals employed by the project per annum, whether their employment is permanent or temporary. This data shall be extracted from the project developer's employment records. It will be reported as follows:

$E_{p,y}$ = Number of employment opportunities generated in project scenario p in year y

SDG 7

Reports indicate that if current trends continue, 1 out of every 4 people will still use unsafe and inefficient cooking systems by 2030. In 2021, in sub-Saharan Africa, less than 10 percent of the population has access to clean fuels and technologies. If the trends continue unhampered, global access to safe and clean cooking technologies will be undermined. The situation remains uncorrected owing to significant poverty levels [according to the World Bank, at least 70 % of the population lives below 2.15/day per day, a majority of which are concentrated in rural areas].¹⁵ The project distributes locally produced free cookstoves to 80,000 households in rural areas of Kasungu district thereby increasing the level of the population with access to affordable, reliable and clean cooking technologies.

The SDG indicator is quantified as the number of households with access to and use of cookstove technology in the project area. It is calculated using parameters from the project scenario as expressed below:

¹⁵ World Bank. Poverty and Equity Brief: Malawi. (World Bank, October 2025)?

$$ICS_{p,y} = ICS_{t,y} * U_{p,y}$$

Where:

$ICS_{p,y}$ = Project ICS active in project scenario p in year y

$ICS_{t,y}$ = Project ICS distributed in year y

$U_{p,y}$ = Usage rate in year y

SDG 5

Women and girls are primarily responsible for cooking and collecting firewood such that this results in a disproportionate usage of time on productive activities whereby women spend a significant amount of time on these activities which could have otherwise be spent on productive activities ultimately creating and exacerbating discrimination.¹⁶

The SDG impact will be quantified by surveying and calculating the difference in the minutes associated with cooking in the baseline and project scenarios:

$$Time_{savingsp,y} = Thh_{b,y} - Thh_{p,y} * N_{b,p,y}$$

Where:

¹⁶ Jane Ardrey, Kate Jehan, Nicola Desmond, Caroline Kumbuyo, Kevin Mortimer and Rachel Tolhurst. Cooking is for everyone': Exploring the complexity of gendered dynamics in a cookstove intervention study in rural Malawi. (2021) 12(1) PMC.

$Time_{savingsp,y}$	= Time spent on cooking and wood collection/purchase tasks in project scenario p in year y
$Thh_{b,y}$	= Time spent on cooking and wood collection/purchase tasks in baseline scenario b in year y (minutes per household)
$Thh_{p,y}$	= Time spent on cooking and wood collection/purchase tasks in project scenario p in year y (minutes per household)
$N_{b,p,y}$	= Number of project technology-days included in the project database for baseline b /project p pair in year y (days)

SDG 3

A significant number of deaths and illnesses are contributed to by hazardous chemicals and air. Poverty contributes to lack of access to safe and clean cooking technologies which in turn translates into large numbers of the population being exposed to hazardous air emanating from usage of these unsafe technologies. This widespread combustion of fuel for cooking generates household air pollution [HAP]. In Malawi, one study indicates that real-time personal exposure to fine particulate matter ranges from 97 $\mu\text{g}/\text{m}^3$ to 1,163 $\mu\text{g}/\text{m}^3$ with maximum exposures reaching up to 11, 370 $\mu\text{g}/\text{m}^3$ when cooking using wood.¹⁷ Subsequently, individuals often suffer from health effects of exposure to HAP.¹⁸

The project distributes cookstoves which limit wood combustion use and cooking time thereby limiting HAP exposure and indoor air pollution. Contribution to the SDG shall be measured by the reduction in incidence of respiratory illnesses. A contribution to the

¹⁷ Fiona Mabonga, Tara Beattie, Kondwani Luwe, Tracy Morse, Caitlin Hope and Iaian Beverland. Exposure to Air Pollution in Rural Malawi: Impact of Cooking Methods on Blood Pressure and Peak Expiratory Flow. (2021) 18(14) International Journal of Environmental Research and Public Health.

¹⁸ Sepeedeh Saleh, Henry Sambakunsi, Debora Makina, Martha Chinouya, Moses Kumwenda, James Chirombo, Sean Semple, Kevin Mortimer and Jamie Rylance. Personal exposure to fine particulate matter and carbon monoxide in relation to cooking activities in rural Malawi. (2023) Wellcome Open Research.

SDG shall be achieved through a measured decrease in incidence of respiratory illnesses by certain percentage/number in any given year. The indicator will be measured as follows:

$$HHillness_{p,y} = HHvisited_{b,y} - HHvisited_{p,y}$$

Where:

$HHillness_{p,y}$ = Percentage of households reporting reduction in occurrences of respiratory illness among households in project scenario p in year y

$HHvisited_{b,y}$ = Percentage of households reporting incidence of respiratory illness in baseline scenario b in year y

$HHvisited_{p,y}$ = Percentage of households reporting incidence of respiratory illness in project scenario p in year y

SDG 1

According to results from the baseline survey, households utilize at least 10kg of firewood for daily cooking. At an approximate cost of MWK93.2 per kg of firewood, this amounts to at least MWK932 spent on purchasing firewood daily. The cookstove reduces amount of wood usage and associated cost significantly. The indicator will be calculated as follows:

$$FWS_{p,y} = P_{b,y} - P_{p,y} * MWK_{b,p,y} * N_{b,p,y}$$

Where:

$FWS_{p,y}$	= Value of fuel savings in project scenario p during year y (MWK/year)
$P_{b,y}$	= Quantity of fuel that is consumed in the baseline scenario b during year y (tonnes/household/day)
$P_{p,y}$	= Quantity of fuel that is consumed in the project scenario p during year y (kg/household/day)
$MWK_{b,p,y}$	=Cost of fuel consumed in baseline b /project p pair in year y (MWK/kg)
$N_{b,p,y}$	= 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)

B.6.2 Data and parameters fixed ex ante

SDG13

Data/parameter ID	ICS 1
Data/parameter	Baseline scenario survey results
Unit	NA
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 3.4 above, relevant for the baseline scenario definition.
Value(s) applied	NA

Choice of data or Measurement methods and procedures	Deemed valid by methodology
Additional comment	Undertaken at the start of first crediting period.

Data/parameter ID	ICS 2
Data/parameter	Project technology description
Unit	Percentage; kWh
Description	- Manufacturer name: HCS Limited - Technology type: Portable Rural Wood Stove - Fuel: Firewood - Continuous useful energy output whereby continuous useful energy output of ICS below the threshold of 150Kw per unit:2.18 - Rated thermal efficiency, for the improved biomass cookstoves above 25%: 30.5
Source of data	Manufacturer's specifications
Value(s) applied	30.5; 2.18
Choice of data or Measurement methods and procedures	Deemed valid by methodology
Additional comment	N/A

Data/parameter ID	ICS 3
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Data/parameter	Expected technical life of project technology
Unit	Years
Description	The expected technical life of an individual project technology.
Source of data	Fixed and recorded at the time of registration or distribution Manufacturer's specifications.
Value(s) applied	5
Choice of data or Measurement methods and procedures	Deemed valid by methodology
Additional comment	N/A

Data/parameter ID	ICS 4
Data/parameter	Indoor air pollution (IAP) levels of the project technology
Unit	g/min and mg/min
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	For the description of IAP level of the project technology, reliance on certification resulting from a manufacturer's test. Laboratory testing of the project cookstove conducted at RTKC/CREEC using WBT v4.2.3 indicates indoor CO emission rates between 2.06 and 3.04 g/min and Indoor PM _{2.5} emission rates range between 5.35 and 11.53 mg/min. Four different cookstoves were tested, and the average of the sum is treated as the actual value namely: 2.47 g/min (CO emissions) and 8.98 mg/min (PM _{2.5} emissions)
Value(s) applied	2.47 g/min (CO emissions) and 8.98 mg/min (PM _{2.5} emissions)
Additional comment	For the IAP level of the baseline scenario, in the absence of recent laboratory or filed testing data for baseline cooking technologies, IAP is determined in accordance with published literature which classify traditional three stone fires as having high indoor CO and PM _{2.5} emissions that far exceed safe levels published by WHO (15 µg/m ³ for PM _{2.5} and 3.5 ppm for CO). ¹⁹

