# Key Project Information & VPA Design Document (VPA DD)

###### PUBLICATION DATE **29.06.2023** VERSION **v.2.3** RELATED SUPPORT

###### [- Programme of Activity requirements](https://globalgoals.goldstandard.org/107-par-programme-of-activity-requirements/)

- [TEMPLATE GUIDE VPA Design Document](https://globalgoals.goldstandard.org/t-prereview-vpa-design-document/)

This document contains the following sections

Section A – Description of project

Section B - Application of approved Gold Standard Methodology (ies) and/or demonstration of SDG Contributions

Section C – Duration and crediting period

Section D – Summary of Safeguarding Principles and Gender Sensitive Assessment

Section E – Summary of Local stakeholder consultation

Section F - Eligibility and inclusion criteria for VPAs inclusion

[Appendix 1](#_Appendix_1_-) – Safeguarding Principles Assessment (mandatory)

Appendix 2 – Contact information of VPA Implementer (mandatory)

Appendix 3 – LUF Additional Information (VPA specific)

Appendix 4 – Design Changes

### KEY PROJECT INFORMATION

|  |  |
| --- | --- |
| Type of VPA | Real case VPA  Regular VPA |
| Scale of VPA  Note that a VPA can be of one scale. Please select applicable scale accordingly. | Microscale  Small scale  Large scale |
| Title of corresponding real case VPA (if applicable) | N/A |
| GS ID of real case VPA  (if applicable) | N/A |
| GS ID of VPA | GS-12882 |
| Title of VPA | GS 12544 VPA 01 Sidama Multipurpose Cook Stove Distribution Project |
| Time of First Submission Date | 20/06/2024 |
| Date of Design Certification | To be determined |
| Version number of the VPA-DD | 4.0 |
| Completion date of version | 04/08/2025 |
| Coordinating/managing entity | Horn of Africa Regional Environment Centre and Network |
| VPA Implementer (s) | Sidama coffee farmer cooperative union |
| Project Participants and any communities involved | Sidama coffee farmer cooperative union |
| Host Country (ies) | Ethiopia |
| GS ID and Title of applicable Design Certified VPA | - |
| GS ID and Title of applicable Performance Certified VPA | - |
| Activity Requirements applied | Community Services Activities  Renewable Energy Activities  Land Use and Forestry Activities/Risks & Capacities  N/A |
| Other Requirements applied | N/A |
| Methodology (ies) applied and version number | REDUCED EMISSIONS FROM COOKING AND HEATING: Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC). Version 4.0 |
| Product Requirements applied | GHG Emissions Reduction & Sequestration  Renewable Energy Label  N/A |
| VPA Cycle: | Regular  Retroactive |

##### Table 1 – Estimated Sustainable Development Contributions

|  |  |  |  |
| --- | --- | --- | --- |
| SUSTAINABLE DEVELOPMENT GOALS TARGETED | SDG IMPACT  (DEFINED IN B.6.) | ESTIMATED ANNUAL AVERAGE | UNITS OR PRODUCTS |
| 13 Climate Action (mandatory) | Emission reduction from the use of non-renewable biomass | 16,111 | tCO2e |
| 5. Gender Equality | Average time saved associated with cooking | 730 | Hours |
| 7 Affordable and Clean Energy | Number of beneficiaries: Households | 4,638 | Number of beneficiary households |
|  |  |  |  |

1. DESCRIPTION OF PROJECT
   1. Purpose and general description of project

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Sidama Multipurpose Cook Stove Distribution Project is a small scale project activity that disseminates fuel saving stoves for coffee farmers in Aleta Wondo, Dara and Dale districts, of Sidama region, Ethiopia. The project is located the area where high quality Arabica coffee is produced that needs shade for proper growth and high yield. The coffee forest is degrading over time due to population pressure on the forest and increasing demand of fire wood. Rural communities use traditional open fire cooking that consume huge amount of wood and is the major cause for indoor pollution and deforestation. Baseline assessment in the project boundary indicated that coffee farmers are dependent on open fire stoves for cooking and backing. The technology has low efficiency (less than 10%) and consumes more fuel wood and has multiple social, economic and environmental negative impacts. This project aimed to replace the baseline technologies by multipurpose cook stoves and reduce the amount of fuel consumption by half. Multipurpose cook stoves have thermal efficiency of 32.34%. The stove will reduce the amount of fuel wood consumed for cooking thereby reduces GHG emissions, deforestation, and improve the health condition of the farmers.

The new project "Sidama Multipurpose Improved cook stove distribution project” is included as VPA-1 in the program of activities (PoA) GS 12544 “Horn of Africa Energy Efficient Technology Distribution Programme of Activity (HoA-EETD-PoA)" and will be implemented in Sidama Regional states.

MICS is produced from locally available materials such as sand/mud and will be used for injera baking and cooking. It has three heating zones: a big one for baking injera and a two small one for cooking sauces (figure.1). Smoke is directly released to the outside via a chimney installed on the stove. It is locally manufactured in using metal molds. The average lifetime of MICS is about five to seven years.

The project's boundaries will take into account a number of communities which are the members of the coffee cooperatives in the districts that is being targeted for the spread of MICS efficient cook-stoves. Since the objective of this project is to reduce deforestation and land degradation by improving energy efficiency in the face of climate change in Ethiopia and in the region, it therefore allows the mitigation of greenhouse gas emissions. This project will increase the capacity to reduce CO2 emissions by more than 50%. The MICS efficient cookstove is significantly more efficient (thermal efficiency 32.34%) than the traditional open fire three stone cooking method. The project will thus help reduce wood consumption by more than half in each household and therefore preserve the local forests and improve coffee quality. This will also help combat the ever-increasing threat of deforestation in the area. The MICS efficient cookstove has further benefits like the reduction of harmful smoke in the local rural village households and the reduction of time spent in collecting wood.

* + 1. Eligibility of the VPA under approved PoA

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**Table 1 Eligibility for VPA inclusion as per PoA requirements**

|  |  |  |  |
| --- | --- | --- | --- |
| NO.No. | ELIGIBILITY CRITERION | DESCRIPTION/  REQUIRED CONDITION | MEANS OF VERIFICATION/SUPPORTING EVIDENCE  FOR INCLUSION |
| 1 | Conditions to check how VPAs will meet the eligibility criteria as per GS4GG Principles & Requirements | Each VPA shall apply the GS4GG principles & requirements  Version 2.1 and Community Services Activity Requirements Version 1.2 | The VPA shall contribute to SDG 5, 7 and 13 as elaborated in section A4.  VPA upfront safeguarding assessment shall undertake and demonstrates how all relevant Requirements are met that including monitoring and reporting plan. The VPA shall identify and engage Relevant Stakeholders and seek Baseline Scenario and Project Scenario of Each VPA shall define with in VPA-DD.  The VPA shall get Certification and receive Issuance of Gold Standard and Design Certification shall Renew every 5 years. |
| 2 | Conditions to check how VPAs will meet the General Eligibility criteria of the applicable Activity Requirements | Each CPA shall apply the GS4GG principles & requirements  Version 2.1 and Community Services Activity Requirements Version 1.2 | The VPA shall focus on the small scale End-use energy efficiency project type that address efficient cooking within the boundary of the PoA that specified in each VPA-DD as per the Host Country’s legal, environmental, ecological and social regulations. |
| 3 | Geographical boundaries of the VPA consistent with that of the PoA | The VPA is located within the project boundary. During verification, locations of all ICS belonging to the VPA will be checked. In case any of them will be found not in line with the boundary/ location requirement, it will not be counted for emission reduction calculation. | The VPA will be implemented in Aleta Wondo, Dara and Dale of Sidama region, Ethiopia. |
| 4 | Conditions to avoid double counting of GHG emission reductions or net anthropogenic GHG removals, such as unique identifications of product and end user locations | A unique numbering or identification system for the ICSs disseminated is applied.  A search of the GS database on the UNFCCC website will be conducted by the CME prior to inclusion to ensure that each CPA-DD has not been registered as a single CDM, Verra project or another CPA. Moreover, if CME is not one of CPA implementers, CME and each CPA implementer conclude the letter which consent for CPA to contain in PoA, and not be registered as other PoA or CDM projects. | The specific numbering or identification number will be given for each stove distributed by the project. |
| 5 | Conditions to check the start dates of VPA through documentary evidence | VPA start date shall not be before the PoA webhosting date. The ICS sales dates will be checked during verification, and in case any deployed stove will be found not in line with VPA start date requirement, those stoves will not be counted for emission reduction calculation. | The start date of the project is after the PoA start date which is 01/06/2024 |
| 6 | Conditions to ensure compliance with the applicability of the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents | Each VPA shall apply the applicability of TPDDTEC version 4.0 | The VPA consists in the distribution of ICSs with efficiency improvements in thermal applications of non-renewable biomass as per TPDDTEC version 4.0. |
| 7 | Conditions to ensure that VPA meet the requirements for demonstration of additionality | The additionality of each CPA shall be demonstrated in accordance with TPDDTEC Methodology “CDM tool- 21 demonstration of additionality of small-scale project activities Appendix” and GSGG Community services activity requirements, Version 1.2. per 4.1.8 and 4.1.9. | The VPA shall deemed additional and therefore are not required to prove Financial Additionally. |
| 8 | Condition to ensure that the real case VPA and its regular VPAs meet the  applicability criteria of selected methodology of combination of methodologies | Real case VPA and its regular VPAsshall comply with the applicability and meet all requirements  of the applied methodology TPDDTEC. | The VPA is a real case VPA and TPDDTEC version 4.0 is applied |
| 9 | Conditions to ensure that real case and its regular VPAs systematically  Demonstrate additionality in accordance with Principles & Requirements. | The real case VPA (ICS dissemination) and its regular VPAs (in the different areas) shall fulfill the Gold Standard for the global goals principles and requirements version 2.1 principle 5 parag 4.1.9 | The VPAs will indicated impacts as compared to their baseline scenario in accordance with the Gold Standard for the global goals principles and requirements version 2.1. |

