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GOLD STANDARD FOR THE GLOBAL GOALS (GS4GG)
REPORT
-
VERIFICATION FOR VOLUNTARY PROJECT ACTIVITY (VPA)

PoA Title	Global Household Water Treatment Technology dissemination project
GS4GG project ID:	GS 12219
VPA Title:	GS12219 VPA-1 Water filter project in Dindori, Madhya Pradesh, India
GS4GG VPA ID:	GS 12220
Monitoring Period:	11/05/2023 to 31/01/2024 (Both days included)
Internal ID:	TQC 21623
Customer:	EKI Energy Services Limited
Date:	12/02/2025
Version:	4.0

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SUMMARY			
Reference No.	**Date** *(first version)*	**Version No.**	**Date** *(last version)*
TQC 21623	14/06/2024	4.0	12/02/2025
GS4GG Verification			
GS4GG Certified Product *(sought)*:	GS VER		
GS4GG SDG Impact Statement *(sought)*:	Impact Certification		
General Information			
Client	EKI Energy Services Limited		
PoA Title	Global Household Water Treatment Technology dissemination project		
VPA Title	GS12219 VPA-1 Water filter project in Dindori, Madhya Pradesh, India		
Project Participant/CME	EKI Energy Services Limited		
PoA Location	India		
VPA Location	Dindori and Anuppur District of Madhya Pradesh in India		
Contact Person	Mr. Manish Dabkara		
Monitoring Period	Monitoring Period No.: 01 11/05/2023 to 31/01/2024 (inclusive of both dates)		

GS4GG Version: GS4GG Principles and Requirements version 1.2 **GS4GG Activity Requirements:** • Community Services Activity Requirements, version 1.2 • Programme of Activities Requirements, version 2.1 • Gender Equality Requirements & Guidelines, version 1.1 • Stakeholder Procedure, Requirements & Guidelines, version 2.1 • Safeguarding Principles & Requirements, version 2.1 • **Applied Methodology Version:** Methodology For Emission Reductions From Safe Drinking Water Supply, version 1.0 • Validation and Verification Standard version 01.0 • GHG Emissions Reduction & Sequestration Product Requirements version 2.3 The following tools and guidance's have been followed (References): • Tool 30 – Calculation of the fraction of non-renewable biomass, version 4.0	GS4GG Principles and Requirements V 1.2 UNFCCC CDM Sectoral Scope: 3 GS4GG Scope: 2 Technical Area: 3.1
Initial Monitoring Report Version: 01.0 Date: 12/02/2024	Final Monitoring Report Version: 4.0 Date: 11/02/2025

Referred VPA DD Version: version 4.0
Date: 07/02/2025

Estimated Annual Emission Reductions: 5,884 tCO_2e per year

Estimated SDG Goals for current monitoring period:

Selected Sustainable Development Goals (SDGs): 1, 3, 4, 5, 6, 7, 8, 12, 13

Estimated Sustainable Development Contributions:

SDG 01 (No poverty) -

SDG indicator 1.4.1: Percentage of population living in households with access to basic services (water treatment).
Project Specific Indicator: Total number of premises with at least one water filter distributed / installed under the project: 2,010

SDG 03 (Good Health and Well Being) -

SDG indicator 3.9.1**:** Mortality rate attributed to household and ambient air pollution.

Project Specific Indicator: % users reporting reduction in incidences of waterborne diseases such as skin rashes, diarrhoea, foot sores, parasites, eye problems and other waterborne diseases: 100%

SDG 04 (Quality Education) -

SDG indicator 4.3.1: Number of employees who have undergone skill development training.

Project specific Indicator: Project-specific indicator: number of employees who have undergone skill development training: 1 training

SDG 05 (Gender Equality) -

SDG indicator: 5.4.1: Proportion of time spent on unpaid domestic and care work, by sex, age, and location Indicator: % users reporting.

Project Specific Indicator: % Users reporting a time-saving in fuel collection after shifting to Econeer water filter: 100%

SDG 06 (Clean Water and Sanitation) –

SDG indicator: 6.1.1: Proportion of population have access to improved source of water.

Project Specific Indicator: No of people who have access the water filter.: 9,668 numbers

SDG 07 (Affordable and Clean Energy) –

SDG indicator:7.1.2: Number of unique households that were provided access to clean water purification technology.

Project Specific Indicator: Total number of premises with at least one water filter distributed under the VPA: 2,010 Econeer water filters.

SDG 08 (Decent Work and Economic Growth) –

SDG indicator: 8.5.1: Average hourly earnings of female and male employees, by occupation, age and persons with disabilities.

Project Specific Indicator: Total no of jobs created (in distribution, Monitoring & Evaluation): 4 numbers

SDG 12 (Responsible Consumption and Production) –

SDG indicator:12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP
Project Specific Indicator: Reduction in consumption of renewable biomass.: 369.00 tonnes

SDG 13 (Climate Action) –

SDG indicator: 13.2.2 Amount of CO_2e emissions reduced by the project per year

Project Specific Indicator: Emission Reductions: 5,745 tCO_2e (GS VERs)

SDG 15 (Life on Land) –

SDG indicator: 15.2.1 Progress towards sustainable forest management.

Project Specific Indicator: Reduction in consumption of non-renewable biomass: 3,053 tonnes

Actual Emission Reductions: 3,155 tCO_2e

Actual SDG Goals achieved during current monitoring period:

Selected Sustainable Development Goals (SDGs): 1, 3, 4, 5, 6, 7, 8, 12, 13

Actual Sustainable Development Contributions:

SDG 01 (No poverty) -

SDG indicator 1.4.1: Percentage of population living in households with access to basic services (water treatment).

Project Specific Indicator: Total number of premises with at least one water filter distributed / installed under the project: 2,010

SDG 03 (Good Health and Well Being) -

SDG indicator 3.9.1**:** Mortality rate attributed to household and ambient air pollution.

Project Specific Indicator: % users reporting reduction in incidences of waterborne diseases such as skin rashes, diarrhoea, foot sores, parasites, eye problems and other waterborne diseases: 100%

SDG 04 (Quality Education) -

SDG indicator 4.3.1: Number of employees who have undergone skill development training.

Project specific Indicator: Project-specific indicator: number of employees who have undergone skill development training: 2 training

SDG 05 (Gender Equality) -

SDG indicator: 5.4.1: Proportion of time spent on unpaid domestic and care work, by sex, age, and location Indicator: % users reporting.

