Gold Standard for the Global Goals
Key Programme Information & Programme Design Document (PoA-DD)

July 2017, Version 1

KEY PROGRAMME INFORMATION

Title of Programme:	GS7591 International Programme for Safe Water Access and Efficient Cookstoves
Brief description of Programme:	This project involves the distribution of improved cook stoves and safe water technologies across several countries. In addition to reducing wood use (for cooking and water boiling), the project is also expected to have additional benefits for local communities such as reduced incidences of illnesses related to indoor air pollution, smoke inhalation and consumption of unsafe drinking water; increased gender equality; improved access to safe water and clean cooking technology; improved employment opportunities; and less time and money spent on firewood collection.
Expected duration of Programme:	15 years (Crediting periods of 5 years, twice renewable)
Coordinating & Management Entity:	CO2balance UK Ltd.
Project Representative:	James Walker
Project Participants and any communities involved:	Various partner organisations in target countries to be mentioned at the VPA level
Version of PoA-DD: Date of Version:	Version 8.4 28/04/2022
Host Country (ies) / Location:	The Republic of Kenya, The Republic of Mozambique, The Republic of Uganda, The Republic of Zambia, The Republic of Malawi, The Republic of Rwanda, The Federal Democratic Republic of Ethiopia, and The State of Eritrea
Certification Pathway (Project Certification/Impact Statements & Products	Impact Statements & Products - Voluntary Emission Reductions & Gender Equality Certification
Activity Requirements applied: (mark GS4GG if none relevant)	GS4GG
Methodologies applied:	GS TPDDTEC v3.1 GS Methodology for Emission Reductions from Safe Drinking Water Supply v1.0
Product Requirements applied:	VERs, ADALYS, Gender Certification
Regular/Retroactive:	Regular
SDG Impacts:	This list comprises all the SDGs which may be targeted by component VPAs of this PoA. All component VPAs will contribute to at least 3 of the SDGs listed here, including SDG 13. 1 – SDG 3: Good Health and Well-Being 2 – SDG 4: Quality Education 3 – SDG 5: Gender Equality 4 – SDG 6: Clean Water and Sanitation 5 – SDG 7: Affordable and Clean Energy 6 – SDG 8: Decent Work and Economic Growth 7 – SDG 13: Climate Action 8 – SDG 15: Life on Land

SECTION A. General description of PoA

A.1. Purpose and general description of the PoA

>> (Provide a brief description of the PoA including information on policy/measure or stated goal that the PoA seeks to promote and framework for the implementation of the proposed PoA.)

The purpose of this PoA is to reduce greenhouse gas (GHG) emissions from the burning of non-renewable biomass for cooking and water treatment. The PoA will distribute improved cook-stoves and/or safe water supply and treatment technologies to households/communities. Voluntary Project Activities (VPAs) registered under the PoA will be financed by the generation and marketing of Voluntary Emission Reductions (VERs). The PoA will use the Gold Standard methodology Technologies and Practices to Displace Decentralized Thermal Energy Consumption, version 3.1.

Biomass, principally firewood and charcoal, holds huge importance in developing countries, accounting for a significant proportion of energy consumption. Biomass is often the predominant source of energy for cooking and water boiling, especially in rural areas. Cooking and water boiling are generally carried out on thermally inefficient traditional devices and produce large amounts of smoke and indoor air pollution.

The distribution of efficient cook stoves and/or safe water supply and treatment technologies in this PoA will significantly reduce fuel consumption, resulting in an improved living environment for recipients, and reduced pressure on local forests. By reducing fuel consumption, CO2 emissions from combustion of non-renewable biomass will be correspondingly reduced.

A.2. CME and participants of PoA

>> (Details of the CME of the proposed PoA, as the entity which communicates with the Gold Standard Secretariat)

CO2balance UK Ltd. is the CME of the PoA. CO2balance UK Ltd. is the entity which communicates with the Gold Standard.

Local partner organisations and staff will be involved in the implementation of activities in some VPAs, therefore being participants in the PoA. These will be identified and indicated at the individual VPA level.

Project Implementer is defined as CO2balance UK Ltd. or a nominated organisation defined in each VPA-DD.

A.3. Physical/ Geographical boundary of the PoA

>> (Provide details of the defined boundary of the proposed PoA in terms of a geographical area e.g. municipality, region within a country, country or several countries within which all VPAs to be included in the PoA will be implemented)

The PoA is provisionally planned to incorporate activities within five countries. These are:

- The Republic of Kenya,
- The Republic of Mozambique,
- The Republic of Uganda,
- The Republic of Zambia,
- The Republic of Malawi,
- The Republic of Rwanda,
- The Federal Democratic Republic of Ethiopia,
- The State of Eritrea.

An exemplar VPA will be submitted alongside the PoA for each of these countries. Future VPAs may be submitted for projects based in other LDCs, LLDCs, SIDSs and LMICs.

A.4. Technologies/measures and eligibility under Gold Standard

>> (Describe the technologies and/or measures to be employed and/or implemented by the VPAs in the PoA including a list of the facilities, systems and equipment that will be installed and/or modified by the VPA. Include information essential to understand the purpose of the PoA and how it will contribute positively to three SDGs. Describe how the VPAs meet the eligibility criteria as per section 3.1.1 of GS4GG Principles & Requirements document and the relevant activity requirements document)

The VPAs will employ and/or implement one of two distinct technology types: improved cookstoves (ICS); and technologies which supply safe water:

Improved Cookstoves

Improved cookstove (ICS) will replace the inefficient baseline cooking technology, such as iron bar stoves and three stone fires, and greenhouse gas emitting fuels such as non-renewable biomass and fossil fuels . The models and details of the improved cookstoves will be set out in the VPA-DDs where this is the relevant technology. This technology is eligible under GS4GG Community Services Activity Requirements s3.1.1(b): End-Use Energy Efficiency, and the project type, '*efficient cooking*', is mentioned in the section.

The ICS VPAs will contribute to the following SDGs: (specific SDG contributions will be determined on a VPA level)

- SDG 3: Ensure healthy lives and promote well-being for all at all ages
- SDG 5: Achieve gender equality and empower all women and girls
- SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all
- SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all SDG 13: Take urgent action to combat climate change and its impacts
- SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Safe Water Technologies

The safe water technologies include the distribution, rehabilitation, drilling or construction of centralised and domestic water points including but not limited to boreholes, hand pumps, deep wells, protected springs, water filters and gravity flow systems, and water treatment technologies such as water filters and chlorination The details of the specific technology will be provided in the VPA-DDs.

The safe water technologies will provide safe water to households and communities who collect unsafe water from unprotected sources and typically boil it with firewood as a treatment method. The safe water provided by the project technologies will remove the need to treat unsafe water by boiling. This technology is eligible under GS4GG Community Services Activity Requirements 3.1.1(b): End use energy efficiency and 3.1.1(d): Water, Sanitation and Hygiene (WASH). The energy requirements in the baseline scenario will be reduced by the project as households will no longer have to boil unsafe water as a treatment method. The technology chosen may vary by VPA as different locations, climates, traditions and improvements in technology demand. The technology likely to be chosen is a zero emission pumped borehole. The project activity will involve the installation and/or repair of broken water points; or the distribution of water filters, and their maintenance over the lifetime of the project. The end users will be clearly identified by water point user lists, and a physical intervention will take place at the user end, such as borehole rehabilitation. WASH training will be conducted for all safe water technology projects under the PoA.