Data/parameter ID	ICS 5
Data/parameter	Avoidance of double counting or double claiming among project participants

¹⁹ World Health Organization, *WHO Global Air Quality Guidelines: Particulate Matter (PM_{2.5} and PM₁₀), Ozone, Nitrogen Dioxide, Sulfur Dioxide and Carbon Monoxide* (World Health Organization 2021) ISBN 9789240034228; United Nations Environment Programme, *Cooking smoke kills millions every year. Here's what the world can do about that* (UNEP, 5 September 2024) <https://www.unep.org/news-and-stories/story/cooking-smoke-kills-millions-every-year-heres-what-world-can-do-about> accessed 25 January 2026.

Unit	NA
Description	Evidence of avoidance of double counting or double claiming with other parties directly involved with the project or programme
Source of data	Written assertions with the project developer of the ownership rights and intention of selling the emission reductions resulting from the project activity directed at or signed with all the applicable parties of the following: • all other project participants; • project technology producers; and • retailers of the project technology or the renewable fuel.
Value(s) applied	NA
Additional comment	NA

Data/parameter ID	ICS 6
Data/parameter	Avoidance of double counting or double claiming with other mitigation actions
Unit	NA
Description	Review and analysis of mitigation actions in other voluntary market or UNFCCC/compliance mechanisms
Source of data	• A search of the Gold Standard database did not identify an ongoing cookstove mitigation action in Kasungu districts using biomass improved cookstoves like the project technology. Furthermore, no programmes were identified in the target villages of the project.

Value(s) applied	NA
Additional comment	• The project will implement a household tracking system using unique stove IDs. During baseline and monitoring surveys, households will be asked about existing stove technologies. Only emission reductions from households that have received stoves through this project will be included in quantification. • The project will avoid distributing stoves in villages already covered by other mitigation actions using similar technology. Any household found to have received a stove from another program will be excluded from emission reductions calculations. • In the event that a household is found to participate in both this project and another mitigation action using the same stove technology, emission reductions attributed to that household will be excluded from the total project reductions to avoid double-counting. Undertaken at the time of project design review.

Data/parameter ID	ICS 7
Data/parameter	Regulatory framework for provision of thermal energy services
Unit	NA
Description	Evidence that the project does not undermine or conflict with any national, sub-national or local regulations or guidance for thermal energy supply/devices or fuel supply or use.

Source of data	National Energy Policy encourages sustainable and efficient use of biomass energy and supports private sector involvement in manufacturing, supply and adoption of improved cookstoves. ²⁰
Value(s) applied	NA
Additional comment	Undertaken at the start of each crediting period.

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	Wood: Methodology default, 112 tCO ₂ /TJ
Value(s) applied	112
Choice of data or Measurement methods and procedures	Deemed valid by methodology
Purpose of data	Calculation of emission reductions
Additional comment	N/A

Data/parameter ID	ICS 9
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²⁰ Government of Malawi. National Energy Policy(GoM, 2018).

Data/parameter	$EF_{b,f,nonCO2}$
Unit	tCO ₂ /TJ
Description	Non-CO ₂ emission factor arising from use of fuels in baseline scenario
Source of data	Wood: Methodology default: - 9.46 tCO ₂ e/TJ (AR5 GWP) or
Value(s) applied	9.46
Choice of data or Measurement methods and procedures	Deemed valid by methodology
Purpose of data	Calculation of emissions reductions
Additional comment	N/A

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	Wood: Methodology default, 112 tCO ₂ /TJ
Value(s) applied	112

Choice of data or Measurement methods and procedures	Deemed valid by methodology
Purpose of data	Calculation of emission reductions
Additional comment	N/A

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	Wood: Methodology default: 9.46 tCO ₂ e/TJ (AR5 GWP)
Value(s) applied	9.46
Choice of data or Measurement methods and procedures	Deemed valid by methodology
Purpose of data	Calculation of emissions reductions
Additional comment	N/A

Data/parameter ID	ICS 12
Data/parameter	$NCV_{b,fuel}$
Unit	TJ/ton

Description	Net calorific value of the fuels used in the baseline
Source of data	Methodology default value for wood, 0.0156 TJ/ton
Value(s) applied	0.0156
Choice of data or Measurement methods and procedures	Deemed valid by methodology
Purpose of data	Determination of baseline emissions for purposes of calculating emission reductions
Additional comment	N/A

Data/parameter ID	ICS 13
Data/parameter	$NCV_{p,fuel}$
Unit	TJ/ton
Description	Net calorific value of the fuels used in the project
Source of data	Methodology default value for wood, 0.0156 TJ/ton
Value(s) applied	0.0156
Choice of data or Measurement methods and procedures	Deemed valid by methodology
Purpose of data	Determination of project emissions for purposes of calculating emission reductions
Additional comment	N/A

Data/parameter ID	ICS 17
Data/parameter	$fNRB_{i,y}$
Unit	Percentage

Description	Fractional non-renewability status of woody biomass fuel during year y , in case the baseline fuel is biomass.
Source of data	Calculated value, determined using MoFUSS (Modelling Fuelwood Savings Scenarios) ²¹
Value(s) applied	62
Measurement methods and procedures	Calculated as per MoFUSS (Modelling Fuelwood Savings Scenarios) ²²
Monitoring frequency	Determined ex ante and fixed for a given crediting period
QA/QC procedures	Compliance with requirements of the MoFUSS (Modelling Fuelwood Savings Scenarios) ²³
Purpose of data	Calculation of emissions reductions
Additional comment	The measurement method MoFUSS is a GIS-based model that simulates the spatial- temporal impacts of wood fuel harvesting over dynamic landscapes. It is an eligible method of fNRB estimation

Data/parameter ID	ICS 18
Data/parameter	$P_{b,y}$
Unit	Tonnes
Description	Quantity of fuel that is consumed in baseline scenario b during year y *(Mass or volume units/household-day)

²¹ <https://www.mofuss.unam.mx> deemed as eligible method for fNRB estimation as per section 2.3.1. of Gold Standard fNRB Application for GS4GG Certification v 1.0 published on 24.04.2025.

²² <https://www.mofuss.unam.mx>.

²³ <https://www.mofuss.unam.mx>.

Source of data	Baseline performance field tests
Value(s) applied	0.0108
Measurement methods and procedures	Baseline performance field tests
Monitoring frequency	At start of crediting period (fixed for one crediting period)
QA/QC procedures	Random selection of households conducted using reproducible method. Sample size shall be statistically valid to ensure 90% confidence interval and 10% margin of error. Enumerators will be duly trained on KPT protocols. Instruments will be calibrated and well maintained. Every KPT record will have unique household ID. All processes will be transparent and auditable. Compliance with general requirements for sampling (Section 4.4), general requirements for QA/QC (Section 4.5) and Annex 2 Kitchen performance test
Purpose of data	Determination of fuel savings for calculating non-renewable biomass saving
Additional comment	Applicable to SDG 1

Data/parameter ID	ICS 28
Data/parameter	$LE_{p,y}$
Unit	Percentage
Description	Leakage in project scenario p during year y
Source of data	Sources established by following section 2.4.a Leakage of emissions. Default discount value applied.