Project Specific Indicator: % Users reporting a time-saving in fuel collection after shifting to Econeer water filter: 100%

SDG 06 (Clean Water and Sanitation) –

SDG indicator: 6.1.1: Proportion of population have access to improved source of water.

Project Specific Indicator: No of people who have access the water filter.: 9,668 numbers

SDG 07 (Affordable and Clean Energy) –

SDG indicator:7.1.2: Number of unique households that were provided access to clean water purification technology.

Project Specific Indicator: Number of unique households that were provided access to clean water purification technology: 2,010 Econeer water filter.

SDG 08 (Decent Work and Economic Growth) –

SDG indicator: 8.5.1: Average hourly earnings of female and male employees, by occupation, age and persons with disabilities.

Project Specific Indicator: Total no of jobs created (in distribution, Monitoring & Evaluation): 23 numbers

SDG 12 (Responsible Consumption and Production) –

SDG indicator:12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP

Project Specific Indicator: Reduction in consumption of renewable biomass.: 202.00 tonnes.

SDG 13 (Climate Action) –

SDG indicator: 13.2.2 Amount of CO_2e emissions reduced by the project per year

Project Specific Indicator: Emission Reductions: 3,155 tCO_2e

SDG 15 (Life on Land) –

SDG indicator: 15.2.1 Progress towards sustainable forest management.

Project Specific Indicator: Reduction in consumption of non-renewable biomass:1,676.00 tonnes

Verification Summary

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by EKI Energy Services Limited to perform the GSVER verification of "GS12219 VPA-1 Water filter project in Dindori, Madhya Pradesh, India". (GS VPA ID: GS 12220) applying the approved GS4GG methodology "METHODOLOGY FOR EMISSION REDUCTIONS FROM SAFE DRINKING WATER SUPPLY", Version: 1.0[1]. The management of EKI Energy Services Limited is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions.

A desk review and an on-site inspection have been conducted to verify the data submitted in the monitoring report. Applus+ Certification confirms the following have been reviewed:

a. The GS4GG VPA DD including the monitoring plan;
b. Monitoring report;
c. The applied monitoring methodology;
d. Relevant decisions, clarifications and guidance from the GS4GG Registry;
e. The Gold Standard for Global Goals "Principles and Requirements" Version 1.2 and GS4GG guidelines;
f. All information and references relevant to the project activity's resulting in emission reductions.

The purpose of this Micro-scale Project Activity (VPA) is the dissemination of Household Water Treatment (HWT) units i. e. water purifiers to approximately 2,010 families/22/ within the Dindori and Anuppur districts, Madhya Pradesh, India. The VPA replaces conventional method of boiling water by using with water purifier.

Applus+ Certification confirms that the VPA is implemented in accordance with the GS4GG VPA-DD version 02.0. The monitoring plan complies with the applied methodology "Methodology for Emission Reductions from Safe Drinking Water Supply", version 1.0 and the Gold Standard for Global Goals "Principles and Requirements" version 1.2, and other GS4GG guidelines as mentioned in the summary in accordance of which the monitoring has been carried out. The monitoring system is in place and the emission reductions are calculated without material misstatements.

The report describes a total of 11 findings which include:

[1] https://globalgoals.goldstandard.org/429-ee-sws-emission-reductions-from-safe-drinking-water-supply/

07 Corrective Action Requests (CARs);

04 Clarification Requests (CLs/CRs);

00 Forward Action Request (FAR).

Our opinion relates to projects GHG emissions & the resulting GHG emission reductions reported and related to valid project baseline and monitoring parameters and its associated documents. Based on information reviewed and evaluated, Applus+ Certification confirms that implementation of VPA has resulted in 3,155 tCO_2e emission reductions for monitoring period 11/05/2023 to 31/01/2024 (Both days included).

ASSESSMENT TEAM		
Team Members	**Type of Resource**[2]	**Organization** *(for OEs)*
Lead Auditor: Mr. Deepak Pundlik	☐ IR ☐ EI ☒ OE	True Quality Certifications Private Limited
Auditor: Mr. Amit Rai	☐IR ☐EI ☒OE	M/s True Quality Certifications Private Limited
Auditor in Trainee: Ms. Shruti Shrivastava	☐IR ☐EI ☒OE	M/s True Quality Certifications Private Limited
Technical Reviewer: Mr. Simon Shen	☐ IR ☒ EI ☐ OE	Applus+ Certification

[2] IR (Internal Resource); EI (External Individual); OE (Outsourced Entity)

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ABBREVIATIONS	
Applus+ LGAI / Applus+	LGAI Technological Center, S.A. (Applus+ Certification)
CAR	Corrective Action Request
VER	Verified Emission Reduction
CL / CR	Clarification Request
CME	Co-ordinating/ Managing Entity
EF	Emission Factor
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
GS4GG	Gold Standard for Global Goals
HWT	Household Water Treatment Technologies
IPCC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
POA	Programme of Activity
SDG	Sustainable Development Goal(s)
TAC	Gold Standard Technical Advisory Committee
VPA	Voluntary Project Activity
VVB	Validation and Validation Body
VVS	Validation and Validation Standard

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1. INTRODUCTION

1.1 Objective

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by EKI Energy Services Limited to perform the GSVER verification of "GS12219 VPA-1 Water filter project in Dindori, Madhya Pradesh, India". (GS VPA ID: GS 12220) applying the approved GS4GG methodology "Methodology for emission reductions from safe drinking water supply", Version 1.0[3] and GS4GG guidelines.

Gold Standard projects must undergo periodic audits and verification of emission reductions as the basis for issuance of Gold Standard VERs. The objective of the verification work is to assess the compliance with the requirements GS4GG guidelines and relevant Principles and Requirements. According to this assessment Applus+ Certification shall:

- Ensure that the VPA has been implemented and operated as per the GS4GG VPA-DD version 02.0/2/ and that features of the VPA such as technology used, its monitoring etc. are in place;
- Ensure that the referred MR and other supporting documents provided are complete, verifiable and in accordance with applicable relevant GS4GG requirements;
- Ensure that the actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology/6/;
- Evaluate the data recorded and stored as per the applied methodology i.e. Methodology for emission reductions from safe drinking water supply", Version 1.0 /6/.

