

**TEMPLATE**

# KEY PROJECT INFORMATION & PROGRAMME DESIGN DOCUMENT (POA-DD)

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VERSION **2.2**

RELATED SUPPORT

- [Programme of Activity requirements](#)
- [TEMPLATE GUIDE Key Project Information & PoA Design Document v.2.2.1](#)

This document contains the following Sections

Key Project Information

SECTION A– General description of PoA

SECTION B - Management System and Inclusion Criteria

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SECTION E - Outcome of Stakeholder Consultations

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

Appendix 2 - Design Changes

## KEY PROJECT INFORMATION

<b>GS ID of Programme</b>	GS12239
<b>Title of Programme:</b>	Amazi Meza Rwanda Water Supply Project for Schools - PoA
<b>Type of PoA</b>	<input checked="" type="checkbox"/> Non – Forestry and/or Non -AGR PoA <input type="checkbox"/> Forestry and/or AGR PoA
<b>VPAs scale included in the PoA</b> <i>Note that same PoA can included VPAs of different scales. Please select all applicable.</i>	<input type="checkbox"/> Microscale <input checked="" type="checkbox"/> Small scale <input type="checkbox"/> Large scale
<b>Start Date of POA</b>	26/06/2023
<b>Date of Design Certification</b>	Not certified yet
<b>Start date of crediting cycle of PoA</b>	26/06/2023
<b>Version number of the PoA-DD</b>	1.5
<b>Completion date of the PoA-DD</b>	08/07/2024
<b>Coordinating/managing entity</b>	Virridy Carbon LLC
<b>Project Participants and any communities involved</b>	Virridy Carbon LLC
<b>Host Country (ies)</b>	Rwanda
<b>Activity Requirements applied</b>	<input checked="" type="checkbox"/> <a href="#">Community Services Activities</a> <input type="checkbox"/> <a href="#">Renewable Energy Activities</a> <input type="checkbox"/> <a href="#">Land Use and Forestry Activities/Risks &amp; Capacities</a> <input type="checkbox"/> N/A
<b>Other Requirements applied</b>	<ul style="list-style-type: none"> <li>- Programme of Activities Requirements and Procedures, version 2.1</li> <li>- Community Services Activity Requirements, version 1.2</li> <li>- GHG Emissions Reduction &amp; Sequestration Product Requirements, version 2.3</li> </ul>

Methodology (ies) applied and version number	Methodology For Emission Reductions From Safe Drinking Water Supply, v1.0
Product Requirements applied	<div> <input checked="" type="checkbox"/> GHG Emissions Reductions &amp; Sequestration                 </div> <div> <input type="checkbox"/> Renewable Energy Label                 </div> <div> <input type="checkbox"/> N/A                 </div>

REAL CASE VPAS (ALL REAL CASE VPAS INCLUDED IN THE POA)

GS 12240	GS12239 VPA-1 Amazi Meza Rwanda Water Supply Project for Schools
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## SECTION A. General description of PoA

### A.1. Purpose and general description of the PoA

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According to the World Health Organization, unsafe water, along with poor sanitation and hygiene, are the main contributors to an estimated 4 billion cases of diarrhea disease annually, causing more than 1.5 million deaths<sup>1</sup>. This project activity addresses the lack of safe drinking water in certain schools in Rwanda and the resulting negative impacts on students' health and learning.

The objectives of this Gold Standard Program of Activities (PoA) are:

- (i) Provide water treatment to Schools in Rwanda to address microbiological contamination, and;
- (ii) Avoid CO<sub>2</sub>e emissions associated with water treatment.

The project is managed and implemented by Virridy Carbon LLC, the Coordinating Management Entity (CME). Virridy, through its wholly owned subsidiary Virridy Rwanda LTD, will distribute, install, and service low greenhouse gases (GHG) emitting water purification systems at point-of-collection (POC) to provide safe drinking water (SDW) for institutional application at schools (mostly, primary and secondary schools; other educational institutions can be included<sup>2</sup>) in approximately one thousand (1,000) schools countrywide. The specific location of the schools and water purification systems will be recorded including GPS coordinates.

Schools will be identified based on a set of criteria, with the top criterion being that the water currently being provided to students is determined to be unsafe through microbiological testing. The water purification systems that will be installed include

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<sup>1</sup> World Health Organization, 2014. Preventing diarrhea through better water, sanitation and hygiene. Available at: <https://www.who.int/publications/i/item/9789241564823>

<sup>2</sup> See more details below about the eligibility criteria for educational institution to join the grouped project.

the LifeStraw® Community and/or the Amazi ultrafiltration filters and/or the Amazi ultraviolet disinfection systems.

LifeStraw® Community is a point-of-use microbiological water purifier designed for routine use in educational settings. The LifeStraw® Community includes a LifeStraw® Ultrafiltration Membrane with a lifetime filtration capacity of 70,000 – 100,000 liters, which can be replaced<sup>3</sup>. Amazi filters are water filtration systems that provide clean and safe drinking water. Amazi filters come pre-loaded with all cartridges which need to be replaced every 3-6 months. Amazi UV disinfection systems use ultraviolet light to disinfect water.

The water purification systems will reduce both the use of and demand for firewood and other fuels used to boil water for drinking, leading to a reduction and/or demand for carbon dioxide emissions. The project aims to reduce the energy demand and respective carbon emissions from the population served by the project activity for whom the common practice of water treatment is or would have been water boiling, considering the emission factor of the baseline energy source mix, including the displacement of Non-Renewable Biomass (NRB). The project accounts for purified water consumed for drinking.

The program will be implemented in Rwanda. The implementation of the PoA is a voluntary action by the CME.

## **A.2. Physical/ Geographical boundary of the PoA**

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The geographic boundaries within which project technologies shall be installed are the political boundaries of the Host Country of Rwanda.

The project activities are implemented in several schools of different districts in the (Northern, Southern, Eastern, Western) Provinces.

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<sup>3</sup> LifeStraw® Community specs. Available at: <https://lifestraw.com/products/lifestraw-community>

Each individual filter distributed under the project technology will record the geographical location (e.g. latitude/longitude data), which can be verified from the recorded data (monitoring surveys).



Figure 1. The Physical/geographical boundaries of this PoA: Rwanda

### A.3. Technologies/measures

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The technology employed will be installed at schools where there is no public distribution network supplying SDW. In case a public distribution network exists, but is not supplying SDW, water quality testing will be conducted to demonstrate that the water supplied from the public water network does not meet SDW standards.

The project developer trains school staff, including headmasters, teachers, and support personnel, on cleaning and maintaining filters.<sup>4</sup> They also provide instructional materials and posters for the hygiene campaign. Designated staff are then responsible for monitoring and reporting daily cleaning and usage.

The technology deployed includes one or more of the advanced water filtration technologies:

- LifeStraw® Community
- 4-Stage – No electricity Ultra Filter
- 4-Stage – Filter with ultraviolet (UV) disinfection
- 5-Stage Filter with UV + Chlorine
- 4-Stage, Filter with Chlorine.

LifeStraw® Community


The LifeStraw® Community is a point-of-use microbiological water purifier intended for routine use in community, educational and institutional settings. It can serve four people simultaneously and includes a built-in 25-liter safe storage container. It includes a LifeStraw® Ultrafiltration Membrane with a lifetime filtration capacity of 70,000 – 100,000 liters, which can be replaced. LifeStraw® water purifiers are rigorously tested by independent laboratories (including an ISO certified lab) to meet protocols established by the US Environmental Protection Agency (EPA) and NSF International/ANSI.

