Validation report form for Renewal of Crediting Period of GS4GG Voluntary Project Activity (VPA)

BASIC INFORMATION	
Title and GS reference number of the programme of activities (PoA)	Improved Kitchen Regimes Multi-Country PoA GS ID: 1247
Title of the project	GS1247 VPA 203 Sierra Leone Safe Water (GS7475) GS1247 VPA 204 Sierra Leone Safe Water (GS7476) GS1247 VPA 205 Sierra Leone Safe Water (GS7477)
Version number of the PoA-DD to which this report applies	15.3
Scale of the project	☐ Large-scale ☐ Small-scale ☒ Micro-scale
Version number of the validation report	3
Completion date of the validation report	18/12/2024
Version number of the VPA-DD to which this report applies	Version 04, dated 01/11/2024
Date when VPA-DD was uploaded for global stakeholder consultation	N/A
Project participants	CO2Balance UK Ltd
Host Party	Sierra Leone
Applied methodologies and standardized baselines	Emission Reductions from Safe Drinking Water Supplies v1[1]
SDG Impacts	SDG 1: No Poverty SDG 5: Gender Equality SDG 7: Affordable and Clean Energy SDG 13: Climate Action (mandatory) SDG 15: Life on Land
Mandatory sectoral scopes	TA 03/3.1
Conditional sectoral scopes, if applicable	N/A

[1] During the 1st crediting period, the methodology "TPDDTEC" was applied. However subsequently the Annex 3 of the TPDDTEC was replaced with new methodology "Emission Reductions from Safe Drinking Water Supplies v1, which is now currently applied during renewal of the crediting period of VPAs. Please refer to the "document history" of the currently applied methodology "Emission Reductions from Safe Drinking Water Supplies v1" for more details.

Estimated amount of annual average GHG emission reductions or GHG removals by sinks	VPA 203: 6,396 tCO_2e/year VPA 204: 6,396 tCO_2e/year VPA 205: 6,396 tCO_2e/year
Name and reference number of the VVB	Ampere for Renewable Energy (Ampere) UNFCCC Ref. No: E-0071
Name, position and signature of the approver of the validation report	Ahmad Qadry, Technical Manager  

SECTION A. Executive summary

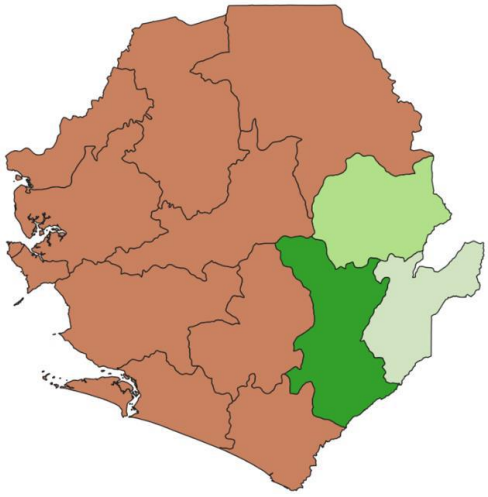
>>

Ampere for Renewable Energy (hereafter referred to as Ampere) is performing the Renewal of Crediting Period Validation (Re-validation) of the GS projects:

- "GS1247 VPA 203 Sierra Leone Safe Water" (GS project Id: GS 7475)
- "GS1247 VPA 204 Sierra Leone Safe Water" (GS project Id: GS 7476)
- "GS1247 VPA 205 Sierra Leone Safe Water" (GS project Id: GS 7477)

The VPAs encompass the installation of domestic safe water systems using borehole to the households within Kono, Kenema, Kailahun, and Bo Districts, in the Eastern Provinces of Sierra Leone.

The Micro Scale Safe Water project, registered under the Gold Standard methodology, aims to provide safe water to households in Sierra Leone using borehole technology. This initiative reduces GHG emissions by minimizing the need for firewood in water purification. In rural areas, where wood fuel is commonly used for purification, inefficient methods contribute to greenhouse gas emissions. CO2balance UK Ltd, through community involvement and maintenance programs, the project ensures reliable access to clean water for hundreds of households (HHs), contributing to sustainable development for at least five years. The 57 boreholes were originally rehabilitated between the 19th May 2019 to the 1st February 2020; an additional 75 boreholes were rehabilitated between 17th April 2020 and 28th August 2020. A further 60 boreholes were rehabilitated between 10th April 2022 and 8th October 2022 in the 1st crediting period within the below geographical location:



At this point, the projects have been active for approximately 5 years, and are now entering their second crediting period. This document is the revalidated VPA-DD for the second crediting period and incorporates the changes as the projects transition to the GS Emission Reductions from Safe Drinking Water Supplies v1.

According to the VPA-DDs, the overall objective of the VPAs is to contribute to the achievement of the Sustainable Development Goals (SDGs) under SDG 1, SDG 5, SDG 7, SDG 13, and SDG 15 by providing safe water. By providing safe water to communities, households in the project no longer consume unsafe water and there is no longer a need to use fuel to boil and treat the water and as

a result there shall be a reduction of carbon dioxide emissions from the reduction of combustion of firewood.

This report summarizes the findings of the revalidation of the project, performed on the basis of Gold Standard for Global Goals (GS4GG), as well as criteria given to provide for consistent project operations, planning, and reporting and the subsequent decisions by the Gold Standard. Validation is required for all registered GS project activities intending to confirm the conformity of the project design with available GS4GG standards, and to review the estimated emission reductions and proceed with the project implementation and monitoring. This report contains the findings and resolutions from the validation statement for the validated VPA design document.

Validation Process

The scope of the validation is defined as an independent and objective review of the Voluntary Project Activity (VPA) design document, against the requirements for including VPAs in the PoA, UNFCCC rules, and requirement of Gold Standard (GS4GG).

A desk review has been conducted to validate the data submitted in the GS4GG VPA-DD. Ampere confirms the following documents have been reviewed:

a. The registered PoA-DD and VPA-DD.
b. Previous validation and verification reports from the 1st crediting period.
c. The applied monitoring methodology.
d. Relevant decisions, and clarifications from the CMP and GS4GG.
e. GS4GG guideline and related Annex.
f. All information and references relevant to the project activity's resulting in estimated emission reductions.

The validation report is finalized based on the assessment of the VPA-DD and applying standard auditing techniques including but not limited to document reviews, follow up actions (e.g., remote site visit, telephone, or e-mail interviews) and the review of the applicable approved methodology and underlying formulae and calculations.
The report describes a total of 17 findings as demonstrated in Appendix 4, which include:

- 10 Corrective Action Requests (CARs);
- 07 Clarification Requests (CLs/CRs);
- 01 Forward Action Requests (FARs).

The CME has responded these findings by modifying the Gold Standard VPA-DD and providing adequate additional explanations and evidence. **Ampere** confirms that all the findings have been "closed out" before submitting the request for registration to GS board.

Conclusion

As a summary of the validation, the review of the Gold Standard GS4GG VPA-DD and the subsequent follow-up actions have provided **Ampere** with sufficient evidence for the determination of the VPA fulfilment with all stated criteria. In our opinion, the project, with its updated methodology[2], parameters, and details, meets all relevant requirements of Gold Standard GS4GG with no need for a separate design change request to be submitted.

Therefore, **Ampere** recommends the VPAs GS7475, GS7476, GS7477 for the renewal of crediting period for 5 years under PoA GS1247.

[2] During the 1st crediting period, the methodology "TPDDTEC" was applied. However subsequently the Annex 3 of the TPDDTEC was replaced with new methodology "Emission Reductions from Safe Drinking Water Supplies v1, which is now currently applied during renewal of the crediting period of VPAs. Please refer to the "document history" of the currently applied methodology "Emission Reductions from Safe Drinking Water Supplies v1" for more details.

SECTION B. Validation team, technical reviewer and approver

B.1. Validation team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)	Involvement in			
						Desk/document review	Remote inspection	Interviews	Validation findings
1.	Team Leader & Technical Expert	EI	Badaya	Rohit	Central	Y	Y	Y	Y
2.	Validator & Technical Expert	IR	Dar Issa	Mohammad	Central	Y	Y	Y	Y
3.	Local Expert	EI	Kamara	Lansana	Central	Y	Y	Y	-

B.2. Technical reviewer and approver of the validation report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)
1.	Technical Reviewer	EI	K	Sudheendra	Central
2.	Approver	IR	Qadry	Ahmad	Central

SECTION C. Means of validation

C.1. Desk/document review

>> The validation is performed primarily as a desk review of the documents submitted at various stages of assessments. The review is performed by assessment team using validation protocols (checklists). The assessment team cross-checked the information provided in the VPA-DD and information from sources other than those used, if available. Ampere conducted a desk review, involving but not limited to,

- A review of the data and information presented to verify their completeness;
- A review of the sampling approach, and the ongoing validity of the baseline data.
- A review of calculations and assumptions made in determining the GHG data and emission reductions.
- A review of the proposed sustainable development co-benefits, their calculation methods and assumptions.
- A review of the monitoring plan and monitoring methodology, paying particular attention to the proposed frequency of measurements;
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions and sustainable development co-benefits.

The list of documents reviewed is included in the section 'Appendix 3' of this report.

C.2. On-site inspection

There is no site visit conducted for the re-validation. In accordance with the guidelines outlined under paragraph 3.2.1 of *Site Visit and Remote Audit Requirements and Procedures* v. 02, "A physical site visit by VVB is not mandatory at the validation (Design Certification or Design Certification Renewal) of a project". Hence the validation team opted and applied the alternative means of conducting the remote audit.

As per para 4.1.4 of ***Site Visit and Remote Audit Requirements and Procedures* v. 02**, Validation team has used the following alternative means for its assessment and to justify that they are sufficient for the purpose of validation of the VPA. Along with desk review, assessment team has conducted remote audit interview corresponding to the VPA as follows:

(a) Desk review of the PoA-DD & VPA-DD (all versions) and all applicable country legal requirement and supportive evidence have been checked by the assessment team.
(b) Video conferencing with representatives of the CME and stakeholders to check the implementation, current situation, management system of the PoA/VPA, programme technology, location, training provided, start date etc.
(c) Employing a mixed-methods approach to gather detailed household information, utilizing both structured survey instruments and video documentation to comprehensively assess sampling and data collection methods.
(d) Photographic evidence of the water points, Installed handpumps with Unique Serial IDs, baseline survey.
(e) Information's congregated during the remote audit are further verified through the PoA-DD and VPA-DD and other supporting documents.
(f) Cross checks between information provided by interviewed personnel (i.e., by checking sources) to ensure that no relevant information has been omitted.

The remote inspection has been conducted as follows:
An interview with the CME and the local implementer was conducted on the 3rd June 2024.

Additionally, due to telephone/internet network limitations that hindered direct communication between households and the validation team, the local implementor was tasked to conduct recorded interviews with selected households (as form of the acceptance sampling conducted by the VVB). These have been physically conducted during the period of 13/08/2024 to 29/08/2024, video recordings and pictures were then uploaded on Google Drive link prepared by the VVB and have been reviewed by the validation team. Moreover, each interview's answers were recorded on paper forms that were scanned and submitted to the VVB using the same Google Drive link.

The scope of the remote inspection encompassed conducting acceptance sampling across diverse population and boreholes, aligned with the agreed-upon reasonable level of assurance. The samples taken by the CME were used for examining the baseline scenario. The location of the sample population is across Kono, Kenema, Kailahun, and Bo districts, which are deemed to be homogenous. The situation of households in rural areas in above districts is identical with the same legislations applied as well. The local expert provided his opinion was also taken into consideration. The outcome of the acceptance sampling was positive.

C.3. Interviews

Interview with the Project Developer/ Implementor:

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Jones	Megan	Senior Project Manager, CO2 Balance	03/06/2024 Through Google Meet	1. VPA design and Implementation 2. Project boundary 3. Baseline assessment 4. Crediting period 5. Roles and responsibilities 6. Applicability of the methodology 7. Emission reduction 8. Monitoring requirement 9. Monitoring procedure 10. Data collection 11. Start date. 12. Carbon Rights 13. Sustainable Development parameters 14. Local Stakeholder Consultation 15. Grievance Mechanism. 16. Environmental impacts etc.	Rohit Badaya Mohammad Dar Issa
2.	Narkortu	Prince Teye	Carbon Project Officer, CO2 Balance			
3.	Sheriff	Mohamed	Representative, Local Partner			
4.	Bangalie	Samuel	Representative, Local Partner			

Interviews with the baseline households:

The list of the names of the interviewed households is deemed **confidential** as requested by the interviewees. The list is available in Appendix 5 in a separate document titled **"(GS7475-7477) CONFIDENTIAL - Appendix 5 - List of Stakeholder Interviews**". This document is not intended for public release.

Interviews Questions:

Questions?	Summary of Response by Stakeholders/HHs
Are you responsible for water collection or treatment in this household?	The person responsible for water collection and treatment in the household was identified for the interview.
The household details (like address, head of households, mobile number etc.) was questioned?	All the households provided households related information during the interviews.
Assuming the project water point was not available, what would be your main water source for drinking water, food washing, and basic personal hygiene? How many trips per week to water source? How long would it take to get the water sources	Most of the households confirmed they were using open well and river stream water for drinking, food washing. All the households interviewed reported operational condition.
Assuming the project water point was not available, who would be the main person to collect drinking water from the alternative source?	The households confirmed on the main person responsible for this activity.
What method do you use to make your water safe for drinking, food washing, and basic personal hygiene in the absence of safe water? How often the treatment is done?	All households confirmed that they were purifying the water through boiling using wood fuel in the absence of safe water.
Technologies used for treatment of water in the absence of safe water	Most of the households confirmed on using the traditional methods of boiling water
Fuels used for the treatment of water in the absence of safe water	Most of the households confirmed on using the traditional fuels like wood for boiling water
Source of fuel used for the treatment of water in the absence of safe water	The households replied with the actual scenario in each of the households.
Whether hygiene is maintained in the household?	Each households confirmed as how the hygiene is maintained.
Have you attended stakeholder consultation meeting?	Few households confirmed they attended stakeholder consultation meeting conducted in past.

C.4. Sampling approach

>> As the target population is homogeneous, CME has proposed simple random sampling plan using 90/10 as confidence/precision. This is in line with the applied methodology "Emission Reductions from Safe Drinking Water Supplies v1".
The sample size for each parameter is determined following guidelines for Sampling and Surveys for CDM Project activities and Programme of Activities Ver. 4.0 (EB86, Annex 4). The verification sampling approach was also in line with the GS VVS v.1.0 clause 17.2.5.

The CME followed the 90% confidence and 10% precision as per the methodological requirement, and the achieved sample sizes using CDM Sampling Calculator, were found to be 15 villages. The 15

villages were randomly selected from the borehole database comprising of villages from all the 3 VPAs. To cover the minimum of 100 samples as indicated by the methodology, the CME sampled a total of 120 households, which were further surveyed. This was deemed acceptable by the validation team since the final number of surveys (120) is still above the minimum required as per the methodology (100).

In line with paragraph 26 of the Sampling and surveys for CDM project activities and programmes of activities, the validation team has applied acceptance sampling approach through remote interviews on the monitoring survey as part of the validation.

As per the Sampling standard, based on the AQL and UQL below, the VVB acceptance sample size should be 18. However extra samples have been chosen to make it 22 as can be seen in the tables below. The sample of the VVB is representative of all villages sampled by the PD.

Parameters	Producers risk	Consumers risk	AQL	UQL	Sample size	Acceptance Number (c)
Parameters monitored through sample survey	10%	10%	1.0%	20%	18 + 4 (extra)	1

C.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Ampere has raised 07 clarifications (CLs), 10 corrective action requests (CARs), and 1 forward action request (FARs). A comprehensive listing of the findings of this validation is documented in Appendix 4 of this document

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Demonstration of prior consideration of the auditing standard	-	-	-
Identification of project type	-	-	-
Description of project	CL 11, CL15	CAR 02, CAR 03, CAR 04,	
Application and selection of methodologies and standardized baselines	-	-	-
- Application of methodologies and standardized baselines	-	-	-
- Deviation from methodology and/or methodological tool	-	-	-
- Clarification on applicability of methodology, tool and/or standardized baseline	-	-	-
- Project boundary, sources and GHGs	-	-	-
- Baseline scenario	CL 12	-	-
- Demonstration of additionality	CL 16	-	-
- Estimation of emission reductions or net anthropogenic removals	-	CAR 01	-
- Monitoring plan	CL13, CL14	CAR 05, CAR07	-
Start date, crediting period type and duration	-	CAR 09	-
Environmental impacts	-	-	FAR 01
Local stakeholder consultation	CL 17	CAR 08	
Sustainable development co-benefits	-	CAR 06	-
Approval	-	-	-

Authorization	-	-	-
Modalities of communication	-	-	-
Global stakeholder consultation	-	-	-
Others (Appendix 1)	-	CAR 10	-
Total	7	10	01

SECTION D. Validation findings

D.1. Compliance with VPA-DD Form

Means of validation	By means of document review and cross check with GS4GG website, the validation team checked the VPA Design Document with latest version of VPA-DD template available in the GS website (i.e., version 2.3) in addition to the latest VPA-DD template Guide available on the Gold Standard website.
Findings	No findings raised.
Conclusion	The validation team confirms that the proposed VPAs meet the requirement of GS4GG and the VPA-DD is completed using the valid version of the VPA DD Form (version 2.3 dated 29/06/2023).