The safe water VPAs will contribute to the following SDGs: (specific SDG contributions will be determined on a VPA level)

- SDG 3: Ensure healthy lives and promote well-being for all at all ages
- SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- SDG 5: Achieve gender equality and empower all women and girls
- SDG 6: Ensure availability and sustainable management of water and sanitation for all
- SDG 13: Take urgent action to combat climate change and its impacts

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

Eligibility Criteria as per section 3.1.1 of GS4GG Principles & Requirements, and requested at Validation

Eligibility Criteria	Description	Means of Verification (Checked at VPA Inclusion)
(a) Types of Project	Eligible Projects shall include physical action/implementation on the ground. Pre-identified eligible Project types are identified in the Eligibility Principles and Requirements section.	Projects will involve the distribution of improved cookstoves or the distribution/installation/rehabilitation of safe water sources. Project types are eligible under Community Services Activity Requirements s.3.1.1(b) and s3.1.1(d).
(b) Location of Project	Projects may be located in any part of the world.	The host country and location of each VPA will be specified in each VPA-DD, in line with the locations outlined in Section A.3.
(c) Project Area, Project Boundary and Scale	The Project Area and Project Boundary shall be defined. Projects may be developed at any scale although certain rules, requirements and limitations may apply under specific Activity Requirements, Impact Quantification Methodologies and Products Requirements. In order to avoid double counting the Project shall not be included in any other voluntary or compliance standards programme unless approved by Gold Standard (for example through dual certification). Also, if the Project Area overlaps with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature, the project shall demonstrate that there is no double counting of impacts at design and performance certification (for example use of similar technology or practices through which the potential arises for double counting or misestimation of impacts amongst projects).	Each VPA will state the location of the Project and provide a range of GPS coordinates and maps to define the Project boundary. Each small-scale VPA included under this PoA will not be included by any other carbon standard and will not exceed CDM small-scale threshold requirements: Type (ii) projects 60GWh/yr Type (iii) projects 60,000tCO2e/yr
(d) Host Country Requirements	Projects shall be in compliance with applicable Host Country's legal, environmental, ecological and social regulations.	Each VPA will be in compliance with these regulations.
(e) Contact Details	As part of the Project Documentation the Project Developer shall provide (i) name and (ii) contact details of all Project Participants; AND in case of an organisation (iii) the legal registration details and (iv) documentation by the governing jurisdiction that proves that the entity is in good standing (defined as being a legal or other appropriate entity registered in or allowed to operate within the required jurisdiction and with no evidence of insolvency or legal/criminal notices placed against it or any of its Directors). Gold Standard retains the right (at its own discretion) to refuse use of the Standard where reputational concerns are highlighted.	The details of the Project Developer will be included in each VPA-DD.
(f) Legal Ownership	Full and uncontested legal ownership of any Products that are generated under Gold Standard Certification, (for example carbon credits) shall be demonstrated. Where such ownership is transferred from project beneficiaries this must be demonstrated transparently and with full, prior and informed consent (FPIC). Note that for certain Project types there is a requirement for full and uncontested legal land title/tenure to be demonstrated. These are contained within specific Activity or Product Requirements. All projects shall	Means of demonstration of legal ownership of Products generated under the Programme will be specified in each VPA-DD. Demonstration of legal ownership will be in line with Community Services Activity Requirements s.3.1.4

	immediately report to Gold Standard any land title/tenure disputes arising.	
(g) Other Rights	As well as legal title and ownership, the Project Developer shall also demonstrate where required uncontested legal rights and/or permissions concerning changes in use of other resources required to service the Project (for example, access rights, water rights etc.). Any known disputes or contested rights must be declared immediately to Gold Standard by the Project Developer and resolved prior to further Project implementation in affected areas.	This will be demonstrated where applicable in the relevant VPA-DDs.
(h) Official Development Assistance (ODA) Declaration	All Project Developers applying for project activities located in a country named by the OECD Development Assistance Committee's ODA recipient list and seeking Gold Standard Certification for carbon credits shall declare the Official Development Assistance (ODA) support. The Project Developer shall follow the GHG Emissions Reduction & Sequestration Product Requirements and submit the declaration at the time of Design Certification.	A declaration confirming that there is no diversion of ODA for each VPA will be attached with the PoA-DD and individual VPA-DDs.
Requested in Design Review		
(i) Fraction of Non-Renewable Biomass	Reference from where fNRB shall be calculated for VPAs shall be included in the eligibility criteria to avoid confusion at the time of VPA inclusion and for consistency	The fNRB value will be taken, where possible, from default values provided by CDM and the Gold Standard. Where default values are not available, or are expired, fNRB values shall be calculated in accordance with TPDDTEC v.3.1 Annex 1, or CDM Tool 30.
(j) Test for Wb,y parameter	The test for fixed parameter Wb,y is based on the water boiling test.	VPAs may apply the default Wb,y value of 0.4 kg/litre. If a VPA conducts field tests then the test for the Wb,y fixed parameter will be conducted following the WBT Protocol.
(k) Water Project Treatment Capacity	The treatment capacity limits of project technology/source are required to be monitored to ensure that the water consumption level applied for emission reductions must not be greater than the treatment capacity of the project technology/sources.	Each VPA will ensure that consumption levels are not greater than the treatment capacity of the project technology/source.
(l) Cookstove Project Theoretical Savings	The theoretical wood savings from a cook stove project shall be estimated based on following- Py = Bb,y * (1-hb/hp,y) Py - quantity of firewood consumed in project Bb,y - quantity of firewood consumed in baseline hb – efficiency of baseline technology hp,y – efficiency of project technology	Cookstove projects will provide theoretical estimates based on the calculation.
(j) Double Counting	Conditions to confirm that VPAs are neither registered as CDM project activities, included in another registered PoAs, nor the project activities that have been deregistered.	PP will confirm that VPAs are not registered anywhere else, with the submission of unique IDs for each technology, and GPS coordinates of the project boundary
(k) Technical Specification	Specification of the technology/measure, such as the level and type of service, as well as performance specification based on, inter alia, testing/certification.	VPA-DDs will include technical specifications of the Project Technology.
(l) Start Dates	Conditions to check the start dates of VPAs through documentary evidence.	The start date of projects will be confirmed by carbon transfer forms, repair confirmation forms, or other suitable methods depending on the project type and circumstances.

(m) Applicability	Conditions to ensure compliance with the applicability of the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents.	This will be set out in each VPA-DD.
(n) Additionality	Conditions to ensure that VPAs meet the requirements for demonstration of additionality.	This will be set out in each VPA-DD, in line with Section B of the POA-DD
(o) LSC and EIA	Conditions related to undertaking local stakeholder consultation and environmental impact analysis.	This will be set out in each VPA-DD, and will be carried out in line with the GS Stakeholder Consultation and Engagement Requirements.
(p) Target Group	Target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/offgrid), and where applicable, distribution mechanisms (e.g. direct installation).	This will be set out in each VPA-DD.
(q) Sampling	Sampling approaches are set out in each VPA and will follow the TPDDTEC v3.1 methodology.	The VPAs will follow the sampling approach set out in the applicable methodologies which take precedence over CDM methodologies.
(r) Crediting Period	All VPAs submitted for inclusion after the first crediting cycle of such PoA and completion of transition to GS4GG shall follow the GS4GG Certification Cycle (i.e. 5 years renewals.	The crediting period will be stated in each VPA-DD.