LifeStraw® Community specs<sup>5</sup>:


LifeStraw® Community	
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<sup>4</sup> Details available in the document "Amazi Meza\_ Revised Training Protocol", provided to the VVB.

<sup>5</sup> Detailed information on LifeStraw® Community and LifeStraw® Ultrafiltration Membrane (such as Product Support Guide & FAQs, Performance Data Sheet, User Manual, Lab Information) can be found at the "Resources" section. Available at: <https://lifestraw.com/products/lifestraw-community>

	
Dimensions (assembled)	558 x 558 x 850 mm (22" x 22" x 33.5" in)
Weight (without water)	8 kg (17 lbs)
Others	Uses no chemicals, thus leaves no bad taste or odor in purified water. <b>Does not require electrical power or batteries.</b>
Includes	LifeStraw® Membrane Ultrafilter

LifeStraw® Ultrafiltration Membrane specs<sup>6</sup>:

LifeStraw® Ultrafiltration Membrane	
Standards	WHO 3-star rating for comprehensive protection. Meets US EPA & NSF P231 drinking water standards for the removal of viruses, bacteria, and parasites. Meets NSF 42 standards for chlorine reduction.

<sup>6</sup> Ibid



	Meets NSF 53 standards for reduction of lead.
Removes	<p>99.999999% of bacteria  <i>(Brucella melitensis, Campylobacter jejuni, Francisella tularensis, Pseudomonas aeruginosa, Shigella, Staphylococcus aureus, Vibrio cholerae (Cholera), Vibrio parahaemolyticus, Yersinia enterocolitica, Yersinia pestis, <b>Enteropathogenic Escherichia coli (E. coli)</b>, Haemophilus influenzae, Klebsiella pneumoniae, Legionella pneumophila, Mycobacterium tuberculosis, Mycoplasma pneumoniae, Burkholderia pseudomallei, Salmonella enterica, Salmonella typhi (Typhoid), Streptococcus pneumoniae, Streptococcus pyogenes, Leptospira).</i></p> <p>99.999% of parasites  <i>(Ascaris lumbricoides, Cryptosporidium spp., Entamoeba histolytica, Giardia intestinalis (Beaver Fever), Naegleria gruberi, Schistosoma mansoni, Taenia saginata).</i></p> <p>99.999% of viruses  <i>(Adenoviridae, Astroviridae, Calicivirus, Enterovirus, Hepatovirus A (Hepatitis A), Influenzavirus, Norovirus, Human parainfluenza viruses (HPIVs), Paramyxovirus, Human parvovirus B19, Rhinovirus, Rotavirus, Alphavirus, Rubivirus (Rubella))</i></p> <p>99.999% of microplastics</p>
Reduces	Turbidity (silt, sand, cloudiness)
Pore size	0.02 micron
Filtration rate	2.5 L / min.
Lifetime	Filters 70,000-100,000 liters over its lifetime. The LifeStraw® Ultrafiltration Membrane can be replaced.
Safety	<b>When the purifier reaches the end of its lifetime, the membrane clogs naturally, thus eliminating the possibility of anyone drinking contaminated water.</b>



Figure 2. LifeStraw® Community

#### 4-Stage – Filter with ultraviolet (UV) disinfection


This is a four-stage whole water filtration system that guarantees a healthy life. The system filters water through four steps to provide clean, safe to drink water.

Characteristics:

1. The PP 5-micron sediment filter removes all sediments (e.g., salt, sand, or rust) from the water.
2. The Granulated Activated Carbon Cartridge (CAG) absorbs activated carbon and is highly effective in reducing unwanted taste, odor, chlorine, and chemicals.
3. The Carbon Block Cartridge (CTO) removes all remaining hardness and chemicals.
4. The UV lamp kills up to 99.99% of all remaining bacteria and viruses to guarantee safe drinking water without the need for chlorine or any other chemicals.

4-Stage – Filter with ultraviolet (UV) disinfection specs:

4-Stage – Filter with ultraviolet (UV) disinfection	
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Cartridges	<p>Cartridges are captured in a three-staged body filter system that is available in two sizes:</p> <ul style="list-style-type: none"> <li>- The 10-inch version comes with a flow rate of ~30 liters per minute (~38,400 L per day).</li> <li>- The 20-inch version comes with a flow rate of ~55 liters per minute (~78,600 L per day).</li> </ul> <p>The filters come pre-loaded with all four cartridges (sediment, CAG, CTO and UV). Cartridges need to be replaced every 3-6 months.</p>
Specs	<ul style="list-style-type: none"> <li>- Max working pressure: 8 bar (116 psi).</li> <li>- Ambient working temperature: 4°–45°C (39°–113°F).</li> <li>- Non-toxic material, suitable for drinking water.</li> <li>- Head &amp; blue bowl material: reinforced polypropylene.</li> <li>- Metal frame: Black or white powder-coated steel.</li> <li>- Flow rate: 1800LPH.</li> <li>- Reactor dimensions: 910 × 63.5mm.</li> <li>- In/outlet: ¾" male.</li> <li>- UV light code: UVT5-430.</li> <li>- Wattage: 30/55W.</li> </ul>
UV filter	<p>99.99% destruction of bacteria (such as E-coli), viruses and protozoan cysts.</p>


#### 4-Stage, Filter with Chlorine.

This is a four-stage water filtration system that guarantees a healthy life. The system filters water through four steps to provide clean, safe to drink water.

Characteristics:

1. The PP 5-micron sediment filter removes all sediments (e.g., salt, sand, and rust) from the water.
2. The Granulated Activated Carbon Cartridge (CAG) absorbs activated carbon and is highly effective in reducing unwanted taste, odor, chlorine, and chemicals.
3. The Carbon Block Cartridge (CTO) removes all remaining hardness and chemicals.
4. The chlorine dispenser automatically injects the right dose of chlorine into running water, effectively killing off bacteria **without needing electricity**.

4-Stage, Filter with Chlorine specs:

4-Stage, Filter with Chlorine	
Cartridges	<p>Cartridges are captured in a three-staged body filter system that is available in two sizes:</p> <ul style="list-style-type: none"> <li>- The 10-inch version comes with a flow rate of ~30 liters per minute (~38,400 L per day).</li> <li>- The 20-inch version comes with a flow rate of ~55 liters per minute (~78,600 L per day).</li> </ul> <p>The filters come pre-loaded with all four cartridges (sediment, CAG, CTO and UV). Cartridges need to be replaced every 3-6 months.</p>
Specs	<ul style="list-style-type: none"> <li>- Max working pressure: 8 bar (116 psi).</li> </ul>

	<ul style="list-style-type: none"> <li>- Ambient working temperature: 4°–45°C (39°–113°F).</li> <li>- Non-toxic material, suitable for drinking water.</li> <li>- Head &amp; blue bowl material: reinforced polypropylene.</li> <li>- Metal frame: Black or white powder-coated steel.</li> <li>- Min working pressure: 1 bar</li> <li>- Max working pressure: 5 bar</li> <li>- Male In/outlet: 1.5 Inch</li> <li>- Cartridge treat up to 360,000 Liters</li> </ul>
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### 5-Stage Filter with UV + Chlorine

This is a five-step filter. It combines the power of the cartridges, UV, and chlorine. Amazi FH filters water through five steps to provide clean, safe to drink water and thus guarantees a healthy life.