D.2. Description of project

Means of validation

The Voluntary Project Activities "GS1247 VPA 203 Sierra Leone Safe Water" (GS7475), "GS1247 VPA 204 Sierra Leone Safe Water" (GS7476), "GS1247 VPA 205 Sierra Leone Safe Water" (GS7477) are developed under the PoA "GS1247 Improved Kitchen Regimes Multi-Country PoA", is a voluntary programme of activity by the Coordinating & Management Entity (CME) "CO2balance UK Ltd.". The programme is implemented in the host country of "Sierra Leone".

The co-ordinates of the location of the site were appropriately included in the VPA-DD. The location has also been confirmed through website https://www.google.co.in/maps

	Latitude	Longitude
North	9°59'59.32"N	11°53'39.77"W
South	6°55'3.04"N	11°27'24.86"W
East	8°28'46.04"N	10°16'31.33"W
West	9° 1'51.84"N	13°18'10.96"W

The CME will work with the government and communities in Kono, Kenema, Kailahun, and Bo Districts, in the Eastern Provinces of Sierra Leone to identify broken down boreholes and rehabilitate them so that they deliver clean, safe water. The capacity of communities to maintain their boreholes will also be supported through the project to ensure that the water keeps flowing. The boreholes included under the project will be mainly hand-powered pumps, however, the project is not limited to any model of hand-pump or water scheme.

The technical description of the voluntary project activity has been validated by requesting sample WQT and RCFs and the actual photographs. All the information was correctly mentioned in the VPA-DD.

The number of boreholes per VPA will be limited by the amount of pure water supplied by each unit; based on ex ante calculations, the maximum number of boreholes that can be rehabilitated in one VPA to achieve 10,000 tCO_2e is approximately 81, however, the exact number is to be determined. CO2balance and local partner (CODE-SL) will install/rehabilitate the boreholes and deliver the maintenance programme for all the boreholes included in the project activity to 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 five years.

The project is funded 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 economic impact.

There are currently a total of 192 boreholes incorporated within all these VPAs, which are transitioning from TPDDTEC to ERSDWS. There may be newly rehabilitated or installed boreholes added into the VPAs during CP2.
At this point, the projects have been active for approximately 5 years, with an anticipated lifetime of 15 years, and are now entering their second crediting period. This document is the revalidated VPA-DD for the second crediting period and incorporates the changes as the projects transition to the GS Emission Reductions from Safe Drinking Water Supplies v1.
Under the impact of adopting GS ERSDWS.

As such, the 192 boreholes are distributed into the VPAs undergoing revalidation, with some capacity left within the VPAs for additional boreholes to be added.

Eligibility for VPA inclusion as per PoA requirements:

Description/ Required condition	**Description of the VPA in relation to the criteria,**	**Validation Assessment**
(a) Types of Project Eligible Projects shall include physical action/implementation on the ground. Pre-identified eligible Project types are identified in the Eligibility Principles and Requirements section.	This project will involve the rehabilitation, installation and maintenance of safe water sources. The project type is eligible under Community Services Activity Requirements sections 3.1.1(b) and 3.1.1(d).	The validation team has reviewed the VPA-DD and supporting evidence submitted by the CME and interviewed the CME, it is confirmed that the VPAs involves the rehabilitation, installation and maintenance of safe water sources. Hence, the VPA meets the eligibility criteria of section 3.1.1 of GS4GG Principles & Requirements version 1.2.
(b) Location of Project Projects may be located in any part of the world.	The host country and location of each VPA will be specified in each VPA-DD, in line with the locations outlined in Section A.3.	VPA is in Sierra Leone as confirmed through the VPAs database and through cross checks the coordinates of the project boundary with the web base map application (i.e.,

			google maps). Hence, the VPAs meets the eligibility criteria
	(c) Project Area, Project Boundary and Scale The Project Area and Project Boundary shall be defined. Projects may be developed at any scale although certain rules, requirements and limitations may apply under specific Activity Requirements, Impact Quantification Methodologies and Products Requirements. In order to avoid double counting the Project shall not be included in any other voluntary or compliance standards programme unless approved by Gold Standard (for example through dual certification). Also, if the Project Area overlaps with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature, the project shall demonstrate that there is no double counting of impacts at design and performance certification (for example use of similar technology or practices through which the potential arises for double counting or misestimation of impacts amongst projects).	The Project area and boundary is defined in section A.2 of the VPA-DD. The Project is only included under the Gold Standard and no dual certification will take place. Each water point has a unique location recorded and stored in the Project Database. Each micro-scale VPA included under this PoA will not be included by any other carbon standard and will not exceed the 10,000 VERs per year cap. The Project is not included in any other voluntary or compliance standards programme. All technologies have the GPS coordinates logged and are given a unique identification code to avoid double-counting.	The Project Area, Project Boundary and Scale of each VPA will be checked at VPA level. It is confirmed through the ER calculation sheet that the VPA eligible under micro-scale category and maximum energy saving is not exceeding the threshold of 10,000 VERs per year as per GS product requirements. The validation team has confirmed by means of platform cross-check on VERRA and SustainCERT that the VPAs are not duplicated. The CME confirmed the same during remote interviews.

	(d) Host Country Requirements Projects shall be in compliance with applicable Host Country's legal, environmental, ecological and social regulations.	Each homogeneous VPA included in this project will comply with Sierra Leone's national policies around water access, rural water infrastructure, community engagement, women empowerment and climate change action.	The validation team has checked the sources provided by the CME. The sources "The Sierra Leone Electricity and Water Regulatory Commission - The Water (Quality of Supply) Regulations, 2019", "The Government of Sierra Leone, Ministry of Water Resources - The National Water and Sanitation Policy: About Rural Water Supply, 2014" has been checked and the VPA meets the eligibility criteria
	(e) Contact Details As part of the Project Documentation the Project Developer shall provide (i) name and (ii) contact details of all Project Participants; AND in case of an organisation (iii) the legal registration details and (iv) documentation by the governing jurisdiction that proves that the entity is in good standing (defined as being a legal or other appropriate entity registered in or allowed to operate within the required jurisdiction and with no evidence of insolvency or legal/criminal notices placed against it or any of its Directors). Gold Standard retains the right (at its own discretion) to refuse use of the Standard where	Project Developer information is in appendix 2 of the VPA-DD.	Name and contact details of the CME have been provided in Appendix 2 of the VPA-DD. The details of Local partner organizations and staff involved in the implementation of VPAs is checked and found consistent with the real case VPAs. The CME has provided the company registration certificate and found to be satisfactory. Declaration that no evidence of insolvency or legal/criminal notices placed against it or any of its directors has been submitted by the CME. Hence, the VPAs meet the eligibility criteria

	reputational concerns are highlighted.		
	(f) Legal Ownership Full and uncontested legal ownership of any Products that are generated under Gold Standard Certification, (for example carbon credits) shall be demonstrated. Where such ownership is transferred from project beneficiaries this must be demonstrated transparently and with full, prior and informed consent (FPIC). Note that for certain Project types there is a requirement for full and uncontested legal land title/tenure to be demonstrated. These are contained within specific Activity or Product Requirements. All projects shall immediately report to Gold Standard any land title/tenure disputes arising.	The Project Developers have full rights over the Products generated from GS Certification. A representative from each waterpoint signs a carbon transfer form at the time of the rehabilitation, which exchanges the rights to carbon savings for repair and ongoing maintenance of the waterpoint.	The CME has presented a sample of the Carbon Transfer Forms signed by the elected representative from the borehole community It can be confirmed that the emission reductions achieved by the project technology are owned by the CME. Hence, the VPAs meets the eligibility criteria
	(g) Other Rights As well as legal title and ownership, the Project Developer shall also demonstrate where required uncontested legal rights and/or permissions concerning changes in use of other resources required to service the Project (for example, access rights, water rights etc.). Any known disputes or contested rights must be declared immediately to Gold Standard by the Project Developer and resolved prior to further	PD will inform GS of any disputes.	The CME has submitted a declaration stating that there are no legal disputes or contested rights that have arisen related to the project. And the same has been confirmed during the interview with the CME representative Hence, the VPAs meet the eligibility criteria of section 3.1.1 of GS4GG Principles & Requirements version 1.2.

Project implementation in affected areas.		
(h) Official Development Assistance (ODA) Declaration All Project Developers applying for project activities located in a country named by the OECD Development Assistance Committee's ODA recipient list and seeking Gold Standard Certification for carbon credits shall declare the Official Development Assistance (ODA) support. The Project Developer shall follow the GHG Emissions Reduction & Sequestration Product Requirements and submit the declaration at the time of Design Certification.	PD has submitted a signed ODA Declaration	The validation team has assessed the ODA declaration submitted by the CME of the VPAs and found it be appropriate. Hence, the VPAs meets the eligibility criteria.
Criteria demanded from PoA Re-Validation Review		
(i) Factor of Non-Renewable Biomass Reference from where fNRB shall be calculated for VPAs shall be included in the eligibility criteria to avoid confusion at the time of VPA inclusion and for consistency	There is no default fNRB value provided by CDM or Gold Standard for Sierra Leone. Therefore, the fNRB has been calculated by PD in accordance with CDM tool 30, and updated in the key parameter box and ex-ante calculations.	The fNRB value has been checked by the validation team, and the report is deemed a valid source for this information. The PD has submitted the fNRB Report, which follows the latest fNRB Tool, version 04. Based on the submitted report, it can be concluded that credible sources of data has been used in the fNRB calculations and hence the fNRB calculations are found correct. During the 1st crediting period, the default

			value of 95% as published during EB35 meeting was used. However during the CP2, more conservative value of 63% is used, which results into more conservative estimate of emission reduction calculations, hence accepted. Similar projects in Sierra Leone were reviewed on SustainCERT and VERRA platforms, and the fNRB value is deemed comparable to registered projects.
	(j) Test for Wb,y parameter The test for fixed parameter Wb,y is based on the water boiling test.	The updated SWS Gold Standard Methodology no longer includes parameter Wb,y. Instead, specific energy required to boil water (kJ/L) is used (SEw,b,y)	The default value used is found appropriate by the Validation team
	(k) Water Project Treatment Capacity The treatment capacity limits of project technology/source are required to be monitored to ensure that the water consumption level applied for emission reductions must not be greater than the treatment capacity of the project technology/sources.	Technical specifications of the water supply technologies will be collected, and the monitored water consumption of the technology will not be above the treatment capacity of the technology. PD will ensure that user numbers are within the capacity of the water source and the specifications of the technology. Capacity of the water sources will be taken from online specifications for technologies.	The validation team has checked the calculations of each VPA's outputs and it was capped by the maximum litres per person per day and found appropriate.

		Technologies will have meters or sensors installed on a sampled basis (minimum 90/10). As per section B.1 of the PoA-DD, the user capacity of the technology can be calculated from the measured output per technology per day. This value would then be divided by the monitored total water consumed from the technology per person per day. A self-imposed minimum cap of 12 L/pp/day monitored total water consumption from the technology will be applied in order to maintain conservativeness. This calculates the maximum number of people that can be served by the technology. User cap (pp) = Total output of technology per day (L/d) / Total water consumption per day per person (L/d/pp). User lists will still be collected, and the figure capped at the calculated user cap. Any user lists under the calculated cap will apply the	

		monitored user list value.	
	(j) Double Counting Conditions to confirm that VPAs are neither registered as CDM project activities, included in another registered PoAs, nor the project activities that have been deregistered.	PP can confirm that VPAs are not registered anywhere else. Unique IDs and for project technologies will be provided for proof of no double counting.	The project activity is not a debundled component of a large scale POA and the double counting is avoided through provision of geographical location, GPS coordinates for all the boreholes included in the project activity and with unique identification number. The same can be cross-verified through UNFCCC CDM 3 website, GS4GG and Verra Registry website interface.
	(k) Technical Specification Specification of the technology/measure, such as the level and type of service, as well as performance specification based on, inter alia, testing/certification.	This VPA-DD includes technical specifications of the Project Technology in Section A.3.	The technical specifications and their references[4] have been reviewed by the validation team and are deemed appropriate
	(l) Start Dates Conditions to check the start dates of VPAs through documentary evidence.	The start date of project is confirmed by Carbon Transfer Forms and Installation and Rehabilitation Confirmation Forms.	The original start dates were checked against the provided CTFs and RCFs.
	(m) Applicability Conditions to ensure compliance with the applicability of the applied methodologies, the applied standardized baselines and the other applied	The project complies with the applied methodology as it involves community safe water supply systems, which are eligible under ERSWDS v1.	The validation team has revised the change of methodology for the VPAs and reviewed the information mentioned in sections B.2. The new methodology is deemed applicable for the VPAs

[3] https://cdm.unfccc.int/Projects/projsearch.html
[4] https://www.rural-water-supply.net/en/implementation/public-domain-handpumps/

methodological regulatory documents.		
(n) Additionality Conditions to ensure that VPAs meet the requirements for demonstration of additionality.	This has been set out in this VPA-DD. This VPA is within Sierra Leone, an LDC listed under section A.2. of the PoA-DD. Projects within these countries are deemed additional.	Sierra Leone is an LDC. This project is also a Micro-scale project and so is deemed additional by the relevant activity requirement. Hence, the validation team deemed the project additional.
(o) LSC and EIA Conditions related to undertaking local stakeholder consultation and environmental impact analysis.	This has been set out in Section E of the VPA-DD. An EIA is not required to be carried out for this safe water project.	The validation team had thoroughly studied the safeguarding principle submitted during project initiation and found it most appropriate with the revised one, as mentioned in the revised GS-PD. As per the recent PDD filling guidelines, the VPA-DD is filled.
(p) Target Group Target group (e.g. domestic/ commercial/ industrial, rural/urban, grid-connected/offgrid), and where applicable, distribution mechanisms (e.g. direct installation).	The target group are households.	The validation team has verified that the target group are households. Hence this requirement is fulfilled.
(q) Sampling Sampling approaches are set out in each VPA and will follow the TPDDTEC v3.1 methodology.	The VPAs will follow the sampling approach set out in the applicable methodologies (Emission Reductions from Safe Drinking Water Supply methodology) which take precedence over CDM methodologies. Sampling approaches are set out in Section B7.2 of the VPA-DD and will	The validation team has validated the sampling approach. The newly adopted methodology "*Emission Reductions from Safe Drinking Water Supplies v1*" follows the sample approach for random sampling for homogeneous population is in accordance with TPDDTEC 3.1. Hence it

		follow the Safe Water methodology. Confidence and precision levels are considered to ensure suitable sample sizes are applied and data is representative of the project area.	is deemed satisfactory.
	(r) Crediting Period All VPAs submitted for inclusion after the first crediting cycle of such PoA and completion of transition to GS4GG shall follow the GS4GG Certification Cycle (i.e. 5 years renewals).	The crediting period start date is: GS7475: 19/05/2024 GS7476: 20/05/2024 GS7477: 13/06/2024	The VPAs' crediting periods are renewed for 5 years as per the Community Service Guidelines. The start date for each VPA is demonstrated and found to be satisfactory.
	(s) Prior Consideration Demonstration of prior consideration of revenues from Gold Standard certification are required in the following circumstances: (a) Regular projects are exempt from any kind of prior consideration of revenues from Gold Standard certification checks (b) Retroactive projects shall submit the required documents for preliminary review (time of first submission) within one year of the project start date. (c) The prior consideration rule is also applicable to a Project that undergoes a design change. A project with a Certified Design requesting to include a new technology/measures shall submit the request	This project is regular.	The project is a regular project, which has been confirmed through the approved documents of the 1st crediting period. Hence the prior consideration has already been demonstrated.

for approval of design change to Gold Standard within one year of the start date of the proposed technology/measures (design change component).		