1.2 Scope

The verification scope encompasses an independent and objective review and ex-post determination of monitored reductions in GHG emissions by the VVB. The verification is based on the submitted monitoring report/1/, the GS4GG requirements, submitted latest versions of PoA-DD, VPA-DD/2/, the applied monitoring methodology, "Methodology for emission reductions from safe drinking water supply", Version 1.0 /6/, relevant decisions, GS4GG guideline and any other information and references relevant to the VPA's resulting emission reductions. These documents are reviewed against the requirements of GS4GG such as Principle & Requirements version 1.2, Programme of Activities requirements version 2.1, Community Services Activity Requirements version 1.2, GS4GG Validation and Verification Standard version 01.0/7/ and applicable CDM tool i.e. Tool 30/6/.

Based on the requirements of GS4GG guidelines, Applus+ Certification has applied a rule-based approach for the verification of the VPA. The principles of accuracy, completeness, relevance, reliability and credibility were combined with a conservative approach to establish a traceable and transparent verification opinion.

[3] https://globalgoals.goldstandard.org/429-ee-sws-emission-reductions-from-safe-drinking-water-supply/

The verification considers both quantitative and qualitative information on emission reductions. It also considers the monitoring of sustainable parameters.

Verification activity is not meant to provide any consultancy towards the client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the monitoring activities.

1.3 Description of the project activity

Title of PoA:	Global Household Water Treatment Technology dissemination project.
Gold Standard PoA ID:	PoA GS ID: 12219.
Title of VPA:	GS12219 VPA-1 Water filter project in Dindori, Madhya Pradesh, India.
Gold Standard VPA ID:	VPA GS ID: 12220.
Applied methodology:	Methodology for emission reductions from safe drinking water supply", Version 1.0.
Monitoring period:	11/05/2023 to 31/01/2024
VPA Implementer:	EKI Energy Services Limited
Coordinating/Managing Entity:	EKI Energy Services Limited
Location of the VPA:	Dindori and Anuppur districts of Madhya Pradesh, India

The main purpose of this micro-scale Voluntary Project Activity (VPA) is distribution of household water treatment (HWT) units, named as Econeer/17/ in Dindori and Anuppur districts of Madhya Pradesh, India. Household Water treatment (HWT) are manufactured locally in India by GHG Reduction Technologies Private Limited. EKI Energy Services Limited (CME) work as the VPA implementer and is responsible for distribution and monitoring operations/18/ current VPA. The VPA implements HWT technologies which are based on replacing inefficient devices using traditional biomass/charcoal for boiling unsafe water or consuming untreated unsafe water in the baseline scenario.

Geographical boundary for the project are Dindori and Anuppur districts of Madhya Pradesh, India.

The above-mentioned location of implemented VPA has been appropriately included under the section A.2 of the MR Version 2.0. Same has been cross verified by VVB from the KML file/12/ provided for the verification of project location by CME. VVB further verified against the GPS Software i.e. Google Earth Pro (https://www.google.com/earth). Also, during the on-site inspection, when checked with the mobile application GPS Map camera, the geo-coordinates were found to be consistent as mentioned in the latest version of the MR.

During this monitoring period, it was checked from the Usage Survey and their results/22/ of the beneficiaries that all 2,010 HWT technologies were operational, resulting in 3,155 tCO_2e which is less than 10,000 tCO_2e . Thus, as per para 3.1.2 of Community Services Activity Requirements

Version 1.2[4], the micro scale projects can be defined as a CSA project issuing emission reductions less than or equal to 10,000 tCO_2e. Moreover, as per the clause 2.1.1 (c) i of the GS4GG MICROSCALE PROJECT REQUIREMENTS Version 1.2, *"If the annual emission reductions achieved are limited to a maximum of 10,000 tonnes of CO2eq in each and every year of the crediting period. Whenever actual emission reductions, as per the verification report, exceed the upper threshold, the project can still request for issuance, but the claimable emission reductions are capped at 10,000 tonnes of CO2eq per year."* As checked in the ex-post ER calculation sheet/4/, it was found that the actual ERs calculated for the current monitoring period came out to be 3,155 tCO_2e, which was again cross checked against the usage survey & its results/22/ and were found to be consistent. hence, in accordance with the above clause. Therefore, it is accounted as micro-scale VPA.

Also, as per GHG Emissions reductions & Sequestration Product Requirements v2.2[5] project falls under Type 3: Other project activities: project involves technologies such Safe Water Supply, Waste management, etc. that result in GHG emission reductions not exceeding 60,000 tCO_2e per year in any year of the crediting period.

Table 1: Technical characteristics of the HWT Technologies /17/:

Cartridge Name	Gravity Filter by Econeer	
Types of filter	Hollow Fibre	
Length of Cartridge (mm)	80	
Diameter (mm)	65	
Active Surface area (m^2)	0.45216 m^2	
Flowrate	Operating Pressure	0.1 -0.3 Mpa
	Under Gravity (10 litres top container, 10 litres bottom container) (at 25 °C)	6 to 8 Lit/hr (depends upon quality and temperature of water.
Flow Direction	Outside – in	
Working temp	5 to 35 degree Celsius	
Claims: -	• Bacteria - 6 Log , Virus – 2 log ,Turbidity:- Nill • Life of filter: 10,000 litres (depends upon the intake quality of the water). • Membrane module to be washed weekly or fortnightly.	

The water filter uses ultra filtration process which is useful in the treatment of impure turbid water containing suspended particles, pathogens and other harmful micro-organisms. It involves water purification process in which water is forced through a Semipermeable membrane with a pore size up to 0.1 micron.

The water purifier distributed in this project have a unique number, and during use, due to the quality of the water purifier itself, the project owner is responsible for the replacement of parts and other alternative materials to maintain the normal use of the water purifier. The maintenance

[4] https://globalgoals.goldstandard.org/standards/201_V1.2_AR_Community-Services-Activity-Requirements.pdf
[5] https://globalgoals.goldstandard.org/501-pr-ghg-emissions-reductions-sequestration/

situation in this monitoring period such as parts replacement were carried out smoothly, without affecting the normal use of the water purifier

The above-mentioned technical details have been confirmed by VVB by assessing the provided manufacturer's specification manual/17/, HWTs units actual photographs/17/, and filters efficacy by Third-party certification (NABL certified Lab)/11/. Also, it was confirmed by the VVB during the on-site inspection. CME has conducted project/monitoring surveys along-with the usage survey/22/ on an annual basis between 22/11/2023 to 19/12/2023 in person to ensure HWT technologies usage and also to evaluate the performance of the associated SDGs as well. Survey results of the has been cross checked by the VVB, and was found to be in line with information provided in the Survey forms, hence acceptable to VVB.