Characteristics:

1. The PP 5-micron sediment filter removes all sediments (e.g., salt, sand, and rust) from the water.
2. The Granulated Activated Carbon Cartridge (CAG) absorbs activated carbon and is highly effective in reducing unwanted taste, odor, chlorine, and chemicals.
3. The Carbon Block Cartridge (CTO) removes all remaining hardness and chemicals.
4. The UV lamp kills up to 99.99% of all remaining bacteria and viruses to guarantee safe drinking water, without the need for chlorine.
5. The chlorine dispenser automatically injects the right dose of chlorine into running water, effectively killing off bacteria **without needing electricity**.

5-Stage Filter with UV + Chlorine specs:

<p>5-Stage Filter with UV + Chlorine</p>	
<p>Cartridges</p>	<p>Cartridges are captured in a three-staged body filter system that is available in two sizes:</p> <ul style="list-style-type: none"> <li>- The 10-inch version comes with a flow rate of ~30 liters per minute (~38,400 L per day).</li> <li>- The 20-inch version comes with a flow rate of ~55 liters per minute (~78,600 L per day).</li> </ul> <p>The filters come pre-loaded with all four cartridges (sediment, CAG, CTO and UV). Cartridges need to be replaced every 3-6 months.</p>
<p>Specs</p>	<ul style="list-style-type: none"> <li>- Max working pressure: 8 bar (116 psi).</li> <li>- Ambient working temperature: 4°–45°C (39°–113°F).</li> <li>- Non-toxic material, suitable for drinking water.</li> <li>- Head &amp; blue bowl material: reinforced polypropylene.</li> <li>- Metal frame: Black or white powder-coated steel.</li> <li>- Min working pressure: 1 bar</li> <li>- Max working pressure: 5 bar</li> <li>- Male In/outlet: 1.5 Inch</li> <li>- Cartridge treat up to 360,000 Liters</li> <li>- Flow rate: 1800LPH</li> <li>- Reactor dimensions: 910 × 63.5mm</li> <li>- In/outlet: ¾" male</li> <li>- UV light code: UVT5-430</li> <li>- Wattage: 30/55W</li> </ul>
<p>UV filter</p>	<p>99.99% destruction of bacteria (such as E-coli), viruses and protozoan cysts.</p>


## 4-Stage – No electricity Ultra Filter

This is a technology equipped with filter housing with plastic head, stainless steel bowl, and stainless steel cover, designed to work at high pressure and temperature. It provides safe water **without the need of electricity**. The ultra-filter comes pre-loaded with four cartridges providing you with safe water.

### Characteristics:

1. The 5-micron sediment filter removes all sediments (e.g., salt, sand, and rust) from the water.
2. The Granulated Activated Carbon Cartridge (GAC) absorbs activated carbon and is highly effective in reducing unwanted taste, odor, chlorine, and chemicals.
3. The Carbon Block Cartridge (CTO) removes all remaining hardness and chemicals.
4. The Ultra Filtration Cartridge (UF), using a special sieve, is effective to remove proteins, bacteria, pyrogens, virus, and other organic molecules. No particles bigger than 0.01 microns will pass the sieve.

### 4-Stage – No electricity Ultra Filter specs:

4-Stage – No electricity Ultra Filter	
Cartridges	The cartridges are captured in a three-staged body filter system made out of stainless steel that is available as a 10-inch version that comes with a flow rate of ~4-6 liters per minute (~5,760 -8,640 L per day). Cartridges need to be replaced every 3-6 months.
Specs	- Max working pressure: 10 bar (145 psi).

	<ul style="list-style-type: none"> <li>- Ambient working temperature: 4°–60°C (39°–140°F).</li> <li>- Non-toxic material, suitable for drinking water.</li> <li>- Head &amp; blue bowl material: reinforced polypropylene.</li> <li>- Bowl material: 304 stainless steel</li> <li>- Metal cover: plated steel</li> </ul>
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#### A.4. Target/Indicator for each of the minimum three SDGs targeted by the PoA

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SUSTAINABLE DEVELOPMENT GOALS TARGETED	MOST RELEVANT SDG TARGET	SDG IMPACT <u>INDICATOR (SELECTED IN SDG TOOL)</u>
13 Climate Action (mandatory)	13.2 Integrate climate change measures into national policies, strategies and planning	Amount of GHGs emissions avoided or sequestered
6 Clean water and sanitation	6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1 Proportion of population using safely managed drinking water services
7 Affordable and clean energy	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	Number of beneficiaries: Individuals



<p>8 Decent Work and Economic Growth</p>	<p>8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</p>	<p>Total number of jobs</p>
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#### **A.5. Coordinating/managing entity**

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The Coordinating Managing Entity of the PoA is Virridy Carbon LLC, a US-based company. Virridy is the focal point for all communications with Gold Standard on all matters related to the PoA, VPAs, and associated activities. The full contact details of the CME can be found below in Appendix I.

#### **A.6. Funding sources of PoA**

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The Programme (PoA) does not receive public funding, this is a voluntary initiative led by Virridy. The project is implemented by the project developer at the schools.

Rwanda is a country listed on the OECD Development Assistance Committee's ODA recipient list; nonetheless, no Official Development Assistance (ODA) funding shall be used within the Programme. This will be confirmed by submitting the signed ODA Declaration form for each VPA.

## SECTION B. MANAGEMENT SYSTEM AND INCLUSION CRITERIA

### B.1. Management System

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- (i) *A clear definition of roles and responsibilities of personnel involved in the process of inclusion of VPAs, including a review of their competencies.*

Virridy Carbon LCC is the coordinating and managing entity of the program, who is responsible for managing all phases of the PoA, including all the certification process (project design, documents preparation, managing the validation, design certification, managing verification, performance reviews, inclusion of further VPAs, and request of issuance of GS VERs). The specific activities on field are and regular communication with local actors are managed by Virridy Rwanda LTD, a wholly owned subsidiary of Virridy Carbon LCC. Other entities expected to be involved are schools participating each VPA. The diagram below summarizes the roles and responsibilities of each involved entity in the programme.<sup>7</sup>

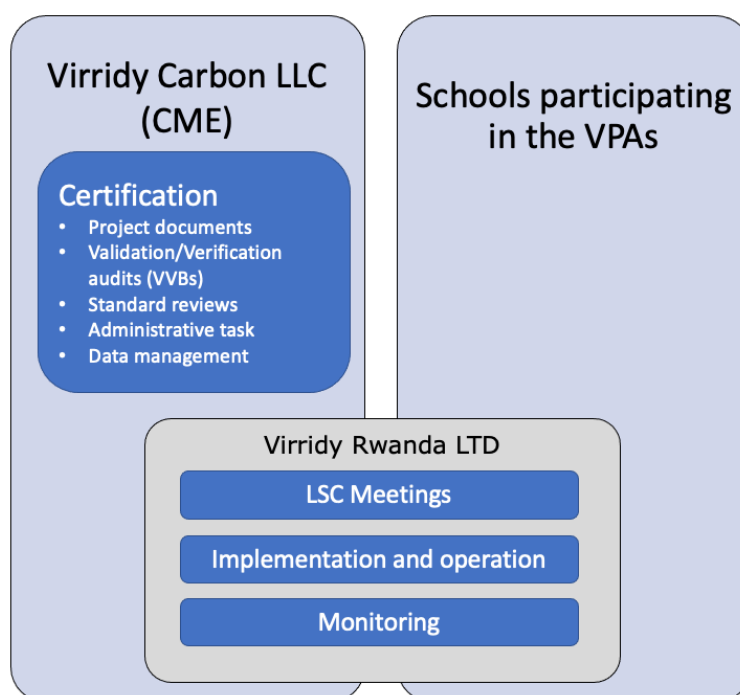


Figure 3. Roles and responsibilities

<sup>7</sup> Other entities can be involved, such as technology providers, implementation partners. Each VPA will include details in this regard.