General Eligibility Criteria as per sections 2 & 3 of Community Services Activity Requirements version 1.2:

Community Services Activity Requirements		
Requirements relevant to this VPA.	Demonstration of meeting Requirements	Validation Assessment
2. Eligibility Project Types		
2.1.2) All CSA projects shall lead to climate change mitigation and/or adaption by providing or improving access to services/resources at household or community level or institutional level. Eligible services include electricity and energy, water and sanitation, waste management, housing, etc.	By providing a safe water source in rural communities, the project improves access to safe water services/resources at community level. As such, the project is an Eligible Project Type in line with the requirements.	The validation team has confirmed that VPAs involves rehabilitation of water boreholes in rural communities, contributing to improved access to safe water resources and eliminating the need for boiling unsafe water and thereby reduces CO_2 emissions. Hence, the VPAs meet the eligibility criteria of section 2 of Community Services Activity Requirements version 1.2.

	2.1.3) Projects shall conform to the Principles and Requirements.	The project conforms with the Principles and Requirements detailed in the document. The project is eligible under section 4, Principle 1, section (a) of the Principles and Requirements as it follows an established Gold Standard methodology. Concerning point 4.1.7, the project does not support geoengineering or entail energy production from fossil fuels or nuclear. Rather it supports a switch away from polluting technologies to an emissions-free means of accessing safe water.	The validation team has reviewed the project against the Principles and Requirements document and found it to be in line with all relevant principles and requirements.
	3 General Eligibility Criteria		
	3.1.1 Types of Project b) End-Use Energy Efficiency: Project activities that reduce energy requirements as compared to baseline scenario without affecting the level and quality of services or products where the end user of the products and services are clearly identified and when the physical intervention is required at the user end.	By providing safe water, the project activity reduces the energy requirements compared to the baseline scenario by ensuring that households consume less firewood through no longer needing to purify their water.	The validation team has confirmed that VPAs involves rehabilitation of water boreholes in rural communities, contributing to improved access to safe water resources and eliminating the need for boiling unsafe water and thereby reduces CO_2 emissions. Hence, the VPAs meet the eligibility criteria of section 3 of Community Services Activity Requirements version 1.2.

	3.1.2 Project Area, boundary and scale Project Area and Boundary shall be defined in line with the applicable Impact Quantification Methodologies and Product Requirements. c) For the purpose of applying UNFCCC methodologies for quantification of GHG reductions, 'small scale' is defined as in CDM Modalities and Procedures for three project types; Renewable Energy, Energy Efficiency and Others.	The project Area and Boundary are defined in line with the applicable Methodology, outlined in Section A.2. The project is a Micro-Scale and is capped at 10,000 tCO_2e per year.	The validation team has reviewed the project boundary mentioned in the VPA-DD and found it to be satisfactory. The annual estimated average for emission reductions per year is capped at 10,000 tCO_2e and thus it complies with the methodology requirements.
	3.1.3 Suppressed Demand baseline Certain Impact Quantification methodologies allow projects to account Suppressed Demand scenario when establishing a baseline. In such cases, the application of Supressed Demand baseline is limited to Small Scale and Microscale Projects. Where a Supressed Demand baseline is applied, it is not possible to 'stack' Gold Standard Certified Impact Statements or Products as the definition of the baseline may be contradictory.	The VPA is a micro-scale project, therefore it is eligible to allow for suppressed demand in the baseline scenario. The baseline scenario is assessed in terms of suppressed demand. Supressed demand is determined through a set of questions in the Baseline Project Survey that establish the method that 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. A fixed suppressed demand baseline has been opted for. However, in the event the project surveys show a substantial change in fuel use characteristics, a new baseline shall be conducted.	The validation team diligently checked all the input values that went into the ER estimation by checking all the evidences and found the estimation appropriate. Additionally, the suppressed demand application comes into picture when the scale of project is either micro or small scale. The CME has used the baseline project surveys and it was undertaken in line with methodology to provide critical information on target population

		No Gold Standard Certified Impact Statements or Products are intended to be stacked in case of suppressed demand baseline.	characteristics, water and fuel consumption needed to purify water, suppressed demand and leakage.
	3.1.4 Legal ownership a) Projects involving the distribution of a large number of devices for services shall provide a clear description of the ownership of the Products that are generated under Gold Standard Certification all along the investment chain. In line with FPIC requirement, the proofs that end-users are aware of and willing to give up their rights on Products shall be provided. b) The transfer for Product ownership shall be discussed during the local stakeholder consultations for projects.	It will be clearly communicated that CO2balance UK Ltd is the Co-ordinating/Managing Entity which communicates with the Gold Standard and the entity that is claiming ownership rights of and selling the emission reductions resulting from the project activity. The project is implemented in the host country by CODE-SL. CO2balance UK Ltd have legal ownership of the carbon credits produced as a result of the project. Both parties maintain the right to operate the projects in the host country. Water points are managed by communities, who are recognized as the main users of the water points in the project. 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 and CODE-SL. An elected representative from each water resources committee responsible for a	The validation team has checked the Carbon Transfer Form sample submitted by the CME and confirm that the ownership of the GS VERs would be with the CME. It was also confirmed from the LSC report that the transfer of Product ownership was discussed during local stakeholder consultations.

			borehole will sign a CTF on behalf of all users thereof. The transfer of ownership was discussed during the local stakeholder consultation conducted by CODE-SL, presenting the details of the project to the attendees. No issues were raised during the meeting voicing issues regarding the transfer of product ownership.	

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Findings	CAR 02, CAR 03, CAR 04, CL 11, CL15 were raised by the VVB and closed out satisfactorily. Refer to Annex 04 of this report for further details.
Conclusion	Ampere confirms that: • The proposed VPAs are voluntary action by the CME. • The VPAs, part of the PoA-DD (hereinafter referred to as VPA- DD) and applies Gold Standard methodology: "Emission Reductions from Safe Drinking Water Supplies v1" • Since the rehabilitated water boreholes provide safe water without the need for boiling, they cut fuel demand, and thus expenditure and unpaid labour time related to firewood collection, as well as reducing the amount of cut non-renewable forests, provide access to clean water for more people, and thus, the VPA has social, economic, and environmental benefits and contributes to sustainable development of host country. • The description in the VPA-DD includes all information in line with the guidelines provided under "The Gold Standard for the Global Goals Programmes of Activities Requirements" ver. 2.1 Published 5th of October 2023. Hence, it can be concluded that the description of the VPAs in VPA-DD is accurate and complete.

D.3. Application and selection of methodologies and standardized baselines

D.3.1. Application of methodologies and standardized baselines

Means of validation	The VPAs employs the Gold Standard methodology 'Emission Reductions from Safe Drinking Water Supply V.01'. The VPAs (VPA 203, VPA 204, VPA 205) are developed under the PoA (GS ID-1247) rehabilitating safe water boreholes, in that way reducing fuel consumption for cleaning water. The VPAs will ensure that households consume less firewood and as a result there will be a reduction in carbon dioxide. The applied methodology is applicable to VPAs introducing technologies and/or practices that reduce or displace greenhouse gas (GHG) emissions from the thermal energy consumption of households and non-domestic

premises. The project activity appears under criteria of the applied methodology i.e., "Technologies that generate a supply of water for a community.". Therefore, the methodology is applicable for the Voluntary project activity.

The compliance of the VPAs to the applicability conditions of the applied baseline and monitoring methodology has been mentioned in the VPA-DD section B.2. The validation team has reviewed the VPA-DDs along with relevant supporting documentation provided by CME. Supporting evidence submitted by the CME is outlined in Appendix 3 of this report

The validation team thus confirms the applicability of the applied methodology, "Emission Reductions from Safe Drinking Water Supply V.01", for the VPAs.

It is to be noted that VPA was registered referring GS methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC), however as per the clause 3.1.1 of rule update "*Application of TPDDTEC Methodology to Safe Water Supply Projects "A registered project applying Annex 3 of TPDDTEC methodology (all versions) shall apply the latest version of Methodology for emission reductions from safe drinking water supply v.1.0 when requesting renewal of crediting period*".

Therefore, VPA applies the approved methodology Emission Reductions from Safe Water Supply v.1.0. Applicability criteria for the baseline methodology are assessed by the validation team by means of document review and interview. The new methodology is included in the latest approved PoA-DD v15.3 and it allows for building on a baseline from TPDDTEC since they both follow the same baseline guidelines.

Applicability criteria as per methodology	**Means of Validation**
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.	This project involves rehabilitating community water sources, specifically handpumps installed onto boreholes within which natural processes are used for filtration. Monitoring water quality is a key principle of ongoing monitoring, if necessary to treat water quality, chlorine interventions or other recommended treatment by the local testing facility will be taken. If this process is undertaken, water quality retests will be conducted to test the effectiveness of the chlorination treatment and repeated if the retest does not result in a positive test.
b. Eligible community water supply technologies (CWS) include new	The project activity involves rehabilitating and maintaining non-functioning borehole hand pumps/02/.

	installation of new borehole hand-pumps, borehole hand-pumps rehabilitation, solar powered drinking water pumps, etc. Water pumps powered by fossil-fuel engines are not eligible, with the exception of backup fossil–fuel engines that are used for no more than 10% of operating hours (parameter SWDS 33).	The project does not include water pumps powered by fossil fuel engines.
	c. All projects involving CWT and CWS technologies must also include ongoing maintenance and repair of the project technology.	The project activity involves installing new borehole handpumps or rehabilitating and maintaining non-functioning borehole handpumps (during the CP1). Pumps are monitored and reactive repairs are conducted if there is an issue with the pump. Repairs are logged and recorded as non-functioning days, the days discounted will include the entire period from the day it was reported to, and including the day the handpump was completely fixed. This ensures only days where the borehole is providing water the whole day are accounted for in the ER calculations WQTs are conducted throughout the year to ensure the water quality meets national standards.
	d. Where the project involves the rehabilitation of an existing technology, the project developer shall provide evidence that the existing technology is non-operational and that there is no planned maintenance or repair for at least 3 months after the date it became non-operational (parameter SWDS 2).	Technical assessments of existing technologies are carried out by the Water Resource Department to determine what spare parts are needed. CTFs are signed by the water committee representative and acts as an agreement between PP and water resource committee the technology needed repair.
	e. This methodology allows for project	The project activity includes households only. Hence this criterion is not applicable.

	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.	
	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 pedalling may be demonstrated (parameter SDWS 1).	The distance that each household is from the CWS is collected in the user lists, and the GPS coordinates are recorded for each CWS.
	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	Not applicable as project activity relates to CWS only.

	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 Technologies8 (World Health Organization, 2011) or (ii) compliance with the national standard or guideline9 for household drinking water treatment technology; if no national guideline or standard is available, then the project technology shall comply with the WHO International Scheme requirements as per (i) (parameter SDWS 2).	
	h. Project technology performance level (CWT and CWS): For each individual CWT or CWS, it shall be demonstrated at the start of each crediting period with water quality testing reports that the water directly supplied by the project water technology/source achieves both: i. microbial quality in line with either (i) national standards or guidelines for microbial quality of drinking water, or in	Microbial and physiochemical WQTs will be conducted at the start of the crediting period at all the project water sources by an accredited laboratory, in line with the methodology.

	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); and ii. compliance with (i) national standards or guidelines on priority chemical contamination and physical and aesthetic aspects, or in the absence of such requirements, (ii) international standards or guidelines on priority chemical contamination and physical and aesthetic aspects. (parameter SWDS 3).	
	i. The project must conduct annual water hygiene education campaigns for the end-users. (parameter SDWS 20).	Annual WASH training takes place once a year at each waterpoint. The training involves sensitization on principles of WASH, household water management, cleanliness of transport containers and preventing pollution of the ground water. The annual surveys follow the core questions set out by the JMP (https://washdata.org/monitoring/methods/core-questions)
	j. A project applying this methodology may make SDG claims if relevant monitoring parameter(s) is included in the monitoring plan to demonstrate and confirm the project's contributions to SDGs. See parameter SDWS 19.	SDG 1, 5, 7, 13 & 15 are monitored in this project. SDG impacts are calculated (shown in section D.5) to quantify the projects impact on these SDGs.
Findings	No findings raised.	
Conclusion	Ampere confirms that:	

	• It has critically assessed each applicability condition listed in the selected methodology and the relevant information contained in the VPA-DD against these criteria. • The selected methodology for the proposed GS project activity is applicable • The methodology was found to be in accordance with the applicable requirements in GS4GG requirements.

D.3.2. Deviation from methodology and/or methodological tool

Means of validation	N/A
Findings	N/A
Conclusion	N/A

D.3.3. Clarification on applicability of methodology, tool and/or standardized baseline

Means of validation	N/A
Findings	N/A
Conclusion	N/A

D.3.4. Project boundary, sources and GHGs

Means of validation

In accordance with the applied methodology ERSDWS v1.0, Project proponents must provide clear definitions of project boundary.

By means of thorough desk review and utilization of Google Maps, the following assessment was performed:

Methodology Requirement	Validation Assessment
the physical, geographical sites of the low- or zero-greenhouse gas emitting technologies to treat/supply safe drinking water installed by the project activity,	The water points (safe water boreholes) are distributed in Kono, Kenema, Kailahun, and Bo Districts, in the Eastern Provinces of Sierra Leone. Each borehole has a unique ID coupled with its GPS coordinates. The geographical site information mentioned is deemed satisfactory
any back-up engines or other equipment using fossil-fuel related to the low-greenhouse gas emitting technologies,	The technology used is manual hand pump boreholes, requiring no engines or other sources of energy.
the electricity grid, in the case electricity is used by the project, and	No electricity is used by the project technology
the household, commercial and institutional buildings where the end users of safe water provided by the project are located.	The project mainly serves households in rural areas in Kono, Kenema, Kailahun, and Bo Districts, in the Eastern Provinces of Sierra Leone. Household user list was provided by the client, showcasing unique Head of HH name, HH information, and distance from BH.
Emissions from wood fuels utilized for obtaining safe drinking water displaced due to project activity	CO_2, CH_4, and N_2O were considered through the parameter EF_f as per the methodology.

	Emissions from fossil fuels for operating project water supply/treatment technology	Project scenario is zero emission. The CME has accounted for potential double counting through excluding population that boils water anyways even for safe water from project technology
Findings	No findings were raised.	
Conclusion	The project boundary is correctly identified in accordance with the methodology ERSDWS v1.0.	

D.3.5. Baseline scenario

Means of validation	During this validation of renewal of crediting period, by means of document review, the baseline scenario has been found in accordance with the applied Gold Standard methodology "Emission Reductions from Safe Drinking Water Supplies v1". As per the paragraph 3.10.1 of the applied methodology, "*When the project developers apply for crediting period renewal, the baseline technologies and fuel types shall be reassessed, in addition to other relevant methodological parameters as per the latest version of the methodology available at the time submission of renewal of crediting period*". Hence the baseline scenario was reassessed at the time of renewal of the crediting period. A total of 120 Baseline Project Surveys were conducted across Kono, Kenema, Kailahun and Bo districts between 05/02/2024 and 04/03/2024, which is representative of the baseline scenario in the absence of the project technology. The survey comprised of questions covering broad topic areas such as household characteristics, water use before and after the safe water project and wood fuel use in the area. Information collected to inform the baseline includes household information, household characteristics, where drinking water is obtained and whether it has to be treated to be safe for consumption. Further questions inquire about cooking methods and fuel types used and how these acquired, and time spent on these tasks. The assessment team reviewed the revised VPA-DD to assess the impact of new national and/or sectoral policies and circumstances existing at the time of requesting renewal of crediting period on the modalities to estimate baseline GHG emissions for the subsequent crediting period of each corresponding VPA, without reassessing the baseline scenario. It is assessed whether SDG parameters used for determining the original baseline, that were determined during the first crediting period and are still valid for baseline at the renewal of the crediting period. During 2nd renewal period, VPA has applied valid version of the methodology "Emission Reductions from Safe Water Supply v.1.0". In accordance with the requirements of Annex-Z: Gold Standard Procedures for the Renewal of a Crediting Period, the validity of the original baseline has been assessed by the PP in line with the steps provided in the latest version of the "Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period", version 03.0.1, EB 66 Annex 47. **Step 1:** Assess the validity of the current baseline for the next crediting period

The validity of the current baseline is assessed using the following Sub-steps:

Step 1.1: Assess compliance of the current baseline with relevant mandatory national and/or sectoral policies

There are no mandatory national/and or sectoral policies for providing safe drinking water to communities. The national energy policy of Sierra Leone doesn't provide any mandatory requirements for usage of safe water for drinking purposes. Based on the review of the VPA-DD, it is confirmed that there are no mandatory national/and or sectoral policies to enable the use of safe water to communities.