Value(s) applied	95%
Choice of data or Measurement methods and procedures	Sources established by following section 2.4.a Leakage of emissions.
Purpose of data	Calculation of emission reductions
Additional comment	N/A

SDG 5

Data/parameter	$Thh_{b,y}$
Unit	Minutes per household
Description	Time spent on cooking and wood collection or purchase tasks per day by a household in baseline scenario b in year y
Source of data	Project activity
Value(s) applied	279
Measurement methods and procedures	Sample surveys in representative households
Monitoring frequency	Annual
QA/QC procedures	Compliance with the general requirements for sampling (Section 4.4) and the general requirements for QA/QC (Section 4.5)
Purpose of data	Calculation of time savings
Additional comment	None

SDG 1

Data/parameter	HHvisited _{b,y}
Unit	Percentage
Description	Percentage of households reporting incidence of respiratory illness in baseline scenario _b in year _y
Source of data	Project activity
Value(s) applied	13.64
Measurement methods and procedures	Conduct a detailed (standardized) survey on the occurrence of respiratory diseases and eye infections among a representative group of households participating in the project
Monitoring frequency	Annual
QA/QC procedures	Compliance with the general requirements for sampling (Section 4.4) and the general requirements for QA/QC (Section 4.5) Randomly selected statistically viable representative sample of households. Data integrity and privacy to be in line with strict requirements for health data
Purpose of data	Calculation of reduction in incidence of respiratory disease Reduced incidence of disease caused by air pollutants
Additional comment	N/A

B.6.3 Ex ante estimation of SDG Impact

SDG 13

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

PARAMETER	UNIT	VALUE
$N_{b,p,y}$	Days	365
$U_{p,y}$	Percentage	99%
$SFS_{p,b,y}$	Tonnes	0.007
$NCV_{b,fuel}$	TJ/ton	0.0156
$fNRB_{b,y}$	Percentage	62%
$EF_{b,f,CO2}$	tCO ₂ /TJ	112
$EF_{b,f,nonCO2}$	tCO ₂ /TJ	9.46
$LE_{p,y}$	Percentage	95%
Equation 1 = $N_{b,p,y} * U_{p,y} * SFS_{p,b,y} * NCV_{b,fuel}$		0.04
Equation 2 = $fNRB_{b,y} * EF_{b,f,CO2} + EF_{b,f,nonCO2}$		78.4968
Equation 3 = $N_{b,p,y} * U_{p,y} * SFS_{p,b,y} * NCV_{b,fuel} * (fNRB_{b,y} * EF_{b,f,CO2} + EF_{b,f,nonCO2})$		3.10
$ER_y = N_{b,p,y} * U_{p,y} * SFS_{p,b,y} * NCV_{b,fuel} * (fNRB_{b,y} * EF_{b,f,CO2} + EF_{b,f,nonCO2}) - LE_{p,y}$		2.15

SDG 15

$$Biomass_{saving,p,y} = SFS_{p,b,y} * fNRB_{i,y} * N_{b,p,y} * ICS_{t,y} * U_{p,y}$$

PARAMETER	UNIT	VALUE
$SFS_{p,b,y}$	Tonnes	0.007
$fNRB_{i,y}$	Percentage	62%
$N_{b,p,y}$	Days	365
$ICS_{t,y}$	Number	80000
$U_{p,y}$	Percentage	99%
$Biomass_{saving,p,y}$		125,461

SDG 8

$E_{p,y}$ = Number of employment opportunities generated in project scenario p in year y

PARAMETER	UNIT	VALUE
$E_{p,y}$	Number	156

SDG 7

$$ICS_{p,y} = ICS_{t,y} * U_{p,y}$$

PARAMETER	UNIT	VALUE
$U_{p,y}$	Percentage	99%
$ICS_{p,y}$	Number	80,000
$ICS_{t,y}$	Number	79200

SDG 5

$$Time_{savingsp,y} = Thh_{b,y} - Thh_{p,y} * N_{b,p,y}$$

PARAMETER	UNIT	VALUE
$Thh_{b,y}$	Minutes	279
$Thh_{p,y}$	Minutes	140
$N_{b,p,y}$	Days	365
$Time_{savingsp,y}$	Number	50,735

SDG 3

$$HHillness_{p,y} = HHvisited_{p,y} - HHvisited_{b,y}$$

PARAMETER	UNIT	VALUE
HHillness _{p,y}	Percentage	13.64
HHvisited _{b,y}	Percentage	5.18
HHvisited _{p,y}	Percentage	8.46%

SDG 1

$$FWS_{p,y} = P_{b,y} - P_{p,y} * MWK_{b,p,y} * N_{b,p,y} * U_{p,y}$$

PARAMETER	UNIT	VALUE
P _{b,y}	Kgs	10.8
P _{p,y}	Kgs	3.8
MWK _{b,p,y}	Number	93.2
N _{b,p,y}	Days	365
U _{p,y}	Percentage	99%
FWS _{p,y}	Number	235,744.7

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

SDG 13: Reduction of Emissions

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 1	386,174	135,876	250,298
Year 2	386,174	135,876	250,298
Year 2	386,174	135,876	250,298
Year 4	386,174	135,876	250,298
Year 5	386,174	135,876	250,298
Total	1,930,870	679,380	1,251,490

Total number of
crediting years

5

Annual average over
the crediting period

386,174

135,876

250,298

SDG 15: Total non-renewable wood fuel saved (tonnes/y)

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
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Year 1	193,568	68,107	125,461
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Year 2	193,568	68,107	125,461
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Year 2	193,568	68,107	125,461
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Year 4	193,568	68,107	125,461
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Year 5	193,568	68,107	125,461
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Total	967,840	340,535	627,305
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Total number of
crediting years

5

Annual average over
the crediting period

193,568

68,107

125,461

SDG 8: Employment opportunities created

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
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Year 1	0	156	156
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Year 2	0	156	156
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Year 2	0	156	156
Year 4	0	156	156
Year 5	0	156	156
Total	0	780	780
Total number of crediting years 5			
Annual average over the crediting period 0			
		156	156

SDG 7: Increased energy access

YEAR	BASILINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 1	0	79,200	79,200
Year 2	0	79,200	79,200
Year 2	0	79,200	79,200
Year 4	0	79,200	79,200
Year 5	0	79,200	79,200
Total	0	79,200	79,200
Total number of crediting years 5			
Annual average over the crediting period 0			
		79,200	79,200

SDG 5: Time saving on cooking and collecting fuel

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 1	101,835	51,100	50,735
Year 2	101,835	51,100	50,735
Year 2	101,835	51,100	50,735
Year 4	101,835	51,100	50,735
Year 5	101,835	51,100	50,735
Total	509,175	255,500	253,675
Total number of crediting years 5			
Annual average over the crediting period			
	101,835	51,100	50,735

SDG 3: Households reporting to hospital with eye infections and respiratory illness

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 1	13.64%	5.18%	8.46%
Year 2	13.64%	5.18%	8.46%
Year 2	13.64%	5.18%	8.46%
Year 4	13.64%	5.18%	8.46%
Year 5	13.64%	5.18%	8.46%
Year n (delete if N/A)			
Total	13.64%	5.18%	8.46%

Total number of
crediting years

5

Annual average over
the crediting period

13.64%

5.18%

8.46%

SDG 1: MWK Savings on Firewood Expenditure

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 1	363,720	127,976	235,744
Year 2	363,720	127,976	235,744
Year 2	363,720	127,976	235,744
Year 4	363,720	127,976	235,744
Year 5	363,720	127,976	235,744
Year n (delete if N/A)			
Total	1,818,600	639,880	1,178,720
Total number of crediting years	5		
Annual average over the crediting period	363,720	127,976	235,744