* + 1. Legal ownership of products generated by the VPA and legal rights to alter use of resources required to service the project

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Sidama coffee farmer union was established by primary coffee farmers cooperatives and is the legal owner of the project. The union was established to create fair coffee market for the farmers, to stabilize private companies’ market influence and to increase farmers benefit. Each primary cooperative has share in the union and represented by a representative selected from farmers. The union has full and uncontested legal ownership of the carbon credits that are generated under the Gold Standard Certification as well fair-trade certification premium. The transfer of carbon credit ownership is demonstrated transparently in full, prior and informed consent of cook stove end-users and project owner. Each project stove end-users sign a written assertion giving their permission for the credit transfer at the time they receive the project stove. As part of this agreement, the ownership and rights of the emission reductions resulting from the project activity are clearly defined.

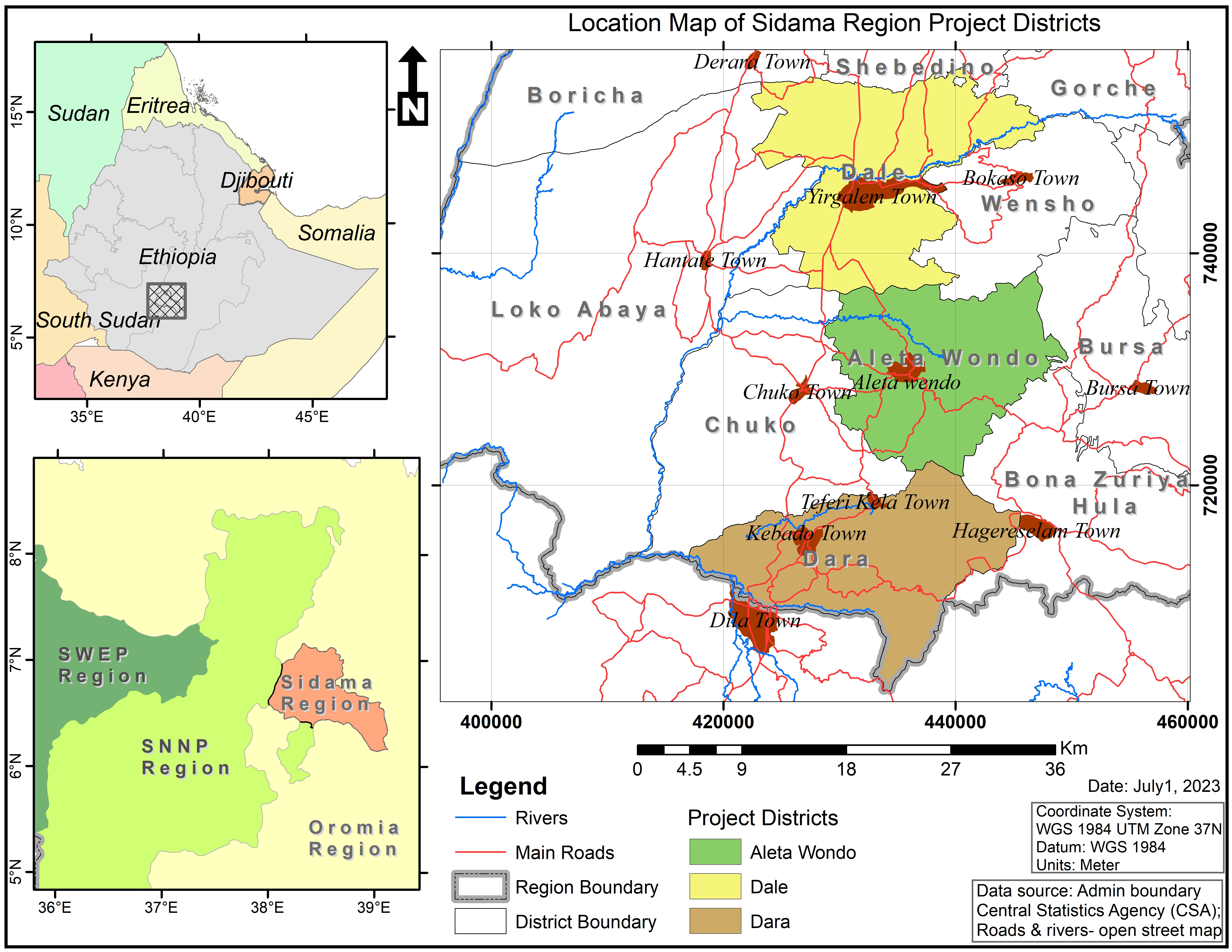
Since the project activity does not account any activity that lead to the transfer use of resources, therefore acquiring specific legal right to do is not applicable.

* 1. Location of VPA

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The project is implemented in the host country - Federal Democratic Republic of Ethiopia in sidama region, Aleta wondo, Dara and Dale districts as shown in the map bellow.

|  |  |  |
| --- | --- | --- |
| Geographical/physical project areas | | |
| Woredas | Latitude | Longitude |
| Aletawondo | 6°36′N | 38°25′E |
| Dara | 6°30′N | 38°25′E |
| Dale | 6° 44' N | 38° 19' E |



* 1. Technologies and/or measures

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The project will disseminate a locally produced fuel-efficient multipurpose improved cook stove (MPICS) that will meet both the cooking and backing demands of the local community. It is the most recent biomass-saving (energy efficient) and safest multipurpose stove in Ethiopia.

It will be made with easily available local materials like mud blocks, cement, sand and straw with chimney integrated and built above the ground. The stove has three burning chambers, one for Injera (local bread) baking stove suitable for households and institutions. The other two stoves will be used for smaller cooking tasks such as preparing wot (typical Ethiopian sauce), coffee, and water boiling.

The stove will be built on a bed height of 50- 70cm and 180cmx150cm upper surface. The three stoves are interconnected by holes that channel the smoke to the chimney. The central stove is cylindrical having 60cm diameter and 24cm height. The remaining cooking stoves have 40cm diameter with 24cm height, and 25cm diameter and 24cm height respectively. The chimney has an overall height of 150cm and is built on the bed using piled-up mud blocks.



Figure 2 Stove picture

The stove will have:

* an average life span of more than 15 years.
* an average 32.34% thermal efficiency
* almost smokeless and low indoor air pollution (with chimney)
  1. Scale of the VPA

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The VPA is a small-scale project activity as per the requirements for End-Use energy efficiency type 2 project mentioned in section 9.1.2 of The Gold Standard’s “GHG Emissions Reduction & Sequestration Product Requirements” which states that, “activities that reduce energy consumption, on the supply and/or demand side, with a maximum energy saving of 60 GWh per year (or an appropriate equivalent) in any year of the crediting period. In this context, for project activities that improve thermal energy efficiency, the maximum energy saving of 60 GWh(e) per year is equivalent to 180 GWh(th) per year saving;”

As per the above requirement, the energy savings by project technology was determined by conducting fuel consumption test of baseline and project technologies as per the KPT protocol V4.0 and analyzed in TPDDTEC tool and found to be 0.0279TJ/hh/year which is 0.0077614 GWh/household/year (ER sheet and kitchen performance for detail)

total Energy Output is calculated as of 4.63667 KW/d which is 1.499 kW/unit of technology (ER energy saving sheet for detail).

* 1. Funding sources of VPA

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No public funding is involved in PA. No Official Development Assistance (ODA) is used for PA implementation.

1. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS
   1. Reference of approved methodology (ies)

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The Gold Standard Methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC)”, Version 4.0 s applied to this project activity.