Step 1.2: Assess the impact of circumstances

The impact of circumstances existing at the time of requesting renewal of the crediting period on the current baseline emissions has been provided in the VPA-DD.

As confirmed through the review of the VPA-DD and the national energy policy of Sierra Leone, it is confirmed that despite past efforts to promote wood fuel substitutes, the number of people relying on purification of water through boiling is not decreasing. Currently no new fuel available the market and use of electricity for boiling water is prohibitive due to high electricity tariffs and because most rural households are not connected to the grid. Therefore, the old baseline conditions still are valid and apply.

Step 1.3: Assess whether the continuation of use of current baseline equipment(s) or an investment is the most likely scenario for the crediting period for which renewal is requested.

In Sierra Leone, 86% of the primary energy is estimated to be woodfuel[5]. Further Eastern province in Sierra Leone accounts for more than 90% of wood fuel[6]. The energy for cooking is dominated by fuel wood[7]. Based on the review of the VPA-DD, it is confirmed that the baseline is thus not affected for the crediting period for which renewal is requested.

Step 1.4: Assessment of the validity of the data and parameters

Based on the baseline surveys conducted by CME, the following results were obtained:

1. The survey found that 5.4% of respondents consume safe water either through an improved water source or through a treatment method that isn't boiling. The unsafe water sources respondents used included unprotected wells, surface water, and unprotected springs.

2. 100% of people in the baseline survey boiled their unsafe water as a means of purification.

3. Baseline results show the total time spent collecting water and fuel is 11.44 hours per week. The burden of water collection falls primarily on women, with 76% of primary collectors of water being female adults, and 14% of primary collectors being female children.

4. 100% of households use a traditional wood fuel stove or three stone fires as their main stove (10% efficiency) using wood as a fuel.

[5] https://apps.worldagroforestry.org/downloads/Publications/PDFS/RP16053.pdf

[6] https://www.researchgate.net/figure/The-proportion-of-cooking-fuel-by-Region-and-Rural-Urban-in-Sierra-Leone-39_tbl2_331413817

[7] https://africa.iclei.org/wp-content/uploads/2023/11/UPDATED_ILEM-Africa-Feasibility-Assessment-Report-Access-to-Clean-Cooking-Solutions-in-Susans-Bay-Sierra-Leone-August-2022.pdf

	The ex-ante data/parameters have been updated based in the survey results (please refer to the Section D.3.7 of report).
Findings	CL #12 was raised and closed satisfactorily. Refer to Annex 04 of this report for further details.
Conclusion	The validation team can conclude that the identified baseline scenario for the proposed GS project activity is reasonably and represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the proposed GS project activity. Furthermore, the assumptions and data used in the identification of the baseline scenario are appropriately justified, supported by evidence, and can be deemed to be reasonable.

D.3.6. Demonstration of additionality

Means of validation	As per paragraph 4.1.9 of Community Services Activity Requirements version 1.2, "Projects that meet any of the following criteria are considered as deemed additional and therefore are not required to prove Financial Additionality at the time of Design Certification: • Positive list (Annex B of this document) • Projects located in LDC, SIDS, LLDC • Microscale projects" Sierra Leone is an LDC. Moreover, the validation team has verified the technical specifications of the Safe Water model included under VPA and the corresponding ER calculation sheet, and it is confirmed that the annual emission reductions of the Boreholes to be included under each VPA will always be less than 10,000 tonnes of emission reductions per year. Thus, this project is a Micro-scale project and so is deemed additional by the relevant activity requirement. Hence, the validation team deemed the project additional
Findings	CL 16 was raised and closed satisfactorily. Refer to Annex 04 of this report for further details.
Conclusion	The validation assessment confirms that the VPA is additional and in compliance with the GS4GG Principle & Requirements, Programme of Activity Requirements and Community Services Activity Requirements.

D.3.7. Estimation of emission reductions or net anthropogenic removals

Means of validation	According to the applied methodology, Emission reductions would be calculated as follows: The overall GHG reductions achieved by the project activity will be calculated as follows: **Baseline Emissions**: CO2 emission reductions are the indicator to demonstrate that the project has raised capacity for effective climate change-related planning and management. This outcome is measured using the project's emission reductions calculations. The baseline emission factor shall be calculated as follows: $EFb = SEw,b,y * \Sigma (xf * (EFb,f,co2 * fNRB * EFb,f, nonCO2)) \div 109$ where: EFb Emission factor for the use of fuel to obtain safe water in the baseline (tCO_2e/L)

SEw,b,y Specific energy required to boil water (kJ/L), to be calculated as per the paragraph below
xf Proportion of fuel f used in the baseline (fraction)
EFb,f,CO2 CO2 emission factor from use of fuel f (tCO2e/TJ)
EFb,f,non-CO2 Non-CO2 emission factor arising from use of fuel f, when the baseline fuel f is biomass or charcoal (tCO2e/TJ)
fNRB Fractional non-renewability status of woody biomass fuel during year y (fraction). For biomass, it is the fraction of woody biomass that can be established as non-renewable. This parameter is omitted when f is a fossil fuel.
f Index for baseline fuel types

The specific energy required to boil water using the baseline technology (SEw,b,y) is determined as follows, by calculating the energy input required to otain 1 L of boiling water, including boiling and vaporization losses, taking into account default or measured stove efficiency.
SEw,b,y = 360.83/ηwb

where:
360.83 Default amount of energy required to obtain 1 L of water after 5 minutes of boiling from a first principles approach kJ/l
ηwb Three Stone Fire – efficiency of the baseline water boiling (%). Weighted average of the baseline stove types
ηwb Charcoal – efficiency of the baseline water boiling (%). Weighted average of the baseline stove types

The baseline emissions shall be calculated as follows:
BEy = EFb * (1- Cb – Xcleanboil,y) *Qy * Mq,y

where
BEy = Baseline emissions from the use of fuel to obtain safe water in the baseline (tCO_2e)

C_b= Proportion of project households who in the baseline were already using a safe water supply that did not require boiling it (%)

$X_{cleanboil,y}$=Proportion of project households that boil safe water in the project year y (%)

Qy Quantity of safe drinking water provided by the project in year y (L)

Mq,y Modifier for the water quality in year y

Method 1 – CWT and CWS technologies (clause 3.6.5 of applied methodology)
Equation 4
In the case of CWT and CWS, the quantity of safe drinking water provided by the project Qy is determined as follows:
Qy = min(Qm,y,Qpop,y)

Where:
Qm,y Monitored quantity of safe water provided by the project in year y (L)
Qpop,y Quantity of safe drinking water that could be consumed by project end-users in year y (L)

Quantity of safe drinking water (in accordance with clause 3.6.6 of applied methodology)shall be calculated as follows:
Qpop,y = ΣpHHp,y * HNp,y * QPWP * DOp,y

where:
HHp,y Number of premises type p served by the project in year y
HNp,y Number of individuals per premises type p (e.g. household, school) in year y
QPWp Volume of drinking water per person per day for premises type p (L). Apply the default value or monitored value through water consumption field tests in the project scenario, capped at 5.5 L per person per day.
DOp,y Days the project technology is operational for end-users in premises p in year y

Project Emissions:
Accordance with clause 3.7.1 of the applied methodology Project emissions may result from the operation of new low-emission water treatment technologies. Project emissions (PEy) shall be calculated as follows:

$PE_y = PE_{ff,p,y} + PE_{ec,p,y}$
Where,
$PE_{ff,p,y}$ = Project emissions from fossil fuel use in year y (tCO_2)

$PE_{ec,p,y}$= Project emissions from electricity use in year y (tCO_2)

It is to be noted that there are no uses of fossil fuel or electricity during operation of project activity, hence project emissions considered as zero.

Leakage emissions:

In accordance with the methodology, leakage risks deemed very low and can be ignored. The methodologically acknowledged low leakage risks are investigated every two years as part of monitoring. The below aspects are other low risk sources of leakage which are investigated every two years as part of the monitoring:

a. Members of the population who do not participate in the project, and previously used lower emitting energy sources, instead use the non-renewable biomass saved under the project activity.

The VPA displaces the need to boil water using non-renewable biomass and/or fossil fuels. However, technologies that are used to facilitate such domestic treatment activities are three stone fires and/or traditional cookstoves (for purposes of ease referred to as appliances). In the baseline the same appliances are needed for preparation of food. For this reason, leakage because of displaced technology is not applicable as the appliances shall not be discarded because of the programme activities.

b. The project significantly reduces the NRB fraction within an area where other GHG mitigation project activities account for NRB fraction in their baseline scenario.

The scale of the VPA is causing it to be unlikely that the fNRB, used as a parameter in other registered CDM or VER project activities within the same area, will be impacted. Moreover, it is unlikely that a new VPA shall be installed to address the same wards.

c. The project population compensates for loss of the space heating effect of water boiling by adopting some other form of space heating or by retaining some baseline wood fuel-burning practices.

This is deemed not applicable due to the reason that the space heating effect for the time taken for boiling water for the purpose of treatment, is negligible.

Emission Reductions (ERy):

The emission reductions are calculated as follows:

ERy = BEy – PEy – LEy

Where,
BEy = Baseline emissions in year y (t CO_2e/yr)
PEy = Project emissions in year y (t CO_2e/yr)
LEy= Leakage emissions in year y (t CO_2e/yr)

The CME had calculated the Ex -ante ER sheet with the following parameters, Baseline emissions from the use of fuel to obtain safe water in the baseline (tCO_2e) can be calculated with Proportion of project households who in the baseline were already using a safe water supply that did not require boiling it (%);Proportion of project households that boil safe water in the project year y (%);Quantity of safe drinking water provided by the project in year y (L);Modifier for the water quality in year y; Efficiency of cookstoves with proportion of charcoal and wood fuel. The values and input source are cross-referenced from the field test conducted; methodology default and IPCC default and project real scenario and hence the ER is conservatively established by the PD.

The values of ex-ante parameter can be found in the table given below.

Parameter fixed ex-ante:

Relevant SDG	Parameter	Value in VPA-DD	Validation Assessment
SDG 13	SDWS 1 Number of households per CWT/ CWS	55.6 (estimate)	The value is taken as the average of the household numbers per borehole by dividing the total number of HH by the total number of BH. This is deemed appropriate.
SDGs 3, 5, 6, 13 and 15	SDWS 2 Project technology description	Provided headpump specifications	The validation team has examined the provided sources and found the technology data to be correctly cited
SDGs 13 & 15	SDWS 3 Project technology	Based on water quality test results	The validation team has validated that the process for water quality testing is in compliance with the methodology.

	performance level		
SDGs 13 & 15	SDWS 4 Regulatory framework for safe water supply	Water quality testing will comply with WHO Drinking Water Standard, as outlined in '*The Sierra Leone Electricity and Water Regulatory Commission - The Water (Quality of Supply) Regulations, 2019*' Project goals and implementation are in line with '*The Government of Sierra Leone, Ministry of Water Resources - The National Water and Sanitation Policy: About Rural Water Supply, 2014*'	This standard/regulations for the Sierra Leone is found within the official records and is deemed satisfactory.
SDG 6,13 & 15	SDWS 5 Water sources in the project boundary	Improved source: 5.35% including protected spring and protected well) Unimproved source: 94.65% including unprotected well, unprotected spring and surface water (river, stream, dam, lake, pond, canal,	The validation team has revised the baseline survey values and found this estimate to be reasonable

		irrigation channel).	
SDGs 13 & 15	SDWS 6 Stove technologies used in the project boundary	Three-stone fire (100%)	The validation team has revised the baseline survey values and found this estimate to be reasonable
SDG 3,5, 6, 13 and 15	SDWS 7 Expected technical life of project technology	15 – 25 years depending on the model of handpump	The validation team has checked the technical specifications and found this estimate to be reasonable
SDG 15 & 13	SDWS 8 Xf	Wood: Traditional Stove Users with wood 100%	The validation team has revised the baseline survey values and found this estimate to be reasonable
SDG 13 and 15	SDWS 9 $EF_{b,f,CO2}$	112 tCO_2/TJ	Value is taken from IPCC 2006 default value (from volume 2, Chapter 2, Table 2.5) for wood-fuel has been applied. The validation team has checked the value from the source and confirms that it is consistent.
SDG 13 and 15	SDWS 10 $EF_{b,f,nonCO2}$	9.46 tCO_2e/TJ	The validation team has checked the values used to calculate the parameter through: 1. Annex 1 of The IPCC Non-Co2 Emissions From Stationary Combustion[8] 2. GHGP GWP Potential Values [9]
SDG 13 and 15	SDWS 11 η_{wb}	10% (100% traditional cookstoves)	The validation team has checked the used values and found them to be in line with the methodology defaults for the identified cookstove types
SDG 3, 13 & 15	SDWS 12 C_b	5.42%	The validation team has found that the value used is appropriate considered the baseline survey, and it has been deemed appropriate.

[8] https://www.ipcc-nggip.iges.or.jp/public/gp/bgp/2_2_Non-CO2_Stationary_Combustion.pdf
[9] https://ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf

SDG 13 and 15	SDWS 14 NCV_f	0.0156 TJ/ton	The validation team has found that the value used complies with net caloric value for wood as per IPCC.
SDG 13	SDWS 15 EF_f	112 tCO_2/TJ	Value is taken from IPCC 2006 default value (from volume 2, Chapter 2, Table 2.5) for wood-fuel has been applied. The validation team has checked the value from the source and confirms that it is consistent.
SDG19	SDG19: Baseline: Basic (Drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing)	2.01%	The validation team has checked the used values and found to be based on the conducted baseline survey.
SDG 5	N/A $T_{b,y}$	1.63	The validation team has found the value used consistent with the baseline value.
SDG13 & 15	fNRB,f,y	0.63	The "*Fractional non-renewability status of woody biomass fuel during year y, in case the baseline fuel is biomass or charcoal*" has been determined following the CDM Tool 30. The PD has submitted the fNRB Calculation Report following the CDM Tool 30 EB 115 Annex 22 v4.0 2022, which is found appropriate. Hence the fNRB of 63% has been found appropriate.

The final estimation of emission reductions for the 3 VPAs (7475-7477) is as follows:

	<table><tr><th>Year</th><th>Baseline estimate</th><th>Project estimate</th><th>Net benefit</th></tr><tr><td>Year 1</td><td>5,676 tCO_2e emitted</td><td>0 tCO_2e emitted</td><td>Emissions reduced by 5,412 tCO_2e</td></tr><tr><td>Year 2</td><td>5,676 tCO_2e emitted</td><td>0 tCO_2e emitted</td><td>Emissions reduced by 5,412 tCO_2e</td></tr><tr><td>Year 3</td><td>5,676 tCO_2e emitted</td><td>0 tCO_2e emitted</td><td>Emissions reduced by 5,412 tCO_2e</td></tr><tr><td>Year 4</td><td>8,256 tCO_2e emitted</td><td>0 tCO_2e emitted</td><td>Emissions reduced by 7,872 tCO_2e</td></tr><tr><td>Year 5</td><td>8,256 tCO_2e emitted</td><td>0 tCO_2e emitted</td><td>Emissions reduced by 7,872 tCO_2e</td></tr><tr><td>Total</td><td>33,540 tCO_2e emitted</td><td>0 tCO_2e emitted</td><td>Emission Reduced by 31,980 tCO_2e</td></tr></table>
Findings	CAR #01 was raised and closed satisfactorily. Refer to Annex 04 of this report for further details.
Conclusion	The validation team has found that: • The Ex-ante parameters used by the PD are found to be appropriate and sufficiently conservative • The baseline emission calculations were found to be in line with the applied methodology and are sufficiently conservative. • The emission reduction methodology performed by the PD is found appropriate and sufficiently conservative.

D.3.8. Monitoring plan

Means of validation	The validation team has interviewed the CME and the implementor and by means of document review confirmed that, the coordinating/managing entity (CO2balance UK Ltd.) has established the operational and management system for the implementation of the proposed GS VPA in line with GS4GG guidelines. Since this is a revalidation project, samples for the data collection and management system were also reviewed. The VPA implementer CODE-SL has the overall operational responsibility for the implementation and monitoring of the VPA. The local community maintenance team, monitoring data collection teams, and grievance collection representatives are trained directly by the CME and CODE-SL. The CME and CODE-SL representatives were interviewed to corroborate these roles. The trainings will be conducted regularly and records for the same will be maintained.

The monitoring plan presented in section B.7 of the VPA-DD complies with the PoA-DD and the applied monitoring methodology. The validation team has verified all parameters in the monitoring plan against the requirements of the methodology and no deviations have been found. The validation team through a document review and interviews with the relevant stakeholders has reviewed the procedures. The information provided has allowed the validation team to confirm that the proposed monitoring plan is feasible within the project design.