For the current monitoring period there are 2,010 HWTs were distributed as verified from the project beneficiary database and submitted end-user Agreement duly signed between the beneficiary and the CME/9/. The complete details of the distributed HWT units in this VPA monitoring are provided in 'Beneficiary Database' incorporated in the Usage Survey sheet/22/ provided by the CME.

2. METHODOLOGY

Applus+ Certification approach to the verification is a two-stage process. In the 1st stage, Applus+ Certification completed a strategic review and risk assessment of the VPA and processes in order to gain a full understanding of:

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant;
- Protocols used to estimate or measure GHG emissions from these sources;
- Collection and handling of data;
- Controls on the collection and handling of data;
- Means of verifying reported data; and
- Compilation of the relevant information in the monitoring report.

Applus+ Certification based on the rule-based assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan as mentioned under the section B.7.2 of the corresponding VPA-DD.

In the 2nd stage, Applus+ Certification verified the implementation of the monitoring plan and the data presented in the Monitoring Report/1/ for the period in question. This involved interviewing CME representative & the end-users during the on-site inspection and a desk review of the Monitoring Report/1/. This Verification Report describes the findings of this assessment. Complete findings table has been included under the appendix 01 of this report.

2.1 Appointment of the assessment team

According to the sectoral scope / technical area and experience in the sectoral or national business environment, LGAI Technological Center, S.A. (Applus+ Certification) has composed a project

assessment team in accordance with the appointment rules in the internal Quality Management System of LGAI Technological Center, S.A. (Applus+ Certification).

The composition of audit team shall be approved by the LGAI Technological Center, S.A. (Applus+ Certification) ensuring that the required skills are covered by the team.

The qualification levels for Verification team members that are assigned by aforementioned appointment rules are as presented below:

- Lead Auditor (LA)
- Auditor (A)
- Technical Expert (TE)
- Technical Reviewer (TR)
- Any of the above-mentioned roles in training (iT, e.g. AiT for auditor in training).

The sectoral scope / technical area knowledge linked to the applied methodology/ies shall be covered by the assessment team.

Name	Role	SS Coverage	TA Coverage	Financial aspect	Host country experience
Mr. Deepak Pundlik	LA/TE	Yes	Yes	NA	Yes
Mr. Amit Rai	A	Yes	Yes	NA	Yes
Ms. Shruti Shrivastava	AiT	No	No	NA	Yes
Mr. Simon Shen	TR	Yes	Yes	NA	NA

The complete list of CVs is included as Appendix 2 of this report.

2.2 Document review

The Monitoring Report version 01.0 was submitted to VVB before the verification activity started. The MR was assessed based on all the relevant documents. The aim of the assessment in the desk review was to:

- Verify the completeness of the data and the information presented in the initial & final versions of MR/1/;
- Check the compliance of the MR with respect to the monitoring plan depicted in the GS4GG PoA-DD & VPA-DD/2/ and verify that the applied methodology/6/ was carried out.
- Evaluate the data management and the quality assurance & quality control system in the context of their influence on the generation and reporting of emission reductions.
- Please check list of reference in the end of this report for detail of the documents checked.

2.3 On site assessment and follow up interviews

The objective of the on-site inspection was to:

- Confirm the implementation and operation of the VPA.

- Review the data flow for generating, aggregating and reporting the monitoring parameters.
- Confirm the correct implementation of procedures for operations and data collection.
- Cross-check the information provided in the MR documentation with other sources.
- Check the monitoring equipment against the requirements of the PoA-DD, VPA-DD and the approved methodology/6/.
- Review the calculations and assumptions used to obtain the GHG data and ER & reflect the same in the ER Calculation sheet/4/.
- Identify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters.
- Confirm the SDG goals/ Sustainable monitoring parameter & the safeguarding principles as per the VPA-DD/2/.

Following table provides the list of CME personnel interviewed during on-site inspection conducted from 20/02/2024 to 22/02/2024:

Interviewed Personnel	Functions	Organization	Subject
Mr. Bhaskar Datta	Assistant General Manager	EKI Energy Services Limited	PoA/VPA description, Project boundary, technical description, Monitoring plan, baseline scenario, Project boundary, Ex-ante and Ex- post parameters, fNRB value, need of EIA requirement, Local stakeholder consultation, SDGs and safeguarding principles
Mr. M. D. Meraj Ali	Executive	EKI Energy Services Limited	
Mr. Ravi Vishwakarma	Senior Executive	EKI Energy Services Limited	
Mr. Pawan Sharma	Distributor	Aaransh Agro Tech Pvt. Ltd.	

Household samples checked during on-site inspection:

VVB has applied acceptance sampling in accordance with para 39, Table 2 Sample size and acceptance number based on AQL, UQL, and producer and consumer risks" of CDM standard "Sampling and surveys for CDM project activity and programme of activities" version 09.0. The VVB determined the minimum sample size (n) as 09 and acceptance number (c) as 0 from CME sampling database and same were interviewed. The VVB interviewed the HWT unit's users and filled the VVB monitoring survey form/questionnaire/22/ to check the acceptability of the data for each record in the CME's sample records/22/ (Refer details in Implementation of sampling plan in Section 3.4 of this report).

List of end-users interviewed during the on-site inspection by the VVB are is as provided below:

Interviewed Personnel			Date	Reason	Subject
Last Name	**First Name**	**Survey ID number**			
-	Ms. Shremati	228	20/02/2024 to 22/02/2024	Households for baseline survey	- General information - Number of people in household - Whether use untreated water or boil the same? - Baseline water type - Baseline fuel type use to boil water - Baseline water boiling time - Environmental and health issues due to the boiling of Baseline water. - Sources of water: steam/well/other
-	Mr. Mohanlal	18			
Dhurve	Mr. Jamsingh	01			
-	Ms. Ramkali	180			
-	Mr. Sunaram	256			
Patwari	Ms. Maravi	166			
Tekam	Mr. Mahyendra Singh	135			
Gond	Mr. Sudhin Singh	250			
Bharavi	Mr. Jodha Singh	103			

The objective of the on-site assessment is to:

- Confirm the implementation and operation of the VPA;
- Review the data flow for generating, aggregating and reporting the monitoring parameters;
- Confirm the correct implementation of procedures for operations and data collection;
- Cross-check the information provided in the MR documentation with other sources;
- Check the monitoring equipment against the requirements of the PoA-DD (version 02.0, dated 02/06/2024) and VPA-DD (version 02.0 dated 04/06/2024)/2/ and the approved GS4GG methodology/6/, etc.;
- Review the calculations and assumptions used to obtain the GHG data and ER;
- Identify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters;
- Confirm the SDG goals/ Sustainable monitoring parameter & Safeguarding principles as per the VPA-DD/2/;
- To understand grievance (if any) from the end-users during the monitoring period.