B.7. Monitoring plan

B.7.1 Data and parameters to be monitored

SDG 13

Data/parameter ID	ICS 27
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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	Detailed records will be kept including geographical locations of the cookstoves. At any given point in time, the location of each cookstove can be viewed. Annually, the original and current location of cookstoves will be compared and any discrepancies will be highlighted and addressed.
Monitoring frequency	Annual
QA/QC procedures	Contents of the project database which is the project developer's cloud based iVerify database will be informed by real time, transparent and auditable data from project technology unit geo-locating tags to confirm whether the project technology units are present at end user locations as expected.
Purpose of data	Calculation of emissions reductions
Additional comment	Applicable to SDG 15 and 1

Data/parameter ID	ICS 26
Data/parameter	$U_{p,y}$
Unit	Percentage

Description	Weighted average usage rate in project scenario p during year y
Source of data	Usage survey, following the description in section 4.1 of methodology: Usage survey Usage survey supplemented by continuous use monitoring minimum 100 samples of project technology
Value (s) applied	99
Measurement methods and procedures	Continuous use monitoring and surveys conducted in accordance with the Usage Rate Monitoring Requirements and Guidelines v2.0
Monitoring frequency	Annual
QA/QC procedures	Compliance with the general requirements for sampling (Section 4.4) and the general requirements for QA/QC (Section 4.5) Usage surveys shall be designed in accordance with section 2.2 of Usage Rate Monitoring Requirements and Guidelines v2.0 whereby there will be kitchen observation, interview with primary cook, photos of cooking area and recording of GPS coordinates. Random selection of 100 representative households whose project technologies are to be affixed with continuous stove monitoring data loggers for a period of 90 days.
Purpose of data	Calculation of emissions reductions
Additional comment	Applicable to SDG 15, 7 and 1 Reference is made to Requirements and Guidelines: Usage Rate Monitoring v 2.0 Use and Non-Use defined as follows: A cookstove is considered in use if:

	a. Frequency of use: Once a day b. Duration of use: 2 hours and 30 minutes
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Data/parameter ID	ICS 20
Data/parameter	$SFS_{b,p,y}$
Unit	Kgs
Description	Specific fuel savings for an individual project technology of baseline b /project p pair in year y (Mass or volume units/technology*day)
Source of data	Calculated from $P_{b,y}$, $P_{p,y}$ and other information
Value(s) applied	7 (adjusted)
Measurement methods and procedures	Kitchen Performance Test
Monitoring frequency	Biennial
QA/QC procedures	Transparent data collection, analysis and reporting in accordance with TPDDTEC Ver 4.0 Complementary Guidelines for Kitchen Performance Testing Calculation method, inputs and sources described in detail in PDD and monitoring report. Cross-check with proportional efficiency of baseline and project technology.
Purpose of data	Determination of reduction of fuelwood consumption to calculate emission reductions
Additional comment	Applicable to SDG 15

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Data/parameter ID	ICS 19
Data/parameter	$P_{p,y}$
Unit	Tonnes
Description	Quantity of fuel that is consumed in project scenario p during year y (Mass or volume units/household-day)
Source of data	Project performance field tests
Value(s) applied	0.0038
Measurement methods and procedures	Project performance field test
Monitoring frequency	Biennial
QA/QC procedures	Random selection of households conducted using reproducible method. Sample size shall be statistically valid to ensure 90% confidence interval and 10% margin of error. Enumerators will be duly trained on KPT protocols. Instruments will be calibrated and well maintained. Every KPT record will have unique household ID. All processes will be transparent and auditable. Seasonal and daily variations from expected usage will be monitored through usage surveys, accurately recorded and reflected in emission reduction calculations. Compliance with general requirements for sampling (Section 4.4), general requirements for QA/QC (Section 4.5) and Annex 2 Kitchen performance test.

Purpose of data	Determination of fuel savings for calculating non-renewable biomass saving
Additional comment	Applicable to SDG 1

Data / Parameter ID	ICS 16
Data / Parameter	Presence of stove stacking
Unit	N/A
Description	Descriptive statistics of the presence and usage practices of baseline- and other non-project-technology by project technology end users
Source of data	Usage Survey: 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 evidence to determine the frequency of usage of both the project devices and baseline devices, or monitoring surveys to capture the number of meals cooked.
Value(s) applied	N/A
Measurement methods and procedures	Usage 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. Stove stacking shall be monitored and considered through the usage survey and results shall be cross-checked 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	Determination of stove stacking
Additional comment	Where continual use of baseline technology is observed, or another technology is put in use in parallel, corresponding emissions of said technology (ies) shall be considered and accounted for to ensure that emission reductions of project technology are not overestimated.

Data / Parameter ID	ICS 15
Data / Parameter	Avoidance of double counting or double claiming among project technology end users
Unit	N/A
Description	Evidence of avoidance of double counting or double claiming with project technology end users
Source of data	Evidence of informing / notification of end users, such as: - leaflets distributed with the warranty card of the product alerting end-users to the waiving of their carbon rights in exchange for discount pricing of the improved technology below its true cost, - carbon title waiver forms signed by end users, etc
Value(s) applied	N/A
Measurement methods and procedures	Signed carbon waivers will be collected and stored.
Monitoring frequency	Monitored whenever project technology is disseminated.
QA/QC procedures	General internet searches, searches of Malawi Carbon Registry and searches of public records of Gold Standard and other voluntary and UNFCCC mechanisms shall be leveraged to cross-check parameter.
Purpose of data	Avoidance of double counting
Additional comment	N/A

SDG 1

Data/parameter	$ICS_{t,y}$
Unit	Number
Description	Project ICS distributed in year y
Source of data	Project activity
Value(s) applied	80000
Measurement methods and procedures	Direct measurement and/or surveys following methodology requirements
Monitoring frequency	Annual
QA/QC procedures	Accurate and transparent data collection and reporting
Purpose of data	Determination of number of ICS active in project year for calculation of access to energy
Additional comment	Applicable to SDG 7

SDG 8

Data/parameter	$Employment_{p,y}$
Unit	Number
Description	Number of employment opportunities created during project scenario p during year y
Source of data	Employment records of project activity
Value(s) applied	156

Measurement methods and procedures	Measured using a Full Time Equivalent calculation at the end of the defined annual reporting period, unless there has been a material change during the reporting period.
Monitoring frequency	Annual
QA/QC procedures	Accurate and transparent data collection and reporting
Purpose of data	Determination of increased employment opportunities
Additional comment	N/A

SDG 5

Data/parameter	$Thh_{p,y}$
Unit	Minutes
Description	Time spent on cooking and wood collection or purchase tasks per day by a household in project scenario p in year y
Source of data	Project activity
Value(s) applied	140
Measurement methods and procedures	Sample surveys in representative households
Monitoring frequency	Annual
QA/QC procedures	Compliance with the general requirements for sampling (Section 4.4) and the general requirements for QA/QC (Section 4.5)
Purpose of data	Calculation of time savings
Additional comment	None

SDG 3

Data/parameter	HHvisited _{p,y}
Unit	Percentage
Description	Percentage of households reporting incidence of respiratory illness in project scenario _p in year _y
Source of data	Project activity
Value(s) applied	5.18
Measurement methods and procedures	Conduct a detailed (standardized) survey on the occurrence of respiratory diseases and eye infections among a representative group of households participating in the project
Monitoring frequency	Annual
QA/QC procedures	Compliance with the general requirements for sampling (Section 4.4) and the general requirements for QA/QC (Section 4.5) Randomly selected statistically viable representative sample of households. Data integrity and privacy to be in line with strict requirements for health data
Purpose of data	Calculation of reduction in incidence of respiratory disease Reduced incidence of disease caused by air pollutants
Additional comment	N/A