The monitoring data collected by CME/ VPA implementer consists of the following:

Project Database:
The project implementer maintains an accurate and complete project database. The record is updated and backed up electronically. The customer data maintained for each project unit includes:

- Rehabilitation Date
- Geographic area with GPS
- Unique customer identification number of borehole
- model/type of project technology,
- Quantity of project technology
- Name, telephone number of end-user

The method of data collection has been checked through interviews with the monitoring team and the data recorded in the project sales has also been cross verified during the remote interview with household users.

2) Carbon Transfer Forms:
The assessment team has confirmed during the remote audit that at the point of technology installation/rehabilitation, a Carbon Transfer Form (CTF) was signed and uploaded to CO2balance database stating that the rights to the carbon credits lies with CO2balance. It is verified that an elected representative from each water resources committee responsible for a borehole signed a CTF on behalf of all users thereof.

3) Ongoing Monitoring Studies:
Monitoring surveys provide critical information on trends in end user characteristics (project surveys, PS), leakage assessment (LA) and water quality (WQ). All the monitored data collected by the monitoring team of VPA implementer will be recorded on a hard copy and will be transferred into digital format for analysis. The assessment team has confirmed the same during the remote interviews with the relevant personnel.

The type of surveys and the data is monitored as follows:

Water Consumption Field Test (WCFT):
The WCFT may be conducted biennially with a sample of at least 30 households. The PD will apply default value of 4L / person / day in the calculations in the absence of an updated field test.

Objectives and Reliability requirements: to determine Qp,y (average volume of water treated with project technology per person per day).

Target population: end users' representative of the project scenario target population and currently using the project technology.

Sampling Method: project households will be chosen using appropriate statistical sampling techniques that ensure random and representative results.

Sample size and desired precision: Sample size will be sufficient to meet 90/30 confidence/precision.

Project Technology Usage Survey: [Parameter Uy] estimates the beneficiaries that use the borehole. The usage survey provides a single usage parameter that is weighted based on drop off rates that are representative of the user's population using safe water. Usage survey will be conducted considering minimum sample size of 100. Frequency: Completed once in a year.

Leakage Assessment:
The leakage assessment will be conducted biennially to investigate the potential sources of leakage. 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.

Ex-Post Parameters:
The parameters that will be monitored (ex-post) are as follows:

Relevant SDG	Parameter	Value Applied	Parameter ID	Assessment
SDG 13	$M_{q,y}$ (water quality)	0.9	SDWS 18	The water quality will be tested at the source (within six months of start date) and annually by taking random samples at water access points. WQT will be done by the National Water Quality Reference Laboratory has certified each water supply in line with national standards. WQT will be done either annually for full test or quarterly for partial test, which is deemed in line with the methodology. Further the interviews have also been conducted and the validation team has found it to be sufficient.
SDG 7	SDG claims	Annual surveys	SDWS 19	This parameter determines the following:

		Project Level of Service (%)			a. Level of Service in the baseline/project scenario: The drinking water service levels classified in three categories: limited, basic or safely managed services. Households using improved drinking water sources which are located on premises, with water available when needed, and free from contamination*, are classified as having safely managed services. Households not meeting all of these criteria but using an improved source with water collection times of no more than 30 minutes per round trip are classified as having basic services, and those using improved sources with water collection times exceeding 30 minutes are classified as limited services. b. Project contributions: The project developer shall select water service aspects i.e., Accessibility, Availability and Quality & identify the monitoring indicator(s) to monitor the project contributions. The project may use relevant monitoring indicators and information available in this methodology, for example SDWS 18 for Water Quality. The project may have contributions to one or

					all three aspects. The project developer shall only make claims on aspects that project is contributing to. The project addressed point i under SDG 6 monitoring, determining the number of persons who drink from the 5 JMP Service categories (safely managed, basic, limited, unimproved, surface water). Th monitoring indicators for Accessibility, Availability and Quality are: Accessibility – addressed in SDG 6 parameter by determining the distance of the safe water sources Availability – addressed in non-functionality calculations in ERs Quality – addressed in water quality testing procedures All 3 contributions will also be addressed in a detailed Project Survey which includes JMP WASH questions regarding drinking water and hygiene. Results will be outlined in an annual hygiene report. The data shall be sourced from the monitoring survey to be conducted annually. These values is an estimation by the CME and shall be updated

				during project monitoring surveys. The validation team considers this value sufficient for the validation stage
SDG 7	$U_{p,y}$ (Usage rate in project scenario p through year y,%)	90%	SDWS 19	The data shall be sourced from annual usage survey. For the monitoring purpose, households are randomly selected in from the electronic database. The monitoring shall be on annual basis, in all cases on time for any request for issuance. The value of 90% has been applied for the ex-ante calculation of emission reductions. This value is deemed conservative and acceptable as an estimation as it is in line with good practice guidelines for the usage rate.
SDG 1,7,13	Water hygiene education campaigns	N/A	SDWS 20	Hygiene campaigns carried out among project safe water end users which aims to sensitize the local community (i.e. the project's end-users) on management issues including information about project planning and progress and training on how to report leakages and/or other faults in the water supply system. During these sensitization campaigns, extra emphasis is placed on education on how to consume safe water in a hygienic manner. This will also explain to the people (specifically targeting the women in the

				households) that the water coming from the borehole is safe and does not require any treatment prior to consumption. WASH training is projected to be done annually which is in line with the methodology
SDG 13	$X_{cleanboil,y}$ (Proportion of project end-users that boil safe (treated, or from safe supply) water after installation of project technology in year y.)	0%	SDWS 22	This parameter will be determined though project survey on annual basis. This value is estimated as 0% in line with previous project survey data but shall be updated through the annual project survey. The estimation is deemed appropriate by the validation team.
SDG 13	Qm,y (Monitored quantity of safe water provided by the project in year y)	To be measured	SDWS 23	This parameter will be measured continuously through the flow meter measures water volume directly or Operation sensor measures directly operation time or pump stroke count. Calibration and maintenance of the measurement device will be done as per the manufacturer instructions, sector, national or international standards or guidelines. The project will not be applying Qm,y as the required technology is not yet available. As soon as the required technology is available and reliable it will be implemented.

				Until this time Qpop,y will be applied.
SDG 1, 13	QPW_p (Volume of drinking water per person per day for premises type p)	4	SDWS 24	Water Consumption Field Tests will be conducted at least once in 2 years to determine this parameter. A default value 4 L/person/day may be applied (5.5 L/person/day GS cap) This value is deemed appropriate by the methodology for full-time premises (i.e. households)
SDG 13	HNp,y (Number of individuals per premises type p in the project boundary in year y)	5.63	SDWS 25	This parameter is determined through baseline survey and value considered as 6.35 people per household. During the monitoring parameter will be cross-checked against at least one other source on the list on annual basis.
SDG 13	HHp,y (Number of premises type p served by the project in year y)	55.6 premises per water point – estimated ex-ante	SDWS 26	This parameter will be determined though project survey on annual basis. The premises (e.g. households, schools) within 1 km distance of project water source to check how often the premises used the project water source during the year. The project data sheet was revised by the validation team and is deemed sufficient
SDG 13 and 15	DOp,y (Days the project technology is operational for end-	347	SDWS 27	This parameter will be monitored and recorded annually. The number of days project technology is operational for end-users in premises can

	users in premises p in year y)			be directly measured through using operation sensor or determined as per the operation and maintenance records.
SDG13	*Pp,f,y* Quantity of fossil fuel *f* that is consumed in the project scenario during year y	0	SDWS 33	This parameter will be monitored and recorded annually and found appropriate for monitoring.
SDG1	Project: Basic Proportion of population living in HHs with access to basic service (safe water)	50%	SDWS 19	This parameter will be monitored and recorded annually and found appropriate for monitoring.
SDG 5	Tp,y (Time spent collecting water and fuel per household per day in project)	1.13	SDWS 19	The ex-ante value of 1.13 hours has been applied for the estimation of outcome of SDG 5. The data shall be sourced from the monitoring Survey. This value is an estimation by the CME and shall be updated during project monitoring surveys. The validation team considers this value sufficient for the validation stage
SDG7	*HHp,y* Number of households with access to Safe Water in the project scenario	2,893	SDWS 19	The ex-ante value of 2,893 households has been applied for the estimation of outcome of SDG 7. The data shall be sourced from the monitoring Survey. This value is an estimation by the CME and shall be updated

				during project monitoring surveys. The validation team considers this value sufficient for the validation stage
SDG7	*HHaccess :* Number of households with access to Safe Water from a clean treatment technology in the project scenario	2,444	SDWS 19	The ex-ante value of 2,444 households has been applied for the estimation of outcome of SDG 7. HHaccess = HHp,y * (1 – Cb) * Upy The data shall be sourced from the monitoring Survey. This value is an estimation by the CME and shall be updated during project monitoring surveys. The validation team considers this value sufficient for the validation stage
SDG7	*Np,y:* Number of people served by the project in year y	19,732	SDWS 19	The ex-ante value of 19,732 has been applied for the estimation of outcome of SDG 7. The data shall be sourced from the monitoring Survey. This value is an estimation by the CME and shall be updated during project monitoring surveys. The validation team considers this value sufficient for the validation stage
SDG 5	TRy Total reduction time spent collecting water and fuel per day for project activity in year y	30.7%	SDWS 19	The ex-ante value of 30.7% reduction has been applied for the estimation of outcome of SDG 5. The average amount of time spent collecting firewood in the project scenario is compared to the baseline scenario. The data shall be sourced

				from the Project Survey and baseline survey. This value is an estimation by the CME and shall be updated during project monitoring surveys. The validation team considers this value sufficient for the validation stage
SDG1	P_{access} (Additional proportion of population living in HHs with access to basic service)	48%	NA	The data is calculated as follows: Paccess = % Project Basic Service - % Baseline Basic Service The data shall be sourced from Project Survey, Usage survey and baseline survey.
SDG15	Total amount of biomass saved	3,395	NA	The wood savings have been presented in the ERs Excelsheet, which is found correct.

The sustainable development goals are reported in VPA-DD. Further, it is also confirmed that PD/CME will monitor the sustainable development co-benefits of the following SDG"s indicators:

SDGs targeted	Relevant Indicator	VVB assessment
SDG 1. No Poverty	1.4.1 Proportion of population living in households with access to basic services	The project activity ensuring safe water using borehole technology to households results in a reduction in the poverty associated with the deprived access to basic services. The stated SDG indicator has been appropriately selected by the PD.
5. Gender Equality	5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility	The burden of collecting Water often falls on women and children. By reducing water collection time, the VPA provides women in project households with more time to invest in other productive economic development

	within the household and the family as nationally appropriate. 5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age, and location	activities. The stated SDG indicator has been appropriately selected by the PD.
7 Affordable and Clean Energy	7.1 Total No of households with access to Safe Water from a clean treatment technology	The indicator is related to the total number of households with access to Safe Water from a clean treatment technology.
13. Climate Action	NA	Through avoiding the use of wood fuel for boiling the water, the VPA will bring a reduction in the consumption of the nonrenewable biomass thereby resulting in emission reductions. The stated SDG indicator has been appropriately selected by the PD.
15 Life on Land	15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally	The VPAs aim to rehabilitate community boreholes, providing a source for safe water without the need for boiling. Hence, the dependency on the use of non-renewable biomass per household will significantly reduce eventually leading to reduction in the extent of deforestation. The stated SDG indicator has been appropriately selected by the PD.

Findings	CAR 05, CAR 07, CL13, CL14 was raised and closed satisfactorily. Refer to Annex 04 of this report for further details.
Conclusion	The validation team has confirmed that: • The monitoring parameters are sufficient to calculate the emission reductions in accordance with the methodology. • The list of parameters identified by the CME and as mentioned in the VPA-DD are in line with the monitoring methodology and the SDG

	monitoring parameter will be assessed based on monitoring frequency mentioned. • All the relevant SDG indicators included under the VPA are in line with the SDG goals and the GS4GG principles and requirements.

D.4. Start date, crediting period type and duration

Means of validation

The start date of the 2nd crediting period of the VPAs is as follows:

GS ID	VPA ID	CP1 end date	Transitioning into CP2
7475	203	18/05/2024	19/05/2024
7476	204	19/05/2024	20/05/2024
7477	205	12/06/2024	13/06/2024

The start date has been confirmed by means of document review of the Carbon Transfer Forms and cross-check with public documents.
Hence the VVB can confirm that the start dates of the 2nd crediting period for the 3 VPAs are in line with the GS guidelines.
The total length of the 2nd crediting period is 5 years.

GS ID	VPA ID	2nd Crediting Period Duration
7475	203	19/05/2024 -18/05/2029
7476	204	20/05/2024 – 19/05/2029
7477	205	13/06/2024 – 12/06/2029

The crediting period may be renewed twice in line with the Community Services Activity Requirements.

Findings

CAR 09 was raised and closed satisfactorily. Refer to Annex 04 of this report for further details.

Conclusion

Project start date, crediting period type and its duration comply with Community Services Activity Requirements

D.5. Environmental impacts

Means of validation	The project technology is zero emission technology and no leakage is expected to occur in terms of adverse environmental impacts.
Findings	No findings were raised
Conclusion	The project is deemed not to have any adverse environmental impacts related to the project technology.

D.6. Local stakeholder consultation

Means of validation

The local stakeholder consultation is done before project commencement for a group of regular VPAs once at the time of design certification. This was confirmed by CME in the VPA-DD. This follows section 4.9.3 of the PAR Stakeholder-Consultation-Requirements v2.1 since the proposed VPAs are correspond to real case VPAs, are implemented within the same host country.

Since the present project activity is revalidation due to the change of methodology for the 2nd crediting period, the local stakeholder engagement was performed at the time of design certification. The design certification documents like the PDD and the validation reports were checked. A log book is available for the beneficiaries to share their grievances to the field partners of the CME CODE-SL.

	At present the validation team had conducted remote assessment between 13/08/2024 to 29/08/2024 following the GS rules and guidelines. The stakeholders express their impression that the boreholes are functioning properly and they were happy to get the safe drinking water, and it prevented stomach problem and frequent hospital visits; The community members were happy on the overall performance of the project activity and as such there is no grievances registered during the past years of operation.
Findings	CAR 08, CL17 was raised and closed satisfactorily. Refer to Annex 04 of this report for further details.
Conclusion	LSC was conducted in accordance with the Stakeholder Consultation and Engagement Requirements Version 2.1 and Programme of Activity Requirements Version 2.1. No grievances were raised during the past years of operation.

D.7. Sustainable development co-benefits

Means of validation

The sustainable development goals and their outcome is transparently discussed under section A.1 of the VPA-DD The validation team has checked and reviewed the VPA-DD with supportive evidence and found the details to be correct. The choice of SDGs is in line with the latest approved PoA-DD requirements v15.3.

The project is achieving several sustainable development co-benefits and will monitor them through identified parameters as follows:

Sustainable Development Goals Targeted	Most relevant SDG Target	SDG Impact Indicator (Proposed or SDG Indicator)
SDG 1 – No Poverty	1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	1.4.1 Proportion of population living in households with access to basic services
SDG 5 - Gender Equality	5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	Percentage reduction in time spent collecting water and fuel for project activity in year y

SDG 7 - Affordable and Clean Energy	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	7.1 Total No of households with access to Safe Water from a clean treatment technology
SDG 13 – Climate Action	13.2 Integrate climate change measures into national policies, strategies and planning	Total project emissions reductions
SDG 15 – Life on Land	15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	Total non-renewable wood fuel saved

The validation team, through means of document review, remote interviews, and cross-checking with other projects, has examined the applicability of the methodological choice/ approaches for estimating the above-mentioned SDG outcomes as specifically demonstrated in the VPA-DD section B.6.1.

The explanation is deemed satisfactory and sufficient to include these SDGs as sustainable development co-benefits for this project.

The initial annual average estimations for the SDGs for the 3 VPAs (GS7475-7477) are as follows:

Sustainable Development Goals Targeted	SDG Impact (defined in B.6)	Estimated Annual Average	Units or Products
SDG 1 – No Poverty	Additional number of persons with access to basic/limited services	48.0%	Percentage
SDG 5 Gender Equality	Time saved collecting fuel and water	30.7%	Percentage

	SDG 7 Affordable and Clean Energy	Increased access to energy (safe water systems)	3,821	Total number of project households provided access to safe water in year y
	13 Climate Action	Total project emission reductions	6,396	tCO2e VERs
	SDG 15 Life on Land	Total non-renewable firewood saved	5,308	Tonnes non-renewable firewood saved in the project scenario in year y
Findings	CAR #06 were raised and closed satisfactorily. Refer to Annex 04 of this report for further details.			
Conclusion	The validation team confirms that: • The proposed VPAs will result in contributions to the SDGs 1, 5, 7, 13, & 15, and the CME has mentioned the contribution of the project towards these SDG's clearly in the VPA-DD. • The VPAs contributes to more than two SDGs (including SDG 13), hence the VPAs are eligible under Gold standard as per GS4GG guidelines.			

