

TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

THE GOLD STANDARD MICRO-PROGRAMME ACTIVITY DESIGN DOCUMENT TEMPLATE (VPA-DD)

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SECTION A. General description of micro-programme activity (VPA)

A.1. Title of the micro-scale VPA:

GS1247 VPA 41 Improved Kitchen Regimes: Gatsibo District Borehole Project, Rwanda (GS 4202)

19/09/2018

Version 5

A.2. Description of the micro-scale VPA:

Purpose of Project Activity

This Micro-Scale Voluntary Project Activity 41 Improved Kitchen Regimes: GS 4202, Gatsibo District Borehole Project, Rwanda (mVPA), is eligible under the Gold Standard methodology Technologies and Practices to Displace Decentralized Thermal Energy Consumption Version 1. The project will support the provision of safe water, using borehole technology, to hundreds of households within Gatsibo District. By providing safe water, the project will ensure that households consume less firewood during the process of water purification and as a result there will be a reduction in Carbon Dioxide (CO₂) emissions from the combustion process.

Gatsibo is a largely rural district in which local people typically use wood fuel on inefficient three-stone fires to purify their drinking, cleaning and washing water. This process results in the release of greenhouse gas emissions from the combustion of wood. This can be avoided if a technology that does not require fuel (wood or fossil), supplies the clean water desired by households.

Many existing boreholes are owned by community groups or Community Based Organizations (CBOs), and have fallen into disrepair because maintenance programmes have been poorly managed, or proven too expensive. In this project CO2balance will work with community groups and local NGO Rwandans4Water, in Gatsibo District, to identify broken down boreholes and renovate them so that they deliver clean, safe water and breakdowns are fixed rapidly. CO2balance will ensure that the quality of the water delivered by the boreholes is fit for human consumption for the entire length of the project, which will be a minimum of seven years. This project involves the repair and rehabilitation of 7 boreholes which results in 9,980 tonnes achieved annually.

CO2balance gets funding for this project by marketing the anticipated carbon credits from the wood savings to ethical investors, so borehole owners must agree to transfer the emissions reductions over to CO2balance in return for them supplying the work to renovate the boreholes. This project will be developed under the Gold Standard carbon credit body, which in addition to checking that the carbon credits from this project are real, also measures local social, environmental and economical impact.

This project activity will be implemented in the following manner:

1. Determine which boreholes are the most feasible to repair in terms of community interest/participation and technical viability.
2. Rehabilitate the boreholes into full working order, commencing the crediting of the project activity.
3. Deliver annual maintenance programme to ensure that the water supplied by each borehole is pure and safe, and that the borehole remains in full working order for the length of the crediting period.

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Monitoring data collected during the rehabilitation and operation of the boreholes will be captured in an electronic data management system, or monitoring database. From this data, the emissions reductions of the VPA will be determined. This system will be available for review during validation and verification.

CO2balance UK Ltd has undertaken a thorough stakeholder engagement process for the Gatsibo District Borehole Project VPA under the PoA, ensuring that communities understand the purpose of the project, and the rehabilitation and maintenance agreement. Physical assessments undertaken by co2balance in country partner Rwandans4Water revealed that boreholes in the Gatsibo district have fallen into disrepair. Various problems indicated via the feasibility study include:

Stolen pump

Rising main broken

Borehole not functional

Broken head pump

Rods collected rust overtime, were broken, and fell down the well

CO2balance UK Ltd used the feasibility study to identify which boreholes were to be rehabilitated and which boreholes are to be repaired. The boreholes are rehabilitated and provided to the community and borehole users free of charge.

Technology

An example of the technology common in Rwanda (Afridev Hand Pump, included in picture) that will be renovated as part of this project is shown on the picture. This project is not limited though to any particular model of hand-pump, we will renovate pumps according to local needs. The boreholes included under the project will be entirely human operated and will be fitted with hand pump models that are commonly used in the area such as Afridev, U3 Modified and India Mark II pumps. The depth of the boreholes will be limited to 100m or less. Throughout the lifetime of the project the continuous feedback mechanism serves the borehole end users by informing the project developer how end users feel about technologies at all stages of the project.



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Contribution to Sustainable Development

The VPA 41 GS 4202 Gatsibo District Borehole Project contributes to the sustainable development of the Gatsibo District in a number of ways:

- i. Environmental
 - The VPA will help significantly reduce greenhouse gas emissions over its lifetime.
 - The VPA will help reduce the use of non-renewable biomass from forests, assisting with the preservation of existing forest stock, protecting natural forest eco-systems and wildlife habitats.
 - The protection of standing forests will ensure the maintenance of watersheds that regulate water table levels and prevent flash flooding.
 - A reduction in fire wood consumption will lead to reduced deforestation and therefore reduced erosion and nutrient loss.

- ii. Social
 - Considerably less time will need to be spent collecting wood fuel for the purification of water, thereby reducing the work burden on rural families and presenting alternative opportunities for economic development and a higher standard of living.
 - The incidence of illness and disease caused by drinking dirty water will be reduced.
 - The amount of indoor pollutants from the burning of biomass in the family home will be reduced. Less Carbon Dioxide (CO₂), Carbon Monoxide (CO) and particulates will be emitted, reducing the likelihood of respiratory diseases and thus impacting positively on the health of the households.
 - Less time will need to be spent purifying water, allowing greater opportunity to focus on other household tasks and the supervision of children.

- iii. Economic
 - The project will benefit the rural economy by providing employment in the maintenance and monitoring of the boreholes.
 - Costs incurred in the purchase of fuel will be reduced through reduced need for wood fuel, allowing more money to be spent on food, health care, education etc.

The Gatsibo District Borehole Project VPA will deliver long-term, secure and simple contributions to sustainable development in the Gatsibo District which, without carbon finance, would not exist.

The complete breakdown of Gatsibo borehole VPAs is as follows:

Borehole ID	Village	Pump Model	Lat	Long	No of users	Start of CP
GS3306						
GAT002	Gashya I	U3 modified	1.67096	30.40233	768	05/11/2014
GAT003	Nyabisindu	U3 modified	1.67096	30.40233	668	05/11/2014
GAT004	Isangano	U3 modified	1.65755	30.40486	510	10/11/2014

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GAT005	Kabane	U3 modified	- 1.69779	30.38204	494	10/11/2014
GAT007	Cyibumba	U3 modified	- -1.4653	30.2257	520	11/11/2014

GS3430

GAT010	Gahorawe (Gashya2)	Afridev	- 1.79623	30.38889	726	05/11/2014
GAT011	Bushenyi	Afridev	- 1.81366	30.37515	583	04/11/2014
GAT012	Rebero	Afridev	- 1.66539	30.41101	503	10/11/2014
GAT017	Kabeza	Afridev	- 1.70231	30.41547	627	05/06/2015
GAT018	Kabezall	Afridev	- 1.61215	30.38777	521	06/06/2015

GS3431

GAT023	Kimironkoll	Hand Pump	- 1.79045	30.37594	519	03/06/2015
GAT024	Kimironko	Hand Pump	- 1.79594	30.37632	427	01/06/2015
GAT025	Kiyovu	Afridev	- -1.643	30.4351	882	09/06/2015
GAT026	Munagol	Afridev	- 1.77015	30.34641	623	03/06/2015
GAT027	Munagoll	Afridev	- 1.77091	30.35111	514	02/06/2015

GS3432

GAT028	Munagolll	Afridev	- 1.77097	30.35395	526	02/06/2015
GAT034	Nyamata	Afridev	- 1.70126	30.44677	507	12/06/2015
GAT030	Ngarama	Afridev	- 1.60261	30.42379	438	10/06/2015
GAT031	Ngaramall	Afridev	- 1.58999	30.39139	545	11/06/2015
GAT032	Nyabikiri	Afridev	- 1.58672	30.3437	857	11/06/2015

GS3433

GAT037	Reberolll	Hand Pump	- -1.7264	30.3922	589	15/06/2015
GAT039	Rutembo	Afridev	- -1.656	30.4256	556	17/06/2015
GAT042	Simbwa	Afridev	- 1.54559	30.35735	921	19/06/2015
GAT043	Akabagendo	Afridev	- -1.7418	30.38926	655	26/08/2015
GAT044	Bushenyi I	Afridev	- 1.79851	30.36953	239	21/08/2015

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GS4202							
GAT046	Bymana I	Afridev	-	1.79391	30.3562	185	24/08/2015
GAT047	Bymana II	Afridev	-	1.79285	30.35239	188	27/08/2015
GAT050	Kiburara	Afridev	-	1.66785	30.41568	529	25/08/2015
GAT051	Kigabiro	Afridev	-	1.80712	30.31485	463	20/08/2015
GAT052	Maya I	Afridev	-	1.80419	30.31039	595	20/08/2015
GAT053	Maya II	Afridev	-	1.85073	30.46383	519	01/09/2015
GAT054	Munini	Afridev	-	1.80172	30.42948	485	21/08/2015

GS4203							
GAT055	Nyamwiza	Afridev	-	1.59373	30.51485	823	19/08/2015
GAT059	Rebero	Afridev	-	1.66049	30.40731	445	18/08/2015
GAT057	Rebero I	Afridev	-	1.67283	30.39238	434	28/08/2015
GAT058	Rebero II	Afridev	-	1.67588	30.38931	388	28/08/2015
GAT062	Rwagashyaba	Afridev	-	1.67711	30.40872	431	31/08/2015
GAT063	Tungiro	Afridev	-	1.67564	30.46383	436	27/08/2015

GS6786							
GAT001	Akabingo	U3 modified	-	-1.4846	30.255	760	05/11/2014
GAT006	Rwabirenge	U3 modified	-	1.81366	30.37515	265	11/11/2014
GAT008	Kiyovu	U3 modified	-	1.82347	30.42489	451	11/11/2014
GAT009	Kimironko	U3 modified	-	-1.8091	30.3587	405	11/11/2014
GAT021	Kidugudull	Afridev	-	1.59851	30.46499	479	08/06/2015
GAT049	Karambi	Afridev	-	1.64673	30.45684	468	19/08/2015

GS6787							
GAT029	Mutarama	Afridev	-	-1.6406	30.39029	626	10/06/2015
GAT033	Nyakagarama	Afridev	-	1.81343	30.44441	1058	12/06/2015
GAT035	Nyamatetell	Afridev	-	-1.6312	30.4297	725	13/06/2015

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GAT036	Nyamatetel	Afridev	-	1.62834	30.43798	519	13/06/2015
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GS6788							
GAT013	Agakiri	Afridev	-	1.68831	30.43399	325	04/06/2015
GAT015	Businde	Hand Pump		1.80356	30.40954	824	01/06/2015
GAT019	Kagugu	Afridev		1.62592	30.4311	600	06/06/2015
GAT020	Kamamesa	Afridev		1.73264	30.39679	605	08/06/2015
GAT022	Kidugudul	Afridev		-1.6129	30.46591	500	09/06/2015

GS6789							
GAT016	Kabarondo	Afridev		1.7552	30.3639	583	05/06/2015
GAT038	Rugando	Afridev		-1.6637	30.4354	506	16/06/2015
GAT040	Rutenderi	Afridev		1.60402	30.33127	444	17/06/2015
GAT060	Rubiri	Afridev		1.78246	30.40674	533	24/08/2015
GAT061	Rukomo	Afridev		1.66005	30.46137	820	18/08/2015

GS6790							
GAT014	Akajevuba	Afridev		1.6457	30.4235	692	04/06/2015
GAT041	Rwimbogo	Afridev		1.65979	30.43514	524	18/06/2015
GAT045	Bushenyi II	Afridev		1.79506	30.36255	252	21/08/2015
GAT048	Gakiri	Afridev		1.62962	30.37743	1013	26/08/2015
GAT056	Rambura	Afridev		1.67042	30.45224	488	26/08/2015

A.3. Entity/individual responsible for the micro-scale VPA:

The Coordinating/Managing Entity (CME) of the PoA is co2balance UK Ltd. co2balance UK Ltd is the entity which communicates with Gold Standard and is the entity responsible for the VPA.