SDG 1

Data/parameter	MWK _{b,p,y}
Unit	Number
Description	Per Kg cost of fuel consumed in baseline _b /project _p pair in year _y
Source of data	Project activity
Value(s) applied	93.2
Measurement methods and procedures	Conduct a survey to collect data on household expenditure among a representative group of households participating in project
Monitoring frequency	Annual
QA/QC procedures	Compliance with general requirements for sampling (Section 4.4), general requirements for QA/QC (Section 4.5) and Annex 2 Kitchen performance test
Purpose of data	Determination of financial savings
Additional comment	N/A

B.7.2 Sampling plan

Sampling Approach

The project requires sampling across several surveys to establish baseline and project scenarios in accordance with TPDDTEC v4.0 and Annex 2 of the Gold Standard methodology. For all surveys conducted and to be conducted under the project, a random sampling approach is applied for the selection of project participants. At the

community level, households are enumerated and every 10th household is selected for participation, ensuring systematic random selection and representativeness of the target population. All relevant sampled parameters are designed to achieve a minimum confidence level of 90 percent with a margin of error of ± 10 percent, in line with methodological requirements. Where the required confidence level and precision are not achieved, the lower bound of the confidence interval shall be applied in a conservative manner. All survey records are accurately and transparently recorded, monitored and evaluated, and all supporting documentation is maintained and made readily accessible for spot checking, cross referencing and verification by independent third party auditors.

Baseline Survey

For the baseline survey, an assumed coefficient of variation of 1.5 was applied at the sampling design stage. Based on this assumption, a sample size of 140 project participants was determined. To account for potential non-response and drop out, an attrition rate of 15 percent was applied, resulting in an initial target sample of 161 households. During implementation, five households dropped out, resulting in a final effective sample size of 156 households. The baseline survey was conducted from 3 to 5 June 2024, prior to implementation of the project activity.

Kitchen Performance Tests

For both the baseline and project Kitchen Performance Tests, an assumed coefficient of variation of 1.3 was applied in accordance with Table 4 of Annex 2 of the Gold Standard methodology. On this basis, a target sample size of 105 households per stove type was selected for both baseline and project KPTs. An attrition rate of 40% was adopted bringing the total sample size to 147 for each KPT. The decision on the attrition rate was influenced by experience whereby an attempt to conduct the study earlier failed owing to over 50% drop out. The baseline KPT was conducted between 16 and 23 June 2024, while the project KPT was conducted between 27 and 31 August 2024 following stove dissemination and a stabilisation period for stove use. Both measurement campaigns were undertaken during the cool dry winter season and are therefore considered seasonally comparable and methodologically appropriate. A similar approach will be taken for KPTs to be conducted throughout the project cycle.

Monitoring Survey

Random selection of a representative sample of households with project cookstoves will be adopted for monitoring surveys. To assess stove usage rates, a randomly selected subset of representative cookstoves is fitted with temperature sensing data loggers to enable continuous use monitoring. The target sample size for continuous usage monitoring is a minimum of 100 households, with at least 30 samples for each stove age cohort, in line with methodological guidance and good practice for monitoring continued usage and performance over time.

B.7.3 Other elements of monitoring plan

1. Legal and Ethical Compliance

- All data is processed with informed individual consent.
- Fully compliant with Malawi's data protection regulations.
- Zero tolerance for child or forced labor, monitored via employment audits.

2. Institutional Monitoring Framework

- CDI: On-ground monitoring and data collection.
- iVerify Manager: Oversee data collection, reporting, and integrity.
- Auditors: To audit compliance by monitoring teams.

3. Grievance and Community Input Monitoring

- Monthly or biannual reviews of community feedback via:
- Suggestion boxes at district and CDI offices.
- Officer logs and grievance registers (manual and digital).
- Feedback review loop into project improvements (e.g., cookstove redesign).

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1 Start date of project

01/08/2024. Project is regular. Stakeholder consultations were conducted before the date of distribution of first unit in 02/2024.

C.1.2 Expected operational lifetime of project

5 years

C.2. Crediting period of project

C.2.1 Start date of crediting perio

01/09/2024²⁴

C.2.2 Total length of crediting period

5 years, renewal twice

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1 Safeguarding Principles that will be monitored

A completed Safeguarding Principles Assessment is summarized below.

PRINCIPLES MITIGATION MEASURES ADDED TO THE MONITORING PLAN

1	Human Rights	No negative impacts
2	Gender Equality and Women’s Empowerment	Project contributes to gender equality and women’s empowerment – continuous equitable participation of women and girls is embedded throughout project in line with Country’s Constitution and National Gender Policy.

²⁴ Start date of project is different from start of crediting period because we do not assume immediate full adoption. To ensure emissions reductions are accurately captured, realistic and reflecting technology usage, households are attributed a 4-week acclimatization period to adapt to the improved cookstove.

3 Community Health and Safety	Project does not in way affect community health and safety. Cookstoves are built in accordance with minimum safety requirements and are targeted to improve community health by lowering exposure to hazardous gases from burning of fuel wood. There is continuous monitoring of cookstoves to ensure no detrimental degradation of technology throughout lifecycle.
5 Corruption	Project adopts transparency and anti-bribery and anti-corruption mechanisms as established by Country's Anti—Corruption laws and policies. It does not in any way involve or contribute to corruption or corrupt practices.
6 Economic Impacts	Cookstoves are distributed for free hence pose no economic burden on users. They lower firewood consumption thereby lowering costs for households.
	Local employment is prioritized as well as local procurement as project utilizes local trained staff and cookstoves are produced using locally sourced materials.
	Project follows stringent policy against child labor, forced labor and safe and healthy working conditions in compliance with Country's labor regulations. Equal employment opportunities are offered. Project is financially sustainable and poses no potential negative economic impacts to community.
7 Climate and Energy	Project promotes sustainable use of energy by deploying cookstove technology that reduces firewood consumption thereby correlatively reducing GHG emissions. It is a recognized climate change mitigation strategy.
9 Environment , Ecology and Land Use	Project lowers firewood consumption needs of households hence it promotes reduction of deforestation By its design, the cookstove minimizes release of pollutant gases to lower levels as compared to the levels in the baseline scenario which is characterized by reliance on three stone fires.

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

Women and girls are disproportionately affected by unclean cooking practices. Statistically, they spend significant time collecting firewood and are exposed to hazardous gases using unclean technologies. The project therefore reflects the key issues and requirements of technologies. The project therefore Gender Sensitive design and directly targets women and girls who have participated in the design of the project implementation as outlined in the Gender Policy?

from its onset through local stakeholder consultations i.e. the cookstove was designed to be light and portable, which was a specific design requirement and input from the women and girls consulted.

Question 2 - Explain how the project aligns with existing country policies, strategies and best practices

Malawi implemented a National Gender Policy in 2016. It recognises the need for gender mainstreaming in natural resources management to respond to prevalent gender inequalities. It is stated that women and girls are principal players in usage of energy for cooking. Unclean cooking technologies therefore disproportionately affect women. Women are affected in terms of exposure to harmful pollutant gases from burning of biomass; and they are also disproportionately affected in terms of time wastage to source firewood for cooking which translates into time being taken away from their involvement in productive social and economic activities. The project reduces fuelwood biomass utilised in cooking and exposure to pollutant gases thereby freeing up time for women and girl's involvement in productive activities and reducing their exposure to hazardous gases respectively.

Question 3 - Is an Expert required for the Gender Safeguarding Principles & No Requirements?

Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder No Consultation?

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.

Meetings were conducted in Kasungu district on 28 and 29 February 2024. These meetings were scheduled through a combination of written letters and voice calls. These methods were chosen as the mode of communication as they were recommended by the District Council and CDI, both experienced with stakeholder engagement with the target stakeholders.