D.8. Approval

Means of validation	N/A
Findings	N/A
Conclusion	N/A

D.9. Authorization

Means of validation	N/A
Findings	N/A
Conclusion	N/A

D.10. Modalities of communication

Means of validation	N/A
Findings	N/A
Conclusion	N/A

D.11. Global stakeholder consultation

Means of validation	N/A
Findings	N/A
Conclusion	N/A

SECTION E. Internal quality control

>> Following the completion of the validation process and a recommendation by the validation team, relevant documentation will be forwarded to an independent technical reviewer. The task of the technical reviewer is to check that all procedures have been followed and all conclusions are justified. The technical reviewer will either accept or reject the recommendation made by the validation team. Findings can be raised at this stage and client must address them within an agreed timeline.

SECTION F. Validation opinion

>> Ampere for renewable energy (hereafter referred to as Ampere) has been contracted by CO2blance UK Ltd to perform the validation of the crediting period renewal of VPAs titled "GS1247 VPA 203 Sierra Leone Safe Water (GS7475), GS1247 VPA 204 Sierra Leone Safe Water (GS7476), GS1247 VPA 205 Sierra Leone Safe Water (GS7477)" are developed under the PoA "GS1247 Improved Kitchen Regimes Multi-Country PoA". The validation was performed based on rules and requirements defined of GS4GG.

The VPA involves the rehabilitation of safe water boreholes thereby promotes zero-energy safe water provision and reduces CO_2 emissions that are real, measurable, and mainly helps in mitigating climate change. It is demonstrated that the baseline scenario is equal to current practice of boiling water using wood fuel on inefficient three-stones fires for water purification. The project activity provides safe water to communities through rehabilitation of the boreholes, hence the households do not consume unsafe water and also there is no need to use fuel for boiling water, hence it results into the emission reductions.

The project correctly applies GS Methodology for Emission Reductions from Safe Drinking Water Supply v1.0 is assessed against latest valid GS4GG requirements, and is in compliance with the PoA requirements (GS1247)

Based on the information seen and evaluated, the validation team confirms that the implementation of the project will result in positive contribution (across each VPA) to sustainable development as follows:

SDG 1

Year	Baseline estimate	Project estimate	Net benefit
Year 1	2.0% of population living in HHs with access to basic service	50.0% of population living in HHs with access to basic service	Additional 48.0% of population living in HHs with access to basic service
Year 2	2.0% of population living in HHs with access to basic service	50.0% of population living in HHs with access to basic service	Additional 48.0% of population living in HHs with access to basic service
Year 3	2.0% of population living in HHs with access to basic service	50.0% of population living in HHs with access to basic service	Additional 48.0% of population living in HHs with access to basic service
Year 4	2.0% of population living in HHs with access to basic service	50.0% of population living in HHs with access to basic service	Additional 48.0% of population living in HHs with access to basic service
Year 5	2.0% of population living in HHs with access to basic service	50.0% of population living in HHs with access to basic service	Additional 48.0% of population living in HHs with access to basic service
Total	2.0% of population living in HHs with access to basic service	50.0% of population living in HHs with access to basic service	Additional 48.0% of population living in HHs with access to basic service

SDG 5

Year	Baseline estimate	Project estimate	Net benefit
Year 1	1.63 hours spent collecting water and fuel per household per day prior to project	1.13 hours spent collecting water and fuel per household per day prior to project	30.7% reduction time spent collecting water for project activity in year y (proportion)
Year 2	1.63 hours spent collecting water and fuel per household per day prior to project	1.13 hours spent collecting water and fuel per household per day prior to project	30.7% reduction time spent collecting water for project activity in year y (proportion)
Year 3	1.63 hours spent collecting water and fuel per household per day prior to project	1.13 hours spent collecting water and fuel per household per day prior to project	30.7% reduction time spent collecting water for project activity in year y (proportion)
Year 4	1.63 hours spent collecting water and fuel per household per day prior to project	1.13 hours spent collecting water and fuel per household per day prior to project	30.7% reduction time spent collecting water for project activity in year y (proportion)
Year 5	1.63 hours spent collecting water and fuel per household per day prior to project	1.13 hours spent collecting water and fuel per household per day prior to project	30.7% reduction time spent collecting water for project activity in year y (proportion)
Total	1.63 hours spent collecting water and fuel per household per day prior to project	1.13 hours spent collecting water and fuel per household per day prior to project	30.7% reduction time spent collecting water for project activity in year y (proportion)

SDG 7

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0 households with access to Safe Water from a clean treatment technology	2,068 households with access to Safe Water from a clean treatment technology	2,068 households with access to Safe Water from a clean treatment technology
Year 2	0 households with access to Safe Water from a clean treatment technology	2,068 households with access to Safe Water from a clean treatment technology	2,068 households with access to Safe Water from a clean treatment technology
Year 3	0 households with access to Safe Water from a clean treatment technology	2,068 households with access to Safe Water from a clean treatment technology	2,068 households with access to Safe Water from a clean treatment technology
Year 4	0 households with access to Safe Water from a clean treatment technology	3,008 households with access to Safe Water from a clean treatment technology	3,008 households with access to Safe Water from a clean treatment technology
Year 5	0 households with access to Safe Water from a clean treatment technology	3,008 households with access to Safe Water from a clean treatment technology	3,008 households with access to Safe Water from a clean treatment technology
Total	0 households with access to Safe Water from a clean treatment technology	2,444 households with access to Safe Water from a clean treatment technology	2,444 households with access to Safe Water from a clean treatment technology

SDG 13

Year	Baseline estimate	Project estimate	Net benefit
Year 1	5,676 tCO_2e emitted	0 tCO_2e emitted	Emissions reduced by 5,412 tCO_2e
Year 2	5,676 tCO_2e emitted	0 tCO_2e emitted	Emissions reduced by 5,412 tCO_2e
Year 3	5,676 tCO_2e emitted	0 tCO_2e emitted	Emissions reduced by 5,412 tCO_2e
Year 4	8,256 tCO_2e emitted	0 tCO_2e emitted	Emissions reduced by 7,872 tCO_2e
Year 5	8,256 tCO_2e emitted	0 tCO_2e emitted	Emissions reduced by 7,872 tCO_2e
Total	33,540 tCO_2e emitted	0 tCO_2e emitted	Emission Reduced by 31,980 tCO_2e

SDG 15

Year	Baseline estimate	Project estimate	Net benefit

Year 1	3,375 tonnes of non-renewable biomass usage (tons/year)	502 tonnes of non-renewable biomass usage (tons/year)	2,873 tonnes non-renewable biomass saved
Year 2	3,375 tonnes of non-renewable biomass usage (tons/year)	502 tonnes of non-renewable biomass usage (tons/year)	2,873 tonnes non-renewable biomass saved
Year 3	3,375 tonnes of non-renewable biomass usage (tons/year)	502 tonnes of non-renewable biomass usage (tons/year)	2,873 tonnes non-renewable biomass saved
Year 4	4,908 Baseline non-renewable firewood usage (tons/year)	730 Project non-renewable firewood usage (tons/year)	4,178 Total non-renewable firewood saved (tons) in the project scenario
Year 5	4,908 Baseline non-renewable firewood usage (tons/year)	730 Project non-renewable firewood usage (tons/year)	4,178 Total non-renewable firewood saved (tons) in the project scenario
Total	3,988 Baseline non-renewable firewood usage (tons/year)	593 Project non-renewable firewood usage (tons/year)	3,395 Total non-renewable firewood saved (tons) in the project scenario

The above stated outcomes have been checked and it is deemed likely, under reasonable level of assurance means of validation, that the stated amount is achievable given the underlying assumptions do not change. The project will hence be recommended by Ampere for request for crediting period renewal within the Gold Standard for Global Goals.

Appendix 1. Abbreviations

Abbreviations	Full texts
Ampere	Ampere for Renewable energy
BE	Baseline Emissions
CA	Corrective Action/ Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CH_4	Methane
CL	Clarification Request
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
CTF	Carbon Transfer Form
DVR	Draft Verification Report
EB	CDM Executive Board
EF	Emission Factor
ER	Emission Reduction
ERSDWS	Emission Reductions from Safe Drinking Water Supply
FA	Final Approval
FAR	Forward Action Request
FVR	Final Validation/Verification Report
GHG	Greenhouse gas(es)
GWh	Giga Watt Hour
GS	Gold Standard
GS4GG	Gold Standard for Global Goals
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
LE	Leakage Emissions
MP	Monitoring Period
MR	Monitoring Report
NA	Not Applicable
PE	Project Emissions
PP(s)	Project Participant(s)
PRC	Post registration change
PS	Project Survey
PTD	Project Technology Days
QC/QA	Quality Control/ Quality Assurance
RCF	Repair Confirmation Form
SDWS	Safe Drinking Water Supply
TA	Technical Area
TPDDTEC	Technologies and Practices to Displace Decentralized Thermal Energy Consumption
TR	Technical Review
UNFCCC	United Nations Framework Convention on Climate Change
US	Usage Survey
VER	Verified Emission Reduction
VPA	Voluntary Project Activity
VVS	Validation and Verification Standard
VVB	Validation & Verification body
WCFT	Water Consumption Field Test
WQT	Water Quality Test

Appendix 2. Competence of team members and technical reviewers

Ampere

Ampere for Renewable Energy

Certificate of Competency for Gold Standard Validation/Verification

Rohit Badaya

has been deemed qualified for validation/verification activities under Gold Standard through Ampere's internal qualifications procedures in accordance with the requirements of the standard:

for the following functions and requirements:

☒ Validator	☒ Verifier	☒ Team Leader	☒ Technical Expert
☒ Technical Reviewer	☐ Financial Expert	☐ Local Expert	☒ SDG+

in the following technical areas:

☒ TA 1.1	☒ TA 1.2	☐ TA 2.1	☐ TA 2.2	☒ TA 3.1
☐ TA 4.1 to 4.n	☐ TA 5.1	☐ TA 11/12.1	☐ TA 6.1	☐ TA 7.1
☐ TA 8/10.1	☐ TA 8/10.2	☐ TA 9.1	☒ TA 13.1	☐ TA 13.2
☐ TA 14.1	☐ TA 15.1			

Issue Date
15/4/2024

Expiry Date
15/4/2025

Eng. Ahmad Qadry
Technical Manager

Ampere

Ampere for Renewable Energy

Certificate of Competency for Gold Standard Validation/Verification

Mohammad Dar Issa

has been deemed qualified for validation/verification activities under Gold Standard through Ampere's internal qualifications procedures in accordance with the requirements of the standard:

for the following functions and requirements:

☒ **Validator**	☒ **Verifier**	☐ **Team Leader**	☒ **Technical Expert**
☐ **Technical Reviewer**	☐ **Financial Expert**	☐ **Local Expert**	☒ **SDG+**

in the following technical areas:

☐ **TA 1.1**	☒ **TA 1.2**	☐ **TA 2.1**	☐ **TA 2.2**	☒ **TA 3.1**
☐ **TA 4.1 to 4.n**	☐ **TA 5.1**	☐ **TA 11/12.1**	☐ **TA 6.1**	☐ **TA 7.1**
☐ **TA 8/10.1**	☐ **TA 8/10.2**	☐ **TA 9.1**	☐ **TA 13.1**	☐ **TA 13.2**
☐ **TA 14.1**	☐ **TA 15.1**			

Issue Date
27/05/2024

Expiry Date
26/05/2025

Eng. Ahmad Qadry
Technical Manager

Ampere

Ampere for Renewable Energy

Certificate of Competency for (CDM, Gold Standard, VCS, etc.) Validation/Verification

Sudheendra K

has been deemed qualified for validation/verification activities under (CDM, Gold Standard, VCS, etc.) through Ampere's internal qualifications procedures in accordance with the requirements of the standard:

for the following functions and requirements:

☐ **Validator**	☐ **Verifier**	☐ **Team Leader**	☐ **Technical Expert**
☒ **Technical Reviewer**	☐ **Financial Expert**	☐ **Local Expert**	☒ **SDG+**

in the following technical areas:

☒ **TA 1.1**	☒ **TA 1.2**	☒ **TA 2.1**	☐ **TA 2.2**	☒ **TA 3.1**
☐ **TA 4.1 to 4.n**	☐ **TA 5.1**	☐ **TA 11/12.1**	☐ **TA 6.1**	☒ **TA 7.1**
☐ **TA 8/10.1**	☐ **TA 8/10.2**	☐ **TA 9.1**	☒ **TA 13.1**	☐ **TA 13.2**
☐ **TA 14.1**	☐ **TA 15.1**			

Issue Date
03/10/2024

Expiry Date
03/10/2025

Eng. Ahmad Qadry
Technical Manager

Ampere

Ampere for Renewable Energy

Certificate of Competency for Gold Standard Validation/Verification

Lansana Kamara

has been deemed qualified for validation/verification activities under (CDM, Gold Standard, VCS, etc.) through Ampere's internal qualifications procedures in accordance with the requirements of the standard:

for the following functions and requirements:

☐ Validator	☐ Verifier	☐ Team Leader	☒ Technical Expert
☐ Technical Reviewer	☐ Financial Expert	☒ Local Expert	☐ SDG+

in the following technical areas:

☐ TA 1.1	☐ TA 1.2	☐ TA 2.1	☐ TA 2.2	☒ TA 3.1
☐ TA 4.1 to 4.n	☐ TA 5.1	☐ TA 11/12.1	☐ TA 6.1	☐ TA 7.1
☐ TA 8/10.1	☐ TA 8/10.2	☐ TA 9.1	☐ TA 13.1	☐ TA 13.2
☐ TA 14.1	☐ TA 15.1			

Issue Date
15/06/2024

Expiry Date
14/06/2025

Eng. Ahmad Qadry
Technical Manager

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	CME	Initial VPA-DD	Version 1.0, dated 24/05/2024	CME
2	CME	Final VPA-DD	Version 04, dated 01/11/2024	CME
3	CME	Registered PoA-DD	Version 15.3, dated 24/11/2021	CME
4	CME	Initial Ex-ante ER calculation sheet	Version 1.0, dated 24/05/2024	CME
5	CME	Final Ex-ante ER calculation sheet V2	Version 04, dated 01/11/2024	CME
6	CME	Baseline Survey	Version 1.0	CME
7	CME	Project database	Version 1.0	CME
8	CME/ Implementor	Remote Site Visit Scanned Questionnaire Forms	Version 1.0	CME
9	CME	Carbon Transfer Form (CTF)	-	CME
10	CME	Pump Minder & WASH Training Agenda Training records	-	CME
11	CME	Declaration of no Legal Disputes Declaration confirming that there is no diversion of ODA	Dated 10/10/2023	CME
12	Govt of Sierra Leone	Letter of recommendation – Community organization for development and empowerment – Sierra Leone (CODE-SL)	27/08/2024	CME
13	CME	Grievance Book / Borehole Community Log Book (Brewala)	-	CME
14	CME	Baseline Survey Random Sample	-	CME
15	CME	Repair Confirmation Form (RCF)	-	CME
16	SLEWRC	'The Sierra Leone Electricity and Water Regulatory Commission - The Water (Quality of Supply) Regulations, 2019' https://ewrc.gov.sl/legislations-standards/water-regulations-codes-standards/		CME
17	Ministry of Water Resources, Govt. of Sierra Leone	The Government of Sierra Leone, Ministry of Water Resources - The National Water and Sanitation Policy: About Rural Water Supply, 2014 https://washdata-sl.org/wp-content/uploads/sites/43/2017/02/National-water-resource-policy.pdf	-	CME