Community Services Activity Requirements	
Requirements relevant to this VPA.	**Demonstration of meeting Requirements**
2 Eligible Project Types and Scope	
2.1.2) All CSA projects shall lead to climate change mitigation and/or adaption by providing or improving access to services/resources at household or community or institution level. Eligible services include electricity and energy, water and sanitation, waste management, housing, etc.	By providing a safe water source in rural communities, the safe water projects will improve access to safe water services/resources at community level. By distributing improved cookstoves the cookstove projects will ensure that households consume less firewood during the process of domestic cooking. As a result there shall be a reduction of carbon dioxide emissions from the combustion process at household level. This mitigates climate change by increasing access to improved cooking technologies amongst rural communities As such, the projects are Eligible Project Types in line with the requirements.
2.1.3) In relation to the above all Projects shall therefore confirm to Gold Standard for the Global Goals Principles & Requirements (and associated documents)	The project conforms with GS4GG Principles and Requirements.
3 General Eligibility Criteria	
3.1.1 Types of Project – b) End-Use Energy Efficiency: Project activities that reduce energy requirements as compared to baseline scenario without affecting the level and quality of services or products where the end user of the products and services are clearly identified and when the physical intervention is required at the user end. For example, efficient cooking, heating, lighting, etc.	By providing safe water, the safe water project activities reduce the energy requirements compared to the baseline scenario by removing the need for households to boil water for purification. By distributing improved cookstoves the cookstove project activities reduce the energy requirements compared to the baseline scenario by ensuring that households consume less firewood through the use of a more efficient technology.
3.1.2 Project Area, Boundary and Scale Project Area and Boundary shall be defined in line with the applicable Impact Quantification Methodologies or Product Requirements. For the purpose of applying UNFCCC methodologies for quantification of GHG reductions, 'small scale' is defined as in CDM Modalities and Procedures for three projects types; type (i) Renewable Energy, type (ii) Energy Efficiency and type (iii) Others.	The project area and boundary are defined in line with the applicable Methodology, outlined in Section A.3. The project is a Small-scale project issuing emission reductions which will be capped at in line with CDM small-scale thresholds: Type (ii) projects 60GWh/yr Type (iii) projects 60,000tCO2e/yr
3.1.4 Legal ownership: a) Projects involving the distribution of a large number of devices for services such as heating, cooking, lighting, electricity generation, water treatment technology such as water filter etc. shall provide a clear description of the ownership of the Products that are generated under Gold Standard Certification all along the investment chain. In line with FPIC requirement, the proofs that end-users are aware of and willing to give up their rights on Products shall be provided. **b)** The transfer of Product ownership shall be discussed during the local stakeholder consultations for regular cycle projects.	a) CO2balance UK Ltd is the Co-ordinating/Managing Entity which communicates with the Gold Standard; the project is managed in the Host Country by Project Implementer and/or its partners. Project Implementer have legal ownership of the carbon credits produced as result of the project. b) The discussion of transfer of Product ownership will be discussed in detail during Local Stakeholder Consultations, presenting the details of the project to the local community members, officials and Community Leaders who attend.

3.1.3 Where Gold Standard methodologies allow for a Suppressed Demand baseline scenario, this shall be limited to Small and Microscale Projects. Where a Suppressed Demand baseline is applied, it is not possible to 'stack' Gold Standard Impact Statements or Products as the definition of baseline may be contradictory.	The VPA is a small-scale project, therefore it is eligible for suppressed demand in the baseline scenario.

A.5 Funding sources of PoA

>> (Provide the public and private funding sources for the programme. Confidential information need not be provided.)

The Programme is currently intended to be funded by private funding from Project Implementer or its partners.

There is currently no public funding for the Programme. However, Project Implementer and its partners may apply for public funding for projects under the Programme. Details of any relevant public funding sources will be included on a VPA basis.

No ODA funding shall be used within the PoA, as confirmed by signed ODA Declarations to be made at the VPA level.

SECTION B. Demonstration of additionality and development of eligibility criteria

B.1. Demonstration of additionality for PoA

>> (Justify why the PoA will not be implemented without revenues from transaction of certified SDG outcomes.)

The Programme of Activities represents a more cost-efficient way of implementing multiple VPAs for which an in-depth demonstration of additionality will be provided at VPA level. Without the revenues generated by the VPAs, the PoA would not be viable:

(i) the proposed CPA/VPA would not be implemented

The higher number of proposed SS-VPAs would not be implemented without the PoA due to the high cost of standalone GS fees. All VPAs will apply the GS4GG Principles & Requirements and involve the technologies defined in section A.4. They will follow GS4GG Community Services Activity Requirements Version 1.2 and thus will comply with the same regulations allowing them to fall under the PoA umbrella, reducing costs.

(ii) the mandatory policy/regulation would systematically not be enforced and that non-compliance with those requirements is widespread in the country/region

Mandatory policy/regulation and non-compliance are applicable at the host country level and will be evaluated at VPA level in the VPA-DD to ensure all projects are additional.

(iii) that the PoA will lead to a greater level of enforcement of the existing mandatory policy/regulation or to a greater level of adoption of an existing voluntary scheme

The PoA will lead to the distribution or rehabilitation of key energy efficiency technologies aimed to improve the daily quality of life of citizens of the host countries in which the project is located. These technologies will take into consideration all the applicable national and/or sectoral policies and regulations of each host country and aid countries in meeting their Nationally Determined Contributions and national targets with regards to the adoption of energy efficiency technologies.

B.2. Eligibility criteria for inclusion of a VPA in the PoA

>> (Describe the eligibility criteria to be met by VPAs for inclusion in the PoA)

Any VPAs included in the PoA shall demonstrate additionality as set out in the GS4GG Principles & Requirements and involve the technologies defined in section A.4. As per the GS4GG Community Services Activity Requirements Version 1.2 – projects that meet the criteria outlined in section 4.1.9 of the document can be

deemed automatically additional without needing to prove financial Additionality at the time of Design Certification.

For each VPA, it shall be clearly indicated in the VPA-DD how additionality is proved as per GS requirements. Examples of how this shall be achieved for different types of VPAs are given below:

(a) Positive List (annex B of CSA Requirements v1.2)

(b) Projects located in LDC, SIDS, LLDC

Means of proving additionality	**Standard document(s) used/cited**	**Example of how additionality is proven**
VPA is additional due to being implemented in an LDC, SIDS or LLDC.	GS4GG Community Services Activity Requirements, Section 4.1.9. (b)	VPAs included in this PoA that are conducted in LDCs, such as Malawi and Rwanda, will automatically be deemed additional.
VPA is solely composed of isolated units where the users of the technology/measure are households or communities or institutions and where each unit results in: For type (ii) projects <= 600 MWh of energy savings per year For type (iii) projects<=600 tonnes of emission reductions per year.	GS4GG Community Services Activity Requirements, Annex – B: Positive List	VPAs included in this PoA that consist of isolated units can be deemed additional as long as it is proven through ex-ante calculations that each individual unit shall generate: For type (ii) projects less than or equal to 600 MWh of energy savings per year For type (iii) projects ERs of less than 600 tCO2e per year.
Where the VPA is not in an LDC, SIDS or LLDC and is comprised of isolated units resulting in emission reductions above 600 tCO2e per year, additionality shall be demonstrated using the appropriate UNFCCC-approved additionality tool, which is in this case the CDM Attachment A to Appendix B of 4/CMP.1 Annex II.	GS4GG Principles & Requirements, Section 4.1.48 CDM Attachment A to Appendix B of 4/CMP.1 Annex II	VPAs shall be deemed additional by demonstrating that the project activities would not have occurred in the absence of carbon finance due to technological or investment barriers, prevailing practice or some other form of barrier.