Following Tool is applied for the project activity:

* TOOL33: Default values for common parameters, Version 03.0
* Tool 21: Demonstration of additionality of small scale project activities, Version 13.1
  1. Applicability of methodology (ies)

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##### Following are the justifications for the applicability conditions under 2.2 of the applied

##### methodology TPDDTEC v.4.0-

|  |  |
| --- | --- |
| **Applicability condition** | **Justification** |
| a, Project shall choose a technology design that has predictable performance in that it is proven to be efficient and durable under field conditions; for cookstoves, the rated thermal efficiency shall be at least 20%  b, The technology shall have continuous useful energy output of less than 150kW per unit where “continuous useful energy output” is defined above.  c, The project activity is implemented by a project developer and can include additional project participants listed in Appendix 2 of the PDD template. The individual households and institutions may be represented collectively by community organizations, etc., but do not individually act as project participants.  d. The project developer must design incentive mechanism(s), which should be effective as fast as possible, for the elimination of inefficient baseline stoves that are replaced by the project cooking devices and describe the incentive mechanism(s) in the PDD/VPA-DD at the time of validation.  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.  f. Project activities making use of solid fossil fuel in the project scenario or other improved fossil fuel cookstoves meeting certain conditions described in the footnote to Table 1 (e.g. switch from three-stone fire biomass stoves to LPG stoves) may only claim emission reductions for energy efficiency improvement aspect and shall assume the same baseline and project fuel for emission reduction calculations.  g. Project activities making use of a new solid biomass feedstock in the project situation (e.g. switch to green charcoal or renewable biomass briquettes) must comply with relevant specific requirements for biomass related project activities, as defined in the latest version of the Community Services Activity Requirements. The specific requirements apply to both plantations established for the project activity and/or existing plantations that will supply biomass feedstock.  h. Adequate evidence is supplied to demonstrate that indoor air pollution (IAP) levels are not worsened compared to the baseline, and greenhouse gases emitted by the project fuel/stove combination are estimated with adequate precision. 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 manufacturer’s test, report of field testing of the technology’s PM2.5 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.  The project shall not undermine or conflict with any national, sub-national or local regulations or guidance for thermal energy supply or fuel supply or use. The project shall document the national, regional and local regulatory framework for provision of thermal energy services of the type of the project provided in the project boundary.  If the expected technical life of project technology (parameter ICS 3) is shorter than the crediting period, the project developer shall describe measures to ensure that end users are provided replacement technology of comparable quality at the end of the technical life, by either replacing with comparable or better technology, or retrofitting essential parts with performance guarantee. If neither of the prior conditions can be demonstrated, no emission reductions can be claimed for the technology after its technical life has ended. | 1. As described in Section A.3., the rated thermal efficiency of the project cook stove is 32.34% 2. As described in Section A.4., the MPICS has energy output of 1.499 kW which is less than 150kW. See the ER sheet for detail Hence, this applicability condition is met 3. Sidama union is the only project proponent and individual household does not act as project proponents. They are collectively represented by the union. 4. Sidama union purchase the technologies from local producers and distribute to member farmers at discounted price so that the actual needy could get the benefits of having ICS. This has helped implementation of the project faster. The union will also cover transportation cost. 5. Avoid double counting/claiming 6. Sidama union will purchase and disseminated the stove to farmers. There will be contract between the union and local technology producers that indicate the producers will produce quality stoves and install for end users but do not have the right to claim carbon credits. All households will be communicated and informed by Sidama union before installation. 7. End users will be informed about the benefit of the stove, implementation modalities of the project and sign a carbon waiver mentioning that they transfer their carbon right and will not claim emission reduction 8. Each cook stove will have unique identification number and stoves disseminated by other similar projects will not be included in the project 9. PA does not involve use of improved fossil fuel cook stoves. Emission reductions are claimed for energy efficiency improvement in any case 10. PA does not involve use of a new solid biomass feedstock. 11. The technology is an improved cooking device with chimney that drastically reduces indoor air pollution.   Refer parameter “Regulatory framework for provision of thermal energy services” under section B.6.2.  The project implemented as per the national and sub national rural energy promotion strategy.  The ICS lifespan is 15 years and thus meets the crediting years of 5 years. |

* 1. VPA boundary

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Source | | GHGs | Included? | Justification/Explanation |
| **Baseline scenario** | Source 1 | CO2 | Yes | Major source of emission |
| CH4 | Yes | Important source of emissions |
| N2O | Yes | Important source of emissions |
| … |  |  |
| **Project scenario** | Source 1 | CO2 | Yes | Major source of emission |
| CH4 | Yes | Important source of emissions |
| N2O | Yes | Important source of emissions |
|  |  |  |
|
|

* 1. Establishment and description of baseline scenario

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Ethiopia’s energy is highly dependent on biomass such as fire wood, charcoal, crop residue and animal dung. Solid biomass accounted for (84%), charcoal (8%), coal and kerosene (1%) and other clean cooking (7%)[[1]](#footnote-1) of the total national energy consumption. 63.3% of households use a three stone stove as their primary cooking and 18.2% of households use manufactured/improved stoves. Only 4.1% of households use a clean stove with electricity as fuel. 27.2% of households use multiple stoves types. Penetration of manufactured biomass stoves and clean fuel stoves increases with household spending quintile: 6.1% of households in the top spending quintile use a manufactured biomass stove, compared with 1.3% of households in the bottom spending quintile, and 2.6% of households in the top spending quintile use a clean fuel stove, compared with 0.1% of households in the bottom spending quintile[[2]](#footnote-2). Three stone stove is the existing cooking technology used by communities in the project boundary. Baseline fuel consumption survey was conducted as per the TPDDTEC procedure on 100 randomly selected households from the target community, baseline, survey and baseline KPT was conducted on the 100 sampled households between 08/12/2023 to 20/12/2023 as per the KPT protocol 4.0. and the project KPT was conducted between 11/06/2024 to 04/07/2024.

The balance used for the survey was calibrated by Ethiopian standard agency (an authorized body) and used for the survey. Data collectors (most of them were first degree holders) were selected from the area, trained and conducted the KPT. The data was analysed by GS excel KPT analysis tool. The survey result indicated that all households in the project boundary are using three stone stove and fuel wood as their primary cooking and the average fuel consumption is 11.5 kg per household per day. The project KPT result indicated that the average fuel consumption per household per day is 6.42kg. Tool 33 default value is applied for Fnrb It will be updated during first verification and every two years.

* 1. Demonstration of additionality

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| --- | --- |
| Specify the methodology, activity requirement or product requirement that establishes deemed additionality for the proposed project (including the version number and the specific paragraph, if applicable). | As per the requirements listed in Community Services Activity requirements version 1.2 –  Projects that meet any of the following criteria are considered as  deemed additional and therefore are not required to prove Financial  Additionality at the time of Design Certification:  (a) Positive list (Annex B of this document)  (b) Projects located in LDC, SIDS, LLDC  (c) Microscale projects |
| Describe how the proposed project meets the criteria for deemed additionality. | For positive list, the project is automatically deemed additional if “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 tons of emission reductions per year.”  As described above in section A.4 - Each ICS distributed under this PA is estimated to utilize less fuel which is equal to savings of 1.7885 tons of firewood annually, corresponding to 7.75MWh of thermal energy savings per annum which is less than 600 MWh of energy saving per annum see the KPT, ER and energy output calculation.  Hence, the project is automatically deemed additional. |

* + 1. Prior Consideration

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LSC was conducted before the start date of the project on 23/05/2023 and the first date of submission is 20/06/2024.

Project start date is 01/06/2024

* + 1. Ongoing Financial Need

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Not applicable

* 1. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the three SDGs

|  |  |  |
| --- | --- | --- |
| SUSTAINABLE DEVELOPMENT  GOALS TARGETED | MOST RELEVANT  SDG TARGET | SDG IMPACT |
| **INDICATOR (PROPOSED OR SDG INDICATOR)** |
| 13 Climate Action | 13.2.2 Total greenhouse gas emissions per year | Reduced GHG emissions |
| 5. Gender Equality | 5.4. Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate | Time saved in fuel wood collection |
| 7 Affordable and Clean Energy | 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services | Households using improved cooking technology |

* + 1. Explanation of methodological choices/approaches for estimating the SDG Impact

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**SDG 5: Gender Equality**

Women perform majority of the activities such as firewood gathering and household cooking. This was assessed as part of the baseline survey, where women from majority of the households were primarily engaged in cooking.

The contribution to this SDG was calculated based on the baseline and project cooking time data as follows: –

Tth = (Ttb – Ttp)

Where,

Tth = Total reduction in time of cooking per household per day (hr/household/day)

Ttb = Time used to cook in baseline technology (hr/household/day)

Ttp = Time used to cook in project technology (hr/household/day)

The data will be captured through user survey both in baseline and project scenario.

SDG 7

The number of households that are continuing the use of distributed MPICS will be used to determine the impact of this SDG. This information will be collected through user feedback as part of monitoring surveys. The user interview will be recorded as evidence.