18	CME	Organizational Chart		Other
19	GS	VPA Design Document Template Guide	Version 2.3, dated 29/06/2023	Others
20	GS	Community Services Activity Requirements	Version 1.2, dated October 2019	Others
21	GS	GS Methodology for Emission-reductions-from-Safe-Drinking-Water-Supply (ERSDWS)	Version 1.0, dated 03/05/2021	Others
22	GS registry	GS4GG 'Principles & Requirements',	Version 1.2 dated October 2019	Others
23	GS	GS4GG 'Programme of Activity Requirements' Gold Standard Procedures for the Renewal of a Crediting Period	Version 2.1, dated 05/10/2023	Others
24	GS	GS4GG Validation and Verification Standard	Version 1.0, dated 06/03/2023	Others
25	UNFCCC	CDM validation and verification standard for programmes of activities	Version 03	Others
26	UNFCCC	CDM project standard for programmes of activities	Version 3	Others
27	UNFCCC	Guideline for sampling and surveys for CDM project activities and programmes of activities	Version 04.0	Others
28	UNFCCC	Sampling and surveys for CDM project activities and programmes of activities	Version 9.0	Others
29	GS registry	GS4GG 'Stakeholder Consultation and Engagement Guidelines'	Version 1.2, dated Oct 2019	Others
30	UNFCCC	Tool 11: "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period"	Version 3.0.1	Others
31	UNFCCC	Methodological too 30: Calculation of the fraction of non-renewable biomass	Version 4.0, EB 115, Annex 22	Others
32	GS	RU_Application of TPDDTEC Methodology to Safe Water Supply Projects	Dated 03/05/2021	Others

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. CARs from this verification

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CAR	Number:	01	Reference:	Table 1
Team Leader Comment:					
The SDG impact value corresponding to the SDG7, SDG13, SDG15 in the Table 1 (VPA-DD) does not match with the SDG impact value available in the "SDG Impacts (Full MP)" spreadsheet of ERs Excelsheet. Check.					
Project Participant Response :			**Date:** 01/08/2024		
'SDG Impacts' tab of ERs Excelsheet has been edited to include SDG figures per water point and VPA. PP has updated figures in Table 1 of the VPA-DD to reflect the figures per VPA.					
Documentation Provided by Project Participant:					
- ERs Excelsheet - 'GS7475-77_ERSDWS_Ex Antes_v.2' tab 'SDG Impacts' (updated from 'SDG Impacts (Full MP)'. - VPA-DD - 'Sierra Leone VPA-DD v3' Table 1					
Information Verified by Team Leader:					
The SDG impact value corresponding to the SDG7, SDG13, SDG15 matches between the Table 1 (VPA-DD) and the ERs Excelsheet. Hence the comment is closed.					
Reasoning for not Acceptance or Acceptance and Close Out:			**Date:** 23/09/2024		
The corrections in the SDG impact value are provided in the Table 1 of VPA-DD.					
Acceptance and Close out by Team Leader: Closed			**Date:** 23/09/2024		

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CAR	Number:	02	Reference:	Section A.1.1
Team Leader Comment:					
The reference of "Section A.3" in the statement "*The location of the Project is Sierra Leone which is eligible under section A.3 of the PoA-DD for GS1247*" does not look correct. Please check.					
Project Participant Response :			**Date:** 01/08/2024		
PP has corrected response in Table 2 to 'section A.2'.					
Documentation Provided by Project Participant:					
VPA-DD - 'Sierra Leone VPA-DD v3' Table 2					
Information Verified by Team Leader:					
The reference of "Section A.3" in the statement "*The location of the Project is Sierra Leone which is eligible under section A.3 of the PoA-DD for GS1247*" is now corrected to "Section A.2", which is found appropriate. However the similar corrections are not provided in the Section F (Eligibility Criterion No. 2) of the VPA-DD. Check. The comment remains open.					
Reasoning for not Acceptance or Acceptance and Close Out:			**Date:** 23/09/2024		
The reference of Section A.3 is now corrected to Section A.2, which is found correct. However similar corrections are also required in the Section F of VPA-DD.					
Acceptance and Close out by Team Leader: Open			**Date:** 23/09/2024		
Project Participant Response :			**Date:** 06/11/2024		
PP has corrected reference in Section F to "Section A.2".					
Documentation Provided by Project Participant:					
Sierra Leone VPA-DD v4					
Information Verified by Team Leader:					

The required corrections not provided in the column "description/required condition" for this eligibility criterion, which still has the following statement in Section F, Section A.1.1 (Table 2) in the VPA-DD: "*The host country and location of each VPA will be specified in each VPA-DD, in line with the locations outlined in Section A.3*" Check.	
Reasoning for not Acceptance or Acceptance and Close Out: Open	**Date:** 11/11/2024
The consistent corrections not provided throughout the VPA-DD.	
Acceptance and Close out by Team Leader: Open	**Date:** 11/11/2024
Project Participant Response :	**Date:** 12/11/2024
PP has corrected the wording in Section A.1.1 (Table 2) and Section F in the VPA-DD to 'A.2'.	
Documentation Provided by Project Participant:	
VPA-DD - 'Sierra Leone VPA-DD v5' Section A.1.1 (Table 2) and Section F.	
Information Verified by Team Leader:	
The required correction has been checked and found out to be adjusted accurately. Hence this comment is closed out.	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 17/11/2024
The CME has checked the updated VPA-DD and found it appropriate.	
Acceptance and Close out by Team Leader:	**Date:** 17/11/2024

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CAR	Number:	03	Reference:	Section A.1.1
Team Leader Comment:					
As the current VPAs are under renewal, hence the following Eligibility Criteria may be updated accordingly: "*All VPAs submitted for inclusion after the first crediting cycle of such PoA and completion of transition to GS4GG shall follow the GS4GG Certification Cycle (i.e. 5 years renewals)*". Similarly check the Section F of VPA-DD.					
Project Participant Response :			**Date:** 01/08/2024		
PP has corrected crediting period start dates listed in Table 2 and Section F of VPA-DD.					
Documentation Provided by Project Participant:					
VPA-DD - 'Sierra Leone VPA-DD v3' Table 2 and Section F.					
Information Verified by Team Leader:					
The CME has now corrected the crediting period start date, which is found appropriate. Hence the comment is closed.					
Reasoning for not Acceptance or Acceptance and Close Out: Closed			**Date:** 23/09/2024		
The start date of the 2nd crediting period is updated in the VPA-DD.					
Acceptance and Close out by Team Leader: Closed			**Date:** 23/09/2024		

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CAR	Number:	04	Reference:	Section A.1.1
Team Leader Comment:					
The scale is referred as "small scale" in the statement "*The project is a Small-Scale and is capped at 10,000 tCO2e per year for each VPA*" in Section A.1.1, however the scale is micro-scale as per the KPI section of VPA-DD. Check.					
Project Participant Response :			**Date:** 01/08/2024		
PP has corrected relevant wording in Section A.1.1 to 'micro-scale'.					
Documentation Provided by Project Participant:					
VPA-DD - 'Sierra Leone VPA-DD v3' Section A.1.1.					
Information Verified by Team Leader:					
The scale has been corrected from "small-scale" to "micro-scale" in Section A.1.1 (VPA-DD), since the emission reductions are capped to 10,000 tCO2. Hence the comment is closed.					
Reasoning for not Acceptance or Acceptance and Close Out: Closed			**Date:** 23/09/2024		

The scale has been corrected from small scale to micro scale in the VPA-DD.	
Acceptance and Close out by Team Leader: Closed	**Date:** 23/09/2024

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CAR	Number:	05	Reference:	Section B.6.2
Team Leader Comment:					
1. Please refer to the table for data/parameter "*Number of household/institution per CWT/CWS*", where the value is provided as 6,676 households. However, the value is 6,768 households as per the Table-1 of VPA-DD. Check. 2. Please refer to the table for the data/parameter "*Project technology description*", where the "lifetime of handpump" is provided as 18-25 years. However, the "lifetime of handpump" is provided as "15-25 years" as per the Section A.3 of VPA-DD. Check.					
Project Participant Response :			**Date:** 01/08/2024		
1. Figure in "Number of household/institution per CWT/CWS" table has been updated to 4,123 households, which now matches Table 1. 2. PP has updated "*Project technology description*" table to also include Kardia 65/2000 pump and it's lifetime. These now match figures provided in Section A.3.					
Documentation Provided by Project Participant:					
VPA-DD - 'Sierra Leone VPA-DD v3' Section B.6.2 Tables "Number of household/institution per CWT/CWS" and "*Project technology description*".					
Information Verified by Team Leader:					
1. The value of "*Number of household/institution per CWT/CWS*" has been corrected to 55.6 in the ex-ante parameter table in Section B.6.2 of the VPA-DD. Additionally the "Total number of project households provided access to safe water in year y per VPA" is updated to 3821 in the Table 1 of the VPA-DD, which is found appropriate. Hence the comment is closed 2. The lifetime of all the type of hand-pumps applicable during the monitoring period is now provided in the ex-ante parameter table (Project technology description) in the VPA-DD. Hence the comment is closed.					
Reasoning for not Acceptance or Acceptance and Close Out:			**Date:** 23/09/2024		
1. The "number of household/institution per CWT/CWS" has now been made consistent between VPA-DD and ERs Excelsheet. 2. The value in the ex-ante parameter table (Project technology description) has been updated in the VPA-DD.					
Acceptance and Close out by Team Leader: Closed			**Date:** 23/09/2024		

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CAR	Number:	06	Reference:	Section B.6.4
Team Leader Comment:					
1. Please refer to the calculation table corresponding to the SDG7, where the "Year 2" has been repeated two times. Further the average value (6,768) does not look correct based on the yearly values provided in the same table. Check. 2. Please refer to the calculation table corresponding to the SDG15, where the Net Benefit (year 1) based on the baseline estimate (10,972 tonnes) and project estimate (1,632 tonnes) arrives as "9,340 tonnes of non-renewable biomass usage". However the Net benefit is provided as "9,339 tonnes non-renewable biomass saved" in the same table. Check.					
Project Participant Response :			**Date:** 01/08/2024		
1. PP has corrected 'Table 2' to 'Table 3' throughout Section B.6.4. PP has now updated all tables in Section B.6.4 to include figures per VPA, rather than total per project. PP has also corrected average values for each table. 2. Figures for SDG15 have now been updated to reflect each VPA. PP has checked that table calculation is accurate.					
Documentation Provided by Project Participant:					
VPA-DD - 'Sierra Leone VPA-DD v3' Section B.6.4 Tables					
Information Verified by Team Leader:					

1. The "Year2" has now been corrected to "Year 3" in the SDG7 table in Section B.6.4 of the VPA-DD, which is found correct. However please Net Benefit is provided as "2,444" in the Section B.6.4, however the value is 3,821" as per the ERs Excelsheet. Similar mismatch is also observed in case of SDG13, SDG15 between Table 1 and Section B.6.4 of VPA-DD. Check The comment remains open. 2. The calculations in the SDG15 table under Section B.6.4 have been updated, which is found correct. Hence the comment is closed.	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 23/09/2024
1. The editorial corrections related to the numbering of year has been made in the VPA-DD. However mismatch on the Net Benefit (SDG07) is observed between VPA-DD and ERs Excelsheet. 2. The baseline estimate and project estimate related to the SDG15 has been corrected in the Section B.6.4.	
Acceptance and Close out by Team Leader: Open	**Date:** 23/09/2024
Project Participant Response :	**Date:** 06/11/2024
PP has corrected formulas in 'SDG Impacts' tab of ERs Excelsheet, correct value for SDG7 is 2,444, SDG13 is 6,396, SDG15 is 3,395.	
Documentation Provided by Project Participant:	
GS7475-77_ERSDWS_Ex Antes_v.4	
Information Verified by Team Leader:	
1. The similar corrections in the SDG 07 Impact under the Table 1 not provided. Check.	
Reasoning for not Acceptance or Acceptance and Close Out: Open	**Date:** 11/11/2024
The consistent corrections not provided throughout the VPA-DD.	
Acceptance and Close out by Team Leader: Open	**Date:** 11/11/2024
Project Participant Response :	**Date:** 12/11/2024
PP has corrected the 'Estimated Annual Average' column of Table 1 in VPA-DD to represent figures in Summary (VPA) tab of Ex-antes Excelsheet and Section B.6.4.	
Documentation Provided by Project Participant:	
VPA-DD - 'Sierra Leone VPA-DD v5' Table 1.	
Information Verified by Team Leader:	
The CME has checked and found all are consistent and adjusted accurately. Hence this comment has been closed out	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 17/11/2024
The CME has checked "Sierra Leone VPA-DD v5 – clean & GS7475-77_ERSDWS_Ex Antes_v.5" and found it accurately adjusted.	
Acceptance and Close out by Team Leader:	**Date:** 17/11/2024

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CAR	Number:	07	Reference:	Section B.7.1
Team Leader Comment:					
Please refer to the table for the monitoring parameter "*HHp,y: Number of households with access to Safe Water in the project scenario*", "*HHaccess (Number of households with access to Safe Water from a clean treatment technology in the project scenario)*" and "*Np,y (Number of people served by the project in year y)*", where the value of parameters does not match with the value as available in the "SDG Impacts (Full MP)" spreadsheet of ERs Excelsheet. Check.					
Project Participant Response :			**Date:** 01/08/2024		
PP has corrected values for *HHp,y, HHaccess, Np,y to reflect values per VPA, which now match 'SDG Impacts' tab of ER Excelsheet.*					
Documentation Provided by Project Participant:					
VPA-DD - 'Sierra Leone VPA-DD v3' Section B.7.1 Tables					
Information Verified by Team Leader:					

The VVB has checked the VPA-DD and the spreadsheet and found as follows: 1. HHp,y: The value is 3821 in the VPA-DD (SDWS-19, page-79, Section B.7.1), however the value is 55.6 in the ERs Excelsheet. Check on the observed differences. 2. Np,y: The value is rounded-down to 30,850 in the VPA-DD (page-81), however the value is 30,851 in the ERs Excelsheet (SDG impacts spreadsheet). Check. 3. HHaccess: The value is rounded-down to 3821 in the VPA-DD (page-80), however the value is 3821 in the ERs Excelsheet (SDG impacts spreadsheet). Check. The comment remains open.

Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 23/09/2024
The value in the VPA-DD is still inconsistent with the values in the ERs Excelsheet.	
Acceptance and Close out by Team Leader: Open	**Date:**
Project Participant Response :	**Date:** 06/11/2024
HHp,y, Np,y and HHaccess values in Section B.7.1 have been updated to each represent figures per VPA. These now match the VPA values in SDG Impacts tab of Excelsheet. 1. HHp,y value has been corrected to 2,893. 2. Np,y value has been correct to 19,732. 3. HHaccess value has been corrected to 2,444.	
Documentation Provided by Project Participant:	
Sierra Leone VPA-DD v4	
Information Verified by Team Leader:	
HHp,y: Please check the Cell E21 and Cell E22 in the tab "SDG Impacts" in the ERs Excelsheet, where two different values for the same parameter (HHp,y) is provided. Further the units for both the values are same. Hence the two different values with same units for the same parameter appears as confusing and not logical. Check. Similarly check the above issue for the other two parameters (Np,y, HHaccess) as well and provide appropriate corrections.	
Reasoning for not Acceptance or Acceptance and Close Out: Open	**Date:** 11/11/2024
The different values with same unit are provided for a single parameter, which does not look logical.	
Acceptance and Close out by Team Leader: Open	**Date:** 11/11/2024
Project Participant Response :	**Date:** 12/11/2024
PP has clarified the specific values for parameters HHp,y, Np,y and HHaccess in the Ex-antes Excelsheet and has corrected the values for each in Section B.7.1.	
Documentation Provided by Project Participant:	
Sierra Leone VPA-DD v5 Section B.7.1. GS7475-77_ERSDWS_Ex Antes_v.5 "SDG Impacts" tab.	
Information Verified by Team Leader:	
The CME has checked the documents and found all to be adjusted correctly. Hence this comment has been closed.	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 17/11/2024
The CME has checked "Sierra Leone VPA-DD v5 Section B.7.1. & GS7475-77_ERSDWS_Ex Antes_v.5 "SDG Impacts" and found to be appropriate.	
Acceptance and Close out by Team Leader:	**Date:** 17/11/2024

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CAR	Number:	08	Reference:	Section B.7.2
Team Leader Comment:					
The older version of the "Guideline: Sampling and surveys for CDM project activities and programmes of activities, Version 03.1" has been referred, while the latest version is version 4.0. Check.					
Project Participant Response :			**Date:** 01/08/2024		
PP has updated CDM sampling guidelines referred to in Section B.7.2 of the MR to v.4.					
Documentation Provided by Project Participant:					
VPA-DD - 'Sierra Leone VPA-DD v3' Section B.7.2					
Information Verified by Team Leader:					