For any activities that don't qualify with the above criteria will be subject to a full additionality assessment using the CDM "Tool for the demonstration of additionality." This will be conducted at VPA level in the VPA-DD.

In the case of any retroactive projects being included under the PoA, additionality will be demonstrated using the most up to date UNFCCC-approved or a Gold Standard-approved additionality tool to demonstrate project additionality.

DOE Validation and Verification Site Visits

A Validation and Verification Body (VVB)/Designated Operational Entity (DOE) will be appointed to review the Projects and conduct a site visit as part of the Validation and Verification processes. As the VPAs form part of a group of homogenous VPAs, a VVB/DOE site visit at Validation and Verification is only required for the first VPA in each homogenous group. Subsequent homogenous VPAs that are Included or Verified under the PoA will undergo a Compliance Check to ensure that they meet the criteria provided in the PoA-DD.

Homogenous VPAs are defined as those that share a common baseline and project technology. The criteria for homogeneity are:

- a common baseline
- common project technology(ies)
- shared project area

- common demographics, and
- common beneficiaries.

B.3. Application of technologies/measures and methodologies

>> (Describe the technology/measures and indicate the methodology chosen. In cases where multiple technologies/measures or multiple methodologies are being applied, list all the combinations of technologies/measures and methodologies that will be used in the PoA. If applicable, provide a description of the sampling plan applied for monitoring.)

B.3.1 Methodology Requirements

The PoA will apply GS Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC) v3.1:

Technology	Methodology
Improved Cookstoves	GS Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC) v3.1
Safe Water Technologies	GS Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC) v3.1 GS Methodology for Emission Reductions from Safe Drinking Water Supply v1.0

This methodology is applicable to programmes or activities introducing technologies that reduce or displace greenhouse gas (GHG) emissions from the thermal energy consumption of households. Examples of these technologies include the introduction of improved biomass or fossil fuel cook stoves and safe water supply and treatment technologies that displace water boiling by introducing new zero emission technologies.

The following conditions in Section 1.0 of TPDDTEC are also met:

Methodology Requirement	Project
1. The project boundary needs to be clearly identified, and the technologies counted in the project are not included in any other voluntary market or CDM project activity (i.e. no double counting takes place). In some cases there maybe another similar activity within the same target area. Project proponents must therefore have a survey mechanism in place together with appropriate mitigation measures so as to prevent any possibility of double counting.	The project boundary is the physical, geographical sites of the project technologies and potentially of the baseline and project fuel collection. The individual households where the project technologies will be installed, and/or communities where the boreholes are situated, are within the target area, which have been clearly demarcated using administrative boundaries. The technologies counted are given a unique identification number which is stored in the project database. This ensures that the technologies are not counted in other project activities.
2. Technologies have a continuous useful energy output of less than 150kW per unit (defined as total energy delivered usefully from start to end of operation of a unit divided by time of operation). For technologies or practices that do not deliver thermal energy in the project scenario but only displace thermal energy supplied in the baseline scenario, the 150kW threshold applies to the displaced baseline technology.	The stove project technology primarily delivers thermal energy, whilst the water technology displaces thermal energy supplied in the baseline. Therefore, the 150kW threshold applies differently to the two technologies. Stoves: Calculations will be included with each VPA-DD to demonstrate that the applicable technology has a continuous useful energy output of less than 150kW per unit Safe Water Technology: Calculations will be included with each VPA-DD to demonstrate that the displaced baseline technology has a continuous useful energy output of less than 150kW.

3. Using the baseline technology as a backup or auxiliary technology in parallel with the improved technology introduced by the project activity is permitted as long as a mechanism is put into place to encourage the removal of the old technology (e.g. discounted price for the improved technology) and the definitive discontinuity of its use.	As referenced in the methodology 'the removal and continued non-use of three stone fires and other easily constructed traditional devices (the baseline technology replaced by this project activity) is in many cases unlikely and impractical to monitor'. However, the mechanism introduced to encourage the cessation of use of baseline technology is educating local people on the extensive health and environmental benefits of abandoning inefficient baseline technology entirely. The same method of educating users about water technology will be adopted, whereby the extensive benefits will be fully explained.
a) The project documentation must provide a clear description of the approach chosen and the monitoring plan must allow for a good understanding of the extent to which the baseline technology is still in use after the introduction of the improved technology. For example, whether the existing baseline technology is not surrendered at the time of the introduction of the improved technology, or whether a new baseline technology is acquired and put to use by targeted end users during the project crediting period	Overall use of the baseline technology will be monitored in conjunction with that of the project technology, as will the emergence of any other baseline technology by targeted end users.
b) The success of the mechanism put into place must therefore be monitored, and the approach must be adjusted if proven unsuccessful. If an old technology remains in use in parallel with the improved technology, the corresponding emissions must be accounted for as part of the project emissions.	Parallel baseline technology use (three stone fires or traditional equivalent for either cooking or water boiling) will be revealed during monitoring and its effect on emissions reductions will be captured in line with equations provided in the Methodology: Stoves: $B_{p,y} = N_{p,y} * ((P_{p,y} * U_{p,y}) + (P_{b,y} * (1 - U_{p,y}))$ Safe Water Technologies: $B_{p,y} = (1-C_i) * N_{p,y} * W_{b,y} * (Q_{p,rawboil,y} + Q_{p,cleanboil,y})$ The uptake rate U will be determined by usage surveys and hence used to account for parallel baseline and project technology use.
4. The project proponent must clearly communicate to all project participants the entity that is claiming ownership rights of and selling the emission reductions resulting from the project activity. For technology producers and the retailers of the improved technology or the renewable fuel in use, this must be communicated by contract or clear written assertions in the transaction paperwork. If the claimants are not the project technology end users, the end users will need to be informed and notified that they cannot claim for emission reductions from the project.	A full explanation will be given to all household stove and/or water technology recipients, or end users, that Project Implementer have provided them with the technology, on the basis that the emissions reductions will be transferred to CO2balance UK Ltd.
5. Project activities making use of a new biomass feedstock in the project situation (e.g. shift from	The emission reductions from this project, for both stove and water technologies, will result from a

non-renewable to green charcoal, plant oil or renewable biomass briquettes) must comply with relevant Gold Standard specific requirements for biomass related project activities, as defined in the latest version of the Gold Standard rules.	change in quantity of fuel c*onsumed*, rather than change of fuel *type,* therefore this condition is not applicable.
a) Adequate evidence is supplied to demonstrate that indoor air pollution (IAP) levels are not worsened compared to the baseline, and greenhouse gases (as listed in section 2.1) emitted by the project fuel/stove combination are estimated with adequate precision. The project fuel/stove combination may include instances in which the project stove is a baseline stove.	The fuel used in both the project and baseline scenario is the same, as such there are no additional harmful gases released in the project scenario. Stoves: Distributed in households that previously used a traditional inefficient device. As such, both the volume of greenhouse gases and volume of harmful gases are reduced in the project scenario. Safe Water Technologies: Result in reduced boiling of water, hence also a reduction in both the volume of greenhouse gases and volume of harmful gases.
b) Records of renewable fuel sales may not be used as sole parameters for emission reduction calculation, but may be used as data informing the equations in section 2.0 of this methodology. These records need to be correlated to data on distribution and results of field tests and surveys confirming (a) actual use of the renewable fuel and usage patterns such as average fraction of non-renewable fuels used in mixed combustion or seasonal variation of fuel types, (b) GHG emissions, (c) evidence of CO levels not deteriorating (d) any further factors effecting emission reductions significantly.	The emission reduction calculation will be based on fuel wood usage measurements for both cook stoves and water technologies (Kitchen Performance Tests and Water Boiling Tests). Fuel sales will not be monitored or used in any equations in this project.