A.4. Technical description of the micro-scale VPA:

A.4.1. Identification of the micro-scale VPA:

GS1247 VPA 41 Improved Kitchen Regimes: Gatsibo District Borehole Project, Rwanda

A.4.1.1. Host Party:

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The Republic of Rwanda

A.4.1.2. Geographic reference or other means of identification allowing the unique identification of the micro--scale VPA (maximum one page):

Below is the geographic reference to allow unique identification of VPA 41 Improved Kitchen Regimes: Gatsibo District Borehole Project, Rwanda. The location of the project activity is within the Gatsibo District, in the Eastern Province of Rwanda. The project boundary is taken from the administrative boundaries of the Gatsibo District, and the GPS co-ordinates are also listed. The unique names of the boreholes will allow easy identification of which village within the project area the boreholes belong to. The target area and the fuel collection area are defined as being contained within project boundary, with the outer limits of the project boundary being clearly defined below.

Continent	Country	Region	District	Sector	Sub-Location	Geographical Reference	
Africa	Rwanda	Eastern Province	Gatsibo	N/A	N/A	-1.621765	30.20435
						-1.661604	30.731782
						-1.664072	30.731782
						-1.782487	30.798536

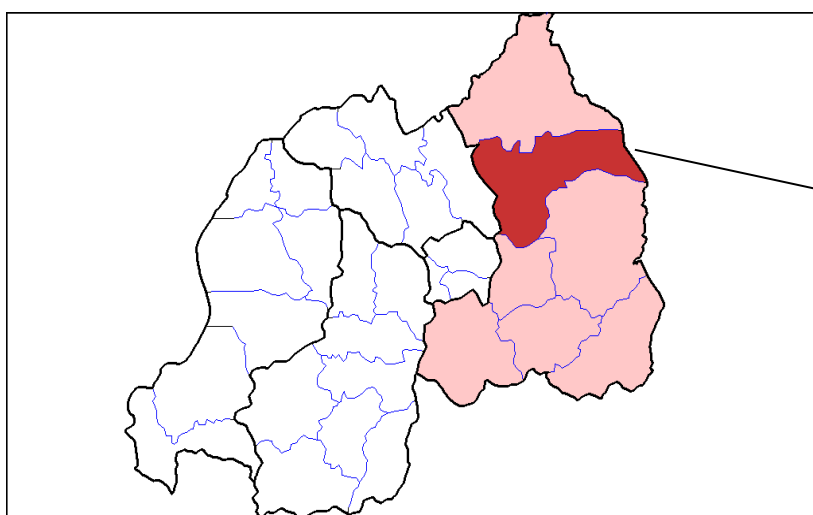


Figure 1a - Gatsibo District



Figure 1b – Close up of Gatsibo District

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A.4.2. Duration of the micro--scale VPA:

A.4.2.1. Starting date of the micro--scale VPA:

19/08/2015

A.4.2.2. Expected operational lifetime of the micro--scale VPA:

7 years

A.4.3. Choice of the crediting period and related information:

Renewable crediting period

A.4.3.1. Starting date of the crediting period:

20/08/2015

A.4.3.2. Length of the crediting period, first crediting period if the choice is renewable CP:

7 years

Boreholes are designed to last for up to 20-50 years with adequate maintenance¹, which is often ignored due to short term cash flow problems in the community groups that manage boreholes in Rwanda. Therefore it is anticipated that under the planned, financed maintenance programme introduced in this project, boreholes will easily last the length of the crediting period. However, if necessary, repair and/or replacements will be made to ensure the technology lifetime covers the crediting period. CO2balance have devised a maintenance programme in order to guarantee a consistent supply of pure water from the borehole pumps rehabilitated as part of this project. The maintenance programme is comprised of a continuous reactive repair service and community engagement. See '*Gatsibo Maintenance Programme*' for full breakdown.

The business model is based on financing any repair and maintenance of the borehole for up to 7 years.

A.4.4. Estimated amount of emission reductions over the chosen crediting period:

Year	Annual estimation of emission reduction of tCO ₂ -e
Year 1	9,374
Year 2	9,374
Year 3	9,374
Year 4	9,374
Year 5	9,374
Year 6	9,374
Year 7	9,374
Total estimated emission reductions (tCO ₂ -e)	65,620

¹ http://www.unicef.org/wash/files/Code_of_Practice_FINAL.pdf (See principle 5 Design and Construction)

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Total number of crediting years	7
Annual average over crediting period of estimated reductions (tCO ₂ -e)	9,374

A.4.5. Public funding of the VPA:

There is no diversion of public or ODA funding for this project activity. Please see the signed ODA declaration form in Annex 2.

A.4.6. Confirmation that micro--scale VPA is neither registered as an individual GS project activity or with any other standard or is part of another Registered PoA:

The mVPA is neither registered as an individual GS Project Activity or with any other standard, nor is it part of another Registered PoA.

SECTION B. Eligibility of micro--scale VPA and Estimation of emissions reductions

B.1. Title and reference of the Registered PoA to which micro--scale VPA is added; title of baseline and monitoring methodology applicable to the VPA:

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The VPA applies the Gold Standard Methodology Technologies and Practices to Displace Decentralized Thermal Energy Consumption Version 1. The applicability of this methodology is discussed below:

Methodology Requirement	Project
The project boundary can be clearly identified, and the technologies counted in the project are not included in another voluntary market or CDM project activity.	<p>The project boundary has been clearly demarcated using political divisions recognized in Rwanda. In the absence of a serial number, the boreholes counted are individually based on their individual name known to the community. The same is referenced in all records relating to the borehole, stored in the project proponent's database. Project Surveys will be used to eliminate the potential for double counting from other voluntary market or CDM activity within the project area.</p> <p>The VPA is uniquely defined by a range of GPS coordinates and current administrative maps to define the project boundary.</p>
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	The project technology does not deliver thermal energy; the 150kW threshold therefore applies to the baseline technology. It is assumed that only one stove will be used in each kitchen counted by the proposed project activity. Using the results of the baseline WBT study, the continuous useful energy output delivered in the most energy intensive scenario has been

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<p>threshold applies to the displaced baseline technology.</p>	<p>estimated at 12.16kW, which is well within the limit imposed by the methodology of 150kW.</p>
<p>The use of 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 and the definitive discontinuity of its use.</p>	<p>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, this project will introduce a mechanism to encourage the cessation of use of baseline technology by educating local people on the health and environmental benefits of abandoning inefficient baseline technology entirely. WASH meetings are held simultaneously when the borehole rehabilitations happens. The meetings are conducted by the local in-partners Rwandans4Water and FAPDR and attendance forms are signed. Beside this official training at the beginning of the project, informal training during the maintenance are also held by Rwandans4Water. The WASH trainings are repeated as and when necessary on a borehole level.</p>
<p>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, 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.</p>	<p>Overall use of the baseline technology to boil clean water (q,p,cleanboil,y) will be monitored in conjunction with that of the project technology, as will the emergence of any other baseline technology by targeted end users. This information will also ensure that requirement 1 (above) of the methodology is also met.</p>
<p>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, corresponding emissions must of course be accounted for as part of the project emissions.</p>	<p>Parallel baseline technology use (viz three stone fires or traditional equivalent) will be revealed during monitoring and its effect on emissions reductions be captured in the parameter Q, p, clean boil, y and in the usage surveys. The uptake rate U will also be determined by surveys and hence used to account for parallel baseline and project technology use.</p>
<p>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. This must be communicated to the technology producers and the retailers of the improved technology or the renewable fuel in use in the project situation by contract or clear written assertions in the transaction paperwork, if the claimants are not the project</p>	<p>A full explanation will be given to elected representatives of borehole users that CO2balance have committed to provide them with a rehabilitated and fully maintained for free on the basis that the emissions reductions will be transferred to CO2balance. This will be recorded using a Carbon Transfer Form, which elected representatives of borehole owners will sign confirming that they</p>

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technology end users, the end users should be notified that they cannot claim for emission reductions from the project.	understand the agreement and will explain it to borehole users.
Project activities making use of a new biomass feedstock in the project situation (e.g. shift from 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.	As the technology used in this project has been specifically designed to displace baseline feedstock use viz fuelwood, rather than a new biomass feedstock, this criterion is not applicable to this project. The emission reductions from this project will result from a change in quantity of fuel consumed, rather than change of fuel type.
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 II.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. The baseline technology has also not changed; rather its use will have been eliminated.
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 II of this methodology if 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.	Renewable fuels are not sold as part of this project therefore this point is non applicable.

B.2. Justification of why the micro--scale VPA is eligible to be included in the Registered PoA:

Eligibility Criteria	Description	Means of Verification (Checked at VPA Inclusion)
VPA Location and Project Boundary	The geographical boundary within which the technologies are installed will be within the Project Boundary outlined in Section A.4.1.2	The location of VPA 41 is specified in Section A.4.1.2, in which the CME states that the location is within Rwanda; one of the countries outlined in the PoA-DD.