The stakeholders that attended the meetings included local authority representatives, local NGOs/CSOs, National Government Officials, Community members, representatives of government institutions, traditional leaders, working groups, media, and religious leaders.

The stakeholder feedback round lasted the month of March 2024.

E.1 Summary of stakeholder mitigation measures

A. Feedback received:

- Community members emphasized the importance of portable cookstoves with strong handles.
- Chiefs requested prior approval of beneficiary lists to track usage and ensure local accountability.
- Youth leaders expressed concern over their involvement and requested formal community structures.
- Concerns about the practicality of monthly meetings due to transport and household obligations.
- Suggestions for verbal acknowledgements for grievances due to literacy challenges.

- Requests for job clarity, inclusiveness in employment (youth, elderly, uneducated), and pay transparency.

B. Project Design Changes and Commitments:

- iRise committed to improving the cookstove design to make it portable.
- Agreed to collaborate with chiefs on beneficiary lists and monitoring.
- Pledged to define clear community roles, especially for youth and women leaders.
- Shifted from monthly meetings to a more accessible grievance mechanism, including suggestion boxes and a dedicated officer.
- Adopted inclusive hiring practices, prioritizing women and ensuring non-discrimination by age or education level.

C. Mitigation Measures Proposed:

- Carbon monoxide exposure: User training on safe cooking practices (e.g., outdoor or ventilated areas).
- Injury risk: Detailed training on cookstove handling and maintenance.
- Double-beneficiary overlap: Clear policy against receiving stoves from multiple projects to maintain carbon tracking integrity.
- Corruption and abuse: Zero tolerance policies and ethical standards were emphasized.

D. Monitoring of Mitigation and SDG Impacts

- SDG monitoring will focus on climate action, health, gender equality, poverty reduction, clean energy, and forest preservation.
- Surveys were selected as the main method for community feedback, to be scheduled around farming seasons.
- District councils and community leaders will participate in oversight to ensure transparency and local relevance.
- Continuous monitoring through feedback channels: suggestion boxes, in-person reporting to CDI staff, and a grievance logbook.

E. Comments on Implementation and Oversight

- Chiefs and councils will be active in overseeing equitable employment and stove distribution.
- Community-wide support was expressed, with appreciation for health, environmental, and economic benefits.
- Recommendations made to periodically review the grievance mechanism's effectiveness.
- iRise committed to maintaining transparency, timely communication, and alignment with Malawi's legal and human rights frameworks.

E.2 Final continuous input / grievance mechanism

METHOD	INCLUDE ALL DETAILS OF CHOSEN METHOD (S) SO THAT THEY MAY BE UNDERSTOOD AND, WHERE RELEVANT, USED BY READERS.
Continuous Input / Grievance Expression Process Book (mandatory)	<i>Grievance Expression Process Book which is available at the CDI office and the DCs office.</i> CDI repeatedly interfaces with local chiefs who are also utilised as a tier for receiving complaints from communities. Email id: compliance@iriseccarbon.com Telephone: +265 996305335
GS Contact (mandatory)	help@goldstandard.org
Other	

APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

Complete the Assessment below and copy all Mitigation Measures for each Principle above. Please refer to the instructions in 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?	☐ YES ☒ 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?	☐ YES ☒ 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)?	☐ YES ☒ 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?	☐ YES ☒ NO
P.1.1.3 	Does this project undermine national or regional measures for the realization of the right to development?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements. Please add text here...		
Would the project potentially involve or lead to:		
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 marginalized groups?	☐ YES ☐ POTENTIALLY ☒ NO
P.1.1.2 	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or	☐ YES ☐ POTENTIALLY

	marginalized or excluded individuals or groups, including persons with disabilities?	☒ NO
P.1.1.3 	restrictions in availability, quality of and/or access to resources or basic services, to marginalized individuals or groups, including persons with disabilities?	☐ YES ☐ POTENTIALLY ☒ NO
P.1.1.3 	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project incorporates a human rights-based approach.

For example, by describing how the project design:

- is informed by human rights analysis, including from UN human rights mechanisms (human rights treaty bodies, universal periodic review, special procedures)
- includes measures to assist the government to realize (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 marginalized 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.

Please add text here....

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)?	☐ YES ☒ NO
P.2.1.2 	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?	☐ YES ☒ 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?	☐ YES ☒ NO
P.2.1.2 	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	☐ YES ☒ 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?	☐ YES ☒ NO

P.2.1.3 	Has the project assessed gender risks without referencing the country's gender strategy or equivalent national commitment?	☐ YES ☒ 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?	☐ YES ☒ NO

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

Please add text here....

Would the project potentially involve or lead to:

P.2.1.1 	adverse impacts on gender equality and/or the situation of women and girls?	☐ YES ☐ POTENTIALLY ☒ NO
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.	☐ YES ☐ POTENTIALLY ☒ NO
P.2.1.2 	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	☐ YES ☐ POTENTIALLY ☒ NO
P.2.1.2 	limitations on women's ability to use, develop and protect natural resources, considering different roles and positions of women and men in accessing environmental goods and services? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well-being.	☐ YES ☐ POTENTIALLY ☒ NO

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

Please add text here....

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?	☐ YES ☒ NO
P.3.1.2 	Does the project involve any potential risks to the workers' safety and health?	☐ YES ☒ NO

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

Please add text here....

Would the project potentially involve or lead to:

P.3.1.1 	construction and/or infrastructure development (e.g., roads, buildings, dams)?	☐ YES ☒ NO
P.3.1.2 	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	☐ YES ☐ POTENTIALLY ☒ NO
P.3.1.2 	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	☐ YES ☐ POTENTIALLY ☒ 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?	☐ YES ☐ POTENTIALLY ☒ 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)?	☐ YES ☐ POTENTIALLY ☒ 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)?	☐ YES ☐ POTENTIALLY ☒ NO

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

Please add text here....

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?	☐ YES ☒ 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.

Please add text here....

Would the project potentially involve or lead to:

P.4.1.1 	activities adjacent to or within a cultural heritage site?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.1.1 	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.1.1 	alterations to landscapes and natural features with cultural significance?	☐ YES ☐ POTENTIALLY ☒ 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)	☐ YES ☐ POTENTIALLY ☒ NO
P.4.1.2 	utilization of tangible and/or intangible forms (e.g., practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	☐ YES ☐ POTENTIALLY ☒ 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?	☐ YES ☐ NO ☒ NA
P.4.1.3 	If answer to question above is "YES" - does the project provide equitable sharing of benefits from commercialization of such knowledge, innovation, or practice, consistent with their customs and traditions?	☐ YES ☐ NO ☒ 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?	☐ YES ☐ NO ☒ 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?	☐ YES ☐ NO ☒ NA

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

Please add text here....

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

P.4.2.1 	Does the project involve any risks related to involuntary relocation of people?	☐ YES ☒ 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.

Please add text here....

Would the project potentially involve or lead to:

P.4.2.1 	risk of forced evictions or involuntary relocation of people?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.2.2 	temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?	☐ YES ☐ POTENTIALLY ☒ 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)?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.2.2 	If answer to question above is “YES” or “POTENTIALLY”, - has the project developed Resettlement Action Plan or Livelihood Action Plan in consultation and agreement with affected individual, group or community? - has the project integrated Resettlement Action Plan or Livelihood Action Plan into the Project design?	☐ YES ☐ NO ☒ NA
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?	☐ YES ☐ NO ☒ 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?	☐ YES ☐ NO ☒ NA

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

Please add text here....

[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?	☐ YES ☒ 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.

Please add text here....