The responsibility and roles from each party involved in the project are described below.

### **Virridy Carbon LLC (CME)**

Virridy, as CME, is responsible for the overall management, implementation, and operation of the PoA and its VPAs.

- Manage the PoA and VPAs (including documentation and submissions)
- Secure financing and manage the resources to deploy the project technology.
- Confirm the feasibility of each VPA.
- Manage Validation and Verification processes for PoA and VPAs, including hiring VVBs, collection and submission of required documentation, and direct communication with parties.
- Build and manage a database system that contains detailed and valid information related to each VPA.
- Continuously review and improve the programme performance, including an evaluation to achieve expected emission reductions.
- Maintain close and ongoing communication with schools and technology providers.
- Train staff on the project activities.
- Update the programme structure as needed.

The specific responsibilities of the CME relating to the certification include the following:

- Develop the project documents required for the validation (e.g. PoA-DD, VPA-DDs, etc.), and the verification (e.g. monitoring reports, emission reductions calculations, etc.). Coordinate with the consultant the preparation of these documents for proceeding with Gold Standard Design Certification and Gold Standard Performance Review.
- Contact with Gold Standard Validation Verification Body (VVB) for validation, verification, and further inclusions of VPAs.
- Communicate with the host country's local authorities (as required).
- Establish a procedure to avoid double counting.
- Capture GPS locations of the water purification systems installed, its unique identification, and photos.

- Ensure schools and other entities (if any) involved in the programme sign the carbon rights waivers to transfer all the emission reductions to the CME.

Other activities to be performed by the CME includes the following:

*(ii) Records of arrangements for training and capacity development for personnel*

All training records will be documented, including participants, dates, and agenda/curriculum, and shared with VVB and Gold Standard upon request.

The project database is managed electronically using specialized operating systems: mWater<sup>8</sup> and Salesforce. The questionnaires of baseline and project surveys are also designed and managed with mWater. The database, survey records, and all the data collected include redundancy and backups to avoid data losses.

*(iii) A procedure for technical review of inclusion of VPAs*

Virridy, as the CME, shall ensure that all VPAs included in the PoA meet the eligibility criteria outlined in section B.3 below and that records of the technical review processes are maintained. Prior to the VPA inclusion process, the proposed VPA will be given a technical review by the CME or by an appointed team (e.g., carbon consultant). The technical review shall check that data and details of the new VPA align with the eligibility criteria and other applicable criteria. A final check will be done by the CME before proceeding to the inclusion of the new VPA.

*(iv) Procedure to avoid double counting*

The VPA's water purification systems installation database will help identify the schools reached and the filters installed. Each water purification system will be

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<sup>8</sup> mWater is a leading, free operating system for WASH in low-resource regions. It is a flexible data management platform used in over 190 countries by utilities, governments, and civil society organizations.

uniquely identified with a unique serial number and GPS coordinates to ensure no double counting occurs.

To avoid double counting, the technology employed will be installed at schools where there is no public distribution network supplying SDW. In case a public distribution network exists, but is not supplying SDW, water quality testing will be conducted to demonstrate that the water supplied from the public water network does not meet SDW standards.

The procedure to avoid the case of including a new VPA that has already been registered either as a project activity or included as a VPA in another registered PoA, including but not limited to Gold Standard consist in the following steps:

- Written confirmation from the CME and project partners confirming the activity proposed has not been included in another PoA, or grouped project, or as stand-alone project in GS or other carbon registries.
- Search of similar projects implemented in the same geographic area identifying differences with the proposed VPA (e.g. CME, Project Proponent, Technology, Specific location, etc.).

*(v) Records and documentation control process for each VPA under the PoA*

The CME shall retain primary responsibility for all documentation related to Gold Standard PoA and VPAs. The VPAs sales database will be a key component of the annual monitoring report since the actual installation date is used to calculate the emission reductions achieved and track the lifetime as per the filters' manufacturer specifications, which is critical to identify when replacement is required to ensure SDW is delivered by the project.

The records, data and project supporting evidence will be kept<sup>9</sup> by the CME for at least two (2) year after the end of the crediting period.

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<sup>9</sup> Project records and data can be stored either in physical or electronic format.

*(vi) Measures for continuous improvements of the PoA management system*

Virridy shall continually improve the effectiveness of the PoA management system through policies, objectives, audit results, data analysis, and corrective and preventive actions.

**Virridy Rwanda LTD (local office with local staff)**

Local Management Staff is responsible for the physical implementation, quality control, inspection, and monitoring; including the promotion, installation, training, monitoring, data management, quality control, and providing post-installation services. Local Management Staff will be the field coordinators providing technical assistance to schools. Their role includes actions at national, sub-national, and district levels.

Local Management Staff is responsible for ensuring the database of the filters installed is correct and complete, including schools' details, unique identification of each installed filter, training records, maintenance records, carbon waivers, and any other relevant.

The filter assembling is responsibility of Virridy Rwanda LTD with technical support of Virridy Carbon of LLC. When the filters are installed, the best location is decided along with the headmaster to ensure accessibility, basically all the filters are installed in the classrooms where students and teachers can take water on a free-demand basis. In all the cases, the schools staff including the headmaster, teacher and supporting staff receive a training how to clean and maintain the filters (e.g. filling and backwash). In some cases, students are also involved in the training. The project delivers instructions material and posters as part of the hygiene campaign. The headmaster appoints teachers or supporting staff as responsible to report daily cleaning and usage, some schools also record how many times each filter is refilled.

**Participating Schools**

The students and staff at the schools are the beneficiaries of the project activity. School staff will receive training on how to use the project technology. Virridy will provide support and follow-up to ensure the proper operation and good performance.

## B.2. Application of methodologies

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The following methodologies and tools are applicable to VPAs:

- Gold Standard Methodology “Emission reduction from safe drinking water supply”, version 1.0
- CDM Methodological Tool 30 “Calculation of the fraction of non-renewable biomass” version 4.0
- Guidelines for sampling and surveys for CDM project activities and programmes of activities, version 04.0

CME confirms that the latest version of the methodology and applicable tools were applied at the time of submission for preliminary review.

Methodology’s Eligibility Criteria		
Paragraph	Criterion	Project activity justification
§ 2.2.1 (a)	Eligible household water treatment technologies (HWT), institutional water treatment technologies (IWT), and community level water treatment technologies (CWT) include bleach/chlorine, water filter (ceramic, sand, composite, membrane, etc.), UV disinfection, etc.	The project includes eligible treatment technology. The project activity includes the installation and service of low/zero-emission water purification systems at point-of-collection (POC) to provide safe drinking water (SDW) for institutional application at schools. This activity is defined as institutional water treatment technologies (IWT).
§ 2.2.1 (b)	Eligible community water supply technologies (CWS) include new installation of new borehole hand-pumps, borehole hand-pumps rehabilitation, solar powered drinking water pumps, etc. Water pumps powered by fossil-fuel engines are not eligible, with the exception of back-up fossil-fuel engines that are used for no more than 10% of operating hours (parameter SWDS 33).	NA, the project does not include CWS activities.
§ 2.2.1 (c)	All projects involving CWT and CWS technologies must also include ongoing maintenance and repair of the project technology.	NA, the project does not include CWT, nor CWS. However, the project will provide maintenance and repair for the project technology.