The following conditions in Section 2.0 'SCOPE, APPLICABILITY, AND ENTRY INTO FORCE' of GS Methodology for Emission Reductions from Safe Drinking Water Supply v1.0 are met:

Methodology Requirement	**Project**
2.1.1 This methodology is applicable to project activities that introduce a new, or rehabilitate an existing, zero-emission or low-emission technology to supply safe drinking water.	Eligible technologies are set out in section A.3 and detailed in the VPA-DDs.
2.1.2 Technologies include household water treatment technologies (HWT), Institutional water treatment technologies (IWT), Community level water treatment technologies (CWT) and community water supply technologies (CWS). The methodology provides two sets of calculation methods and monitoring requirements, one set that applies to the HWT and IWT types of technologies, and another set that applies to the CWT and CWS types of technologies.	The VPAs will apply the relevant calculation methods.

2.1.3 Under this Methodology, a project's objectives are to reduce or avoid greenhouse gas emissions from boiling unsafe drinking water in the baseline, and to supply drinking water that is safe for consumption when it enters the project households or institutional premises. When the drinking water is treated in the household or institution (HWT or IWT), then the water supplied from the treatment technology should be safe. When the water is supplied or retrieved from a CWT or CWS directly to the premises of the household or institution, then the water entering the end-user premises should be safe.	The Projects under this PoA align with these objectives, and water quality testing in line with the methodology will ensure this.
2.2.1.a. Eligible household water treatment technologies (HWT), institutional water treatment technologies (IWT), and community level water treatment technologies (CWT) include bleach/chlorine, water filter (ceramic, sand, composite, membrane, etc.), UV disinfection, etc.	Eligible technologies are set out in section A.3 and detailed in the VPA-DDs.
2.2.1. b. Eligible community water supply technologies (CWS) include new installation of new borehole hand-pumps, borehole hand-pumps rehabilitation, solar powered drinking water pumps, etc. Water pumps powered by fossil-fuel engines are not eligible, with the exception of backup fossil–fuel engines that are used for no more than 10% of operating hours (parameter SWDS 33).	Eligible technologies are set out in section A.3 and detailed in the VPA-DDs.
2.2.1.c. All projects involving CWT and CWS technologies must also include ongoing maintenance and repair of the project technology.	All Projects include ongoing maintenance and repair programmes to ensure that safe water is provided throughout the Project.
2.2.1.d. Where the project involves the rehabilitation of an existing technology, the project developer shall provide evidence that the existing technology is non-operational and that there is no planned maintenance or repair for at least 3 months after the date it became non-operational (parameter SWDS 2).	Such Projects will provide evidence of this, most likely in the form of an official letter.
2.2.1.e. This methodology allows for project activities to include safe water treatment and/or	Relevant Projects will state this in the VPA-DD and apply the relevant calculations.

supply technologies implemented for end-users in households, and/or commercial premises such as shops or institutional premises including half or full day/boarding schools, prisons, army camps & refugee camps.	
2.2.1.f. In cases where the safe water is retrieved at the CWT or CWS location, the water in its improved form shall be available within a distance of 1 km or less from the end-users, as demonstrated by satellite imaging or GPS coordinates of each CWT or CWS location. Alternatively, as a proxy, a total collection time of 30 minutes or less for a round trip, including queuing, using the travel modes of walking or pedaling may be demonstrated (parameter SDWS 1).	CWT and CWS Projects will record the GPS coordinates of the Project Technology and record the distances of the beneficiaries from the Technology.
2.2.1.g. Project technology performance level (HWT and IWT): It shall be demonstrated based on report of laboratory testing or official notification that the project technology or equipment achieves either (i) the performance target classification 3-star or 2-star level, meaning "Comprehensive Protection," as per the WHO International Scheme to Evaluate Household Water Treatment Technologies (World Health Organization, 2011) or (ii) compliance with the national standard or guideline for household drinking water treatment technology; if no national guideline or standard is available, then the project technology shall comply with the WHO International Scheme requirements as per (i) (parameter SDWS 2).	HWT and IWT Projects will follow the WQT requirements set out in the Methodology.
2.2.1.h. Project technology performance level (CWT and CWS): For each individual CWT or CWS, it shall be demonstrated at the start of each crediting period with water quality testing reports that the water directly supplied by the project water technology/source achieves both: i. microbial quality in line with either (i) national standards or guidelines for microbial quality of drinking water, or in the absence of such requirements, (ii) the guideline	CWT and CWS Projects will follow the WQT requirements set out in the Methodology

values for verification of microbial quality from the Guidelines for drinking-water quality (Table 7.10, WHO, 2017); and ii. compliance with (i) national standards or guidelines on priority chemical contamination and physical and aesthetic aspects, or in the absence of such requirements, (ii) international standards or guidelines on priority chemical contamination11 and physical and aesthetic aspects. (parameter SWDS 3).	
2.2.1.i. The project must conduct annual water hygiene education campaigns for the end-users. (parameter SDWS 20).	The details of the water hygiene education campaigns for the end-users will be set out in the VPA-DD and reported for each MP.
2.2.1.j. A project applying this methodology may make SDG claims if relevant monitoring parameter(s) is included in the monitoring plan to demonstrate and confirm the project's contributions to SDGs. See parameter SDWS 19.	SDG claims are set out in the VPA-DDs.
2.3.1 Project shall document the national, regional and local regulatory framework for provision of safe drinking water in the project boundary (parameter SDWS 4). The project shall not undermine or conflict with any national, sub-national and local regulations or guidance for safe drinking water supply, operation and maintenance, including any tariff requirements.	Adherence to the relevant regulatory frameworks are set out in the VPA-DDs.
2.3.2 If the expected technical life of project technology (parameter SDWS 7) is shorter than the crediting period, describe measures to ensure that end users are provided replacement systems of comparable quality at the end of the expected technical life (for example, replace with comparable or better technology, retrofit with performance guarantee, etc.). This applies both for new technology and rehabilitated.	Technical life of the Project Technologies are set out in the VPA-DDs.
2.3.3 All CWT and CWS projects must include ongoing maintenance and repair of the project technology. The PDD must describe the maintenance and repair plan, including the system for logging/documenting of technology operation and	All Projects include ongoing maintenance and repair programmes to ensure that safe water is provided throughout the Project. Such work is recorded and reported at Verification.

maintenance events including periods of downtime. The log of operation and maintenance shall be required during the monitoring period to demonstrate project technology operation.	

B.3.2 Sampling Plan applied for monitoring:

This PoA will contain numerous VPAs covering different technologies and having different monitoring periods.

Homogenous VPAs, defined as those that share a common baseline and project technology, may apply cross sampling of technologies across during the monitoring period; or may apply VPA sampling if deemed more suitable.