2.4 Quality of evidences

Sufficient evidence covering the full verification period in the required frequency is available to verify the figures stated in the final MR Version 02.0/1/. Specific cross-checks have been done in cases that further sources were available. The monitoring report's figures were checked by the

assessment team against the estimated data. The data collection system meets the requirements of the monitoring plan in accordance with the applied methodology/6/.

2.5 Reporting of findings

As an outcome of the verification process, the assessment team can raise different types of findings.

Where a non-conformance arises the assessment team shall raise a Corrective Action Request (CAR). A CAR is issued, where:

- Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;
- Modifications to the implementation, operation and monitoring of the VPA has not been sufficiently documented by the project participants;
- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
- Issues identified in a FAR during validation, or preliminary review to be verified during verification or previous verification(s) have not been resolved by the project participants.

The assessment team shall raise a Clarification Request (CL/CR) if information is insufficient or not clear enough to determine whether the applicable GS4GG requirements have been met.

All CARs and CL/CRs raised during verification shall be resolved prior to submitting a request for issuance.

Forward Action Requests (FARs) may be raised during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period.

Total Numbers of CAR(s): 07, CL(s): 04, FAR(s): 00 FAR for the current monitoring period. Please refer Appendix 01 of this report for further details.

2.6 Internal Quality Control

As a final step of verification, the final documentation including the verification report has to undergo an internal quality control by the Technical Reviewer. Each report has to be finally approved either by the VVB's Technical Manager or the Deputy. This approval process also includes another quality assurance check in terms of Administrative Review. In case one of these two persons is part of the assessment team, the final approval can only be given by the person who is not a part of the assessment team. If the documents have been satisfactorily approved, the Request for Issuance is submitted to the GS4GG Registry along with the relevant documents.

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3. VERIFICATION FINDINGS

3.1 FARs from Validation / Previous Verification

This is first verification of the real case VPA, there was no FAR raised during Validation. However, 01 FAR were raised during the GS4GG Preliminary review for inclusion of category E stakeholder which was confirmed through e-mail copy submitted by CME. This mail copy confirmed that category E stakeholders were invited for SFR round hence, FAR is closed under VPA Validation (real case). And same is also addressed in the Design Certification report for VPA (GS ID: 12220)

3.2 Project Implementation in accordance with the implemented Voluntary Proposed Activity (VPA)

The current VPA is implemented according to the description presented in the latest version of GS4GG VPA-DD. The VVB confirms, through the on-site inspection and interview with end-users during households visit that all features of the Programme of activity (PoA) as well as real case VPA including data collecting systems and storage have been implemented in accordance with the GS4GG VPA-DD version 02.0 and were found to be consistent. The description of implemented VPA is as provided below:

CME	EKI Energy Services Limited
Title of Programme of activity (PoA)	Global Household Water Treatment Technology dissemination project.
PoA ID	GS ID: 12219
Title of Voluntary Project Activity (VPA)	GS12219 VPA-1 Water filter project in Dindori, Madhya Pradesh, India
VPA ID	GS ID: 12220
Baseline and monitoring methodology	Methodology For Emission Reductions From Safe Drinking Water Supply, version 1.0
Project type	The purpose of the PoA & the corresponding VPA is the dissemination of Household Water Treatment (HWT) Units.
Project scale	Large scale
Location	Various districts of Madhya Pradesh state in India
Crediting period	11/05/2023 – 10/05/2028 (1st Crediting Period)
Total duration of the VPA	5 years (Renewable crediting period)
Period verified in this verification (Current Monitoring Period)	11/05/2023 to 31/01/2024 (Inclusive of both days)

As observed during on-site inspection & the interviews with the end-users, the VVB was able to confirm that VPA implementation is in accordance with the project description contained in the GS4GG VPA-DD and the corresponding PoA-DD.

The purpose of this micro-scale VPA is the dissemination of Household Water Treatment (HWT) Units in the districts, which include Dindori & Anuppur (KML file of all the locations were submitted by CME to VVB) of Madhya Pradesh state of India. The implementation of current VPA replaces conventional/traditional methods of boiling water for drinking purposes which eliminate the use of fuelwood. HWT units disseminated under this VPA are portable devices serving domestic users.

In total 2,010 HWT units were distributed are found to be operational in this monitoring period and the data accordingly has been used for the emission reduction calculations. The total number of HWT units till the end of this monitoring period was cross verified against the usage survey data and the corresponding survey results/22/ as submitted by CME and were found to be correct.

During this monitoring period, only HWT units were distributed within the project boundary, i.e. the across chosen districts of the Madhya Pradesh state. Same had been cross checked and confirmed against the KML file/12/ submitted for the VPA location. The GHG offset during the current monitoring period is 4,186 tCO_2e.

During the on-site inspection, the VVB has inspected the design and technology of the distributed HWT units to different users, which were found to be line with the submitted HWT unit's technical description/17/ as provided by the CME.

VVB confirms that, there are no changes in the monitoring plan from the VPA-DD version 2.0 dated 04/06/2024. The Monitoring parameter along with their justification related to SDGs has been mentioned under section D.2 of the MR version 2.0. Since this is a joint validation & verification of the Programme of Activity (PoA) along with the Voluntary Project Activity (VPA), there is no such registered document for this project, and the complete monitoring plan is verified on the basis of the submitted PoA-DD version 2.0 as well as VPA-DD version 2.0 by the CME.

Therefore, the VVB confirms that monitoring procedure of GHG data is found to be sufficient and in accordance with the procedures stipulated under the monitoring plan.

Also, in VVB's opinion;

a) The implementation and operation of the implemented VPA is in compliance with the description in the VPA-DD version 02.0.

b) There is a no revision/deviation in monitoring plan during the current monitoring period.

c) The actual emission reductions for the current monitoring period are 3,155 tCO_2e which are lower than the estimated ERs (5,745 tCO_2e) for the comparable period.