§ 2.2.1 (d)	Where the project involves the rehabilitation of an existing technology, the project developer shall provide evidence that the existing technology is non-operational and that there is no planned maintenance or repair for at least 3 months after the date it became non-operational.	NA, the project does not include rehabilitation of an existing technology.
§ 2.2.1 (e)	This methodology allows for project activities to include safe water treatment and/or supply technologies implemented for end-users in households, and/or commercial premises such as shops or institutional premises including half or full day/boarding schools, prisons, army camps & refugee camps.	The project activity includes IWT for half, or full-day/boarding schools.
§ 2.2.1 (f)	In cases where the safe water is retrieved at the CWT or CWS location, the water in its improved form shall be available within a distance of 1 km or less from the end-users, as demonstrated by satellite imaging or GPS coordinates of each CWT or CWS location. Alternatively, as a proxy, a total collection time of 30 minutes or less for a round trip, including queuing, using the travel modes of walking or pedaling may be demonstrated.	NA, the project does not include CWT, nor CWS.
§ 2.2.1 (g)	Project technology performance level (HWT and IWT): It shall be demonstrated based on report of laboratory testing or official notification that the project technology or equipment achieves either (i) the performance target classification 3-star or 2-star level, meaning "Comprehensive Protection" as per the WHO International Scheme to Evaluate Household Water Treatment Technologies (World Health Organization, 2011) or (ii) compliance with the national standard or guideline for household drinking water	<p>The performance level of the IWT technology is rigorously tested by independent laboratories (including an ISO certified lab) to meet protocols established by the US Environmental Protection Agency (EPA) and NSF International/ANSI.</p> <p>The technologies are also tested and approved for use in Rwanda by the Rwanda Bureau of Standards.</p>



	treatment technology; if no national guideline or standard is available, then the project technology shall comply with the WHO International Scheme requirements as per (i).	
§ 2.2.1 (h)	<p>i. Project technology performance level (CWT and CWS): For each individual CWT or CWS, it shall be demonstrated at the start of each crediting period with water quality testing reports that the water directly supplied by the project water technology/source achieves both: i. microbial quality in line with either (i) national standards or guidelines for microbial quality of drinking water, or in the absence of such requirements, (ii) the guideline values for verification of microbial quality from the Guidelines for drinking-water quality (Table 7.10, WHO, 2017) 10; and</p> <p>ii. compliance with (i) national standards or guidelines on priority chemical contamination and physical and aesthetic aspects, or in the absence of such requirements, (ii) international standards or guidelines on priority chemical contamination and physical and aesthetic aspects.</p>	NA, the project does not include CWT, nor CWS activities.
§ 2.2.1 (i)	The project must conduct annual water hygiene education campaigns for the end-users.	<p>The annual water hygiene education campaign for end-users will include the following aspects:</p> <ul style="list-style-type: none"> <li>- Access to sanitation amenities, equipment and infrastructure, and the behavioral use of such amenities, including prevention of infections from water-related diseases.</li> </ul>

		- The hygiene campaigns will be carried out on a yearly basis and results will be summarized in the monitoring reports. The campaign's outcome report will include any major changes in the health status of the water users as a result of contaminated water and a strategy (when required) to address issues found (e.g., an outbreak of water-related disease).
§ 2.2.1 (j)	A project applying this methodology may make SDG claims if relevant monitoring parameter(s) is included in the monitoring plan to demonstrate and confirm the project's contributions to SDGs.	<p>Besides SDG 13, the project includes impacts to:</p> <ul style="list-style-type: none"> <li>• SDG 6 indicator: Proportion of population using safely managed drinking water services.</li> <li>• SDG 7 indicator: Number of beneficiaries: Individuals.</li> <li>• SDG 8 indicator: Total number of jobs created (during Distribution and monitoring, and Evaluation).</li> </ul>

#### B.2.1. Multiple technologies/measures

>>

The PoA includes only one type of technology (water filters) and only one Methodology "Emission reduction from safe drinking water supply", version 1.0. Therefore, a cross-effect from using multiple technologies or multiple methodologies is not applicable to this PoA.

The Real Case VPA for this PoA is GS12240 titled "GS12239 VPA-1 Amazi Meza Rwanda Water Supply Project for Schools".

### B.3. Eligibility criteria for inclusion of a VPA in the PoA

NO.	ELIGIBILITY CRITERION	DESCRIPTION/ REQUIRED CONDITION	MEANS OF VERIFICATION/SUPPORTING EVIDENCE FOR INCLUSION
1	Location/Geographic boundary of the VPA	All new project activities will install the project technology within the geographic boundary which is the Rwanda territory.	GPS coordinates of each technology installed will be recorded and the location of each VPA will be specified in each VPA-DD, including a statement from the CME confirming the geographical boundary of the VPA that shall be within the boundary of the PoA.
2	Project technology and Target Users	VPAs only involve the use of one technology i.e., distribution of safe drinking water systems (IWT technologies). All new VPAs will install the project technology in educational institutions, mostly, primary and secondary schools. Other educational institutions such as high schools and Universities can also be included. All types of schools, including part-time, full-time, and boarding schools, as well as public, private and government-supported non-profit can be included.	The VPA-DD specifies the target end-user group and the technology being distributed as provided in section A.3 of this document.  Supporting evidence: Manufacturer specifications and Distribution database
3	Methodology	All the new VPAs shall apply the Gold Standard methodology "Emission reductions from safe drinking water supply", version 1.0	Each VPA clearly states the methodology applied, the applicable requirements of the methodology, and other applicable regulatory documents.
4	Double counting	(i) All the project technologies installed in new VPAs will have a unique identification that ensures traceability that prevents any double counting.	(i) Unique ID number assigned by the monitoring system. (ii) A statement by the CME is included in the VPA-DD and a declaration has also been provided by the

		<p>(ii) The VPA is exclusively included in this PoA. The VPA shall not be proposed as part of another programme or offset program i.e., as an individual Gold Standard or CDM project and/or as part of any other CDM PoA and/or any other mechanism that includes climate change mitigation impacts/benefits. The VPA-DDs will include a statement from the CME that the specific VPA will not be part of another Gold Standard or CDM project activity or VPA under another PoA.</p>	<p>CME to the VVB that the specific VPA has not participated in any other GHG program and has not been rejected by other GHG program.</p> <p>Supporting Evidence: This shall be cross-checked and verified by the CME with offset mechanisms like UNFCCC-CDM, VERRA, Gold Standard. Declaration by CME included in each VPA-DD.</p>
5	Legal ownership	<p>Carbon rights waivers will be signed by schools and other entities involved in the project to ensure there is no dispute over the certified emission reductions, and to demonstrate the legal ownership of the emission reductions lies with the CME.</p>	<p>Carbon waivers signed by Schools and technology suppliers.</p>
6	Project technology	<p>All VPAs will include the installation of LifeStraw® Community (including a LifeStraw® Ultrafiltration Membrane) OR Amazi filters. These meet the drinking water standard required by the methodology and the host country.</p>	<p>Equipment specifications including manuals, performance data sheets, lab testing reports, and host country certificates.</p>
7	Additionality	<p>All VPAs to be included under the PoA will be in compliance with item 1.1.3 of Annex B – positive list mentioned in the “Community Services Activity Requirements”, version 1.2. All VPAs will be solely composed of isolated units where the users of the technology/</p>	<p>The VPA-DD shall confirm that the thermal energy savings per year at a unit level (i.e., per water purification system) are below 600 MWh of thermal energy savings per year, or 600 tCO<sub>2</sub> per year per unit. This is to be outlined in the ER calculation sheet.</p>