During each verification period, a sample group of technology users within each VPA (or homogenous VPA group) will be identified to be monitored. This sample group will alter during every verification period, according to the random selection process carried out in line with the confidence/precision and sample size requirements in the Methodology. Monitoring will be carried out in line with Section 3 of the Methodology.

The Monitoring Plan will be described in detail in each VPA-DD, which will also include a Sampling Plan for each survey.

SECTION C. Management system

>>

Project Implementer will have overall operational and management responsibility for the implementation and monitoring of the proposed PoA and the VPAs belonging to it; and is therefore the PoA Managing Entity.

C.1 Operation and Management

Project Implementer will be responsible for the following operational and management activities related to each VPA under the PoA as listed below:

C.1.1 Manufacturing and Distribution

a. It is hoped that all components for the improved cook stoves will be manufactured in the host country; however stove parts may be imported if a suitable supplier cannot be found. The stove technology may be changed if an improved product is developed or if a specific requirement is identified in a specific VPA; in this case stove performance figures will be provided and calculations amended accordingly.
b. Safe water treatment technologies will be manufactured where possible in the host country, however they may be sourced from other locations if necessary. Project Implementer will work with partners, Community Based Organisations (CBOs) and/or NGOs responsible for borehole installation and maintenance in applicable areas in relation to safe water provision technologies.

C.1.2 VPA Project Area/Household Identification and Sensitisation

a. For each VPA a process for identifying project areas and/or households will be managed by Project Implementer and their partners. This will involve working with relevant stakeholders to help identify project areas and/or households suitable for stove sales and distribution and/or safe water supply and treatment technology project.

b. In partnership with community leaders, NGOs and other local community organisations, Project Implementer will initiate a sensitisation procedure to ensure that households/recipients understand the benefits of the technology, cultural issues are addressed, and users are trained in the optimal use of the equipment. Sensitisation campaigns for each project type will be carried out as follows:
   i. Improved Cookstoves – End-User training in line with Annex 10 of the Methodology
   ii. Safe Water Technologies - Hygiene campaign will be carried out in line with Annex 3 Section A.3.3.F of the Methodology

C.1.3 Data Collection

a. Upon sale, distribution, rehabilitation or installation of each stove and/or safe water supply or treatment technology in the VPA, a representative or partner of Project Implementer will be responsible for collecting monitoring data. In line with Section 3.A of the Methodology, this will include:

   1. Date of sale/installation/distribution/rehabilitation
   2. Geographic area of sale/installation/distribution/rehabilitation
   3. Model/type of project technology sold/installed/distributed/rehabilitated
   4. Quantity of project technology sold/installed/distributed/rehabilitated
   5. Name and telephone number (if available), and address:
      a. For all bulk purchasers i.e. retailers and industrial users
      b. All end users except in cases where this is justified as not feasible (such as cases of distributed sales of small items, including portable cook stoves and water filters, sold in market stalls or shops where the retailer cannot reasonably be expected to collect customers names and addresses during busy times. In such cases the number of names/telephone numbers/addresses collected will be as many as commensurate with representative sampling
   6. Mode of use: domestic, commercial, other:
      a. At a minimum as many as commensurate with representative sampling

b. This data will be collected and form the Project Database

C.1.4 Monitoring

a. The ongoing monitoring of the performance of the stoves and/or safe water supply or treatment technology in each VPA will be the responsibility of Project Implementer and/or partner organisations.
b. A sampled group of project technologies will be assessed in line with the Methodology monitoring requirements. Sampling will be carried out as described in Section B.3.
c. Monitoring Reports will be written for each VPA or group of homogenous VPAs in each verification period.

C.1.5 Calculation of User Numbers

Projects apply TPDDTEC or GS Methodology for Emission Reductions from Safe Drinking Water Supply will measure user numbers for CWT and CWS projects by one of the following methods:

1. Cap based on Gold Standard Grievance (BAMG) Report;
2. Cap based on field tests, conservative assumptions and other sources; or
3. Cap based on data collected by sensor or meter.

Handpumps

VPAs under this POA can implement 1 of 3 options for monitoring and applying user number caps. VPAs reserve the right to apply different options in different monitoring periods, for example if new data or techniques become available within the project.

1. Cap based on Gold Standard Grievance (BAMG) Report of 300 users per pump:

   User lists will still be collected, and the figure will be capped at 300 per tap. Any user lists under 300 will apply the monitored user list value. If using this option, Treatment Capacity calculations are not required.

2. Cap based on field tests, conservative assumptions and other sources:

   A referenced average daily output cap for each technology (for a borehole this is assumed at 6,000 L/day[1,2,3]) will be applied. To support this assumption, further data from the field such as pump efficiency, pump yield, or operational hours may be collected to verify that 6000L/day output is achievable for each pump.

   This figure is then divided by the monitored total water consumed from the technology per person per day. A self-imposed minimum cap of 12 L/pp/day monitored total water consumption from the technology will be applied in order to maintain conservativeness. This calculates the maximum number of people that can be served by the technology.

   This 12 L/pp/day capped value applies only to Treatment Capacity calculations and shall not be used as a value, or reference value, for any other purposes.

   User cap (pp) = Total output of technology per day (L/d) / Total water consumption per day per person (L/d/pp)

   User lists will still be collected, and the figure capped at the calculated user cap. Any user lists under the calculated cap will apply the monitored user list value.

   If field data suggests that a yield of 6,000 L/day is not achievable for a specific water source, a cap of 300 users (in line with Option 1) will be applied for the specific water source. Output of 6000L/day is defined as achievable when pump efficiency is greater 10 L/min (600 L/hour)[4,5]).

   Pump efficiency can be used to determine operational hours required for each pump to be in use per day to deliver the 6000L/day output. This will provide a verifiable hours of use (or % hour usage) that can be audited through an OO or DOE site visit process.

3. Cap based on data collected by digital sensor:

   Digital sensors will be installed on a minimum 90/10 sample of technologies across a project (homogenous VPAs may be cross sampled).

   Sensors would provide data on output per technology per day and operational hours.

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[1] Gold Standard Foundation Safe Water Supply Grievance, Technical Advisory Committee Grievance Working Group, Investigation Report, 1 October 2020, p28 and p35

[2] https://www.rural-water-supply.net/en/implementation/handpump-overview/139-india-mark-ii

[3] https://www.rural-water-supply.net/en/implementation/public-domain-handpumps/afridev

[4] https://wedc-knowledge.lboro.ac.uk/resources/conference/30/Harvey.pdf p341

[5] http://nora.nerc.ac.uk/id/eprint/516825/1/OR16044.pdf p29

Output per technology per day (from sensor data) would then be divided by the monitored total water consumed from the technology per person per day. A self-imposed minimum cap of 12 L/pp/day monitored total water consumption from the technology will be applied in order to maintain conservativeness. This calculates the maximum number of people that can be served by the technology.

This 12 L/pp/day capped value applies only to Treatment Capacity calculations and shall not be used as a value, or reference value, for any other purposes.

User cap (pp) = Total output of technology per day (L/d) / Total water consumption per day per person (L/d/pp)

User lists will still be collected, and the figure capped at the calculated user cap. Any user lists under the calculated cap will apply the monitored user list value.

Protected Springs: Direct User Monitoring

Biennial verification of user numbers through directly monitoring water collection from protected springs. A minimum of a 90/10 sample of protected springs will be visited by field staff/data collectors. The number of users at each protected spring distribution point will be monitored over the course of three consecutive days.