3.3 Compliance of the Monitoring Plan with the Monitoring Methodology

The VVB is able to confirm that the monitoring plan contained in the latest version of VPA-DD is in accordance with the applied GS4GG approved methodology "METHODOLOGY FOR EMISSION REDUCTIONS FROM SAFE DRINKING WATER SUPPLY", Version, 1.0/6/.

During the verification all relevant monitoring parameters (as listed in the VPA-DD) have been verified with regard to the appropriateness of the applied measurement/determination method, the correctness of the values applied for ER calculation, the accuracy, and applied QA/QC measures.

The monitoring is in accordance with the applied methodology and has been carried out in accordance with monitoring plan contained in VPA-DD. Detailed description regarding each parameter has been elaborated in the further sections of this report.

Therefore, VVB is of the opinion that the monitoring plan mentioned is in line with the applied methodology "METHODOLOGY FOR EMISSION REDUCTIONS FROM SAFE DRINKING WATER SUPPLY", Version, 1.0. The monitoring mechanism is also in line with the methodology and is effective & reliable. No deviation, correction or permanent change to the monitoring plan has been requested or observed.

3.4 Completeness of Monitoring

The monitoring has been carried out in accordance with the monitoring plan contained in the VPA-DD/2/. During the course of verification, all relevant monitoring parameters have been verified with regard to the appropriateness of the applied measurement/ determination method and applied QA/QC procedures. It is confirmed that the monitoring parameters have been measured / determined without material misstatements**.**

The VVB reviewed the actual implementation of monitoring during the on-site inspection, which was also cross checked from the relevant supporting document review and compared it against the requirements of the monitoring plan in the GS4GG VPA-DD. It was found to be line with the requirements as mentioned in the para 6.10 of the GS4GG Programme of Activity Requirements and Procedures v 2.1.

The VVB assessed the monitoring techniques and each monitoring value in the monitoring report; and provided a short summary on the verification of every parameter listed in the monitoring plan and used for calculation of emission reductions.

a. Data and parameters fixed ex ante or at renewable of crediting period

S. No.	Ex-ante Parameter and unit	Description	Values Applied	VVB Assessment
1.	SDWS 2: Project technology description	The detailed description of the project technology shall include as a minimum: - Manufacturer name, - product name (if	The project HWT technologies unit's Description has been correctly added under	HWT technology sources such as manufacturer's technical specifications /17/, Third-party certifications (NABL-certified lab)/11/ and the actual HWT units photographs/17/ was

		applicable), - technology type, - capacity characteristics, - Any performance certifications from National/international Standards body or certification body recognized by national standards body also shall be provided.	the section D of MR.	submitted by the CME and cross-checked by VVB during the on-site inspection and Information was found to be consistent with one provided under the section A.3 of the MR[/1/].
2.	SDWS 4 Regulatory framework for safe drinking water supply	Description of referenced safe water national policies and guidelines in India.	Water quality of the treated water with Project Water Filter is in line with the national drinking water standard of India: 0 CFU E.coli/100ml (IS 10500: 2012)[6]	VVB checked the website of ministry of Jal Shakti, Government of India (Policies | Department of Water Resources, River Development and Ganga Rejuvenation | India (jalshakti-dowr.gov.in). which mentioned multiple policies one of which is national water policy, 2012 which asks for framework to be established for water to everyone. Moreover, VVB noted that this or any other policy/regulation does not mandates or contradicts the VPA implementation. The same ministry has one more mission, "Jal Jeevan mission", - https://jaljeevanmission.gov.in/ which is envisioned to provide safe and adequate drinking water through individual household tap connections by 2024 to all

[6] https://cpcb.nic.in/wqm/BIS_Drinking_Water_Specification.pdf

				households in rural India. VVB during on-site visit have observed and confirmed that the project area does not have individual household tap connections.
3.	SDWS 5 Water sources in the project boundary	The water source in the project boundary and whether they are used for drinking water, and their classification as improved and unimproved water source	Unprotected well, Un-protected spring, surface water and handpump	CME has conducted baseline survey of more than 200 households during February and March, 2023. And the baseline survey results showed that 94.07% of water sources are unimproved sources like unprotected (open) well, spring/stream etc and 5.93% of water sources are improved one i .e. handpump. VVB during on-site interviews and visits have checked water sources for randomly selected end users and all of them were found to be using unimproved sources with either open well or running stream being used for water collection.
4.	SDWS 6 Stove technologies technologies used in the project boundary. (Relevant SDG: 13)	Type of methods utilized by users to boil water in baseline	94.06% Three-stone fire or a conventional system for woody biomass lacking improved combustion air supply mechanism and flue gas ventilation system	CME has conducted baseline survey of more than 200 households during February and March ,2023. The survey results showed 100% of the interviewed users are dependent on traditional three stone stove for clean water through boiling water. VVB during on-site interviews and visits have checked and confirmed the same. The most recent study by

			5.94% fossil fuel combusting systems	Council on Energy, Environment and Water (CEEW) titled – "State of Clean Cooking Energy Access in India" mentions that rural areas in Madhya Pradesh reply on firewood as the fuel for their daily needs though Liquified Petroleum Gas (LPG) is being promoted through government for clean cooking. The detailed assessment about non-use of LPG as a major fuel is already being discussed in the PDD. CME has demonstrated the same in PDD section B.6.2. Hence, on a conservative measure, CME has chosen that 94.06% use basic cookstove i. e. traditional three stone stove and 5.94% are using LPG based stoves i. e. fossil fuel combustion system. Neither the baseline survey not on-site visit has found use of any other fuel within the sampled households. Hence this is found appropriate.
5.	SDWS 7 Expected technical life of project technology. (Relevant SDG: 13)	The expected technical life of an individual project technology shall be defined in the MR.	15 years	The expected life time of project technology i.e. Household water treatment (HWT) units is 15 years and incorporating membrane's life up-to 10,000 litres. VVB verified sources such as manufacturer's technical specifications /17/ and the actual HWT

				unit photographs/17/ were submitted by the CME and cross-checked by interviews with CME's representatives during the on-site inspection. Therefore, Information was found to be consistent with the under section A.3 of the MR/1/.
6.	SDWS 8 Percentage of fuel f use in target population. (Relevant SDG: 3, 12, 13)	Percentage of different cooking fuel used by users (Household, school, Institution) etc.	Traditional Stove – Firewood - 94.06% LPG - 5.94%	CME has conducted baseline survey of more than 200 households during February and March, 2023. The survey established that 100% of users are using fuel wood for boiling the water. This was cross checked and confirmed during on-site visit by VVB. As per the methodology, baseline survey is one of the source of data and CME has cross checked the same against government data[7] which provides % user dependent on fuel wood in the project area as 94.8%. This official government publication is more than 5 years old but provides conservative value. However, as discussed in the PDD, the most recent study by Council on Energy, Environment and Water (CEEW) titled – "State of Clean Cooking Energy Access in India" mentions that rural areas in Madhya Pradesh reply on firewood as the fuel for their daily