The version of "Guideline: Sampling and surveys for CDM project activities and programmes of activities" has not been updated at all the places in the VPA-DD. Check. The comment remains open.	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 23/09/2024
The corrections are not uniformly provided throughout the VPA-DD.	
Acceptance and Close out by Team Leader: Open	**Date:** 23/09/2024
Project Participant Response :	**Date:** 06/11/2024
PP has also updated CDM sampling guidelines to version 4 on pages 81-82.	
Documentation Provided by Project Participant:	
Sierra Leone VPA-DD v4	
Information Verified by Team Leader:	
The version of the Sampling Guidelines has now been updated in the VPA-DD. Hence the comment is closed.	
Reasoning for not Acceptance or Acceptance and Close Out: Closed	**Date:** 11/11/2024
The version of the Sampling Guidelines has now been updated in the VPA-DD.	
Acceptance and Close out by Team Leader: Closed	**Date:** 11/11/2024

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CAR	Number:	09	Reference:	Section C.2.1
Team Leader Comment:					
The start date of the 1st crediting period is only provided, while the start date of the 2nd crediting period not provided in Section C.2.1 of the VPA-DD. Check.					
Project Participant Response :				**Date:** 01/08/2024	
PP has now included dates from 2nd crediting period.					
Documentation Provided by Project Participant:					
VPA-DD - 'Sierra Leone VPA-DD v3' Section C.2.1					
Information Verified by Team Leader:					
The start date of the 2nd crediting period is now updated in the VPA-DD, which is found correct. Hence the comment is closed.					
Reasoning for not Acceptance or Acceptance and Close Out:				**Date:** 23/09/2024	
The start date of the 2nd crediting period is now updated in the VPA-DD.					
Acceptance and Close out by Team Leader: Closed				**Date:** 23/09/2024	

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CAR	Number:	10	Reference:	Appendix 1
Team Leader Comment:					
Please check the error "*ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND*" in the Appendix 1 of VPA-DD. Check.					
Project Participant Response :				**Date:** 01/08/2024	
This is an ongoing error with the VPA-DD template which is not able to be corrected, Sustain Cert are aware of this.					
Documentation Provided by Project Participant:					
N/A					
Information Verified by Team Leader:					
The justification provided by the CME is found reasonable. Hence the comment is closed.					
Reasoning for not Acceptance or Acceptance and Close Out:				**Date:** 23/09/2024	
There has been error in the VPA-DD template, hence the justification by CME is found reasonable.					
Acceptance and Close out by Team Leader: Closed				**Date:** 23/09/2024	

Table 2. CLs from this verification

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CL	Number:	11	Reference:	Section A.1.1
Team Leader Comment:					
Please check the justification "*Renewable energy utilised within the project is not connected to a mini grid or off-grid solutions, therefore the project is not eligible under this project type*" provided in Section A.1.1 of VPA-DD. No details on the type of renewable energy utilized in the project activity is provided in the VPA-DD. Check and Clarify.					
Project Participant Response :				**Date:** 01/08/2024	
PP has corrected table in Section A.1.1 to correct wording. The project does not involve renewable energy.					
Documentation Provided by Project Participant:					
VPA-DD - 'Sierra Leone VPA-DD v3' Section A.1.1					
Information Verified by Team Leader:					
The revisions in the statement is found appropriate as renewable energy is not utilized in the VPA. Hence the comment is closed.					
Reasoning for not Acceptance or Acceptance and Close Out:				**Date:** 23/09/2024	
The error in the statement is corrected.					
Acceptance and Close out by Team Leader: Closed				**Date:** 23/09/2024	

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CL	Number:	12	Reference:	Section B.1
Team Leader Comment:					
The current validation is for the renewal of the crediting period, however the "*Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period*" has not been applied. Check.					
Project Participant Response :				**Date:** 01/08/2024	
PP has added "*Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period*" to Section B.1					
Documentation Provided by Project Participant:					
VPA-DD - 'Sierra Leone VPA-DD v3' Section B.1					
Information Verified by Team Leader:					
The reference of the Tool 11 is provided in Section B.1, however the steps of this Tool (Tool 11) not discussed in the Section B.4 of VPA-DD. Check. Further the version 5 of the CDM Tool 11 is indicated in the VPA-DD, however the latest version of this Tool is 3.0.1 on the CDM website. Check on the observed differences. The comment remains open.					
Reasoning for not Acceptance or Acceptance and Close Out:				**Date:** 23/09/2024	
The Tool 11 has only referenced, however all the steps of the Tool 11 not discussed in the VPA-DD.					
Acceptance and Close out by Team Leader: Open				**Date:** 23/09/2024	
Project Participant Response :				**Date:** 06/11/2024	
PP has included overview of Tool 11 steps followed in Section B.4 of VPA-DD. PP has updated CDM Tool 11 version number to 3.0.1 on page 25.					
Documentation Provided by Project Participant:					
Sierra Leone VPA-DD v4					
Information Verified by Team Leader:					
The reference of the Tool 11 is now provided in the Section B.4 of VPA-DD and also the latest version 3.0.1 of the Tool is now indicated in the VPA-DD. Hence the comment is closed.					
Reasoning for not Acceptance or Acceptance and Close Out: Closed				**Date:** 11/11/2024	
The latest version and reference of the Tool 11 provided in the VPA-DD.					
Acceptance and Close out by Team Leader: Closed				**Date:** 11/11/2024	

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CL	Number:	13	Reference:	Section B.6.2

Team Leader Comment:

1. Please refer to the table for the data/parameter "*Regulatory framework for safe water supply*", as per which no details on the "*summary of any national, sub-national and local regulations or guidance for safe drinking water supply, operation and maintenance, including any tariff requirements*" provided in the VPA-DD. Check.

2. Please refer to the table for the data/parameter "*Water sources in the project boundary*", as per which, "*Identify the water sources in the project boundary, and identify whether they are used for drinking water, and for all that are used for drinking water, classify them as improved or unimproved water source, in line with water source definition in ERDSWD v1 methodology*". However no details on the "*improved or unimproved water source*" is provided in the VPA-DD. Check.

3. Please refer to the parameter "nwb: Weighted average efficiency of the baseline water boiling devices" as per which the default efficiency of 10% has been used for the three-stone fire cooking system. However please refer to the "Methodological Tool: Default values for common parameters, version 2.0" as per which, the default efficiency for three-stone fire using firewood is 15%. Check.

Project Participant Response :	**Date:** 01/08/2024

1. *As there is not a national drinking water standard in Sierra Leone, the WHO Drinking Water Standard is followed. PD has included this information under 'Choice of data or measurement methods and procedures' in "Regulatory framework for safe water supply" parameter box.*
2. *PD has now included this information in the "Water sources in the project boundary" table.*
3. PP has updated "nwb: Weighted average efficiency of the baseline water boiling devices" value to 15%, in line with "Methodological Tool: Default values for common parameters, version 2.0".

Documentation Provided by Project Participant:

VPA-DD - 'Sierra Leone VPA-DD v3' Section B.6.2.

Information Verified by Team Leader:

1. There are water regulations, codes and standards in the host country. Please check the following sources:
https://ewrc.gov.sl/legislations-standards/water-regulations-codes-standards/
https://nwrma.gov.sl/
https://faolex.fao.org/docs/pdf/sie214524.pdf
https://www.washinhcf.org/resource/sierra-leone-standards-guidelines-for-water-sanitation-and-hygiene-services-in-health-care-facilities-in-sierra-leone/
https://nwrma.gov.sl/legislation/
https://washdata-sl.org/wp-content/uploads/sites/43/2017/02/National-water-resource-policy.pdf
https://nwrmaweb.com/acts-policies/
Hence the statement "As Sierra Leone does not have a national drinking water standard" does not look appropriate. Check. Hence the comment remains open.
Further the value of fNRB is not updated to 63% in the VPA-DD inline with the revised ERs Excelsheet. Check.
2. As per the requirements "*Identify the water sources in the project boundary, and identify whether they are used for drinking water, and for all that are used for drinking water, classify them as improved or unimproved water source, in line with water source definition in ERDSWD v1 methodology*". The water sources have not been identified, while only the percentage share of improved source and unimproved source is provided in the VPA-DD. Hence the additional details as per the requirements shall be provided. Hence the comment remains open.
3. The efficiency of the baseline water boiling devices have been updated in the VPA-DD, which is found appropriate. Hence the comment is closed.

Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 23/09/2024

1. The details as per the national requirements have not been provided in the VPA-DD.
2. The details as per the methodological requirements have not been provided in the VPA-DD.
3. The correct efficiency as per the methodological requirements have now been provided in the VPA-DD.

Acceptance and Close out by Team Leader: Open	**Date:** 23/09/2024
Project Participant Response :	**Date:** 06/11/2024

1. PP has now included the relevant policies into Section B.6.2 under "Regulatory framework for safe water supply" parameter box. PP has updated fNRB value in Section B.6.1 to 63% in line with ER Excelsheet.
2. PP has added additional details on the improved and unimproved sources into "Water sources in the project boundary" table. These have also been highlighted in the Report tab of the updated Baseline Survey (v.3).

Documentation Provided by Project Participant:

VPA-DD - 'Sierra Leone VPA-DD v4
Sierra Leone 2024 Revalidation Baseline Survey v.3

Information Verified by Team Leader:	
1. The relevant policies/regulations are considered in the data/parameter "*Regulatory framework for safe water supply*" in the VPA-DD, which is inline with the methodology requirements and hence appropriate. The value for the fNRB has been updated in the VPA-DD inline with the ERs Excelsheet. 2. The details on the on the "*improved or unimproved water source*" is now provided in the VPA-DD. Hence the comment is closed.	
Reasoning for not Acceptance or Acceptance and Close Out: Closed	**Date:** 11/11/2024
1. The relevant policies/regulations are now considered in the data/parameter "*Regulatory framework for safe water supply*" in the VPA-DD, which is inline with the methodology requirements. Also the value for fNRB has been updated in the VPA-DD inline with the ERs Excelsheet. 2. The details on the on the "*improved or unimproved water source*" is now provided in the VPA-DD.	
Acceptance and Close out by Team Leader: Closed	**Date:** 11/11/2024

Date:	01-07-2024		Raised by:	Team Leader		
Type:	CL	Number:	14		Reference:	Section B.7.2, B.7.3
Team Leader Comment:						
No discussions on Water Quality Tests related to sampling and monitoring provided in the Section B.7.2, B.7.3) of VPA-DD. Check and additional details be provided in this regard.						
Project Participant Response :				**Date:** 01/08/2024		
Household water quality tests (Mq,y) are mentioned in section B.7.1 and B.7.2 under SDWS 18. Water quality tests at project technology level are listed in section B.6.2 under SDWS 3.						
Documentation Provided by Project Participant:						
VPA-DD - 'Sierra Leone VPA-DD v3'.						
Information Verified by Team Leader:						
The details on the Water Quality Tests have been checked and found available in the other sections of the VPA-DD, which is found appropriate. Hence the comment is closed.						
Reasoning for not Acceptance or Acceptance and Close Out:				**Date:** 23/09/2024		
The details on the water quality tests are available in the VPA-DD.						
Acceptance and Close out by Team Leader: Closed				**Date:** 23/09/2024		

Date:	01-07-2024		Raised by:	Team Leader		
Type:	CL	Number:	15		Reference:	Section F
Team Leader Comment:						
1. The justification on the Eligibility criteria-1 states "*The Project Technology comes under "Safe Water Source" as the Project Activity involves the installation of safe water sources such as handpumps and solar pumps in the project area*". However no details on the Solar pumps are provided in the Section A.3 of VPA-DD. Check. *2. The PD has mentioned that "An EIA is not required to be carried out for this safe water project", however it is not clarified as how the same has been confirmed by the project developer, when the VPAs are under renewal in year 2024. Clarify.*						
Project Participant Response :				**Date:** 01/08/2024		
1. PP has corrected the wording in Section A.3 to remove 'and solar pumps'. 2. PD has received confirmation that an EIA is not required for this project as it only involves the rehabilitation of existing handpumps and not any new constructions.						
Documentation Provided by Project Participant:						
VPA-DD - 'Sierra Leone VPA-DD v3' Section A.3.						
Information Verified by Team Leader:						
1. As there are no solar pumps installed under the VPA, hence the same has now been corrected in the VPA-DD, which is found appropriate. Hence the comment is closed. 2. The CME is requested to submit the confirmation received on EIA. The comment remains open.						
Reasoning for not Acceptance or Acceptance and Close Out:				**Date:** 23/09/2024		

1. The editorial corrections are now provided in the VPA-DD. 2. The supporting document is awaited.	
Acceptance and Close out by Team Leader: Open	**Date:**
Project Participant Response :	**Date:** 06/11/2024
2. PP is in the process of gaining this evidence but requests that it can be submitted at Design Review so that the rest of the review can progress while this is being obtained.	
Documentation Provided by Project Participant:	
The comment will be closed upon submission of the requested document. The comment remains open.	
Information Verified by Team Leader:	
The supporting document is awaited, hence the following FAR has been raised: **FAR#: The PD shall submit the confirmation related to EIA (EIA not required) for the project at the time of next verification.**	
Reasoning for not Acceptance or Acceptance and Close Out: Closed	**Date:** 17/11/2024
The requested document has not been submitted, hence the FAR has been raised.	
Acceptance and Close out by Team Leader: Closed	**Date:** 17/11/2024

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CL	Number:	16	Reference:	Section B.5.2
Team Leader Comment:					
Please refer to the paragraph 4.152, 4.1.53 of the GS4GG Principles and Requirements as per which the following requirements applies: "*Ongoing Financial Need shall be demonstrated at Design Certification Renewal. The project shall provide a qualitative narrative supported by an overview of project finances, that demonstrates how the finance derived Gold Standard Certification is material to the ongoing sustainability of the Project. The narrative may include, but not limited to the following;* *(a) Information highlighting the key categories and amounts or relative proportions (%) of project income and outgoings, including the relative proportion of certification related cost and revenue.* *(b) Description on how finance derived Gold Standard Certification contributes to or is being used to sustain or enhance the project.* *(c) Where no revenue is realised from Gold Standard certification during a given period, this would be considered a FAR for the next Issuance.* *4.1.53 The submission of the information to demonstrate OFN is mandatory, however this information will not be used for formal decision making to decide whether a project shall renew or not. The information* *(a) shall be validated by the VVB to ensure its accuracy* *(b) may remain confidential (i.e. shall be submitted alongside other project documentation and not published to the Gold Standard Impact Registry), in recognition of the commercially sensitive nature of the information* *(c) shall satisfy the OFN requirements and no further information (beyond responding to clarification questions) will be requested*" Additional information be provided in view of the above requirements.					
Project Participant Response :			**Date:** 01/08/2024		
Section 4.1.51 of the GS4GG Principles and Requirements v.1.2 states 'All Gold Standard Projects (including those that transition from earlier versions) required to demonstrate Financial Additionality, as noted above, shall demonstrate Ongoing Financial Need for such mechanisms'. As this project is not required to demonstrate financial additionality, this is not required.					
Documentation Provided by Project Participant:					
N/A					
Information Verified by Team Leader:					
As the additionality is not demonstrated with the help of financial calculations, hence the OFN is not required for the VPA. Hence the comment is closed.					
Reasoning for not Acceptance or Acceptance and Close Out: Closed			**Date:** 23/09/2024		
As no financial additionality is involved in the project, hence OFN is not required to be demonstrated at the time of renewal of the crediting period.					
Acceptance and Close out by Team Leader: Closed			**Date:** 23/09/2024		

Date:	01-07-2024		Raised by:	Team Leader	
Type:	CL	Number:	17	Reference:	Section E.2
Team Leader Comment:					
No physical address is provided, where the Grievance Book is placed, where stakeholder may register their grievances. Check.					
Project Participant Response :				**Date:** 01/08/2024	
Grievance books are kept with a member of the WASH committee at each village, in a location accessible to all community members.					
Documentation Provided by Project Participant:					
N/A					
Information Verified by Team Leader:					
The justification provided on the Grievance book by the CME is found appropriate., which is also evident from the VPA-DD. Hence the comment is closed.					
Reasoning for not Acceptance or Acceptance and Close Out:				**Date:** 23/09/2024	
The justification on grievance book is found appropriate.					
Acceptance and Close out by Team Leader: Closed				**Date:** 23/09/2024	

Table 1. FAR from this validation

Date:	19-11-2024		Raised by:	Team Leader	
Type:	FAR	Number:	18	Reference:	Section F
Team Leader Comment:					
The PD shall submit the confirmation related to EIA (EIA not required) for the project at the time of next verification.					
Project Participant Response :				**Date:**	
Documentation Provided by Project Participant:					
Information Verified by Team Leader:					
Reasoning for not Acceptance or Acceptance and Close Out:				**Date:**	
Acceptance and Close out by Team Leader:				**Date:**	