Each user will be asked for their name, number of litres collected (estimate if not clear), and the number of people in their household that the water will serve. Every spring shall be monitored biennially, with first monitoring activity taking place prior to first verification. The data collected will be used to gain an average number of users per protected spring which will be compared to the user list database. If the monitored number of users is found to be lower than the user list database then a corresponding adjustment shall be made to the number of users claimed in emission reduction calculations provided for verification, and thus total project technology days claimed.

The following monitored parameters will be included in the Appendices for VPAs:

Data / Parameter	Output per Technology Per Day
Unit	Litres
Description	Total litres output per project technology per day
Source of data	Option 2: Literature sources Option 3: Digital sensor data
Value(s) applied	Value to be provided for each verification
Measurement methods and procedures	Option 2: Value derived from literature sources Option 3: Data to be collected through digital sensors installed on a sample of technologies within the project
Monitoring frequency	Annual
QA/QC procedures	Option 2: Figures to be sense checked with supporting field data such as pump efficiency, pump yield, pump operational hours Option 3: Data to be sense checked with literature values
Purpose of data	User number cap: To measure the total volume of water supplied per technology per day to calculate the total number of persons that can be served by each technology

Additional comment	-

Data / Parameter	Total Water Consumed per person per day
Unit	Litres
Description	Total Water Consumed per person per day
Source of data	Usage Survey or WCFT
Value(s) applied	Value to be provided for each verification. Minimum cap of 12L/pp/day to be applied
Measurement methods and procedures	Annual usage survey, or biennial WCFT will be carried out by staff trained by CO2balance to meet the specific requirements of the methodology. Sample sizes will be determined in line with methodology requirements.
Monitoring frequency	Annual
QA/QC procedures	Clear guidance is provided to field staff and results are spot checked and analysed for accuracy
Purpose of data	User number cap: To measure total water consumed per technology per day to calculate total number of persons that can be served by each technology
Additional comment	Data collected in usage survey will account for seasonal variety

Data / Parameter	Spring Users
Unit	Number of people per day served
Description	The number of people consuming water from a protected spring per day
Source of data	Direct measurement of user numbers at protected spring distribution point(s)
Value(s) applied	Value will be provided in time for first verification and updated biennially
Measurement methods and procedures	In situ monitoring carried out by staff trained by CO2balance
Monitoring frequency	Biennial
QA/QC procedures	Clear guidance is provided to field staff and results are spot checked and analysed for accuracy Results will be compared to user lists for each spring
Purpose of data	Verification of user numbers claimed in emissions reductions

Additional comment	Applies to protected springs only

SECTION D. Duration of PoA

D.1. Date of first submission of PoA to Gold Standard

>> *(State the date when PoA design consultation report was submitted to Gold Standard for review)*

02/10/2019

D.2. Duration of the PoA

>> *(State the total duration of the proposed PoA in years.)*

20 years (Crediting periods of 5 years, twice renewable plus 5 years)

SECTION E. Safeguarding principles and SDG outcome assessment

E.1. Level at which safeguarding principles and SDG outcome assessment is undertaken

>> *(Define whether these assessments will be carried out PoA level or VPA level. Justify, if it is done at PoA level.)*

Safeguarding principles and SDG outcome assessments will be undertaken at VPA level.

E.2. Assessment of safeguarding principles, if undertaken at PoA level

>> (If safeguards assessment is undertaken at PoA level then *refer the GS4GG Safeguarding Principles and Requirements document for detailed guidance on carrying out this assessment. Provide the inclusion criteria to be met by each VPA regarding safeguarding principles in section B.2 above)*

N/A

E.3. SDG outcomes assessment, if undertaken at PoA level

>> (If SDG outcomes assessment is undertaken at PoA level then *specify the relevant SDG target for each of three or more SDGs addressed by the PoA. Refer most recent version of targets here. Provide the inclusion criteria to be met by each VPA regarding SDG outcomes assessment in section B.2 above)*

N/A

SECTION F. Local stakeholder consultation

F.1. Level at which stakeholder consultation is undertaken

>> *(Define whether the stakeholder consultation will be carried out PoA level or VPA level. Justify, if it is done at PoA level.)*

The local stakeholder consultations will be carried out at VPA level.

POA Design Consultation was carried out in line with GS4GG Programme of Activity Requirements.

F.2. Solicitation of comments from stakeholders, if undertaken at PoA level

>> *(Describe how stakeholder consultation was conducted in accordance with GS4GG Stakeholder Procedure Requirements and Guidelines.)*

Relevant stakeholders including Government representatives, relevant national authorities, and NGO communities were identified for project areas intended to be included in the Programme. Initial Key Programme Information was shared and stakeholders were invited to give feedback via an email sent on the 19th August 2019. This consultation was open for a period of 30 days until the 19th September 2019.

An updated Key Programme Information document was shared with the relevant stakeholders for Malawi on 16th December 2020 and Rwanda on the 29th January 2021. Each consultation was open for a period of 30 days until the 15th January 2021 and the 28th February 2021 respectively.

Comments received are presented below in Section F.3. Design Consultation Report includes a full report on stakeholder comments on the design of the PoA.

F.3. Summary of comments received, if stakeholder consultation undertaken at PoA level

>> (Provide a summary of key comments received during the consultation process.)

PoA Design Consultation Review:

Comment	Organization	Response to comment
We have read with interest your proposed projects and their design. They are all well prepared and suitable for addressing energy saving issues especially in Uganda and Sierra Leone where we are working	Transform Africa	N/A
Our main feedback is on the design of the water pump. We are currently supporting communities to construct boreholes using the Indian Mark 2 pumps. From our experience, the main challenges we have is the constant breakdowns brought about by the breaking of the handle and the wearing down of the washers. Since we have not physically tested the new pump you have designed, we only hope that these challenges have been addressed in designing your pump.	Transform Africa	It was confirmed that the safe water projects under the programme will involve the installation and rehabilitation of existing hand pump models. The programme is not limited to any particular hand-pump model, and the technology used in each project will be based on local needs. It was highlighted that as part of the safe water projects developed under the programme, there will be a maintenance fund in place for the lifetime to ensure that hand-pumps can be fixed in case of failure. The safe water projects will also include community WASH and maintenance training so that minor maintenance and upkeep can be carried out at community level to reduce the risk of breakdowns.
Voluntary Project Activities (VPAs) registered under the PoA will be financed by the generation and marketing of Voluntary Emission Reductions (VERs). Please be more specific. Does it mean that the funding is confirmed? Explanation of the technical terms will be helpful.	Action on Poverty Vietnam	The projects included under the Programme will generate carbon savings which, through certification, will generate carbon credits. The carbon credits can then be marketed and sold onto the Voluntary Carbon Market to generate funds for the project. The amount of funds generated will be subject to fluctuations in the market and the amount of carbon credits generated. As such, specific funding is not yet confirmed. A voluntary project Activity is an individual project implemented under the Programme of Activities (PoA). Voluntary emission reductions can only be sold to organisations or individuals that are voluntarily seeking to offset their emission reductions and cannot be sold under the compliance carbon markets such as the Clean Development Mechanism.