Ny,i,j =

Where,

|  |  |  |
| --- | --- | --- |
| Ny,i,j | = | Proportion of commissioned project devices that remain operating in year y (fraction) |
|  | = | Number of project devices of type i and batch j operating during year y |
|  | = | Number of project devices of type i and batch j commissioned  (number) |

**SDG 13 (Climate Action)**

The amount reduced by the project per year is calculated using REDUCED EMISSION FROM COOKING AND HEATING: Technologies and Practice to Displace Decentralized Thermal Energy Consumption (TPDDTEC) methodology Version 4.0.

This Project applies TPDDTEC Method 1, where baseline and project fuel are identical and emission reductions are exclusively from improved efficiency. GHG emissions reductions achieved by the project activity are calculated as follows:

Method 1



Where:

|  |  |  |
| --- | --- | --- |
| 𝐸𝑅𝑦 | = | Emission reduction for total project activity in year *y* (tCO2e/yr) |
| ∑𝑏,𝑝 | = | Sum over all relevant baseline *b*/project *p* pairs |
| 𝑁𝑏,𝑝,𝑦 | = | Number of project technology-days included in the project database  for baseline *b*/project *p* pair in year *y* (days) |
| 𝑈𝑝,𝑦 | = | Cumulative Usage rate for technologies in project scenario *p* in year  *y* (fraction) |
| 𝑆𝐹𝑆𝑝,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)) |
| 𝑁𝐶𝑉𝑏,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. |
| 𝐸𝐹𝑏,𝑓,𝐶𝑂2 | = | CO2 emission factor from use of fuel *f* (tCO2/TJ) |
| 𝐸𝐹𝑏,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. |
| 𝐿𝐸𝑝,𝑦 | = | Leakage for project scenario *p* in year *y* (tCO2e/yr) |

The baseline technology used in the baseline scenario is the same throughout the project boundary and there is no possibility of replaced stoves to be used out of the project boundary. Local communities mainly use collected fuel from their homestead or private forest and there is less possibility of saved fuel to be utilized by non-project users.

* + 1. Data and parameters fixed ex ante

**SDG 13**

**SDG 13**

|  |  |
| --- | --- |
| Data/parameter ID | ICS 1 |
| Data/parameter | Baseline scenario survey results |
| Data 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 |
| Value(s) applied | NA |
| Choice of data or Measurement methods and procedures | As per section 4.3 of the applied methodology |
| Purpose of data | Baseline scenario determination and Evaluation of SDG outcomes |
| Additional comment | Undertake at the start of the first crediting period |

**SDG 13**

|  |  |
| --- | --- |
| **Data/parameter ID** | ICS 2 |
| Data/parameter | Project technology description |
| Data Unit | N/A |
| Description | Thermal efficiency |
| Source of data | Efficiency test |
| Values | 32.34 % |
| Choice of data or Measurement methods and procedures | Efficiency test |
| Purpose of data | Calculate energy output |
| Any comment | Undertaken at the start of the first crediting period and fixed for the crediting period |

**SDG 13**

|  |  |
| --- | --- |
| Data/parameter ID  Data/parameter | ICS 3  Expected technical life of project technology |
| Unit | Years |
| Description | The expected technical life of an individual project technology |
| Source of data | Manual of the technology production |
| Values | 15 |
| Choice of data or Measurement methods and procedures | Report and specification |
| Purpose of data | To determine life span |
| Any comment | Fixed for the crediting period |

**SDG 13**

|  |  |
| --- | --- |
| **Data/parameter ID** | ICS 4 |
| Data/parameter | Indoor air pollution (IAP) levels of the project technology |
| Unit | N/A |
| Description | The project reduced fuel wood consumption by half. This will lead to reduction of indoor air pollution |
| Source of data | Fuel consumption efficiency |
| Value(s) applied | - |
| Choice of data or Measurement methods and procedures | - |
| Purpose of data | - |
| Any comment |  |

**SDG 13**

|  |  |
| --- | --- |
| **Data/parameter ID** | ICS 5 |
| Data/parameter | Avoidance of double counting or double claiming with other project participants |
| Unit | N/A |
| Description | Evidence of avoidance of double counting or double claiming with other parties directly involved with the project or programme |
| Source of data | Written consent letters with the project developer of the ownership rights of emission reductions from:  -ICS beneficiaries |
| Values | - |
| Choice of data or Measurement methods and procedures | - |
| Purpose of data | - |
| Any comment |  |

**SDG 5**

|  |  |
| --- | --- |
| **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 markets or UNFCCC/compliance mechanisms |
| Source of data | Publicly available information from Gold Standard and other voluntary standards, at a minimum Verra and any recognized national or regional standards in the project location, and UNFCCC CDM project & PoA database |
| Values | - |
| Choice of data or Measurement methods and procedures | - |
| Purpose of data | - |
| Additional comment | - |

**SDG 5**

|  |  |
| --- | --- |
| **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 markets or UNFCCC/compliance mechanisms |
| Source of data | Publicly available information from Gold Standard and other voluntary standards, at a minimum Verra and any recognized national or regional standards in the project location, and UNFCCC CDM project & PoA database |
| Value(s) applied | - |
| Choice of data or Measurement methods and procedures | All ICS distributed in the PA shall have:  • a unique ID serial number  • End user data (name/address/physical  location/phone number/govt. ID number)  • Records of baseline stove type and fuel type used  This data uniquely identifies each ICS, avoiding any double counting and tracing its user for future MRV. |
| Purpose of data | To determine the project eligibility |
| Additional comment | - |

**SDG 13**

|  |  |
| --- | --- |
| **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 | There are no national, sub-national or local regulations or guidance for thermal energy supply/devices or fuel supply  or use that is in conflict with the project. |
| Value(s) applied | - |
| Choice of data or Measurement methods and procedures | - |
| Purpose of data | - |
| Any comment | - |

**SDG 13**

|  |  |
| --- | --- |
| **Data/parameter ID** | ***ICS 8*** |
| Data/parameter | *EFb,f,CO2* |
| Unit | tCO2/TJ |
| Description | CO2 emission factor arising from use of fuels in baseline Scenario |
| Source of data | Methodology default |
| Value(s) applied | 112 |
| Choice of data or Measurement methods and procedures | NA |
| Purpose of data | To calculate the emission reduction, SDG 13 |
| Any comment |  |

**SDG 13**

|  |  |
| --- | --- |
| **Data/parameter ID** | ***ICS 9*** |
| Data/parameter | *EFb,f,nonCO2* |
| Unit | tCO2/TJ |
| Description | Non-CO2 emission factor arising from use of fuels in baseline scenario |
| Source of data | Methodology default for wood |
| Value(s) applied | 9.46 |
| Choice of data or Measurement methods and procedures | Latest global warming potential relative to CO2, from the IPCC Fifth Assessment Report, 2014 (AR5 GWP) |
| Purpose of data | To calculate the emission reduction, SDG 13 |
| Additional comment | Method 1 is applied. Baseline and project fuel are identical and emission reductions are exclusively from improved efficiency. Fixed for the crediting period |

**SDG 13**

|  |  |
| --- | --- |
| **Data/parameter ID** | ***ICS 10*** |
| Data/parameter | *EFp,f,CO2* |
| Unit | tCO2/TJ |
| Description | CO2 emission factor arising from use of fuels in project scenario |
| Source of data | Methodology default for wood |
| Value(s) applied | 112 |
| Choice of data or Measurement methods and procedures | NA |
| Purpose of data | To calculate the emission reduction, SDG 13 |
| Any comment | - |

**SDG 13**

|  |  |
| --- | --- |
| **Data/parameter ID** | ***ICS 11*** |
| Data/parameter | *EFp,f,nonCO2* |
| Unit | tCO2/TJ |
| Description | Non-CO2 emission factor arising from use of fuels in project scenario |
| Source of data | Methodology default for wood |
| Value(s) applied | 9.46 |
| Choice of data or Measurement methods and procedures | Latest global warming potential relative to CO2, from the IPCC Fifth Assessment Report, 2014 (AR5 GWP) |
| Purpose of data | To calculate the emission reduction, SDG 13 |
| Any comment | Method 1 is applied. Baseline and project fuel are identical and emission reductions are exclusively from improved efficiency. Fixed for the crediting period |

**SDG 13**

|  |  |
| --- | --- |
| **Data/ parameter ID** | **ICS 12** |
| Data/parameter | NCVb,fuel |
| Unit | TJ/ton |
| Description | Net calorific value of the fuels used in the baseline |
| Source of data | Wood: Methodology default |
| Value(s) applied | 0.0156 |
| Choice of data or Measurement methods and procedures | NA |
| Purpose of data | To calculate the emission reduction, SDG 13 |
| Any comment | Method 1 is applied. Baseline and project fuel are identical and emission reductions are exclusively from improved efficiency. Fixed for the crediting period |