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		<p>Each VPA will be uniquely defined by the current administrative maps to define the project boundary.</p> <p>The below GPS points are included in the Gatsibo project boundary:</p> <p>-1.621765 30.204351 -1.661604 30.731782 -1.664072 30.731782 -1.782487 30.798536</p>
Technology and Target Group	<p>Each VPA will involve the distribution and installation of efficient cook stoves and/or household level water technology, to households and/or communities currently cooking with firewood on a traditional three-stone stove, for domestic purposes and/or currently boiling water as a treatment method before consumption.</p>	<p>This VPA will involve the repair and rehabilitation of boreholes that supply water to households and/or communities currently boiling/would in future boil water as a treatment method (taking into account suppressed demand). Suppressed demand will be determined through a set of questions in the project survey that establish the method households use to purify their water, if any, and how they would choose to purify if they were not subject to monetary and access barriers. In this VPA, suppressed demand is met in the target group because these users previously used pure water sources and as a result of borehole failure are now forced to use water from impure sources. To deliver the same level of service would require users to purify water in the most plausible manner as observed in baseline conditions, which is to boil it on a 3 stone fire. A shortage of wood fuel and a lack of awareness of the health risks of drinking dirty water means that demand for this scenario is suppressed. This is fully described in the Baseline Report.</p>
Baseline	<p>The characteristics and current biomass/water consumption of</p>	<p>A modified Water Boiling Test (WBT) has been carried out applicable to all borehole VPAs</p>

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	households in the baseline scenario will be identified for each VPA	within the country of Rwanda. This is provided in the Baseline Report for Gatsibo District.
Methodology	Each VPA will be compliance with Gold Standard Methodology Technologies and Practices to Displace Decentralized Thermal Energy Consumption Version	The applicability of the methodology is justified in Section B.1 and applies to each VPA.
Additionality	Each VPA will demonstrate additionality according to the criteria outlined in Section D.5 of the PoA-DD.	In accordance with the Micro-Programme rules, any activity meeting one of the criteria outlined in Section D.5 shall be deemed additional. VPA 41 is within Rwanda, an LDC and is therefore additional.
Carbon Transfer	It will be clearly communicated that CO2balance is the entity that is claiming ownership rights of and selling the emission reductions resulting from the project activity.	At the point of technology installation, a Carbon Transfer Form (CTF) will be signed and uploaded to our database stating that the rights to the carbon credits will lie with co2balance UK Ltd. An elected representative from each water resources committee responsible for a borehole will sign a CTF on behalf of all users thereof.
Scale of the Activity	Emission reductions achieved by each one of the activities considered under the micro-scale programme are limited to a maximum of 10,000 tonnes of CO2e in any year of their crediting period.	The total number of emission reductions in this VPA will be limited to a maximum of 10,000t CO2
Non-Diversion of ODA	There will be no public funding or ODA for any of the proposed VPA's.	A declaration confirming that there is no public funding for this VPA is attached with the VPA-DD.
Avoiding Double Counting of Emission Reductions	Each VPA will ensure double counting of emission reductions is	Each borehole rehabilitated in this VPA will be referenced by a unique

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	avoided, through the unique identification of each technology with an identification number.	name and number (i.e. GAT001) This ensures that they are uniquely identifiable to this project and it allow for good monitoring the project activity.
Technology Output	The technologies will each have continuous energy outputs of less than 150kW per unit. This will be applied to the baseline technology with regards to the water technology units.	Calculations for the boreholes show they are within the 150kW limit are submitted with this VPA-DD.
Avoiding Double Counting of Programme Activities	Each VPA will show that it is exclusive to the PoA and not registered as another project activity or VPA under another PoA.	It is stated that VPA 41 is neither registered as a project activity with GS or any other standard or as a VPA of another PoA. The appropriate registries (Gold Standard and CDM) have been accessed on 02/11/15 to confirm this.

Sustainable Development Criteria:

Eligibility Criteria	Description	Means of Verification (Checked at VPA Inclusion)
Air Quality	Both the efficient cook stove and water technologies will result in an improvement in indoor air quality.	The air quality will be measured indirectly through wood consumption as part of the Sustainability Monitoring.

B.3. Assessment and demonstration of additionality of the micro--scale VPA:

B.3.1 Description of how the anthropogenic emissions of GHG by sources are reduced as per the eligibility criteria defined in the registered micro-programme (*when Additionality is demonstrated at the micro-programme level*):

N/A

B.3.2 Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered micro-scale project activity (*when Additionality is*

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demonstrated at the activity level):

As outlined in Section D.5 of the PoA-DD, the Micro-Scale VPA is deemed additional as the project activity is located in Rwanda, which is an LDC.

B.4. Description of the sources and gases included in the project boundary and proof that the micro--scale VPA is located within the geographical boundary of the registered PoA.

The sources listed below are included in the project boundary. The mVPA is limited to Gatsibo District which is within the Republic of Rwanda, as illustrated in Section 4.1.2, therefore within the geographical boundary of the registered PoA.

	Source	Gas	Included?	Justification / Explanation
Baseline	Combustion of fossil fuels	CO ₂	Yes	Important source of emissions
	Combustion of fossil fuels	CH ₄	Yes	Important source of emissions
	Combustion of fossil fuels	N ₂ O	Yes	Gas included in the calculations. Emissions factors for fuel in stationery combustion by the IPCC
Project Activity	Combustion of fossil fuels	CO ₂	Yes	Important source of emissions
	Combustion of fossil fuels	CH ₄	Yes	Important source of emissions
	Combustion of fossil fuels	N ₂ O	Yes	Gas included in the calculations. Emissions factors for fuel in stationery combustion by the IPCC

B.5. Emission reductions:

B.5.1. Data and parameters that are available at validation:

Fixed Parameters:

Data / Parameter:	Cj
Data unit:	Fraction
Description:	Portion of users of project safe water supply who were already in baseline using a non-boiling safe water supply.
Source of data to be used:	Baseline Water Test
Value of data applied for the purpose of calculating expected emission reductions	9.66%
Description of measurement methods and procedures to be applied:	The Baseline Survey is used to determine the amount of safe water supplied by boiling. This data is gathered according to: <i>Technologies and Practices to Displace Decentralized Thermal Energy Consumption Version 1, Draft General Guidelines On Sampling And Surveys</i> ; EB37 Annex 27; and <i>Standard For Sampling And Surveys For CDM Project Activities and Programme of Activities (Version 02)</i> ; EB65 Annex 2
Any comment:	

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Data / Parameter:	EF _{b,co2}
Data unit:	tCO ₂ /TJ
Description:	CO ₂ emission factor arising from use of fuels in baseline scenario
Source of data used:	IPCC default values IPCC default value IPCC 2006 Guidelines for National Greenhouse gas Inventories Chapter 2: Stationary Combustion Page 2.23/ Table 2.5
Value applied:	112
Justification of the choice of data or description of measurement methods and procedures actually applied:	Deemed valid by GS VER Methodology 2006 IPCC Guidelines for National Greenhouse Gas Inventories
Any comment:	-

Data / Parameter:	EF _{b,non co2}
Data unit:	tCO ₂ /TJ
Description:	Non-CO ₂ emission factor arising from use of fuels in baseline scenario
Source of data used:	As provided by IPCC in section 2.10.2 of IPCC Fourth Assessment Report: Climate Change 2007 (http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html) and Emission Factor value provided in Table 2.5 of Chapter 2: Stationary Emissions (2006 IPCC Guidelines for National Greenhouse Gas Inventories).
Value applied:	8.692 (8.692 ((CH ₄ =0.3*GWP 25) + (N ₂ O=0.004*GWP 298)))
Justification of the choice of data or description of measurement methods and procedures actually applied:	Deemed valid by GS VER Methodology Determined as per IPCC default figures
Any comment:	-

Data / Parameter:	EF _{p,co2}
Data unit:	tCO ₂ /TJ
Description:	CO ₂ emission factor arising from use of fuels in project scenario
Source of data used:	IPCC default values IPCC 2006 Guidelines for National Greenhouse gas Inventories Chapter 2: Stationary Combustion Page 2.23/ Table 2.5
Value applied:	112
Justification of the choice of data or	Deemed valid by Methodology Determined as per IPCC default figures

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description of measurement methods and procedures actually applied:	
Any comment:	-

Data / Parameter:	EF _{p,non co2}
Data unit:	tco ₂ /TJ
Description:	Non-co ₂ emission factor arising from use of fuels in project scenario
Source of data used:	As provided by IPCC in section 2.10.2 of IPCC Fourth Assessment Report: Climate Change 2007 (http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html) and Emission Factor value provided in Table 2.5 of Chapter 2: Stationary Emissions (2006 IPCC Guidelines for National Greenhouse Gas Inventories).
Value applied:	8.692 (8.692 ((CH ₄ =0.3*GWP 25) + (N ₂ O=0.004*GWP 298))
Justification of the choice of data or description of measurement methods and procedures actually applied:	Deemed valid by GS VER Methodology Determined as per IPCC default figures
Any comment:	-

Data / Parameter:	NCV _b
Data unit:	TJ/ton
Description:	Net calorific value of the fuels used in the baseline
Source of data used:	IPCC default value IPCC (2006) "IPCC Guidelines for National Greenhouse Gas Inventories", Volume 2, Energy, Chapter 1, Introduction, Table 1.2, p 1.19
Value applied:	0.0156
Justification of the choice of data or description of measurement methods and procedures actually applied:	Deemed valid by Methodology Determined as per IPCC default figures
Any comment:	-

Data / Parameter:	NCV _p
Data unit:	TJ/ton
Description:	Net calorific value of the fuels used in the project
Source of data used:	IPCC default value IPCC (2006) "IPCC Guidelines for National Greenhouse Gas Inventories", Volume 2, Energy, Chapter 1, Introduction, Table 1.2, p 1.19

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Value applied:	0.0156
Justification of the choice of data or description of measurement methods and procedures actually applied:	Deemed valid by Methodology Determined as per IPCC default figures
Any comment:	-

Data / Parameter:	$f_{NRB,i,y}$
Data unit:	Fractional non-renewability
Description:	Non-renewability status of woody biomass fuel in scenario i during year y
Source of data used:	Applicable NRB assessment - Information note: Default values of fNRB for LDCs and SIDs Thirty-fifth meeting Report Annex 20 Page 1 https://cdm.unfccc.int/Panels/ssc_wg/meetings/035/ssc_035_an20.pdf
Value applied:	0.98
Justification of the choice of data or description of measurement methods and procedures actually applied:	CDM default figure for Rwanda for the fraction of non-renewable biomass (fNRB)
Any comment:	-

Data / Parameter:	$W_{b,y}$
Data unit:	T/litre
Description:	Quantity of fuel that is used to treat 1 litre of water in the baseline scenario b during year y
Source of data to be used:	Baseline Water Boiling Test
Value of data applied for the purpose of calculating expected emission reductions	0.0007363
Description of measurement methods and procedures to be applied:	The baseline water boiling test is used to determine the amount of wood used to purify 1 litre of water by boiling. This data is gathered according to: <i>Technologies and Practices to Displace Decentralized Thermal Energy Consumption Version 1, Draft General Guidelines On Sampling And Surveys</i> ; EB37 Annex 27; and <i>Standard For Sampling And Surveys For CDM Project Activities and Programme of Activities (Version 02)</i> ; EB65 Annex 2
Any comment:	