Project duration is 2 years from August 2019 to July 2021. It is too short to meet the target of 15,000 filters sold. Initially, we proposed a 3.5 year project. Distribution time starting from October 2019 is also too early.	Action on Poverty Vietnam	The purpose of the timeline included in the Key Programme is to provide an indication of when the activities will take place and to show the key stages of the project process. The implementation of the first projects is expected to begin with the next two years and. The projects are anticipated to last for an initial period of 5 years, which can subsequently be renewed twice. Project activity (including distribution) will only be carried out after a local stakeholder meeting has been conducted to discuss the project design within the local context.
Users will enter into an agreement with CO2balance UK Ltd. In what form? It will be challenging to collect information of end-users given the key distribution channel is retailers.	Action on Poverty Vietnam	The agreement transfers the rights of the carbon credits to CO2balance UK Ltd so that they can be sold to provide funds for the project. The agreement specifies that CO2balance UK Ltd pledges to implement the project throughout its crediting period and will fund the project activities through expected credit sales. For borehole projects the agreement will be signed on behalf of the community by the borehole manager. For filter and cookstove projects the agreement will be integrated into the distribution records/receipts signed by recipients, which can be collected by retailers.
The filters will be certified and tested annually. Who will do that? Are the test results and certification provided by the manufacturers acceptable?	Action on Poverty Vietnam	Filters will be annually monitored and tested as part of the project by the implementation partner of each water filter project. Results will be collated and analysed by CO2balance UK Ltd and certified by The Gold Standard.
CO2balance UK Ltd will act as the Coordinating Managing Entity. Project participants being registered in relation to the PoA are representatives of CO2balance UK Ltd. What is the process of forming such partnership? Is there a guideline for authorisation/working mechanism between CO2balance UK Ltd and its representatives?	Action on Poverty Vietnam	CO2balance UK Ltd works with a range of different partners, from NGOs to distributors. We have several different partnership models which vary on a case by case basis. If an organisation is interested in partnering with CO2balance UK Ltd or implementing a project under the PoA, it can contact us via enquiries@co2balance.com
For further development of the design, we recommend a market study to get a good grasp of the product demand.	Action on Poverty Vietnam	Baseline and Feasibility Studies will be carried out at project level in each project area to ensure that the market and baseline conditions are eligible for the implementation of a carbon project.
The PoA does not indicate a breakdown of the jobs that will be created by the PoA, indicating the number and type of jobs disaggregated by gender	Ministry of Lands and Natural Resources Department of Climate Change and Natural Resources Management – Zambia	The programme is being developed under the Gold Standard which does not require reporting on jobs created by the programme. The projects implemented under the programme will monitor contributions to key Sustainable Development Goals (SDGs). The SDGs and indicators monitored will be determined at a project level, based on the SDGs determined as relevant to each project which are discussed at the local level stakeholder consultation. Contributions to SDG 8 (Decent Work and Economic Growth) will

		be monitored if determined as relevant at a project level by local stakeholders.
It further does not indicate whether the cookstove would be manufactured locally or not therefore ensuring technology transfer	Ministry of Lands and Natural Resources Department of Climate Change and Natural Resources Management – Zambia	Stove design and manufacturing will be determined at each project level to ensure that the design is in line with the cooking traditions and preferences in each project area. CO2balance UK Ltd prefers to work with local stove manufacturers to ensure that the local economy is also supported by the project. However, this will be determined by the most appropriate technology for a given project area. Details on the stove will be presented in the project design document for each project.
There is need to provide more information on the cost of the improved cook stove	Ministry of Lands and Natural Resources Department of Climate Change and Natural Resources Management – Zambia	The distribution approach, including stove cost, will be influenced by local conditions in each improved cookstove project implemented under the programme. Details and costs of the stoves to be used in each project will be discussed during the local stakeholder consultation held on a project level in each project area
Provide more information on the modalities put in place for repair and maintenance of the India mark II hand pumps on the component of water supply	Ministry of Lands and Natural Resources Department of Climate Change and Natural Resources Management – Zambia	Safe water projects under the programme will identify broken down handpumps/water points in need of repair in each project area. The handpumps/water points will then be rehabilitated by CO2balance UK Ltd implementation partners and/or local technicians. Training is conducted at the start of each project on WASH and minor maintenance to educate communities on good practices and to minimise the risk of water points breaking down. Continuous input mechanisms are put in place for the lifetime of the project to ensure that communities can communicate any handpump/water point breakdowns. Where the communities are unable to conduct repairs, CO2balance UK Ltd's local implementation partners can then coordinate repairs as quickly as possible.
The PoA needs to provide the targeted level of emission reduction and also state the crediting period	Ministry of Lands and Natural Resources Department of Climate Change and Natural Resources Management – Zambia	The programme is being developed under the Gold Standard and therefore emission reductions will be calculated in line with Gold Standard methodology and requirements. As per Gold Standard requirements, small scale projects will be capped based on the CDM small scale definition for energy efficiency projects. The crediting period of the programme will run in line with the first VPA developed under the PoA, which is estimated to start crediting after 1st October 2019
We would like to know more about how Water Works might benefit from your carbon capture project. We operate in TAs Malili and Mbwatilka in the district of Lilongwe. We have assisted over 100 villages meet their water and sanitation needs, including the installation of a rope pump. We have also introduced tree planting	Water Works Charity	CO2balance informed the stakeholder that we are currently implementing our cookstove distribution programme with United Purpose and are not looking for new safe water projects in Malawi at this time. If we are looking to expand to new regions and technologies in the future then we will get in touch.

providing saplings to households to be located in disused latrine pits exploiting the nutrients left there and below the water point where they could be irrigated by the run-off water. We are planning to pilot the use of water filters next year and would be interested in the idea of household cook stoves.		
The only information I can offer of that helps is that with current investment capital CQC expects to install clean efficient Cookstoves in 2 million households in Malawi, 1.5 million in Zambia and 1 million in Mozambique over the next four years. We have completed 750,000 in Malawi and Zambia in two years to date and are building at the rate of 1500/day. We expect to blanket the rural areas completely in the decade and permanently transform cooking away from three stove fires. We have also launched operations in Kenya and Uganda. Not sure there will be much room for your programs to expand.	Total LandCare Green Clean Cooking Alliance CQuestCapital	We enquired whether all cookstoves were already involved in a carbon finance project. We also asked whether C-Quest-Capital were targeting all areas of Malawi and if they are currently working in Lilongwe rural and Chiradzulu districts.

F.4. Report on consideration of comments received, if stakeholder consultation undertaken at PoA level

>> *(Describe how the comments have been addressed by providing a clarification to the stakeholder or by altering the design of the PoA/VPA or by proposing to monitor any anticipated negative impacts etc.)*

Based on the comments, the programme design is not going to be altered. No potential synergies or conflicts with similar programmes being implemented in overlapping geographical boundaries were identified.

Comments received were constructive and helpful, re-affirming the approach adopted by the programme.

Appendix 1. Contact information of coordinating/managing entity and responsible person(s)/ entity(ies)

CME and/or responsible person/ entity	☒ CME ☐ Responsible person/ entity for application of the selected methodology(ies) and, where applicable, the selected standardized baseline(s) to the PoA
Organization	CO2balance UK Ltd
Street/P.O. Box	Cook Way
Building	1 Discovery House
City	Taunton
State/Region	Somerset
Postcode	TA2 2BJ
Country	UK
Telephone	+44 (0) 1823 332233
Fax	N/A
E-mail	James.walker@CO2balance.com
Website	www.CO2balance.com
Contact person	James Walker
Title	Programme Manager
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