**SDG 13**

|  |  |
| --- | --- |
| **Data/ parameter ID** | **ICS 13** |
| Data/parameter | NCVp,fuel |
| Unit | TJ/ton |
| Description | Net calorific value of the fuels used in the project |
| Source of data | Wood: Methodology default |
| Value(s) applied | 0.0156 |
| Choice of data or Measurement methods and procedures | NA |
| Purpose of data | To calculate the emission reduction, SDG 13 |
| Any comment | Method 1 is applied. Baseline and project fuel are identical and emission reductions are exclusively from improved efficiency. Fixed for the crediting period |

|  |  |
| --- | --- |
| **Data / Parameter ID** | **ICS 18** |
| Data / Parameter | Pb,y |
| Unit | Ton per household per annum |
| Description | Quantity of fuel that is consumed in baseline scenario b during year y |
| Source of data | Field performance Tests (FPTs) |
| Value(s) applied | 4.1975 |
| Measurement methods and procedures | Kitchen Performance Test (KPT) |
| Monitoring frequency | Prior of project dissemination |
| QA/QC procedures |  |
| Purpose of data | For emission reduction calculations, SDG 13 |
| Additional comment | KPT protocol shall V.4 be used for PFT |

|  |  |
| --- | --- |
| **Data/parameter ID** |  |
| Data/parameter | Ttb |
| Unit | hour/household/day |
| Description | Time to cook in baseline scenario per household per day |
| Source of data | Baseline Survey |
| Value(s) applied | 8 |
| Choice of data or Measurement methods and procedures | Record the time to cook in baseline stove |
| Purpose of data | SDG 5 |
| Additional comment | - |

* + 1. Ex ante estimation of SDG Impact

>>

**SDG 5: Gender Equality**

Time of cooking in both technologies were assessed and found that the average daily cooking time of the baseline technology is found to be 8 hours and the project technology daily cooking time is 6 hours. The saved cooking time is calculated as the time of cooking difference between the two technologies as follows:

Net Benefit/ time saving (SDG 5) Tth = Ttb – Ttp

= 8:00-6:00

= 2 hours a day

**SDG 7: Affordable and clean energy**

|  |  |  |  |
| --- | --- | --- | --- |
| Parameter | Description | Ex-ante estimate | Unit |
| Ny,i,j | Proportion of commissioned project devices that remain operating in year y (fraction) | 0.9 | Fraction |
|  | Number of project devices of type i and batch j commissioned (number) | 23,192 | Number |
| No,i,j | Number of project devices of type i and batch j operating during year y | 20,873 | Number |

**SDG 13: Climate Action**

As per the GS methodology, the project calculates emissions reduction by applying the emission factor of firewood to the fuel savings per stove.

TPDDTEC version 4, page 13, Method 1 baseline and project fuel are identical and emission reduction are exclusively from improved efficiency has been applied and , the GHG emissions reduction achieved by the project activity in year y is calculated as follows:



Where:

|  |  |  |
| --- | --- | --- |
| 𝐸𝑅𝑦 | = | Emission reduction for total project activity in year *y* (tCO2e/yr) |
| ∑𝑏,𝑝 | = | Sum over all relevant baseline *b*/project *p* pairs |
| 𝑁𝑏,𝑝,𝑦 | = | Number of project technology-days included in the project database  for baseline *b*/project *p* pair in year *y* (days) |
| 𝑈𝑝,𝑦 | = | Cumulative Usage rate for technologies in project scenario *p* in year  *y* (fraction) |
| 𝑆𝐹𝑆𝑝,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)) |
| 𝑁𝐶𝑉𝑏,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. |
| 𝐸𝐹𝑏,𝑓,𝐶𝑂2 | = | CO2 emission factor from use of fuel *f* (tCO2/TJ) |
| 𝐸𝐹𝑏,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. |
| 𝐿𝐸𝑝,𝑦 | = | Leakage for project scenario *p* in year *y* (tCO2e/yr) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Parameter | Description | Unit | Source | Values |
| 𝑁𝑏,𝑝,𝑦 | Cumulative number of project technology-days included in the project database for project scenario p against baseline scenario b in year y | Days | Usage survey | 365 |
| 𝑈𝑝,𝑦 | Cumulative usage rate for technologies in project scenario p in year y, based on cumulative adoption rate and drop off rate revealed by usage surveys (fraction) | fraction | usage survey | 90% |
| P𝑏,𝑦 | Fuel wood consumed by baseline technology (mass /technology\*day) | Tonnes fire wood/household/year | Baseline Field Test | 4.1975 |
| Pp,𝑦 | Fuel wood consumed by project technology (mass /technology\*day) | Tonnes fire wood/household/year | Project Field Test | 2.409 |
| 𝑁𝐶𝑉𝑏,𝑓𝑢e𝑙 | Net calorific value of the fuel that is substituted or reduced in baseline b (TJ/mass or volume units) | TJ/ton | IPCC default for Wood | 0.0156 |
| 𝑓𝑁𝑅𝐵,𝑦 | Fractional non-renewability status of woody biomass fuel during year y (fraction) | Fraction | default value Tool 33 | 33% |
| 𝐸𝐹𝑏,𝑓,𝐶𝑂2 | CO2 emission factor of the fuel that is reduced (tCO2/TJ) | tCO2/TJ | IPCC default for Wood | 112 |
| 𝐸𝐹𝑏,𝑓,𝑛𝑜𝑛𝐶𝑂2 | non-CO2 emission factor of the fuel that is reduced tCO2/TJ, | tCO2e/TJ | IPCC default for Wood | 9.46 |
| 𝐿𝐸𝑝,𝑦 | Leakage for project (tCO2e/yr) | tCO2e/TJ | Baseline survey | 0% |

* + 1. Summary of ex ante estimates of each SDG outcome

SDG 5:

|  |  |  |  |
| --- | --- | --- | --- |
| YEAR | BASELINE ESTIMATE | PROJECT ESTIMATE | NET BENEFIT |
| Year 1 | 2,920 | 2,190 | 730 |
| Year 2 | 2,920 | 2,190 | 730 |
| Year 3 | 2,920 | 2,190 | 730 |
| Year 4 | 2,920 | 2,190 | 730 |
| Year 5 | 2,920 | 2,190 | 730 |
| Total | 14,600 | 10,950 | 3,650 |
| **Total number of crediting years** | 5 |  |  |
| **Annual average over the crediting period** | 2,920 | 2,190 | 730 |

SDG 7

|  |  |  |  |
| --- | --- | --- | --- |
| YEAR | BASELINE ESTIMATE | PROJECT ESTIMATE | NET BENEFIT |
| Year 1 | 0 | 3,500 | 3,500 |
| Year 2 | 0 | 6,000 | 9,500 |
| Year 3 | 0 | 6,000 | 15,500 |
| Year 4 | 0 | 6,000 | 21,500 |
| Year 5 | 0 | 1,692 | 23,192 |
| Total | 0 |  | 23,192 |
| **Total number of crediting years** | 5 |  |  |
| **Annual average over the crediting period** | 4,638 |  |  |

SDG 13 emission reduction

|  |  |  |  |
| --- | --- | --- | --- |
| YEAR | BASELINE ESTIMATE | PROJECT ESTIMATE | NET BENEFIT |
| Year 1 | 0 | *3,157* | *3,157* |
| Year 2 | 0 | *10,045* | *10,045* |
| Year 3 | 0 | *16,933* | *16,933* |
| Year 4 | 0 | *23,792* | *23,792* |
| Year 5 | 0 | *26,625* | *26,625* |
| Total | **0** | 80,553 | 80,553 |
| **Total number of crediting years** |  | 5 |  |
| **Annual average over the crediting period** | 0 | 16,111 |  |

* 1. Monitoring plan
     1. Data and parameters to be monitored

|  |  |
| --- | --- |
| Data / Parameter ID | **ICS 15** |
| Data / Parameter | Avoidance of double counting or double claiming among project technology end users |
| Unit | None |
| Description | Evidence of avoidance of double counting or double claiming with project technology end users |
| Source of data | Project Database |
| Value(s) applied | 0 |
| Measurement methods and procedures | Usage Survey  All ICS distributed in the PA shall have:  • a unique ID serial number  • End user data (name/address/physical  location/phone number/govt. ID number)  • Records of baseline stove type and fuel type used  This data uniquely identifies each ICS, avoiding any double counting and tracing its user for future MRV.  Distribution data is held securely in the project database. |
| Monitoring frequency | Annual |
| QA/QC procedures | - |
| Purpose of data | To determine project technology usage |
| Additional comment | - |

|  |  |
| --- | --- |
| **Data / Parameter ID** | **ICS 16** |
| Data / Parameter | Presence of stove stacking |
| Unit | NA |
| Description | Descriptive statistics of the presence and usage practices of baseline- and other non-project-technology by project technology end users |
| Source of data | Usage Survey - use of other stoves, to capture cooking habits and stove usage of households in the region, including quantification of use of baseline devices, by formulating questions and/or collecting evidences to determine the frequency of usage of both the project devices and baseline devices, or monitoring surveys to capture the number of meals cooked. The surveys may be integrated with the usage survey. |
| Value(s) applied | 0 |
| Measurement methods and procedures | Usage Survey |
| Monitoring frequency | Annual |
| QA/QC procedures | Cross-check results of this survey with independent studies that are specific to the project region (or to the project country, if regional studies are not available), including but not limited to National publications, peer reviewed literature, third party assessments (for example – WISDOM, FAO, UN and similar organizations) and/or  official data or statistics about cooking technologies, not older than 5 years old. |
| Purpose of data | To determine the emission reductions |
| Additional comment | if the baseline fuel consumption was defined based on the total fuel used for cooking by the user, determine the percentage of meals or cooking performed on the project technology and multiply the baseline fuel usage by this percentage |