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?	☐ YES ☐ POTENTIALLY ☒ 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.	☐ YES ☐ POTENTIALLY ☒ NO
P.4.3.2 	Changes in legal arrangements, if yes, are the changes done in line with relevant laws and regulations?	☐ YES ☒ NO ☐ NA
P.4.3.2 	Changes in legal arrangements, if yes, are these changes agree with free, prior and informed consent of the involved stakeholders?	☐ YES ☒ NO ☐ NA

P.4.3.3 	Does some other entity (other than the project developer) hold uncontested land title for the entire Project Boundary?	☐ YES ☒ NO ☐ 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?	☐ YES ☐ NO ☒ 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?	☐ YES ☐ NO ☒ NA
P.4.3.5 	Have project developer in consultation with stakeholders established a functioning mechanism to receive, process, resolve, communicate and record grievances?	☐ YES ☐ NO ☒ NA

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

Please add text here....

[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?	☐ YES ☒ 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.

Please add text here....

Would the project potentially involve or lead to:

P.4.4.1 	affect areas where indigenous peoples are present (including project area of influence)	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.1 	affect areas, land and territory claimed by indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.1 	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.7 	If answer to above questions is "YES" or "POTENTIALLY", - Is it determined that the proposed project may affect the rights, lands, resources, or territories of indigenous people? - Has an "Indigenous People Plan" (IPP) or "Indigenous People Plan Framework" been elaborated and included in the project documentation?	☐ YES ☐ NO ☒ NA

	- 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 	risk of forcibly removing indigenous people from their lands and territories?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.4 	utilisation and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? Consider, and where appropriate ensure, consistency with the answers under Principle 4.1 above	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.5 P.4.4.6 	If answer to question above is "YES" or "POTENTIALLY" - Did the project obtain free, prior and informed consent from indigenous people before taking their cultural, intellectual, religious, and/or spiritual property? - Does the project ensure that the indigenous people receive an equitable sharing of benefits resulting from the use of their traditional knowledge and practices? - Does the project ensure that the sharing of benefits resulting from the use of indigenous peoples' traditional knowledge and practices is culturally appropriate and inclusive? - Does the project ensure that the provision of equitable sharing of benefits does not impede land rights or equal access to basic services including health services, clean water, energy, education, safe and decent working conditions, and housing?	☐ YES ☐ NO ☒ NA
P.4.4.8 	Does the project lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives?	☐ YES ☐ NO ☒ NA
P.4.4.8 	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?	☐ YES ☐ NO ☒ 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?	☐ YES ☐ NO ☒ 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?	☐ YES ☐ NO ☒ NA
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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.

Please add text here....

[P.5 |CORRUPTION](#)

P.5.1.1 	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	☐ YES ☒ NO
P.5.1.1 	Does the project have a risk of encouraging bribery, kickbacks, or other unethical behavior?	☐ YES ☒ NO

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

Please add text here....

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?	☐ YES ☒ NO
P.6.1.1 	Does the project violate any labor or health and safety laws, international obligations, or ILO conventions?	☐ YES ☒ NO
P.6.1.2 	Does the project violate the principles of equal opportunity and fair treatment in its employment decisions?	☐ YES ☒ NO
P.6.1.3 	Does the project violate national laws, if available regarding non-discrimination in employment?	☐ YES ☒ NO
P.6.1.4 P.6.1.5 	Does the project allow child labor?	☐ YES ☒ 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?	☐ YES ☒ 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)?	☐ YES ☒ 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?	☐ YES ☒ NO

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

Please add text here....

Would the project potentially involve or lead to:

(NOTE: APPLIES TO BOTH PROJECT AND CONTRACTOR WORKERS)

P.6.1.1 	use of forced labor?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 	working conditions that do not meet national labor laws and international commitments?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 	working conditions that may deny freedom of association and collective bargaining?	☐ YES ☐ POTENTIALLY ☒ 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>	☐ YES ☐ POTENTIALLY ☒ 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>	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 	having no arrangements for basic services ²⁵ 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>	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.2 	any form of discrimination or harassment based on factors unrelated to job requirements, such as gender, race, nationality, ethnicity, social or indigenous origin, religion or belief, disability, age, or sexual orientation?	☐ YES ☐ POTENTIALLY ☒ NO

²⁵ 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.

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?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.2 	harassment, intimidation, and/or exploitation, especially about women?	☐ YES ☐ POTENTIALLY ☒ 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?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.4 	use of child labor? (including third-party engaged workers)	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.4 	inadequate and verifiable mechanisms for age verification?	☐ YES ☒ NO
P.6.1.7 	no processes and measures in place for the safety and health of project workers?	☐ YES ☒ 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?	☐ YES ☒ NO
P.6.1.7 	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	☐ YES ☒ 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?	☐ YES ☒ 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.	☐ YES ☒ NO
P.6.1.10 	No grievance mechanism available for workers to voice workplace concerns.	☐ YES ☒ 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?	☐ YES ☒ NO

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

Please add text here....

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

P.6.2.1 	Is there a risk of project failure during implementation or after project certification due to a lack of financial resources?	☐ YES ☒ NO
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P.6.2.2 	Does the project have potential negative impacts or pose a risk to the local economy?	☐ YES ☒ NO
P.6.2.2 	Are there any potential risks or negative impacts this project may have on vulnerable or marginalized social groups, despite the benefits it may bring?	☐ YES ☒ NO

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

Please add text here...

Would the project involve or lead to:

P.6.2.2 	economic impacts (negative/detrimental) to the local economy?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.2.2 	negative economic consequences during and after project implementation, e.g., for vulnerable and marginalized social groups in targeted communities?	☐ YES ☐ POTENTIALLY ☒ NO

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

Please add text here...

[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?	☐ YES ☒ 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.

Please add text here....

Would the project involve or lead to:

P.7.1.1 	increase greenhouse gas emissions over the Baseline Scenario?	☐ YES ☐ POTENTIALLY ☒ 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.

Please add text here....

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?	☐ YES ☒ 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.

Please add text here....

Would the project involve or lead to:

P.7.2.1	negative impact on the availability and reliability of energy supply to other users?	☐ YES ☐ POTENTIALLY ☒ 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.

Please add text here....

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?	☐ YES ☒ NO
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?	☐ YES ☒ NO
P.8.1.1	Does the project have the potential risk to exceed the rate of recharge for the groundwater source?	☐ YES ☒ NO
P.8.1.1	Does the project involve any processes or activities that could contaminate the groundwater and render it unsuitable for use?	☐ YES ☒ NO

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

Please add text here....

Would the project involve or lead to:

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?	☐ YES ☐ POTENTIALLY ☒ NO
P.8.1.1	Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	☐ YES

		☐ POTENTIALLY ☒ NO
P.8.1.1 	significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	☐ YES ☐ POTENTIALLY ☒ 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?	☐ YES ☐ NO ☒ NA

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

Please add text here....

[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?	☐ YES ☒ 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.

Please add text here....

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>	☐ YES ☐ POTENTIALLY ☒ 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?	☐ YES ☐ NO ☒ NA

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

Please add text here....

[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?	
P.9.1.3 	<i>If yes, the project shall maintain healthy soils by minimizing negative impacts on soil health, productivity, structure, and water retention. Steps to minimize soil degradation include crop rotation, composting, using N-fixing plants, and reducing tillage and ecologically harmful substances.</i>	☐ YES ☒ NO

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

Please add text here....

Would the project involve or lead to:

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

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

Please add text here....

[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?	☐ YES ☒ 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.

Please add text here....

Would the project involve or lead to:

P.9.2.2 	any potential risks that require emergency preparedness and response planning?	☐ YES ☐ POTENTIALLY ☒ 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?	☐ YES ☐ NO ☒ NA

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

Please add text here....

P.9.3 | BIOSAFETY AND GENETIC RESOURCES

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?	☐ YES ☒ 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.