		measure are households or communities or institutions and where each unit results in <=	
		a. 600 MWh of thermal energy savings per year, or	
		b. 600 tCO <sub>2</sub> emission reductions.	
		The first project technologies from the first VPA are installed from June 26, 2023 <sup>10</sup> , onwards.	
8	Start date	<p><i>First installation</i></p> <p>Date: 26/June/2023</p> <p>School: Institut Technique de Rutobwe - ITER</p> <p>Name on database: "Muhanga.ITEL Rutobwe"</p> <p>Number of filters: five</p> <p>Location: Muhanga, Rwanda (Coordinates 1°59'04.1"S 29°47'33.2"E)</p>	The date of installation will be recorded as part of the project database.
		In order to make the project feasible, there are minimum elements to be confirmed at the schools to join the VPA.	
9	Eligibility criteria for schools to join a VPA	<p>i. Primary or secondary school of at least 200 students in Rwanda.</p> <p>ii. Presently on a water supply (piped utility or self-supply) that tests positive for non-zero e-coli CFUs / 100 ml using the compartment bag test.</p> <p>iii. Has at least one location, but no more than ten, where students and staff</p>	School eligibility checklist along with respective supporting documents.

<sup>10</sup> In line with the paragraph 4.6.2 of the PoA Requirements, the PoA crediting cycle start date is the crediting period start date of the earliest VPA included in the PoA. The start date of the earliest VPA is June 26<sup>th</sup>, 2023

- collect water for drinking.
- iv. School will manage site-preparation and incur associated costs. This includes identifying a protected location to install the water purification system.
- v. The common practice of water treatment is or would have been using firewood or fossil fuels to boil at least some drinking water in the baseline.
- vi. Have school staff that commit to work with Virridy for the water systems installation, operation, and maintenance.
- vii. Agree to be bound to the terms of Virridy/ District Government MOU that stipulate that Virridy will provide the water treatment technology, replacement supplies, water quality testing, and training, in exchange for assignment of all carbon credit rights.
- viii. The school expects to be in operation indefinitely notwithstanding unforeseen circumstances. The school has not received LifeStraw® filters, Amazi filters, or other water quality interventions in the last 3 years.

<p>10 Meet the small-scale and remain within those thresholds throughout the crediting period</p>	<p>The CME will ensure that the emission reductions of each VPA are within &lt;60k tCO<sub>2</sub>e/year limit. In case the threshold is breached the CME will not claim the ERs above the threshold limit.</p>	<p>The CME confirms the scale of the VPA, that it will remain within the threshold limits, and forego the ERs if it surpasses the threshold.</p>
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## SECTION C. DEMONSTRATION OF ADDITIONALITY

>>

The proposed project activity is a voluntary action coordinated by Virridy. A review of the key references relating to the provision of safe drinking water in Rwanda reveal there are no mandatory laws or specific requirements in Rwanda to foster the installation of water filtration technologies.

The key references reviewed include:

- Rural Drinking Water Quality Management Framework (2019).<sup>11</sup>
- Rwanda Standard (RS EAS 12: 2014), Potable water – Specification (RSB 2014).<sup>12</sup>
- National Water and Sanitation Policy (2023).<sup>13</sup>
- Water Law No. 62/2008<sup>14</sup>
- National Guidelines for Sustainable Rural Water Supply Services (2019).<sup>15</sup>

These frameworks and regulations objectives relate to water resources, water supply and sanitation; moreover, the current status of water quality management still fails to provide adequate protection and effective treatment of water exposing communities, including the schools, to health risks.

In the absence of the project, the common practice treatment method (e.g. boiling) or consumption of untreated water would be taken as the business-as-usual scenario in the selected schools.

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<sup>11</sup>

[https://www.mininfra.gov.rw/fileadmin/user\\_upload/Mininfra/Documents/Water\\_and Sanitation\\_docs/2\\_Rural Drinking Water Quality Framework.pdf](https://www.mininfra.gov.rw/fileadmin/user_upload/Mininfra/Documents/Water_and_Sanitation_docs/2_Rural_Drinking_Water_Quality_Framework.pdf)

<sup>12</sup> Available in the Appendix 1 of the "Rural Drinking Water Quality Management Framework (2019)", which is the link right above of this footnote.

<sup>13</sup>

<https://www.mininfra.gov.rw/index.php?eID=dumpFile&t=f&f=93300&token=b5e6a9432df6bd9c46f607218d70699909842d20>

<sup>14</sup> [https://www.rwb.rw/fileadmin/user\\_upload/RWRB/Documents/Water\\_law\\_gazetted.pdf](https://www.rwb.rw/fileadmin/user_upload/RWRB/Documents/Water_law_gazetted.pdf)

<sup>15</sup>

[https://www.mininfra.gov.rw/fileadmin/user\\_upload/Mininfra/Documents/Water\\_and Sanitation\\_docs/1\\_National Guidelines for Sustainable RWSS.pdf](https://www.mininfra.gov.rw/fileadmin/user_upload/Mininfra/Documents/Water_and_Sanitation_docs/1_National_Guidelines_for_Sustainable_RWSS.pdf)

The provision of water treatment is not financially viable in this context because it does not generate an income, rather, water treatment implies cost that schools cannot afford, which makes this activity not financially attractive and makes the carbon revenues crucial for the implementation and operation of the VPAs.

The project has no other revenues than the income from the carbon credits generated (e.g. filters are installed free of charge). Financial support from carbon revenues is required to implement and ensure continued operation of the proposed activity under this PoA, including on-going project activities like WASH awareness; otherwise, the common practice treatment method (e.g. boiling) or consumption of untreated water will continue.

Additionality for VPAs is established following what is stated in paragraph 1.1.3 of Annex B (Positive List) of "Community Services Activity Requirements" version 1.2. All VPAs will be solely composed of isolated units (Water Purification System) where the users of the technology/measure are households or communities or institutions and where each unit results in  $\leq 600$  tCO<sub>2</sub> per year.

Hence, according to paragraph 4.1.9 of the "Community Services Activity Requirements" version 1.2, each VPA, regardless of the host country in which the project activity is being implemented, is deemed additional and therefore it is not required to prove additionality at the time of Design Certification.

Below is shown the Additionality threshold demonstration for the water purification system per unit installed at the schools. To calculate the ERs per device and to corroborate the threshold per purification system, the table below considers 1 as the number of project technologies in each premise.