|  |  |
| --- | --- |
| **Data/ parameter ID** | **ICS 17** |
| Data/parameter | fNRB,i,y |
| Unit | percentage |
| Description | Tool 33 default value for fNRB applied |
| Source of data | Default value |
| Value(s) applied | 33 % |
| Measurement methods and procedures | Default value applied for design certification. |
| Monitoring frequency | Updated at the first verification and every two years |
| QA/QC procedures | National assessment data will be used |
| Purpose of data | To calculate the emission reduction, SDG 13 |
| Additional comment |  |

|  |  |
| --- | --- |
| **Data / Parameter ID** | **ICS 19** |
| Data / Parameter | Pp,y |
| Unit | Tonnes per household per annum |
| Description | Quantity of fuel that is consumed in project scenario p during year y |
| Source of data | Field performance Tests (FPTs) |
| Value(s) applied | 2.409 |
| Measurement methods and procedures | Kitchen Performance Test (KPT) |
| Monitoring frequency | In every two years, or more frequently. |
| QA/QC procedures | The equipment used for testing, if any, either will be externally calibrated or newly purchased at the time of use so measurements are done with the necessary guarantees. |
| Purpose of data | For emission reduction calculations, SDG 13 |
| Additional comment | A ‘Case of a Paired Sample Test’ shall be applied with a minimum sample size of 45 and the ‘90/30 rule’ or ‘90% confidence rule’ applied.  KPT protocol shall be used for PFT (for eg: PCIA KPT protocol may be used) |

|  |  |
| --- | --- |
| **Data / Parameter ID** | **ICS 26** |
| Data / Parameter | Up,y |
| Unit | % |
| Description | Weighted average usage rate in project scenario p during  year y |
| Source of data | Annual usage survey |
| Value(s) applied | 90 |
| Measurement methods and procedures | |  |  |  |  | | --- | --- | --- | --- | | Level | Applicability | Claimable usage rate | Requirements | | Mandatory | Mandatory | Upto maximum 75% | Define use and nonuse  In person household usage survey  Verification of accuracy of results | | Good Practice | Optional | Upto maximum 90% | Field team training and supervision  End-user training and follow-ups  Awareness campaign | | Best Practice | Optional | Above 90% | Continuous use monitoring |   The project developer can claim usage rate by applying any of the above monitoring requirements. |
| Monitoring frequency | Annually |
| QA/QC procedures | PP has provided guidance and training to enumerators for conducting surveys to meet specific requirements of the methodology. |
| Purpose of data | For emission reduction calculations, SDG 13 |
| Additional comment | - |

|  |  |
| --- | --- |
| **Data / Parameter ID** | **ICS 27** |
| Data / Parameter | Nb,p,y |
| Unit | days |
| Description | Number of project technology-days included in the project database for baseline b/project p pair in year y |
| Source of data | Calculated from the Project database as the sum of the number of project technology units times the calendar days during the year y that they were present at the end-user locations |
| Value(s) applied | 365 |
| Measurement methods and procedures | Calculated |
| Monitoring frequency | Annually |
| QA/QC procedures | - |
| Purpose of data | For emission reduction calculations, SDG 13 |
| Additional comment | - |

|  |  |
| --- | --- |
| Data / Parameter | Ny,i,j |
| Unit | percentage |
| Description | Proportion of commissioned project devices that remain operating in year y |
| Source of data | Usage survey |
| Value(s) applied | 90 |
| Measurement methods and procedures | - |
| Monitoring frequency | Annually |
| QA/QC procedures | - |
| Purpose of data | SDG 7 |
| Additional comment | - |

|  |  |
| --- | --- |
| Data / Parameter | 𝑁p,𝑖,𝑗 |
| Unit | Number |
| Description | Number of project devices of type i and batch j commissioned |
| Source of data | Project Database |
| Value(s) applied | 23,192 |
| Measurement methods and procedures | Records of number of ICS distributed in project Database |
| Monitoring frequency | Annually |
| QA/QC procedures | - |
| Purpose of data | SDG 7 |
| Additional comment | - |

|  |  |
| --- | --- |
| Data / Parameter | 𝑁0,𝑖,𝑗 |
| Unit | Number |
| Description | Number of project devices of type i and batch j operating during year y |
| Source of data | Calculated |
| Value(s) applied | 20,873 |
| Measurement methods and procedures | Records of number of ICSs remain operating |
| Monitoring frequency | Annually |
| QA/QC procedures | - |
| Purpose of data | SDG 7 |
| Additional comment | - |

|  |  |
| --- | --- |
| Data/parameter | Ttp |
| Unit | hour/household/day |
| Description | Time to cook in project technology per household per day |
| Source of data | Project fuel consumption test |
| Value(s) applied | 6 |
| Measurement methods and procedures | Record the time to cook in baseline stove or interview with primary cook |
| Monitoring frequency | annually |
| QA/QC procedures | - |
| Purpose of data | SDG 5 |
| Additional comment | - |

|  |  |
| --- | --- |
| **Data / Parameter ID** | **ICS 28** |
| Data / Parameter | LEp,y |
| Unit | tCO2e per year |
| Description | Leakage in the project scenario p during year y |
| Source of data | Baseline and monitoring survey |
| Value(s) applied | 0 |
| Measurement methods and procedures | Aggregate leakage can be assessed for the project scenario |
| Monitoring frequency | Updated every two years |
| QA/QC procedures | Transparent data analysis and reporting |
| Purpose of data | Leakage emission calculation |
| Additional comment | - |

* + 1. Sampling plan

>>

The objective of the sampling plan is to achieve unbiased and reliable estimates of the proportion or the mean value of the key variables over the crediting period. The sampling plan follows the guidelines in the GS methodology “*Technologies and Practices to Displace Decentralized Thermal Energy Consumption” Version 4.0*.

**Target Population:**

The target Population for the baseline survey, baseline KPT and the first round project KPT were households that are members of Sidama coffee farmers cooperative union members. The target population for the project KPT and usage survey after two years are households who are using the improved cook stove installed by the cooperatives where the household information is recorded in a database prepared by the project proponent.

**Sampling Method**

1. **Baseline survey and Kitchen performance test (KPT):**

The baseline survey, baseline and first project kitchen performance tests (BKPT and PKPT) measure real, observed technology performance in the field.

As per the methodology the baseline survey, baseline and first project kitchen performance tests were conducted on the same sampled households (paired sampling).

The samples used in baseline survey and baseline KPT were selected from the total list of members of the cooperatives using excel random generator sampling tool. Since, the target communities are greater than 1000, a total of 100 households were selected randomly using excel RAND method according to the Annex 2 of the methodology TPDDTEC v4.0 table given below:

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

PP has used the paired samples (same in baseline and project scenario) where test has to be done in same kitchen.

Baseline, survey and baseline KPT was conducted between 08/12/2023 to 20/12/2023 and the project KPT was conducted between 11/06/2024 to 04/07/2024.The statistical analysis was based on 90/30 rule based on the estimated MEAN (or average) fuel saved by introduction of the improved stove in one kitchen the 90/30 assessment.

**Usage/monitoring survey,**

Usage survey will be conducted annually/ biennial as per the applied methodology TPDDTEC, the minimum sample size for usage survey is 100, with at least 30 samples for project technologies of each age being selected. The sampling frame will consist of households which have been using the project technology at least for 0.6 months and recorded in the database. Samples will be selected using excel random generator sampling tool.

**Usage Rate Monitoring:**

It shall include the following activities:

i. Kitchen observation;

ii. Interview with the primary cook;

iii. Photos of the cooking area; and

iv. GPS coordinates

Survey will also be conducted on the following conditions:

v. Field team training and supervision;

vi. End-user training and follow-up visits;

vii. Awareness campaign.

1. **Total dissemination record:**

The project implementer has maintained an accurate and complete “dissemination record” or “installation record.”

The required data for each project unit is:

1. Date of installation

2. Geographic area of dissemination

3. Model/type of project technology sold

4. Quantity of project technologies sold

5. Name, telephone number (if available), and address and/or GPS coordinates:

6. Mode of use: domestic, institutional commercial, other.

1. **Project database:**

Project Database is a household information from household registration records. Each household will be registered on installation date by artesian who will install the stoves and the data will be recorded and organized in a central database. The central database holds the following information: Household location, name of beneficiary, system type and serial number of technology and the date of distribution. Records of every distribution and a copy of the agreement will be kept on file. The PP would be responsible for archiving and analysis of monitoring data, calculation of emission reductions and preparation of the monitoring report.