[7] https://mp.census.gov.in/hindi/pdf/census2011/HLO%20report.pdf#page=369

				needs though Liquified Petroleum Gas (LPG) is being promoted through government for clean cooking. The detailed assessment about non-use of LPG as a major fuel is already being discussed in the PDD. CME has demonstrated the same in PDD section B.6.2. Hence, on a conservative measure, CME has chosen that 94.06% use basic cookstove i. e. traditional three stone stove and 5.94% are using LPG based stoves i. e. fossil fuel combustion system. Neither the baseline survey not on-site visit has found use of any other fuel within the sampled households. Hence this is found appropriate.
7.	SDWS 9: $EF_{b,f,CO2}$ tCO_2/TJ. (Relevant SDG: 13)	CO_2 emission factor of baseline fuel used to boil the water for drinking purposes.	Wood: 112 tCO_2	CME has chosen value of CO_2e emission factor from use of fuel i. e. Wood (Use of mostly wood fuel in baseline confirmed from conducted baseline survey from February and March, 2023) as per the applied methodology as 112 tCO_2/TJ which is also cross-checked with IPCC[8] default value of emission factor for wood fuel and confirmed by VVB. For LPG the value used is 63.1 tCO_2/TJ as per the literature review.

[8] https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_2_Ch2_Stationary_Combustion.pdf

8.	SDWS 10: $EF_{b,f,nonCO2}$ tCO_2/TJ. (Relevant SDG: 13).	Non-CO_2 emission factor from use of fuels, in case the baseline fuel is biomass or charcoal	AR5 GWP Wood: 9.46 tCO_2e/TJ	CME has chosen value of non- CO_2e emission factor from use of fuel i. e. Wood (Use of mostly wood fuel in baseline confirmed from conducted baseline survey from February and March, 2023) as per the applied methodology as 9.46 tCO_2/TJ as per AR5 GWP which is checked and confirmed. For LPG, the value would be 0 tCO_2/TJ
9.	SDWS 11: η_{wb} Percentage. (Relevant SDG: 13)	Calculating weighted average water boiling efficiency by using different types of baseline devices.	Three-stone fired - 10% Gas Stove – 57%	VVB has noted during on-site visit that in the baseline, conventional three Stone stoves are being used which is also confirmed from baseline survey results. Hence as per the applied methodology, CME has chosen default value of efficiency as 10% which is for Three-stone fire or a conventional system for Woody biomass lacking improved combustion air supply mechanism and flue gas ventilation system, that is without either a grate or a chimney is found acceptable. For LPG, the efficiency is considered through literature review - https://www.ceew.in/sites/default/files/CEEW-Roadmap-for-Access-to-Clean-Cooking-Energy-in-India-Report-31Oct19-min.pdf and value is

				established as 57% which is found appropriate.
10.	SDWS 12: C_b Percentage. (Relevant SDG: 1, 6 & 13)	Proportion of users who are already using safe drinking water by using improved water source or other method without boiling.	0%	CME has conducted baseline survey of more than 200 households during February and March ,2023. The survey established that Improved sources (Borehole or tubewell and Piped water (borehole or tubewell) are 5.93% (5.56%+0.37%). 31.25% of households with improved sources boil their water which means 31.25% out of 5.93% of improved sources are actually safe for drinking. Additionally, 2.22% households used some other treatment method (not boiling) to make water safe for drinking. This was cross checked and confirmed by VVB during on-site visits and interviews. Hence, value of 2.22 % is acceptable.
11.	SDWS 13: q_i Liters per hour. (Relevant SDG: 13)	Not Applicable (Manufacturer Specifications)	6 Litres /hour	CME has considered value of the Capacity of the household water treatment technology as 06 litres which is based on technical specifications/17/ of water filter provided buy manufacturer. VVB has checked the same with submitted technical datasheet/17/ and thus, VVB found it as acceptable.
12.	SDWS 21: $f_{NRB,f,y}$	Determining fraction of non-	89.2 %	The value of fNRB is calculated using the Tool

	Percentage (Relevant SDG: 13)	renewable woody biomass in year, y and fix-it of throughout the crediting period by using CDM Tool 30, Version 04.0.		30: Calculation of the fraction of non-renewable biomass of CDM, version 4.0. The detailed calculation of the approach has been assessed by the VVB through a fNRB calculation excel sheet[/13/]. The formulas and approach used by the CME is found to be appropriate and in line with the applied methodology and Tool 30. Hence, acceptable.
13.	SDWS 24: QPW_p Volume of drinking water L/person/day. (Relevant SDG: 13)	Not Applicable (Methodology Default)	4	This parameter describes the quantity of volume of drinking water per person per day in premises, type p. This has been assessed by VVB against, option 1 (default value per person) of applied methodology Emission reduction from safe drinking water supply, version 1.0, for monitoring parameter, "QPW_p". Since, CME has chosen the option 1: default value of QPWp and not the option 2: Water consumption field test. Hence, no sampling is required. Thus, CME considers default value of 4 L/person/day consumed in the premises. Since, the approach is in line with the applied methodology default, therefore acceptable to VVB.

14.	SDWS 30: $t_{p,y}$ Usage time of project technology by each premises. (Relevant SDG: 13)	Annually	5 hours	CME has chosen value of usage time of project technology by each premises as per the applied methodology default as 5 hours which is also cross checked with during interview with HWT unit's beneficiaries and thus found acceptable.

The values of ex-ante fixed parameters have been verified from the VPA-DD/2/. The VVB confirms that the values used/applied as per the given sources are correct and justified. Also, the ex-ante values have been correctly applied in the calculation of emission reductions.