Parameter	Description	Units	Traditional cookstoves - Wood			Source/Equations used
$SE_{w,b,y}$	Specific energy required to boil water	KJ/L	3,608.30			$SE_{w,b,y} = 360.83/\eta_w$
$\eta_{wb}$	Efficiency of the stoves for baseline water boiling (%).	%	Type of stove	Proportion of stoves used	Default efficiency	Data from the baseline survey, calculated as per
			3-stone	27.1%	0.1	
			Imbabura	5.1%	0.1	



	Weighted average of baseline stove types.		<table><tr><td>Muvero (carbon project)</td><td>35.6%</td><td>0.1</td></tr><tr><td>Muvero (non-carbon project)</td><td>8.5%</td><td>0.1</td></tr><tr><td>Rondereza</td><td>23.7%</td><td>0.1</td></tr></table>	Muvero (carbon project)	35.6%	0.1	Muvero (non-carbon project)	8.5%	0.1	Rondereza	23.7%	0.1	the methodology equation.
Muvero (carbon project)	35.6%	0.1											
Muvero (non-carbon project)	8.5%	0.1											
Rondereza	23.7%	0.1											
$x_f$	Proportion of fuel f used in the baseline (fraction determined based on an energy basis)	%	100%	Baseline Survey									
$f_{NRB,f,y}$	Fraction of biomass used in year y for baseline scenario b that can be established as non-renewable biomass	Fraction	0.8485	Calculated following the CDM Tool30.									
EFp,i,CO2	CO2 emission factor of the fuel that is substituted or reduced	tCO2/TJ	112	Methodology default									
EFp,i,non-CO2	Non-CO2 emission factor of the fuel that is reduced	tCO2/TJ	9.46	Methodology default									
EFb	Emission factor for the use of fuel to obtain safe water in the baseline	tCO2e/L	0.0003770	$EFb = SE_{w,b,y} * \sum (x_f * (EF_{b,f,CO2} * f_{NRB,f,y} + EF_{b,f,nonCO2})) f \div 10^9$									
QPWhh,p,y	Volume of drinking water per premises p per day in year y (L)	L/p/day	<table><tr><td>Part-time school</td><td>1325</td><td>1,827</td></tr><tr><td>Full-time school</td><td>1,887</td><td>Calculated</td></tr><tr><td>(Boarding school)</td><td>1,347</td><td>3,405</td></tr></table>	Part-time school	1325	1,827	Full-time school	1,887	Calculated	(Boarding school)	1,347	3,405	
Part-time school	1325	1,827											
Full-time school	1,887	Calculated											
(Boarding school)	1,347	3,405											
QPWp	Volume of drinking water per person per day for premises type p (L)	L	<table><tr><td>Part-time school</td><td>3</td></tr><tr><td>Full-time school</td><td>4</td></tr><tr><td>(Boarding school)</td><td>4</td></tr></table>	Part-time school	3	Full-time school	4	(Boarding school)	4	Default			
Part-time school	3												
Full-time school	4												
(Boarding school)	4												
HNp,y	Number of individuals per premises type p in year y		<table><tr><td>Part-time school</td><td>609</td></tr><tr><td>Full-time school</td><td>867</td></tr><tr><td>(Boarding school)</td><td>619</td></tr></table>	Part-time school	609	Full-time school	867	(Boarding school)	619	Baseline Survey			
Part-time school	609												
Full-time school	867												
(Boarding school)	619												
qi	Capacity of the IWT individual project technology	L/h	27.2	Manufacturer’s specifications									

Up,y	Cumulative usage rate for technologies in project scenario p in year y	%	100%			Assumption/To be monitored									
DNp,y	Number of individual project technologies in each project premises type p in year y <sup>16</sup>	-	<table><tr><td>Part-time school</td><td colspan="2">1</td></tr><tr><td>Full-time school</td><td colspan="2">1</td></tr><tr><td>(Boarding school)</td><td colspan="2">1</td></tr></table>			Part-time school	1		Full-time school	1		(Boarding school)	1		Distribution database/Baseline survey
Part-time school	1														
Full-time school	1														
(Boarding school)	1														
DPp,y	Days the project technology is present for end-users in the premises p in year y	-	207			Ministry of Education Rwanda									
Qy	Quantity of safe drinking water provided by the project in year y	L	<table><tr><td>Part-time school</td><td>1,325</td><td>1,827</td></tr><tr><td>Full-time school</td><td>1,887</td><td>3,468</td></tr><tr><td>(Boarding school)</td><td>1,347</td><td>3,405</td></tr></table>			Part-time school	1,325	1,827	Full-time school	1,887	3,468	(Boarding school)	1,347	3,405	$Qy = \sum Np,y \times Up,y \times QPW,p,y \times DPp,y$
Part-time school	1,325	1,827													
Full-time school	1,887	3,468													
(Boarding school)	1,347	3,405													
Cb	Proportion of project end-users who in the baseline were already using a safe water supply that did not require boiling	%	0			Baseline survey Assume this is zero because all schools have at least one contaminated water source and won't continue boiling after filter installation									
Xcleanboil,y	Proportion of project end-users that boil safe water in the project year y	%	0			To be monitored									

<sup>16</sup> To calculate the ERs per device and to corroborate the threshold per purification system, the number of project technologies in each premise is considered 1.

Mq,y	Modifier for the water quality in year y	Fraction	1		To be monitored								
ER/filter unit	Emission reductions per filter	tCO2/yr	<table><tr><td>Schools type</td><td>tCO2/yr</td></tr><tr><td>Part-time school</td><td>103</td></tr><tr><td>Full-time school</td><td>147</td></tr><tr><td>Boarding school</td><td>105</td></tr></table>		Schools type	tCO2/yr	Part-time school	103	Full-time school	147	Boarding school	105	Calculated
Schools type	tCO2/yr												
Part-time school	103												
Full-time school	147												
Boarding school	105												
Energy saving/unit	The energy saving per unit	MWh th/y	The energy saving per unit is as follows: 45.146 MWh th/y <sup>17</sup>										

It is demonstrated that the Emission Reductions from each water purification system unit are way below the threshold of 600 tCO<sub>2</sub>e.

Furthermore, In the Community services activity requirements, point 4.1.9 states that projects that meet any of the following criteria are considered as deemed additional and therefore are not required to prove Financial Additionality at the time of Design Certification.

The project meet two, the (a) Positive list (as explained above), and (b) the Projects is located in LDC (Rwanda is considered an LDC).

#### Prior Consideration

As per Gold Standard "Principles and requirements" (v1.2), specifically according to paragraph 4.1.50, the requirements of Prior Consideration for a PoA/VPA are the following:

*(a) Regular VPAs are exempt from any kind of prior consideration of carbon revenue checks.*

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<sup>17</sup> This is based on the Specific energy required to boil water, the maximum capacity of the filter (27.2 l/h, and a continuous operation during 8 hours during 207 days per year as per the school calendar.

*(b) Retroactive VPAs with a project start date before or after the time of first submission of the PoA must submit the required documents for preliminary review within one year of its start date. Retroactive VPAs that are submitted at a date later than one year from the VPA start date will not be eligible for Gold Standard Certification.*

In case of retroactive VPAs, the GS PoA Activity Requirements (v2.1) states the following:

*4.5.3 | For retroactive PoAs/VPAs, the CME shall demonstrate prior consideration in accordance with GHG Emissions Reduction & Sequestration Product Requirements.*

The GHG Emissions Reduction & Sequestration Product Requirements (v2.3) states the following:

*7.1.3 If the stakeholder consultation for the Project was conducted after the start date of the Project, the Project Developer shall demonstrate that the revenues from carbon credits were seriously considered in the decision to implement the Project. Evidence to support carbon revenue consideration and continuous actions may include contracts, draft versions of Project information, correspondence with financial institutions or other stakeholders, minutes and notes of Board/Management meetings, agreements or negotiations with auditors, publications in newspapers.*

The CME will ensure to demonstrate that the revenues from carbon credits were seriously considered in the decision to implement the Project for retroactive VPAS.

## SECTION D. DURATION OF PoA

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

>>

30/11/2023

### D.2. Duration of the PoA

>>

20 years

Period: 26/06/2023- 25/06/2043(both days included)

The starting date of the PoA has been defined by the date of the installation of the first filters in the first schools included in the first VPA.