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Data / Parameter:	$W_{p,y}$
Data unit:	T/litre
Description:	Quantity of fuel that is used to treat 1 litre of water in the project scenario p during year y
Source of data to be used:	Baseline Water Boiling Test
Value of data applied for the purpose of calculating expected emission reductions	0.0007363
Description of measurement methods and procedures to be applied:	The baseline water boiling test is used to determine the amount of wood used to purify 1 litre of water by boiling. This data is gathered according to: <i>Technologies and Practices to Displace Decentralized Thermal Energy Consumption Version 1, Draft General Guidelines On Sampling And Surveys</i> ; EB37 Annex 27; and <i>Standard For Sampling And Surveys For CDM Project Activities and Programme of Activities (Version 02)</i> ; EB65 Annex 2
Any comment:	

Data / Parameter:	Xboil (Non Suppressed demand)
Data unit:	Percentage
Description:	Percentage of premises that in the absence of the project activity would have used non-GHG emitting technologies like chlorine treatment techniques (if available) in the project boundary,.
Source of data used:	Baseline study. Credible literature, studies, survey, reports, relevant to the project target area
Value applied:	0%
Justification of the choice of data or description of measurement methods and procedures actually applied:	Suppressed demand will be determined through a set of questions in the project survey that establish the method households use to purify their water, if any, and how they would choose to purify if they were not subject to monetary and access barriers. This is in line with the Gold Standard principles of suppressed demand outline in annex 2. A fixed suppressed demand baseline has been opted for.
Any comment:	-

B.5.2. Ex-ante calculation of emission reductions:

Parameter	Value	Unit	Description
BE _{b,y}	tCO ₂ /y	12,114	Baseline emissions per year

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B _{b,y}	T	8194.65	Quantity fuel consumed in baseline scenario
C _j	fraction	9.66 %	Percentage of safe water supplies anyway
N _{jy}		1,642,500	Person Days
Q _{p,y}	L/pd	7.5	Quantity safe water litres supplied by project technology
Q _{p, raw, y}	L/pd	0	Quantity of raw water boiled in addition to project tech water
W _{p,y}	T/L	0.0007363	Tonnes of wood to boil water - water boiling test
EF _{b,fuel,co2}	tCO ₂ /TJ	112	Emissions factor baseline fuel (co2)
f _{NRB}	fraction	0.98	Non renewable biomass fraction
EF _{b, fuel, non-co2}	TCO ₂ /TJ	8.692	Emissions factor baseline fuel (non-co2)

NCV _{b,fuel}	TJ/T	0.0156	Net calorific value of fuel
PE_{p,y}	tCO₂/y	2,740	Project emissions per year
B _{p,y}	T	1853.30	Quantity of fuel consumed in project scenario per HH
C _j	fraction	9.66%	Percentage of safe water supplies anyway
N _{jy}		1,642,500	Person Days
W _{p,y}	T/L	0.0007363	Tonnes of wood to boil water - water boiling test
Q _{p, raw, y}	L/pd	0	Quantity of raw water boiled in addition to project tech water
Q _{p, cleanboil, y}	L/pd	1.70	Quantity of safe water boiled
U _{p,y}	fraction	0.80	Usage rate
Quality of the treated water			Water quality will be assessed using techniques approved by the WHO
EF _{b,fuel,co2}	tCO ₂ /TJ	112	Emissions factor project fuel (co2)
f _{NRB}	fraction	0.98	NRB
EF _{b, fuel, non-co2}	TCO ₂ /TJ	8.692	Emissions factor project fuel (non-co2)
NCV _{b,fuel}	TJ/T	0.0156	Net calorific value of fuel
LE p,y	T Co₂/yr	0	Leakage in project scenario

Baseline Emissions

$$BE_{b,y} = B_{b,y} * \left((f_{NRB_y} * EF_{b,fuel,co2}) + EF_{b,fuel,nonco2} \right) * NCV_{b,fuel}$$

Where:

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$$B_{p,y} = (1 - C_j) * N_{j,y} * W_{i,y} * (Q_{j,y} + Q_{j,rawboil,y}) \quad (11)$$

Where:

$N_{j,y}$	Number of person.days consuming water supplied by project scenario p through year y ⁴⁷
C_j	Expressed as a percentage, this is the portion of users of the project technology j who in the baseline were already consuming safe water without boiling it
$B_{b,y}$	Quantity of fuel consumed in baseline scenario b during the year y in tons
$Q_{p,y}$	Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day
$Q_{p,rawboil,y}$	Quantity of raw water boiled in the project scenario p per person per day
$W_{b,y}$	Quantity of fuel in tons required to treat 1 litre of water using technologies representative of baseline scenario b during project year y, as per Baseline Water Boiling Test.

Project Emissions

$$PE_{p,y} = B_{p,y} * \left((fNRB_y * EF_{p,fuel,co2}) + EF_{p,fuel,nonco2} \right) * NCV_{p,fuel}$$

Where:

$$B_{p,y} = (1 - C_j) * N_{p,y} * W_{b,y} * (Q_{p,rawboil,y} + Q_{p,cleanboil,y})$$

$N_{p,y}$	Number of person.days consuming water supplied by project scenario p through year y
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C_j	Expressed as a percentage, this is the portion of users of the project technology j or who in the baseline were already consuming safe water without boiling it
$B_{p,y}$	Quantity of fuel consumed in project scenario p during the year y in tons
$Q_{p,rawboil,y}$	Quantity of raw water boiled in the project scenario p per person per day
$Q_{p,cleanboil,y}$	Quantity of safe water boiled in the project scenario p per person per day
$W_{p,y}$	Quantity of wood fuel or fossil fuel in tons required to treat 1 litre of water using technologies representative of the project scenario p during project year y

Leakage:

The potential sources of leakage listed in the methodology have been investigated, and addressed below:

a) The displaced baseline technologies are reused outside the project boundary in place of lower emitting technology or in a manner suggesting more usage than would have occurred in the absence of the project.

In all cases the baseline technologies displaced are three stones; these have no market value and are not a product as such. There is nothing limiting the use of three stone cooking across the country (the technology is lowest rung on the energy ladder and the price is zero), which is why this cooking method is so widespread. In any case the primary purpose of these three rocks is for cooking so they will not be replaced/displaced in their entirety as a result of this project - which means they will not be reused outside the project boundary. This leakage source can therefore be discounted.

b) The non-renewable biomass or fossil fuels saved under the project activity are used by non-project users who previously used lower emitting energy sources.

There is no evidence to suggest significant (if any) use of renewable energy for purifying water in the project region as found in the Baseline Water Surveys. Renewable energy used for purifying water would likely be animal dung or crop residues which will be used due to ease of availability/proximity to the home rather than due to a shortage of wood fuel, therefore it is an independent factor. This leakage source can therefore be discounted.

c) The project significantly impacts the NRB fraction within an area where other CDM or VER project activities account for NRB fraction in their baseline scenario.

As the majority of participants collect wood from within the project boundary, it is not expected that the NRB in other areas will be affected. There are currently no other CDM or VER projects in the project area.

d) The project population compensates for loss of the space heating effect of inefficient technology by adopting some other form of heating or by retaining some use of inefficient technology.

The space heating effect of boiling water for purification purposes will be minimal, as the predominant use of baseline technology is for cooking. Therefore it is highly unlikely that another technology will be used for heating when users no longer boil water.

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e) By virtue of promotion and marketing of new technology with high efficiency, the project stimulates substitution within households who commonly used a technology with relatively lower emissions, in cases where such a trend is not eligible as an evolving baseline.

This project is not marketing efficient technology; it is eliminating the need for a fuel based technology to deliver pure water. Lower emission technology substitution within households is therefore not possible and this leakage source can therefore be discounted.

The monitoring of the target group shall be done to assess the project technology users via community sensitization programmes, includes WASH meetings which happens simultaneously with the borehole rehabilitations. Together with the household names, the exact number of people in the household will be also captured by the field team and enumerators by the in-country partner NGO Rwandas4Water. The collection of the borehole users' detail is done during the sensitization process during the rehabilitation. The final list with the names and the household number are then checked with the sector office database so the total number of households using each borehole will also be known, hence a figure for person days can be calculated. Monitoring of the borehole users throughout the project lifetime will be done via usage survey. This survey will take into account possible drop off rates in future.

Overall Emission Reductions

$$ER_y = (\Sigma BE_{b,y} - \Sigma PE_{p,y} - \Sigma LE_{p,y}) * (1 - XBoil)$$

The percentage of non-suppressed demand premises (Xboil) shall be conservatively omitted from the total emission reductions.

B.5.3. Summary of the ex-ante estimation of emission reductions:

Year	Estimation of project activity emission (tCO2)	Estimation of baseline emissions (tCO2)	Estimation of leakage (tCO2)	Estimation of overall emission reductions (tCO2)
20/08/2015 – 19/08/2016	2,740	12,114	0	9,374
20/08/2016 – 19/08/2017	2,740	12,114	0	9,374
20/08/2017 – 19/08/2018	2,740	12,114	0	9,374

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20/08/2018 – 19/08/2019	2,740	12,114	0	9,374
20/08/2019 – 19/08/2020	2,740	12,114	0	9,374
20/08/2020 – 19/08/2021	2,740	12,114	0	9,374
20/08/2021 – 19/08/2022	2,740	12,114	0	9,374
TOTAL				65,620

B.6. Application of the monitoring methodology and description of the monitoring plan:

B.6.1. Description of the monitoring plan:

Parameters Monitored:

Data / Parameter:	N p,y
Data unit:	Person days
Description:	Number of persons consuming water supplied by project scenario p through year y
Source of data to be used:	Borehole Project Database
Value of data applied for the purpose of calculating expected emission reductions	1,642,500
Description of measurement methods and procedures to be applied:	Sum of the total number of people using each borehole in the project multiplied by the number of days crediting each borehole earns in this monitoring period As the name of every user who uses the borehole cannot be established with ease, a minimum of 1000 head of HH names will be collected per project as per the meth to provide a large enough sample size to estimate parameters. Where we know the head of HH name we will also detail the number of people in that household to give a clear understanding of the average number of people per household. The total number of households using each borehole will also be known and will take the form of lists supplied by the community group and or district water officer responsible for that borehole. Using this method, the total number of people using each borehole will be known and hence a figure for person days can be calculated.