A central project database is operated and maintained by the PP to ensure completeness and accuracy of monitoring information. The following information has been recorded during project activity implementation in the database by the PP:

* ICS distribution data through beneficiary and consent form which includes date of distribution/installation, geographic area, unique ID, etc.
* End user details which include name, address and contact number
* Details of ICS replaced and ICS distributed.

The project database has been updated on a regular basis as and when new data is available. Original copies of the distribution forms will be kept and maintained.

B.7.3 Other elements of monitoring plan

>>

PP is overall responsible for the implementation, operation, management, and monitoring of the PA.

**QA/QC process:**

The data collected and recorded in the project database shall be checked on a regular basis by PP as part of the internal quality control process and to check for any discrepancy or missing information.

**Operation & Maintenance:**

If during the monitoring period, any ICS is found to be damaged/not working, then the implementation partner will be responsible for retrofitting or replacing the ICS. Once the ICS reaches its end of life, it will be replaced with a new ICS by the implementation partner. All the data regarding O&M will be recorded and maintained in the project database.

1. DURATION AND CREDITING PERIOD
   1. Duration of project
      1. Start date of VPA

>>

The VPA start date is 01/06/2024

* + 1. Expected operational lifetime of VPA

>>

The VPA duration is five years with two rounds of renewal.

* 1. Crediting period of project
     1. Start date of crediting period

>>

The start date of crediting period of the VPA is 01/06/2024

* + 1. Total length of crediting period

>>

The total crediting period of the project is 15 years.

1. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT
   1. Safeguarding Principles that will be monitored

A completed Safeguarding Principles Assessment is in [Appendix 1](#_APPENDIX_1_–), ongoing monitoring is summarised below.

|  |  |
| --- | --- |
| PRINCIPLES | MITIGATION MEASURES ADDED TO THE MONITORING PLAN |
| **Principle 1** | Not required |
| **Principle 2** | Not required |
| **Principle 3** | Not required |
| **Principle 4** | Not required |
| **Principle 5** | Not required |
| **Principle 6** | Not required |
| **Principle 7** | Not required |
| **Principle 8** | Not required |
| **Principle 9** | Not required |

* 1. Assessment that project complies with GS4GG Gender Sensitive requirements

|  |  |
| --- | --- |
| Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy? | The project activities provide access to fuel efficient cook stoves for local communities. Especially women and girls, mainly responsible on fuel collection and cooking activities, will benefit of the use of fuel efficient cook stoves. The project will not reduce or put at risk women’s access to or control of resources or benefits. Instead, it’s foreseen that women, as main responsible form cooking fuel resources and cooking activities will have better control of these resources The project will reduce the burden of fuel wood collection for women in the target area, reduce cooking time and give extra time for women to use for productive purposes, reduce the health impact of women and children who spend most of the time at home, and reduce fire hazard during cooking and contribute for women empowerment.  It does not involve in any form of based on gender, race, religion, sexual orientation or any other basis. It is implemented as per the country's Gender policies and regulation. |
| Question 2 - Explain how the project aligns with existing country policies, strategies and best practices | Project activities are in line with the country policies, strategies, and best practices. The government of Ethiopia has developed “”Biomass Energy strategy” in 2013[[3]](#footnote-3) with the major objective of improving the use of energy efficient technologies by rural and urban households. The project is designed to contribute for this strategy. |
| Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements? | No, an expert is not required for the  Gender Safeguarding Principles & Requirements. The project do not include particular challenges regarding gender perspective and, thus, it has been enough to address gender issue following the default requirements of the GS4GGs. |
| Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation? | No, an expert was not required to assist  with Gender issues at the Stakeholder Consultation. The project do not include particular challenges regarding gender perspective and, thus, it has been enough to address gender issue following the default requirements of the GS4GGs. |

1. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

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

* 1. Summary of stakeholder mitigation measures

>>

The first LSC was conducted on 23/05/2023. The aim of the consultation meeting was to discuss with potential stakeholders and to collect information for designing and implementation of improved cook stove distribution project in the target community. On the meeting, the project developer presented the Project objective, technologies, scale, duration, implementation means and plan, and Gold Standard registration processes, the social, economic and environmental impacts of the project was presented as per the safeguarding principles and requirements, along with potential known positive and negative impacts. Contribution of the project for sustainable development goals (SDGs) was also explained.

The stakeholders raised questions related to the project and answers were given by the project developer. Some of the major questions raised was about how the communities access the technologies locally, initial money for the startup of the project, technical support for the implementation of the project and about sustainability of the project.

The project developer replied that technologies will be produced by local manufacturers (small and micro enterprises) trained by the project proponent. They will produce quality stoves and distribute for the community. The project should be implemented by pp own money or loan or pri finance from carbon buyer. Funding from development assistance is ineligible for carbon financing. The project technologies will be distributed by subsidized price to enhance the rapid distribution. Continuous training and awareness raising will be given for local community to engage them in the project.

The SFR was conducted physically on 27/10/2023 with relevant stakeholders at Hawasa Lewi resort. After the project design presented in detail the participants raised the following Feedbacks:

* Acceptance of the initiative and its positive effects on health, expected carbon revenues, and indoor air pollution reduction
* Decided to serve as models and begin the installation from their home.
* In terms of the incentive system, the cooperatives demonstrate a willingness to give farmers a portion of the entire price.
* Recommended that end users/farmers receive training and clarity regarding the payment process.
* The initiatives that lessen the burden and exposure of women when cooking were also well-received by the women participants. It also demonstrates the commitment to addressing this project idea so that all women can benefit.
* The project design was approved by the producers, indicating that it has the potential to address the intended quantity of improved cook stoves.

Therefore, According to the received feedbacks, no changes in project design were made.

* 1. 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) | Continuous input and grievance expression book was placed in the primary cooperatives offices of Aleta wondo, Dara and Dale districts. |
| GS Contact (mandatory) | [help@goldstandard.org](mailto:help@goldstandard.org) |
| Other | Mr. Ermiyas Desta  mobile: +251 0913016327  email: [erm20430@gmail.com](mailto:erm20430@gmail.com) |

1. Eligibility and inclusion criteria for VPAs inclusion

>>

The below table shall be completed for all VPAs.

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

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

|  |  |  |  |
| --- | --- | --- | --- |
| NO. | ELIGIBILITY CRITERION | DESCRIPTION/  REQUIRED CONDITION | DESCRIPTION OF THE VPA IN RELATION TO THE CRITERIA, MEANS OF VERIFICATION/SUPPORTING EVIDENCE  FOR INCLUSION |
| 1 | The Geographical  boundaries of VPAs are  consistent with the  geographical boundary of  the PoA | The geographical boundary of the VPA shall  be located within the  geographical boundary of  the PoA | Evidence for inclusion:  The VPA is located in Ethiopia which is within the boundary of the PoA. |
| 2 | Conditions to avoid  double counting of  Impacts, such as unique  identifications of product  and end user locations | A unique numbering  system for devices  (improved cook stove)  will be applied in each  VPA, assigning a unique  serial number to each  device and allowing to  clearly identify for each  device to which VPA it  belongs. | Evidence for inclusion:  VPA-DD section A.3,  describing the unique  serial device numbering  system for the VPA. |
| 3 | Conditions to check the  start dates of VPA  through documentary  evidence | The start date of the VPA  shall not be before the  PoA start date | Confirmation by the  project developer that the  VPA start date is after the  PoA start date.  Signed contract with end users to be provided as supporting evidence on the start date of the VPA. |
| 4 | Conditions to ensure  compliance with the  applicability of the applied  methodologies, the  applied standardised  baselines and the other  applied methodological  regulatory documents | The VPA shall meet the applicability requirements of the methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption Version 4.0” and GS4GG Principles and Requirements. | The applicability of the methodology is justified in section B.2 of the VPA-DD. |
| 5 | Conditions to ensure that VPA meet the requirements for demonstration of additionality | Each VPA within the PoA shall demonstrate additionality through the Gold Standard additionality criteria or the latest version of the CDM Methodological Tool for the demonstration and assessment of additionality | Each VPA shall demonstrate additionality and document in the VPA-DD. |
| 6 | Conditions to confirm that VPAs are neither registered as project activities with other offset Schemes, included in other registered PoAs, nor the project activities that have been deregistered | Confirmation that the VPA is not registered with other carbon standards or it is not being reintroduced after deregistration. | The VPA doesn’t register in any carbon standard and is checked under carbon registries. |
| 7 | Specification of the technology/measure such as the level and type of service, as well as performance specification based on, inter alia, testing/certification | The VPA will include the distribution and sale of highly efficient improved cookstoves. Each VPA will encompass the distribution and installation of efficient cookstoves to households and/or communities. | The VPAs included will undergo verification to ensure that the efficient cooking devices achieve over 20% thermal efficiency. Stove efficiency test results must be provided as evidence of meeting this criterion. The primary beneficiaries targeted should be households and/or communities, as outlined in the VPA-DD |
| 8 | Conditions to ensure no diversion of official development assistance | Verification of the absence of public funding or Official Development Assistance (ODA) from Annex I Parties in the VPA. | A declaration of non-use of ODA to be completed and submitted for the VPA. |
|  |  |  |  |
| 9 | Condition to identify the target group (e.g. domestic/commercial/ industrial, rural/urban, grid-connected/off-grid), and where applicable, distribution mechanisms (e.g. direct installation) | The target groups for the  VPAs shall include domestic users. | The VPA shall distribute cooking devices to domestic end users. The VPA's end user database should indicate that the recipients of their stoves are domestic users |
| … |  |  |  |