## SECTION E. OUTCOME OF PoA LEVEL STAKEHOLDER CONSULTATION

### E.1. Summary of stakeholder consultation at PoA Level

>>

All relevant stakeholders were identified and invited to the PoA stakeholder consultation (virtual). The stakeholders invited included but were not limited to school headmasters or headteachers, local government administration (District level), and Ministry of Education. It was determined that invitation by email was the most appropriate invitation method followed by phone calls, with an emphasis on reaching local stakeholders with less frequent access to email, and two reminder emails were sent. All invitees received the meeting agenda including the contact details to get further information and means to provide feedback, the feedback form, and the non-technical summary that had details about the project design and implementation, objective, duration, scale, benefits, technology applied, summary of the economic, social and environmental impacts, likely contributions to SDGs and other relevant information.<sup>18</sup> The consultation was a virtual meeting via Zoom. During this meeting,

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<sup>18</sup> Documents made available to the VVB.

all key project information was presented to the stakeholders, including the programme objectives, entities involved, geographical boundary, duration, implementation plan, technology, contribution to SDGs and compliance with safeguards, contact details (phone and email) as well as Virridy's physical address in Rwanda for virtual and in-person feedback submission.

The PoA stakeholder consultation virtual meeting included two steps:

- 1) Virtual meeting held on August 21<sup>st</sup>, 2023; and,
- 2) Feedback period lasting for two months after the virtual stakeholder consultation took place, until October 20<sup>th</sup>, 2023.<sup>19</sup>

The VPA stakeholder consultation (physical meeting) include two steps:

- 1) Physical meeting held on June 23<sup>rd</sup>, 2023<sup>20</sup>; and,
- 2) Feedback round lasting for two months after the physical stakeholder consultation took place, until August 22<sup>nd</sup>, 2023.<sup>21</sup>

The physical meeting was held in advance to the virtual meeting due to the nature of the project and the engagement of the project with the stakeholders. For example, since its inception, the project has approached district administrators and school leadership to sign collaboration agreements with Virridy for the project implementation, serving as means to obtain feedback and acceptance. Another example is that the project provided transportation support (financial and logistics) to attend the physical meeting to participants traveling from outside Kigali, including reimbursement for transportation costs at the end of the meeting. Stakeholders that

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<sup>19</sup> Details available in the "2\_GS12239\_PoA Design-Consultation-Report".

<sup>20</sup> *Principles and Requirements v1.2, and Programme of Activity Requirements and Procedures v2.1, and Stakeholder Consultation and Engagement Requirements v2.1* state that Regular Projects are which the Stakeholder Consultation (1<sup>st</sup> round) has been conducted **before** the Project Start Date. The Project Stakeholder Consultation took place on June 23<sup>rd</sup>, 2023, and the project start date is June 26<sup>th</sup>, 2023; hence, this Project complies with the stakeholder consultation to be conducted **before** the start date of the project to be consider a Regular Project (NOT Retroactive).

As per *GS Stakeholder Consultation and Engagement Requirements v2.1*, the PoA Design Consultation timing requirement is to be conducted before the PoA first submission for Preliminary Review. The PoA Design Consultation took place on August 21<sup>st</sup>, 2023, and the Preliminary Review submission was November 30<sup>th</sup>, 2023; hence, the programme does comply with this requirement too. No GS document mentions that the PoA Design Consultation shall be conducted before the start date of the PoA to be a Regular PoA.

This project, PoA and VPA, are regular (not retroactive), as the stakeholder consultation (first round) was conducted before the start date of the project.

<sup>21</sup> Details available in the "5\_GS12240\_VPA Stakeholder-Consultation-Report".

were not able to attend the physical meeting had also the possibility to join in a later date the virtual meeting.

The language used in those meeting was English with interventions in Kinyarwanda to ensure everyone understood the content. Comments delivered in Kinyarwanda have been translated to English as well.

Details of the stakeholder consultation are available in the PoA Design Consultation Report.<sup>22</sup>

## E.2. Consideration of stakeholder comments received

>>

No comments were received during the virtual meeting<sup>23</sup> and no stakeholder feedback was received during the feedback period. Hence, there were no changes made to the Programme design based on stakeholder feedback. Any comments received during LSC (local stakeholder consultation) shall be addressed at VPA level.

## E.3. Final Continuous Input / Grievance Mechanism at PoA Level

>>

METHOD	INCLUDE ALL DETAILS OF CHOSEN METHOD (S) SO THAT THEY MAY BE UNDERSTOOD AND, WHERE RELEVANT, USED BY READERS.
Continuous Input / Grievance Expression Process Book (mandatory)	The inputs and grievance process book will be located at KK 15 Road Silverback Mall, Third Floor, Unit Number SB1-313. Kigali, Rwanda.
GS Contact (mandatory)	<a href="mailto:help@goldstandard.org">help@goldstandard.org</a>
Other	Jean Ntazinda jean.ntazinda@virridy.com

<sup>22</sup> "2\_GS12239\_PoA Design-Consultation-Report" and its corresponding annexes were made available to the VVB.

<sup>23</sup> The recording of the consultation is available to the VVB as per request.

## APPENDIX 1 - CONTACT INFORMATION OF COORDINATING/MANAGING ENTITY AND RESPONSIBLE PERSON(S)/ ENTITY(IES)

CME and/or responsible person/ entity	<input checked="" type="checkbox"/> CME <input type="checkbox"/> Responsible person/ entity for application of the selected methodology(ies) and, where applicable, the selected standardized baseline(s) to the PoA
Organization	Virridy Carbon LLC
Street/P.O. Box	1026 Lincoln Place
Building	
City	Boulder
State/Region	Colorado
Postcode	1026
Country	USA
Telephone	1.303.330.4671
E-mail	evan.thomas@virridy.com
Website	www.virridy.com
Contact person	Evan Thomas
Title	CEO
Salutation	Ph.D.
Last name	Thomas
Middle name	



## APPENDIX 2 - DESIGN CHANGES

### **A2.1. Details of proposed or actual design change**

>> *Provide the description of the proposed design change*

NA

### **A2.2. Describe the Impacts of design change on the following**

#### ***a. Additionality***

>>

N/A

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

>>

N/A

#### ***c. Compliance with the monitoring plan of the applied methodology***

>>

N/A

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

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N/A

#### ***e. Scale of the project activity***

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N/A

#### ***f. Stakeholder consultation***

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N/A

#### ***g. Sustainable development criteria***

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N/A

***h. Safeguarding assessment***

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N/A

***i. Compliance with applicable legislation***

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N/A

## Revision History

Version	Date	Remarks
2.2	14 April 2023	Integrated the design change memo as annex of the document.  Editorial changes
2.1	31 May 2022	Editorial changes and revisions
2.0	04 May 2022	Key Project Information table revised to cater for the following information: <ul style="list-style-type: none"> <li>- Scale of PoA</li> <li>- Title and GS ID of all real case VPAs included in the PoA</li> </ul> A new Management System section included Safeguarding Principles Assessment section removed Outcome of PoA Level Stakeholder Consultation section revised in the following manner: <ul style="list-style-type: none"> <li>- Justification for Stakeholder Consultation at PoA Level Only section removed</li> </ul> A new Consideration of Stakeholder Comments Received section added
1.1	14 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Inclusion criteria table added Clarification on POA level LSC and Safeguard Principles Assessment Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on Stakeholder Consultation information required Provision of an <a href="#">accompanying Guide</a> to help the user understand detailed rules and requirements
1.0	10 July 2017	Initial adoption