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Any comment:	The exact number of borehole users per borehole will be provided prior verification. Based on the clone project GS 3306, the project developer calculated the value with average 500 people using one borehole.
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Data / Parameter:	U p,y
Data unit:	Percentage
Description:	Usage rate in project scenario p through year y
Source of data to be used:	Annual Usage Survey
Value of data applied for the purpose of calculating expected emission reductions	0.80
Description of measurement methods and procedures to be applied:	Annual usage survey will be carried out by staff trained by co2balance to meet the specific requirements of the methodology. All data presented in excel is subject to checking and cross referencing of a sample of the raw data by co2balance UK Ltd
Any comment:	

Data / Parameter:	Qp,y
Data unit:	Litres per person per day
Description:	Quantity of safe water supplied in the project scenario p during the year y using the zero or low emissions clean water supply technology
Source of data to be used:	Water Consumption Field Test (WCFT)
Value of data applied for the purpose of calculating expected emission reductions	7.5
Description of measurement methods and procedures to be applied:	Method used similar to Kitchen Performance Test in which the volume of water consumed in each household is averaged over 3 days. Volume capped at 7.5 litres per person per day as per the methodology The WCFT will be carried out by staff trained by co2balance to meet the specific requirements of the methodology. All data presented in excel is subject to checking and cross referencing of a sample of the raw data by co2balance UK Ltd
Any comment:	

Data / Parameter:	Qp,cleanboil,y
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Data unit:	Litres per person per day
Description:	Quantity of safe water boiled in the project scenario p during the year y using the zero or low emissions clean water supply technology
Source of data to be used:	Water Consumption Field Test (WCFT)
Value of data applied for the purpose of calculating expected emission reductions	1.70
Description of measurement methods and procedures to be applied:	Method used similar to Kitchen Performance Test in which the volume of water consumed in each household is averaged over 3 days. The WCFT will be carried out by staff trained by co2balance to meet the specific requirements of the methodology. All data presented in excel is subject to checking and cross referencing of a sample of the raw data by co2balance UK Ltd
Any comment:	Extremely conservatively estimated at 2.5. Actual value to be provided in time for first verification

Data / Parameter:	Qp,rawboil, y
Data unit:	Litres per person per day
Description:	The raw of unsafe water that is still boiled after installation of the water treatment technology
Source of data to be used:	0
Value of data applied for the purpose of calculating expected emission reductions	0
Description of measurement methods and procedures to be applied:	Method used similar to Kitchen Performance Test in which the volume of water consumed in each household is averaged over 3 days. The WCFT will be carried out by staff trained by co2balance to meet the specific requirements of the methodology. All data presented in excel is subject to checking and cross referencing of a sample of the raw data by co2balance UK Ltd

Data / Parameter:	Quality of Treated Water
Data unit:	Parameters as per national standards
Description:	Performance of the treatment technology

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Source of data to be used:	Laboratory Tests
Value of data applied for the purpose of calculating expected emission reductions	Certificates supplied at verification
Description of measurement methods and procedures to be applied:	Water quality testing will be conducted by a credible 3 rd party in line with national standards. National standards in Rwanda are taken as WHO standards. An example of a specimen certificate has been included in Annex 2.
Any comment:	

Data / Parameter:	LE _{p,y}
Data unit:	tCO ₂ e per year
Description:	Leakage in project scenario p during year y
Source of data to be used:	Baseline and monitoring surveys
Value of data applied for the purpose of calculating expected emission reductions	0
Description of measurement methods and procedures to be applied:	Assessed every two years using baseline and monitoring surveys
Any comment:	

For further details and the full Monitoring Plan, see the attached 'Project Monitoring Plan' document.

A. Installation Record

A comprehensive installation record will record the following information:

- Date of installation/rehabilitation
- Location of the borehole
- Model of the borehole
- Quantity of boreholes installed

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- The total number of people obtaining their water from each borehole

The installation record will be backed up electronically, with original documentation being stored in the Nairobi African head office or appropriate office for the respective VPAs.

B. Project Database

The project database will be derived from the Installation Record, with project technologies differentiated by different project scenarios.

All data collected in relation to the project will be held in the local office and/or on the Project Database for the entire life cycle of the project and a period of 2 years afterwards. The data may be archived during the project in order to maintain clarity and security.

a. Ongoing Monitoring Studies

As explained in the Monitoring Plan, cross sampling of devices will be applied across the following VPAs: GS 3306, GS 3430, GS 3431, GS 3432, GS 3433, GS 4202, GS 4203. The Monitoring Plan is to be implemented by CO2balance UK Ltd for 7 VPAs in the Gatsibo District. As all 7 VPAs are homogenous; located in the same region, use the same technology and share a common baseline-cross sampling of devices shall be applied across the 7 VPAs rather than on a VPA by VPA basis. An additional 5 VPAs will be added in June 2018 to cater for a surplus of emission reductions and will be monitored in the same way.;

a) Monitoring Survey

- Completed annually.
- Begins 1 year after project registration
- Surveys end users currently using project technologies to explore changes in project scenario over time including the cessation of three stone fire use.
- Carried out by Rwandans4Water and co2balance UK
- Guidance on the sampling strategy will be provided by co2balance UK Ltd

b) *Water consumption field test* - Completed annually, prior to first verification and then every year after first verification

The water consumption field test determines three parameters *viz* Q_{p,y} – the quantity of water supplied in the project scenario using the clean water supply technology; Q_{p,rawboil,y} – the raw or unsafe water that is still boiled after installation of the water supply technology and Q_{p,cleanboil,y} – quantity of safe water boiled in the project scenario after installation of the water supply technology.

The measurement method used is similar to Kitchen Performance Test in which the volume of water consumed in each household is averaged over 3 days. The WCFT will be carried out by staff trained by co2balance to meet the specific requirements of the methodology. All data presented in excel is subject to checking and cross referencing of a sample of the raw data by co2balance UK Ltd.

c) *Up,y Usage Survey*- Completed annually, on time for any request of issuance

The usage survey provides a single usage parameter Up,y that is weighted based on drop off rates that are representative of the age distribution for project technologies in the installation record.

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d) *Quality of the treated water* - Completed annually

The quality of the treated water will be assessed to ensure that it is fit for human consumption. The parameters used to assess the water quality will be in line with Rwandan or East African standards for potable water and all parameters will be shown to be within levels considered acceptable for domestic human consumption. An example specimen certificate has been provided in Annex 2.

e) *LEp,y Leakage Assessment*- Completed every other year

The potential sources of leakage will be investigated (*LEp,y*). If the assessment quantifies an increase in fuel consumption by the non-project households attributable to the project activity, then calculations will be adjusted to account for this.

f) *fNRB Non-renewable Biomass Assessment Update*- Reassessed at renewal of crediting period

In accordance with the methodology, the NRB assessment will remain fixed for the entire crediting period, although the project proponent may choose to reexamine the assessment at any time.

g) *Np,y Project Technology Days*

Number of persons consuming water supplied by project scenario p through year y. Sum of the total number of people using each borehole in the project multiplied by the number of days crediting each borehole earns in this monitoring period

SECTION C. Stakeholders' comments

C.1. Brief description how comments by local stakeholders have been invited and compiled:

A Local Stakeholder Consultation Meeting was conducted at the Meeting Room of Gatsibo District, Gatsibo, Rwanda on the 22nd May 2014. This meeting was designed to cover several borehole project VPAs under the PoA. As stated in the Gold Standard Micro-Programme Rules and Procedures, a single LSC live meeting can be organised for several micro-scale project activities. The VPAs that will be covered are all in the same District in Rwanda, in close proximity to each other, the implementation is planned to be carried out within the same 2 years, the distribution approach is the same in all VPAs and the technology involved (boreholes) is identical. It is therefore deemed justifiable for one meeting to cover several project activities.

The pictures below were taken by the co2balance representatives during the stakeholder meeting.

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The meeting was well attended with good representation from each Sector to be included in the proposed VPAs

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Attendees were encouraged to ask questions and share their opinions

Local stakeholders were invited to participate in the consultation for the implementation of the initial (and subsequent) Rwandan Borehole Project VPAs in the co2balance Improved Kitchen Regimes PoA. This comprised of a meeting with local communities from Sectors across the Gatsibo District. The consultation was open to all stakeholders from across the Gold Standard categories including local community leaders and representatives, NGOs etc. The meeting was led by the local NGO partner “Fondation Artisans de la Paix at du Développement au Rwanda” (FAPDR), in conjunction with local water specialist NGO “Rwandans4Water.”

Stakeholders were invited to the meeting using a variety of methods, depending on their category code and the ease of reaching each through the channels available. The table below summarises the groups invited to the meeting as well as the mode of invitation and the method of invite tracking:

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Gold Standard Stakeholder Categories				
Code	Category	Invited by	Mode	Tracked by
A & B	Local people impacted by the project or official representatives. Local policy makers and representatives of local authorities	FAPDR/Rwandans4Water	Letter, radio adverts	Signed Personal Invite Record, advert text and/or receipts
C	Designated National Authority of the Country ^[3]	co2balance	Email (letter)	Sentbox Screen Shot
D	Local non-governmental organizations working on topics relevant to your project location[4]	co2balance & FADPR	Email (letter),	Sentbox Screen Shot, Personal Invite Record
E	The local Gold Standard expert who is located closest to your project location	co2balance	Email (letter)	Sentbox Screen Shot
F	Relevant international non-governmental organisations (NGOs) supporting the Gold Standard, with a representation in your region and ALL GS supporter NGOs located in the country[5]	co2balance	Email (letter)	Sentbox Screen Shot

Invitations:

Invitations to each group were sent out in a phased manner that was appropriate for each category of stakeholders.

Public Invitation: a radio broadcast prior to the meeting. Text and receipt from the radio broadcast below:

TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

Gatsibo Borehole Project: Radio Announcement

Award-winning environmental company co2balance, in collaboration with FAPDR and Rwandans4Water, plan to develop a series of Borehole projects within Gatsibo District. Our aim is to repair and rehabilitate dysfunctional boreholes in this district, so that communities have access to safe, clean water, without the need to use boiling as a method of purification.

The project will:

- Provide safe, clean, drinking water to local communities therefore reducing incidences of water born diseases
- Reduce the need for local residents to boil water as a means of purification, therefore reducing CO₂ emissions
- Reduce harmful smoke in people's homes from boiling water
- Reduce pressure on forest resources for wood fuel

We have arranged a meeting to gather local opinion on our projects; we will use these to shape how our projects are delivered to local people. If you would like to attend and share your ideas, please come to:

This meeting will be conducted in English and Kinyarwanda.

For more information please contact Jean Baptiste Nsabimana on 0788507777

Radio text in English

ITANGAZO RYO KURI RADIO

Umuryango co2balance wo Bwongereza ufatanyije na FAPDR Umunyango nyarwanda uregera ibidukikije baramenyeshya abatanyabikorwa bawo mu mu karere ka Gatsibo baturuka mu mirenge yose igize ako Karere ko batumiwe mu nama izabahuza n'abashinzwe umushinga wo gusana amariba akoreshwa amapombo y'intoki azwi ku nizina rya NAKONDO.

Ababonye ubutumire bese bazahurira ku Biro by'Akarere ka Gatsibo ka wa kane taliki ya 20 Gicurasi 2014 sa tatu za mu gitondo.

Musabwe kwitabira iyo nama kandi muzubahirize isaha.

Bikorewe i Kigali ku wa 11 Gicurasi 2014.

Uhagarariye co2balance mu Rwanda.

Jean Baptiste Nsabimana



RECU N°

RADIO RWANDA

Reçu de : co2 balance
 La somme de (en chiffres) : treute mille francs
 (en lettres) : _____
 Justification : communiquel 4 epis / Gatsibo

 Date : 18/5/2014

 Nom et prénom : Abimana Jean
 Signature : [Signature]

Radio Text in Kinyarwanda

Radio Receipt

Email Invitations were sent to International and local NGOs with a presence in the area, and personal invitations were prepared for community beneficiaries and local representatives, often delivered by hand depending on the situation. Each form of invite was accompanied by a Non-Technical Summary in the appropriate language.

TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

Stakeholder Invitation Letter (English):

Re: Local Stakeholder Consultation – Gatsibo District, Rwanda

Dear Sir/Madam,

Award-winning environmental company CO2balance, in collaboration with FAPDR- a local NGO for environmental protection and development, and Rwandans4Water, plan to develop a series of Borehole projects within the Gatsibo District, Rwanda. This district is largely rural, in which water scarcity is an issue, and local people typically use biomass on inefficient three-stone fires to purify their drinking, cleaning and washing water. This purification process results in the release of greenhouse gas emissions from the combustion of biomass - this can be avoided if a carbon neutral technology (such as a hand pumped borehole) supplies the clean water desired by households.

In this project CO2balance will provide safe drinking water to communities and reduce the need to boil water as a means of purification through the repair and long-term maintenance of damaged boreholes in the Gatsibo District.

Borehole Repair/Rehabilitation

Many existing boreholes are owned by community groups or Community Based Organisations (CBOs) and have fallen into disrepair because maintenance programmes have been poorly managed, or proven too expensive. In this instance, CO2balance will work with technicians at Rwandans4Water to identify broken down boreholes and rehabilitate them so that they deliver clean, safe water and breakdowns are fixed rapidly. We will also ensure that the quality of the water delivered by the boreholes is fit for human consumption for the entire length of the project, which will be a minimum of seven years.

This project will be developed under the Gold Standard of the Clean Development Mechanism which will ensure that enhanced local socio-economic benefits as well as verifiable carbon dioxide (CO₂) emission reductions are achieved. We have arranged a meeting with Local Stakeholders in which we seek their opinion on the project's design and social and environmental impacts; we believe this is an essential step in implementing a project in which the local community has ownership - thereby maximising the chances of successful adoption.

We value your input into our project design and cordially invite you to attend this Stakeholder Consultation – the meeting will be conducted in English and Kinyarwanda.

DATE: Thursday 22nd May 2014

TIME: 10am

VENUE: Meeting Room of the Gatsibo District, Gatsibo District, Rwanda

For further information please contact:

UK Project Manager

ellie.kowalski@co2balance.com

Rwanda Projects Consultant (FAPDR)

jbsabimana@gmail.com

+250 (0)788507777

TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

Stakeholder Invitation (Kinyarwanda):



RWANDANS4WATER

Bringing Water Home

www.rwandans4water.org T: +250-787011131 E: info@rwandans4water.org

Umuyobozi w'akarere ka
Gatsibo

Ku wa 9, Gicurasi, 2014

Impamvu: Gusaba uruhushya rwo gukoresha inama y'abafatanyabikorwa b'ibikorwa by'amazi mu karere ka Gatsibo

Nyakubwaha tukwandikiye iyi baruwa dusaba gukoresha inama y'abafatanyabikorwa b'ibikorwa by'amazi. Iyo nama twifuza ko yazaba tariki ya 22 Gicurasi, 2014 guhera saa tatu za mugitondo.

Ubufatanye hagati y'umushinga CO2Balance hamwe na Rwandans4Water bugamije gusana amariba y'amazi yasenutse mu mirenge yose yo mu karere. Co2 Balance ikaba izatanga inkunga yo kuyasana, amariba agasanwa na Rwandans4Water, bigakurikiranwa n'umuryango FADPR. FADPR ikaba ariyo izategura iyo nama. Iyi nama igamije kwemezako icyo gikorwa gikenewe mu karere.

Abazatumirwa bakaba ari abantu ijana bava mu mirenge yose, hakazaba harimo n'abaterankunga b'umushinga.

Turangije tubashimira ubufatanye bwiza dusanganywe.

Murakoze

Aloys Zunguzungu

Umuyobozi wa Rwandans4Water

Bimenyeshajwe:

Ubuyobozi bwa FADPR




www.rwandans4water.org T: +250-787011131 E: info@rwandans4water.org

TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

Non-Technical Summary (English):

Project Summary

Gatsibo is a largely rural district in which water scarcity is a serious issue, and local people typically use wood fuel on inefficient three-stone fires to purify their drinking, cleaning and washing water. This process results in the release of greenhouse gas emissions from the combustion of wood - this can be avoided if a technology that does not require fuel (wood or fossil) supplies the clean water needed by households.

In this project, CO2balance will provide safe drinking water to communities and reduce the need to boil water as a means of purification, through the repair and rehabilitation of damaged and dysfunctional boreholes in the Gatsibo District.

Many existing boreholes are owned by community groups or Community Based Organisations (CBOs) and have fallen into disrepair because maintenance programmes have been poorly managed, or proven too expensive. In this instance, CO2balance will work with Rwandans4Water to identify broken down boreholes and rehabilitate/repair them so that they deliver clean, safe water and breakdowns are fixed rapidly. We will also ensure that the quality of the water delivered by the boreholes is fit for human consumption for the entire length of the project, which will be a minimum of seven years.



Technology

An example of the technology common in the area is shown below. This project is not limited to any particular model of hand-pump- we will repair/rehabilitate pumps according to local needs.



Afridev Hand Pump

Sustainable Development

In addition to supplying clean, safe water, and greenhouse gas savings, this project will:

- Result in less wood used by households, which will reduce pressure on local ecosystems
- Reduced time spent collecting wood to boil water
- Reduced incidence of illness (and therefore less opportunity costs for families)
- Reduced expenditure on wood fuel, leaving money free for other household expenses

TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

Non-Technical Summary Kinyarwanda:

INCAMAKE Y'UMUSHINGA 'AMAZI MU KARERE KA GATSIBO

Gatsibo ni akarere kari mu cyaro aho ikibazo cy'amazi ari ingorabahizi.

Hari ikibazo gikomeye cy'amavomo akoreshwa n'ipombo y'intoki yakozwe buri Africa ariko abantu ntibayiteho ku buryo buhagije.

Ayo mavomo iyo ahagaze gukora abatunge ntibongera kubona amazi meza yo gukoresha.

Kenshi abaturage bagomba guteka amazi yo kunywa mu rwego rwo kuyasukura.

- Guteka mazi yo kunywa basaba ibicanwa byinshi bityo amashyamba akagabanyuka n'ibidukikije bikangirika.
- Kandi gushaka inkwi zo gucana bitwara igihe kinini cyangwa inkwi zikaba zihenze cyane.

Ibyi bivugako abaturage kenshi banywa amazi yanduye bikabatera indwara zinyuranye

- Uyu mushinga uzageze ku baturage amazi meza ugerageze kureba aho amavomo yangiritse aherereye muri Gatsibo agasanwa.
- Uyu mushinga uzakorana n'abaturage ku buryo haboneka icyizere cy'uko ayo mavomo azaba afashwe neza nibura mu gihe cy'imyaka irindwi.
- CO₂balance uzakorana na Rwandans4Water mu gusana ayo mavomo kandi kandi wizeye neza ko ayo mazi afite isuku ashibora kunyobwa nta kibazo.
- Ibi bizabanywa inkwi zakoreshe waga munguteka amazi yo gukoresha.
- Hakorwa inyigo zijyanye no gusuzuma uko umushinga uzacungwa n'akamaro kawo.

Akamaro uzagirira abaturage

- Kugabanywa ibicanwa byakoreshwaga bateka amazi ngo bayasukure bityo ibidukikije bibungabungwe
- Kugabanywa igihe bataga bashakisha inkwi bakoreshe mu ngo zabo
- Kugabanywa amafaranga yagenda mun kugura inkwi, bityo bayakoreshe mu bindi bikienewe.

TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

Tracking Table:

A 'tracking list' of invitations was created for the stakeholder meeting to ensure that invitations were monitored and logged for responses.

Code	Organisation	Name of Invitee	Means of Invitation	Date of invitation	Confirmation
MURAMBI					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes
KAGEYO					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes
RWIMBOGO					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes
GATSIBO					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes
RUGARAMA					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes
MUHURA					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes

TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

GITOKÉ					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes
KABARORE					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes
REMERA					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes
NYAGIHANGA					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes
NGARAMA					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes
GASANGE					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes
KIRAMURUZI					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes

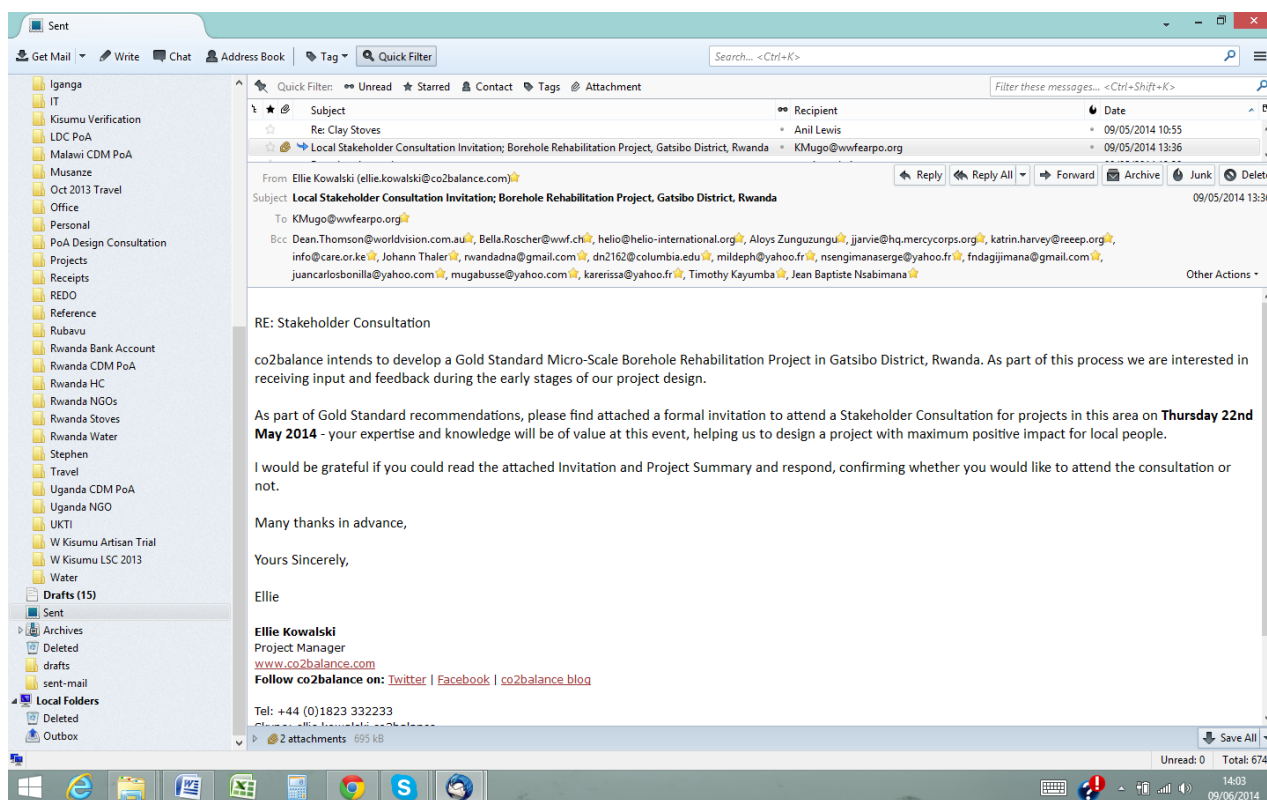
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TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