### Appendix 1 - Safeguarding Principles Assessment

Complete the Assessment below and copy all Mitigation Measures for each Principle into [SECTION D](#check1) above. Please refer to the instructions in the [Guide to Completing](https://globalgoals.goldstandard.org/t-prereview-vpa-design-document/) this Form below.

|  |  |  |  |
| --- | --- | --- | --- |
| **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 realisation of the right to development? | YES  NO |
| If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements. | | | |
| *Please add text here…* | | | |
| Would the project potentially involve or lead to: | | | |
| P.1.1.1 | | adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalised groups? | | YES  POTENTIALLY  NO |
| P.1.1.2 | | inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalised or excluded individuals or groups, including persons with disabilities? | | YES  POTENTIALLY  NO |
| P.1.1.3 | | restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalised individuals or groups, including persons with disabilities? | | 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 realise (respect, protect and fulfil) human rights under international law and to implement human rights-related standards in national law (whichever is higher) * enhances the availability, accessibility and quality of benefits and services for potentially marginalised individuals and groups, and to increase their inclusion in decision-making processes that may impact them (consistent with the non-discrimination and equality human rights principle) * provides reasonable accommodations to strengthen inclusivity and accessibility of project benefits and services to persons with disabilities. | | | |
| *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, taking into account different roles and positions of women and men in accessing environmental goods and services?  For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well-being. | | YES  POTENTIALLY  NO |
| Briefly describe below how the project is addressing any identified risk to gender equality and women’s empowerment. | | | |
| *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 |
| 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 | | utilisation 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 commercialisation 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 |
| 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 recognisable 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 |
| 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 |
| 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? * Was the plan developed in accordance with the effective and meaningful participation of indigenous peoples and in accordance with UNDP Guidelines? | | YES  NO  NA |
| 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 |
| 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 labour? | | YES  POTENTIALLY  NO |
| P.6.1.1 | | working conditions that do not meet national labour 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  *if such agreements do not exist, or do not address working conditions and terms of employment, the project developer shall provide reasonable working conditions and terms of employment.* | | YES  POTENTIALLY  NO |
| P.6.1.1 | | use of migrant workers?  *if engaged, the developer shall ensure that they are engaged substantially equivalent terms and conditions to non-migrant workers carrying out similar work.* | | YES  POTENTIALLY  NO |
| P.6.1.1 | | having no arrangements for basic services[[4]](#footnote-4) for workers?  *the project developer shall put in place and implement policies on the quality and management of the accommodation and provision of basic services in a manner consistent with the principles of non-discrimination and equal opportunity. Workers’ accommodation arrangements should not restrict workers’ freedom of movement or of association* | | 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 |
| 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 in regard to 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 labour? (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 |
| 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 marginalised social groups, despite the benefits it may bring? | | YES  NO |
| If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements. | | | |
| *Please add text here…* | | | |
| **Would the project involve or lead to:** | | | |
| 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 marginalised social groups in targeted communities? | | YES  POTENTIALLY  NO |
| If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements. | | | |
| *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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |  P.8.2.5 | | negatively impact on the catchment area?  *If yes, Erosion prevention measures, including soil and slope protection measures, must be implemented before project commencement. These measures should involve natural terracing, infiltration strips, permanent ground cover, hedge and tree rows, and effective slope length assessment. Regular reassessment of these measures is necessary.* | | YES  POTENTIALLY  NO |
| 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 |  -  P.9.1.3 | | Is there any risk of soil resource degradation or loss of ecosystem services provided by soils in the project?  *If yes, the project shall maintain healthy soils by minimising negative impacts on soil health, productivity, structure, and water retention. Steps to minimise soil degradation include crop rotation, composting, using N-fixing plants, and reducing tillage and ecologically harmful substances.* | | 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 |
| 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 |
| 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](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A22002A0731%2801%29)? | | 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?  *Note - Forestry projects (for example Afforestation/ Reforestation) involving GMO planting are not eligible for Certification under Gold Standard for the Global Goals.* | | YES  No  NA |
| If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements. | | | |
| *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 |
| 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.9.4.1 | | 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 fertilisers, and if so, are measures being taken to minimise 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 has appropriate controls on manufacture, procurement, or distribution and/or use of these chemicals? | | YES  No  NA |
| If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements. | | | |
| *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 |
| 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 |
| 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?  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. | | ☐ YES  No |
| 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?[[5]](#footnote-5) | | 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?  If the answer is yes, implement industry-standard sustainable management practices in line with to one or more relevant and credible standards and utilise available technologies. | | YES  No  NA |
| If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements. | | | |
| *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 minimise 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 recognised Endangered, Vulnerable or Critically Endangered species? | | YES  NO |
| If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements. | | | |
| *Please add text here….* | | | |
| Would the project involve or lead to: | | | |
| 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 |
| 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 behaviour 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 harbour 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 VPA Implementer

|  |  |
| --- | --- |
| Organization name | Sidama coffee farmers’ cooperative Union/SCFCU |
| Registration number with relevant authority | S/15 or  TIN No: 0000857554 |
| Street/P.O. Box | AkakiKality |
| Building |  |
| City | Addis Ababa city |
| State/Region | Addis Ababa |
| Postcode | 122062 |
| Country | Ethiopia |
| Telephone | +251114407165 |
| E-mail | sidacoop@yahoo.com |
| Website | www.sidamacoffee.com |
| Contact person | Ermias Desta |
| Title | Certificate and Project coordinator |
| Salutation |  |
| Last name | Gota |
| Middle name | Ermias |
| First name | Desta |
| Department | Project head |
| Mobile | 0913016327 |
| Direct tel. | +251114407165 |
| Personal e-mail | erm20430@gmail.com |

### Appendix 3- LUF Additional Information

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

### Appendix 4 - Design Changes

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

*NA*

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

1. ***Additionality***

*>>*

NA

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

*>>*

*NA*

1. ***Compliance with the monitoring plan of the applied methodology***

*>>*

*NA*

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

*>>*

*NA*

1. ***Scale of the project activity***

*>>*

*NA*

1. ***Stakeholder consultation***

*>>*

*NA*

1. ***Sustainable development criteria***

*>>*

*NA*

1. ***Safeguarding Assessment***

*>>*

*NA*

1. ***Compliance with applicable legislation***

*>>*

NA

##### Revision History

|  |  |  |
| --- | --- | --- |
| **Version** | **Date** | **Remarks** |
| 2.3 | Dd/mm/yyyy | Editorial changes in line with V2.1 of the Safeguarding Principles and Requirements |
| 2.2 | 21 June 2023 | Editorial changes in line with V2.0 of the Safeguarding Principles and Requirements |
| 2.1 | 14 April 2023 | Integrated the design change memo as annex of the document. |
| 2.0 | 4 May 2022 |  |
| 1.1 | 7 October 2020 | Hyperlinked section summary to enable quick access to key sections  Improved clarity on Key Project Information  Inclusion criteria table added  Gender sensitive requirements added  Prior consideration (1 yr rule) and Ongoing Financial Need added  Safeguard Principles Assessment as annex and a new section to include applicable safeguards for clarity  Improved Clarity on SDG contribution/SDG Impact term used throughout  Clarity on Stakeholder Consultation information required  Provision of an [accompanying Guide](https://globalgoals.goldstandard.org/standards/TGuide-PreReview_V1.1-VPA-Design-Document.pdf) to help the user understand detailed rules and requirements |
| 1.0 | 10 July 2017 | Initial adoption |

1. https://www.iea.org/articles/ethiopia-energy-outlook [↑](#footnote-ref-1)
2. https://documents1.worldbank.org/curated/pt/372371533064359909/pdf/Ethiopia-Beyond-connections-energy-access-diagnostic-report-based-on-the-multi-tier-framework.pdf [↑](#footnote-ref-2)
3. file:///C:/Users/HP/Desktop/Design%20validation%20docs/Ethiopia\_Biomass%20energy%20strategy%20Ethiopia.pdf [↑](#footnote-ref-3)
4. 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. [↑](#footnote-ref-4)
5. 'Involve' means if the project mechanism and/or impact(s) are achieved via changing animal husbandry practices in some way. [↑](#footnote-ref-5)