Please add text here....

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	☐ YES ☐ POTENTIALLY ☒ 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?	☐ YES ☐ NO ☒ NA
P.9.3.2	If answer to above question is "yes" has any risks identified in the risk assessment?	☐ YES ☐ NO ☒ 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>	☐ YES ☐ NO ☒ NA

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

Please add text here....

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?	☐ YES ☒ 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.

Please add text here....

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Would the project involve or lead to:

P.9.4.1 	any potential risk of pollutant release that cannot be avoided?	☐ YES ☐ POTENTIALLY ☒ 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?	☐ YES ☐ NO ☒ 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?	☐ YES ☐ NO ☒ 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?	☐ YES ☐ NO ☒ NA

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

Please add text here....

[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)?	☐ YES ☒ NO
P.9.5.3 	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES ☒ NO
P.9.5.5 	Does the project involve the use of any chemicals or materials subject to international bans or phase-outs?	☐ YES ☒ NO

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

Please add text here....

Would the project involve or lead to:

P.9.5.1 	the generation and management of waste materials?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.5.1 	treatment, destruction, or disposal of waste material?	☐ YES ☒ NO ☐ 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?	☐ YES ☐ NO ☒ NA
P.9.5.3 	risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES ☐ NO ☒ NA
P.9.5.3 	If answer to above question is "yes", does project has measures in place to address health risks?	☐ YES ☐ NO ☒ 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, environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer	☐ YES ☐ POTENTIALLY ☒ NO

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

Please add text here....

[P.9.6 | PESTICIDES & FERTILISERS](#)

P.9.6.1 	Does the project involve the use of chemical pesticides?	☐ YES ☒ 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)	☐ YES ☒ NO
P.9.6.6 	Does the project use fertilizers, and if so, are measures being taken to minimize their use and nutrient losses to the environment?	☐ YES ☒ NO

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

Please add text here....

Would the project involve or lead to:

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

P.9.6.5 	If answer to question above is "yes" or "potentially", does project have appropriate controls on manufacture, procurement, or distribution and/or use of these chemicals?	☐ YES ☐ NO ☒ NA
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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.

Please add text here....

[P.9.7 | HARVESTING OF FORESTS](#)

P.9.7.1 	Does the project have a risk of unsustainable forest management, including timber harvesting?	☐ YES ☒ 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?	☐ YES ☒ 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?	☐ YES ☒ NO

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

Please add text here....

[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?	☐ YES ☒ 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.

Please add text here....

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?	☐ YES ☐ POTENTIALLY ☒ 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.

Please add text here....

[P.9.9 | ANIMAL WELFARE](#)

P.9.9.1 	Does the project involve any risks to animal welfare?	☐ YES ☒ NO
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	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.	
P.9.9.2 	Does the project involve any potential risk of excessive or inadequate use of veterinary medicines?	☐ YES ☒ NO
P.9.9.4 	Does the project involve the risk of administering synthetic growth promoters, including hormones?	☐ YES ☒ NO

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

Please add text here....

Would the project involve or lead to:

P.9.9.1 	animal husbandry or harvesting of fish populations or other aquatic species? ²⁶	☐ YES ☒ NO ☐ NA
P.9.9.1 	limiting access for animals to basic needs like drinking water, adequate food, daylight, appropriate shelter etc.?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.9.3 	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	☐ YES ☒ NO ☐ NA
P.9.9.5 	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	☐ YES ☒ NO ☐ NA
P.9.9.6 	inadequate measures to ensure that animals are exposed to the least stress possible during transportation and slaughtering?	☐ YES ☒ NO ☐ NA
P.9.9.7 	inappropriate spacing per animal and stocking rates per land unit?	☐ YES ☒ NO ☐ NA
P.9.9.8 	inadequate measures to address the specific needs of aquatic animals?	☐ YES ☒ NO ☐ NA
P.9.9.9 P.9.9.10 	primary production of living natural resources such as animal husbandry, aquaculture, and fisheries?	☐ YES

²⁶ 'Involve' means if the project mechanism and/or impact(s) are achieved via changing animal husbandry practices in some way.

	If the answer is yes, implement industry-standard sustainable management practices in line with to one or more relevant and credible standards and utilize available technologies.	☒ NO ☐ 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.

Please add text here....

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?	☐ YES ☒ 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?	☐ YES ☒ NO

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

Please add text here....

Would the project involve or lead to:

P.9.10.1 	identified habitats as HCV areas and or Critical habitats?	☐ YES ☐ POTENTIALLY ☒ 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 or biodiversity values for which the critical habitat was designated, and on the ecological processes supporting that biodiversity?	☐ YES ☐ NO ☒ 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?	☐ YES ☐ NO ☒ 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?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.10.2 	If the answer to the above question is "yes", will the project have any adverse effects on these areas?	☐ YES ☒ No

		☐ NA
P.9.10.3 	If the answer to above question is "yes", does the project has opportunities to minimize unwarranted conversion or degradation of the habitat and to enhance the habitat as part of its development?	☐ YES ☐ No ☒ 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?	☐ YES ☐ No ☒ 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?	☐ YES ☐ NO ☒ NA

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

Please add text here....

[P.9.11 | ENDANGERED SPECIES](#)

P.9.11.1 	Does the project lead to the reduction or negative impact on any recognized Endangered, Vulnerable or Critically Endangered species?	☐ YES ☒ 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.

Please add text here....

Would the project involve or lead to:

P.9.11.2 	distortion of habitats of endangered species?	☐ YES ☐ POTENTIALLY ☒ NA
P.9.11.2 	If answer to the above question is "yes", does the project plan to protect and enhance them?	☐ YES ☐ POTENTIALLY ☐ NO ☒ 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?	☐ YES ☐ NO ☒ NA

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

Please add text here....

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?	☐ YES ☒ 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.

Please add text here....

Would the project involve or lead to:

P.9.12.1	risk of introducing any alien species with a high risk of invasive behavior regardless of whether such introductions are permitted under the existing regulatory framework?	☐ YES ☐ POTENTIALLY ☒ 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 harbor alien species.	☐ YES ☐ POTENTIALLY ☒ NO
P.9.12.2	risk of spreading alien species into areas in which they have not already been established?	☐ YES ☐ POTENTIALLY ☒ NO

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

Please add text here....

APPENDIX 2 - CONTACT INFORMATION OF PROJECT DEVELOPER(S)

Organization name	iRise Africa Limited
Registration number with relevant authority	COYR-RE71A3Y
Street/P.O. Box	P.O. Box 839
Building	Sharma Junction
City	Blantyre
State/Region	Southern Region
Postcode	312237
Country	Malawi
Telephone	
E-mail	
Website	irisecarbon.com
Contact person	Alexander Pettefer
Title	CEO
Salutation	Mr.
Last name	Pettefer
Middle name	Edward
First name	Alex
Department	Administration
Mobile	+265996305335
Direct tel.	+265996305335
Personal e-mail	ap@iriseafrica.com

APPENDIX 3 - LUF ADDITIONAL INFORMATION

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

APPENDIX 4 - DESIGN CHANGES

A4.1. Details of proposed or actual design change
>>

A4.2. Describe the impacts of design change on the following

a. Additionality

>>

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

>>

c. Compliance with the monitoring plan of the applied methodology

>>

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

>>

e. Scale of the project activity

>>

f. Stakeholder consultation

>>

g. Sustainable development criteria

>>

h. Safeguarding assessment

>>

i. Compliance with applicable legislation

>>

- 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 APPROVED DESIGN CHANGE (MM/DD/YYYY)	OF	PROJECT AREA (HA)	ELIGIBLE AREA (HA)		EX-ANTE (TCO2E)	ESTIMATE
		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