KIZIGURO					
B	Executive Secretary		Letter	08/05/2014	Yes
B	Agronome		Letter	08/05/2014	Yes
A	CNF		Letter	08/05/2014	Yes
A	CNJ		Letter	08/05/2014	Yes
B	Executive Secretaries of Cells		Letter	08/05/2014	Yes
A	Religious Organisations		Letter	08/05/2014	Yes
Gatsibo District office					
B	Mayor	RUBONEZA Ambroise	Letter	08/05/2014	Yes
B	Executive Secretary	RUKUNDO G. William		08/05/2014	Yes
B	Agronome			08/05/2014	Yes
B	In charge of Infrastructures	SEBAHIRE Jean Pierre	Letter	08/05/2014	Yes
B	In charge of Environmental Protection		Letter	08/05/2014	Yes
B	Media	BUTARE James	Letter	08/05/2014	Yes
B	ONG 7			08/05/2014	Yes
B	Gender Officer	NTUYAHAGA Jean Bosco	Letter	08/05/2014	Yes
B	District Education Officer			08/05/2014	Yes
C-F					
C	Rwanda Environmental Management Authority (REMA)	Dr. Rose Mukankomeje	Email	09/05/2014	No
C	Rwanda Environment Management Authority (REMA)	Mr. Jean Ntazinda	Email	09/05/2014	No
D	Rwandans4Water	Aloys Zunguzungu	In Person	08/05/2014	Yes
D	Rwandans4Water	Raphael Gatabazi	In Person	08/05/2014	Yes
D	The Dian Fossey Gorilla Fund	Juan Carlos Bonilla	Email	09/05/2014	No
D	The Dian Fossey Gorilla Fund	Felix Ndagijimana	Email	09/05/2014	No
D	ACNR	Serge Nsengimana	Email	09/05/2014	No
D	Fossey Fund	Ildephonse MUNYARUGERO	Email	09/05/2014	Yes
D	Millennium Villages	Donald NDAHIRO	Email	09/05/2014	No
D	FAPDR	Jean Baptiste Nsabimana	In Person	08/05/2014	Yes
D	FAPDR	Patrice Ndatimana	In Person	08/05/2014	Yes
E	Gold Standard	Johann Franz Thaler	Email	09/05/2014	Yes
F	World Vision Australia	Dean Thompson	Email	09/05/2014	No
F	WWF International	Bella Roscher	Email	09/05/2014	No
F	Helio International	Helene O'Connor-Lajambe	Email	09/05/2014	No
F	Mercy Corps, European Headquarters	Jim Jarvi	Email	09/05/2014	No
F	REEEP	Katrin Harvey	Email	09/05/2014	No
F	CARE International		Email	09/05/2014	No

TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

Screenshot of Invites:



Meeting Preparation:

The following was put in place prior to the actual meeting:

- Printed Non-Technical Summaries: a simple description of the project that stakeholders will understand, in both English and Kinyarwanda:
- Minute taker: an individual responsible for taking detailed notes of the meeting findings.
- Participation forms: participants must sign this form to confirm their attendance.
- Evaluation forms: to be completed by all stakeholders. A simple evaluation form asks each stakeholder to write down their feelings and concerns about the meeting and the proposed VPAs in the Gatsibo District, Rwanda.
- Agenda for the meeting
- Translator

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TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

Meeting Conduct:

The meeting followed the agenda below:

- Prayer
- Opening ceremonies
- Project update
 - o Explanation of the project
 - o Activities already realized and those planned
- Debates, discussions, questions and answers
- The Continuous Input Mechanism
- Closing ceremonies

Other Consultation Methods:

The local NGO partners, FAPDR and Rwandans4Water, passed the message to local community members who were unable to attend the meeting. A high volume of community leaders did attend the meeting and were therefore able to pass the message on to their respective communities, women's groups and youth groups.

All stakeholders are also invited to the feedback round.

Documents will be made available to International NGOs and others that were unable to attend.

C.2. Summary of the comments received:

Participants List					
Date and time: Thursday 22 nd May 2014					
Meeting Room of the Gatsibo District, Gatsibo, Rwanda					
Category Code	Name of participant, job/ position in the community	Male/ Female	Signature	Organisation (if relevant)	Contact details

TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

Participants list Gatsibo LSC 22 May 2014

N°	Name	Position	Gender	Organisation	Contact	Signature
1	MUSEVEZA Jonas	DEVO	M	Gatsibo District	0755771016	[Signature]
2	PROENBERZA Gilbert	Coord	M	NYARAMASORER	0783649243	[Signature]
3	TURATUNZE Silas	Coord	M	RENERA	0785360250	[Signature]
4	HAKUMANA F. James	President of coop. ASS	M	NYAGIHANGA	0722918005	[Signature]
5	MPABANAHANGA	Amateur	M	NYAGIHANGA	0788890766	[Signature]
6	NAYIGIZWA JC	CNT	M	NYAGIHANGA	0722253624	[Signature]
7	MURASINAWADUK	CNF Coord	F	NYAGIHANGA	078322470	[Signature]
8	UWAMAHORO Beahide	CNF coord	F	GITOKI	0788458246	[Signature]
9	UJAHIRE Benjamin	Agromoni	M	NYAGIHANGA	0782711103	[Signature]
10	MUGIRASE N. John	Volunteer	M	MURAHOROKI	0782746236	[Signature]
11	MURAHOROKI John	Agromoni	M	MURAHOROKI	0782746236	[Signature]
12	MURAHOROKI John	CNF Coord	M	Rugarama	0788466652	[Signature]
13	KAYUMBA James	EL Civil	M	Gatsibo Sect.	0782710229	[Signature]
14	MURAHOROKI John	CNF coord	F	Gitoki	0782612141	[Signature]
15	MURAHOROKI John	President of coop. ASS	F	Casange	0722701832	[Signature]
16	MURAHOROKI John	Agromoni	M	CASANGE	0782730650	[Signature]
17	MURAHOROKI John	Agromoni	M	Gatsibo	0782730650	[Signature]
18	MURAHOROKI John	CNF Coord	F	KIGALI	0722730650	[Signature]
19	MURAHOROKI John	CNF Coord	F	Casange	0783321969	[Signature]
20	MURAHOROKI John	CNF Coord	F	Rensia	0725999581	[Signature]
21	KAGINA John	Agromoni	M	CASANGE	0782660792	[Signature]
22	MURAHOROKI John	Coop	M	NYAGIHANGA	0782917664	[Signature]
23	MURAHOROKI John	Coop	M	Kigali	0723764110	[Signature]
24	MUREGO Richard	ELs	M	GITOKI	0788260082	[Signature]
25	HATEREMANA Akille	ELs	M	Casange	0782176695	[Signature]
26	BUSORO John	Agromoni	M	RENERA	0788736745	[Signature]
27	MURAHOROKI John	Coop	M	KIRAMURU	0782651852	[Signature]
28	MURAHOROKI John	CNF	F	Rugarama	0788478579	[Signature]
29	MURAHOROKI John	Coop	M	Casange	0785115416	[Signature]
30	Mugirase John	CNF	F	Rugarama	0782902352	[Signature]
31	UWIMANA John	CNF	F	MURAHOROKI	0782337301	[Signature]
32	MURAHOROKI John	Agromoni	M	RUGARAMA	0788476295	[Signature]
33	MURAHOROKI John	Coop	M	Kigali	078898245	[Signature]
34	MURAHOROKI John	Agromoni	M	MURAHOROKI	078266114	[Signature]

TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

B	35	Ntuyahiga J. Eric	Coordinator	M	Gatumba District	078862786	[Signature]
B	36	IRAKOREM, E. Bimac	ETS	M	Gatumba District	078843611	[Signature]
A	37	HMALIZAMA Emmanuel	Coordinator	M	KABARORE	078829859	[Signature]
B	38	Mamushira Jeanne	Apprentice	F	Kigamba	078846617	[Signature]
B	39	MANSURUHA Patrick	Apprentice	M	JGIRKI	078840466	[Signature]
A	40	Jean Pierre DEBATHO	Infrastructure	M	Gatumba Dist	078818702	[Signature]
A	41	Rubushira B. Xytor		M	Kigamba	0788563986	[Signature]
D	42	Sam Sudeley S.	Volunteer	M	FAD'PR	078852817	[Signature]
D	43	Elle Kwasiki	Project Manager	F	Central		[Signature]
D	44	ALOYS ZURUZUO	President	M	Rumukosa		[Signature]
D	45	NATIMANA Patrice	PR Coordinator	M	FAD'PR	0783479833	[Signature]
D	46	NSABIHANA JS	RPC	M	FAD'PR	0788027772	[Signature]
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TITLE OF THE MICRO-PROGRAMME: GS1247 Improved Kitchen Regimes Multi-Country PoA

The meeting was well attended with good representation from each Sector in the Gatsibo District. The CO2balance staff, a representative of the Mayor, and the Executive Secretary of the Gatsibo District was also present. Both genders were well represented.

Overall, the meeting was very successful, with stakeholders actively engaging with the project and participating in discussions and the question and answer session. The stakeholders said that they found the meeting useful and informative, and the majority of feedback concerning the project was positive.

A large percentage of positive comments concerned the improvement in access to safe water, which is a big issue in the area.

Most of the stakeholders giving feedback stated that the project was much needed and improving safe water access is appreciated. Of the negative comments received, the respondents wanted to also have new boreholes installed in addition to the renovation of dysfunctional ones.

C.3. Report on how due account was taken of any comments received and on measures taken to address concerns raised:

Stakeholder comment	Was comment taken into account (Yes/ No)?	Explanation (Why? How?)
Will local people be taught how to repair the boreholes?	Yes	The project will work with local communities and encourage participation and involvement in the repairs where possible, so that the continued maintenance of the borehole in collaboration with local communities will be possible.
Will the project include other water sources such as springs, taps etc?	No	The project will begin with just repairing the broken boreholes, as we are just starting our work in this area, and there are a lot of boreholes in need of repair. In the future, we may look into other water sources and possibilities.
Will the project also drill new boreholes?	No	As above, the project will begin with just rehabilitations and then there is the

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		possibility of new boreholes in the future.
Ngarama Sector has a particularly bad problem with access to water, can the project start there?	No	The boreholes to be included in the first VPA will be chosen in conjunction with Rwandans4Water, and must meet certain criteria to be eligible for the project. It is not known yet where the project will begin, but Rwandans4Water will be in contact with the Sector officials to see how they can assist in the area.

There were no major environmental or other concerns raised during the stakeholder consultation process, therefore the project design will not be changed as it is not necessary to incorporate any additional measure to limit or avoid negative environmental/social impacts.

The stakeholders were very receptive and expressed the need for assistance with safe water in the District.

Overall, the project is perceived to be positive in terms of the three categories of sustainable development; environmental, economic and social.

C.4. Report on the Continuous input mechanism selection:

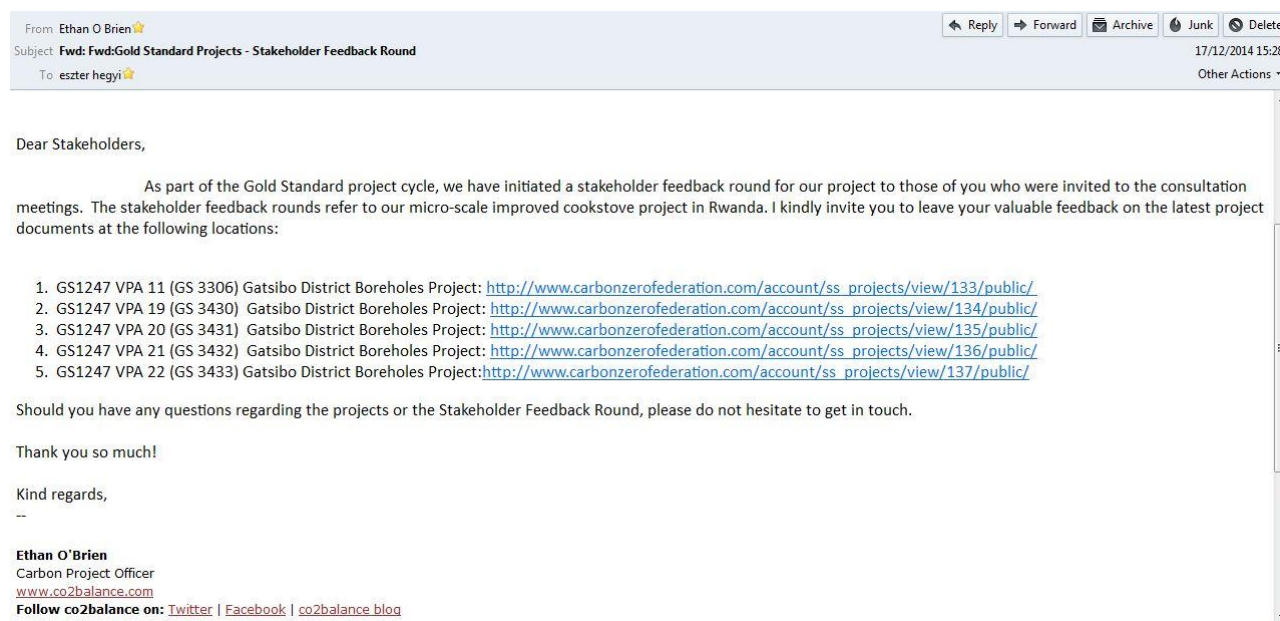
The continuous input mechanism will be carried out via a number of different channels to ensure communication between beneficiaries and co2balance is achieved in the best possible manor. The table provides a description of each feedback mechanism:

	Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator)	Justification
Continuous Input / Grievance Expression Process Book	A input/grievance book will be placed at every water point in this VPA	This was unanimously agreed by participants, as it is the most practical way and will provide easy access to the boreholes users.
Telephone access	A phone number 0789786375 was provided by co2balance to be used by the stakeholders to give feedback and will be operating at all times during the day.	Widely accessible Relatively cheap Can be used by people who are

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		illiterate
Internet/ema il access	<p>http://www.carbonzerofederation.com/account/ss_projects/view/133/public/</p> <p>People will also be able to provide feedback via the below email addresses;</p> <p>rwanda@co2balance.com Read by the relevant Project Managers</p> <p>jbsabimana@gmail.com Read by Jean Baptiste Nsabimana, the Rwanda Projects Consultant</p> <p>johann.thaler@goldstandard.org Read by Mr. Johann Thaler, Gold Standard Africa Regional Manager</p> <p>info@goldstandard.org Gold Standard general info email address</p>	<p>Although there is scarcity of internet access, some government offices have computers and internet access; however there is high internet illiteracy at the village level and extremely low availability of internet services. Hence this option was less preferred.</p>

C.5. Report on stakeholder consultation feedback round:



From: Ethan O'Brien
Subject: Fwd: Fwd:Gold Standard Projects - Stakeholder Feedback Round
To: eszter.hegyi

Dear Stakeholders,

As part of the Gold Standard project cycle, we have initiated a stakeholder feedback round for our project to those of you who were invited to the consultation meetings. The stakeholder feedback rounds refer to our micro-scale improved cookstove project in Rwanda. I kindly invite you to leave your valuable feedback on the latest project documents at the following locations:

- GS1247 VPA 11 (GS 3306) Gatsibo District Boreholes Project: http://www.carbonzerofederation.com/account/ss_projects/view/133/public/
- GS1247 VPA 19 (GS 3430) Gatsibo District Boreholes Project: http://www.carbonzerofederation.com/account/ss_projects/view/134/public/
- GS1247 VPA 20 (GS 3431) Gatsibo District Boreholes Project: http://www.carbonzerofederation.com/account/ss_projects/view/135/public/
- GS1247 VPA 21 (GS 3432) Gatsibo District Boreholes Project: http://www.carbonzerofederation.com/account/ss_projects/view/136/public/
- GS1247 VPA 22 (GS 3433) Gatsibo District Boreholes Project: http://www.carbonzerofederation.com/account/ss_projects/view/137/public/

Should you have any questions regarding the projects or the Stakeholder Feedback Round, please do not hesitate to get in touch.

Thank you so much!

Kind regards,
--

Ethan O'Brien
Carbon Project Officer
www.co2balance.com
Follow co2balance on: [Twitter](#) | [Facebook](#) | [co2balance blog](#)

The project documentation has been made available as part of the Stakeholder Feedback Round (SFR) for all relevant Gatsibo Boreholes VPAs. Email invitations were sent to all non-resident stakeholders on the 17/12/2014 inviting them to the 60 day online SFR. The documents were posted at http://www.carbonzerofederation.com/account/ss_projects/view/133/public with the opportunity for stakeholders to email their feedback directly to the proponents. This round concluded on the 17/02/15.

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Feedback: PP has not received any official feedback from international or national stakeholders, but many community members and local authorities have expressed their gratitude to the field staff.

Annex 1

CONTACT INFORMATION ON ENTITY/INDIVIDUAL RESPONSIBLE FOR THE MICRO--SCALE VPA

Organization:	co2balance UK Ltd
Street/P.O.Box:	Cook Way
Building:	1 Discovery House
City:	Taunton
State/Region:	Somerset
Postfix/ZIP:	TA2 6BJ
Country:	UK
Telephone:	+44(0) 1823 332233
FAX:	
E-Mail:	ellie.kowalski@co2balance.com
URL:	
Represented by:	Ezster Hegyi
Title:	Project Manager
Salutation:	Mr
Last Name:	Hegyi
Middle Name:	
First Name:	
Department:	Carbon Projects
Mobile:	-
Direct FAX:	-
Direct tel:	+44(0) 1823 332233
Personal E-Mail:	ezster.hegyi@co2balance.com

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Annex 2

INFORMATION REGARDING PUBLIC FUNDING

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OFFICIAL DEVELOPMENT ASSISTANCE DECLARATION

Date: 10/03/2014

The Gold Standard Foundation
79 Avenue Louis Casai
Geneva Cointrin, CH-1216
Switzerland

RE: Declaration of Non-Use of Official Development Assistance by Project Owner of GS1247

As Project Owner of the above-referenced project, and acting on behalf of all Project Participants, I now make the following representations:

I. The Gold Standard Documentation

I am familiar with the provisions of The Gold Standard Documentation relevant to Official Development Assistance (ODA). I understand that the above-referenced project is not eligible for Gold Standard registration if the project receives or benefits from Official Development Assistance with the condition that some, or all, of the carbon credits [CERs, ERUs, or VERs] coming out of the project are transferred to the ODA donor country. I hereby expressly declare that no financing provided in connection with the above-referenced project has come from or will come from ODA that has been or will be provided under the condition, whether express or implied, that any or all of the carbon credits issued as a result of the project's operation will be transferred directly or indirectly to the country of origin of the ODA.

II. Duty to Notify Upon Discovery

If I learn or if I am given any reason to believe at any stage of project design or implementation that ODA has been used to support the development or implementation of the project, or that an entity providing ODA to the host country may at some point in the future benefit directly or indirectly from the carbon credits generated from the project as a condition of investment, I will notify The Gold Standard immediately using the Amended ODA Declaration Form provided below.

III. Investigation

The Gold Standard reserves the right to conduct an investigation into any project it reasonably believes may be receiving ODA with the condition that some or all of the carbon credits from the project will be transferred to the ODA donor country.

IV. Sanctions

I am fully aware that the sanctions identified in The Gold Standard Terms and Conditions may be applied to me or the above-referenced project in the event that any of the information provided above is false or I fail to notify The Gold Standard of any changes to ODA in a timely manner.

I swear that all of the statements contained herein are true to the best of my knowledge.

Signed: 
Name: Suzanne Longworth
Title: Director
On behalf of: co2balance
Place: Taunton, UK

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Annex 2 - _Sample Water Quality Test Result

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MLAB

**KG 293 St
Kigali Rwanda
TEL: +250 785834301**

Client: Rwandans4Water
Activity: Water Quality Tests for 12 samples
Location: Gatsibo District, Eastern Province
Parameters to be analyzed: Physiological and bacteriological analysis.

Table: Analytical results of sample taken on May 4, 2015 at the borehole ID: Bushenyi

Parameter/Site	Unit	Results	WHO Standards for drinking water
pH	-	7.5	6.5-8.5
Turbidity	NTU	4	<5
Conductivity	$\mu\text{S/cm}$	40	<800 $\mu\text{S/cm}$
Chloride	mg/l	9	<10
Nitrogen Amonia	mg/l	0.05	<0.05
Fluoride	mg/l	0.9	0.7 - 1.5
Iron	mg/l	0.25	0 - 0.3
Manganese	mg/l	0.1	0.05 - 0.1
E-Coli	-	Not present	

Comment:
The water test results are within acceptable range for drinking water standards set forth by the World Health Organization (WHO). Though the Government of Rwanda offers no minimum requirements for potable water standards, based on the results on the tested parameters, MLAB certifies that this water is good for domestic consumption.

Prepared by: Francine Ishema

Approved by: Vincent Gashongore
Head of MLAB