During the verification all monitoring parameters listed in Section D of MR were compared with monitoring parameters and the monitoring plan of the VPA-DD and have been verified with regard to the:

- appropriateness of the applied measurement / determination method,
- the correctness of the values applied for ER calculation,
- the accuracy, and applied QA/QC measures.

b. Data and parameters monitored

Sr. No.	Ex-post Parameter	Monitoring frequency	Values Applied	VVB Assessment
1.	SDWS 18 : $M_{q,y}$ (Fraction).	Annual	100 %	With reference to VPA-DD, Ongoing water quality indicated as the fraction of samples that pass microbial quality standard requirements specified in relevant microbial quality standard for drinking water of the host country. Thus, CME has selected total 129 samples which is tested by a third-party testing agency (Excellent Bio Solution Research Private. Ltd/11/) a microbiology laboratory affiliated with "National Accreditation Board for Testing and Calibration Laboratories" (NABL) to test the water quality. As per applied methodology, 1st sampling has been conducted at least 6 months after the start date Re. CME has submitted test report

				which confirms that the test was conducted from 22/11/2023 to 19/12/2023 during current monitoring period i.e., from 11/05/2023 to 31/01/2024. CME has submitted the test report which has employed national standard method - IS 15185:2016 RA 2021 for E-coli measurement, IS 5401 (Part 1):2012 RA 2022 for total coliform count and IS 5402:2012 RA 2018 for Aerobic Microbial Count which has been checked by the VVB and found acceptable.
2.	SDWS 19: Number of Water Filter. (Relevant SDG: 01)	Annually	2,010 No's	This parameter describes the number of the efficient and quality HWT units (water – filters) distributed under the current project activity. In this VPA, a total of 2,010 HWT units has been distributed to the households, which was confirmed by VVB against the submitted Project Database/03/, monitoring survey/22/, and also from the interviews with monitoring personnel's during the on-site visit & observations.
3.	SDWS 19: Percent of household reporting reduction in smoke. (Relevant SDG: 03)	Annually	100 %	As the VPA deployed the Household Water Treatment technologies by replacing the traditional method used for boiling water (three-stone stoves along with woody biomass). Thereby, reducing the indoor air pollution and emissions. This parameter describes percentage of HWT units users perceiving health conditions improved after using HWT units. This has been calculated by the CME in project scenario, which has been reflected in the monitoring surveys conducted on 22/11/2023 to 19/12/2023/22/, results of which were cross checked by VVB. It was also confirmed during the on-site visit and interviews by the end users that there was a significant reduction in the Indoor Air Pollution (IAP) levels, which was found to be consistent with the survey results/22

4.	SDWS 19: No of awareness program & trainings. (Relevant SDG: 08)	Annually	2 No's	This parameter describes the Number of training's/ awareness programs organized during current monitoring period. Same has been cross checked against the submitted Training/campaign records/15/, such as photographic evidences. This was also confirmed during on-site inspection by VVB and was found to be correct.
5.	SDWS 19: % of household having reduction in time spent on collecting wood fuel and water boiling. (Relevant SDG: 05)	Annually	100 %	This parameter describes the time saved from collection of fuel wood and boiling water due to the use of HWT units. This has been calculated by the CME in project scenario, which has been reflected in the Monitoring Surveys conducted on 22/11/2023 to 19/12/2023/22/ & their results were also cross checked by VVB. Further, It was confirmed during on-site inspection by the end users that there was a significant reduction in time took for collection of fuelwood & cooking, for which women played a major part. Same was found to be consistent with the survey results.
6.	SDWS 19: Number of persons have access to basic service through the distribution/installation of HWT Units. (Relevant SDG: 06)	Annually	9,668 No's	CME has conducted monitoring survey/22/ from 22/11/2023 to 19/12/2023, and based on quantitative information segregated from the survey and their results established that 9,668 of users have access to improved source of drinking water. This was also cross checked and confirmed during on-site visit interviews and cross checking of maintained field records by the monitoring personnels by GS4GG VVB.
7.	SDWS 19: Number of HWT unit's (Water Filter) operation under the	Annually	2,010 No's	This parameter describes the Number of the operational HWT units distributed under the current VPA. In this VPA, a total of 2,010 HWT units has been distributed to the households, which was confirmed by VVB against the

	current VPA and providing access to basic service in the household. (Relevant SDG: 07)			submitted Project Database/03/ /Monitoring survey/22/ which was conducted during 22/11/2023 to 19/12/2023, and also from the monitoring personnel during the on-site visit and interview's
8.	SDWS 19: Total number of jobs created. (Relevant SDG: 08)	Annually	23 Nos.[9]	This parameter describes the number of persons employed from 11/05/2023 to 31/01/2024 (during current monitoring period. Same has been cross checked against the submitted Employment records/15/ covering the monitoring period which comprises of the list of all employed people in this VPA working in project management, administration and distribution. Further, same was also confirmed during the on-site inspection & interviews by VVB from project representatives and was found to be correct.
9.	SDWS 19: Tonnes of renewable biomass saved (Relevant SDG: 12)	Annually	202.00 tonnes	This parameter describes Reduced fuelwood usage per household (Reduction in consumption of renewable biomass) due to the use of HWT units (water filters). This has been calculated by the CME in project scenario, which has been reflected under section E.1 of Monitoring Report/1/ and detailed calculation demonstrated under ER Spreadsheet/4/. Further, it was also confirmed during on-site interviews by the end users that there was a significant reduction in the fuelwood usage, which was found to be consistent with the monitoring survey/22/ results which were used as a 'reference' for the detailed calculation demonstrated under ER spreadsheet.

[9] Submitted evidences i. e. employment records have confirmed that 23 jobs were created in the 1st annual vintage period i. e. 2023 and same nos. were continued in the next year i. 2. 2024. No new job was created in year 2024

10.	SDWS 19: Tonnes of non-renewable biomass saved (Relevant SDG: 15)	Annually	1,782 tonnes	This parameter describes Reduced fuelwood usage per household due to the use of HWT units (Reduction in consumption of non-renewable biomass). This has been calculated by the CME in project scenario, which has been reflected section E.1 of Monitoring Report/1/ and detailed calculation demonstrated under ER Spreadsheet/4/. Further, it was also confirmed during on-site interviews by the end users that there was a significant reduction in the fuelwood usage, which was found to be consistent with the survey results/22/ which were used as a 'reference' for the detailed calculation demonstrated under ER spreadsheet/4/.
11.	SDWS 20: Water hygiene education campaigns	Annually	2	VVB observed that Water hygiene education campaigns are conducted during current monitoring period using JMP core questions for households, schools and health care facilities are available at https://washdata.org/monitoring/methods/core-questions In year 2023, two water hygiene education and hygiene campaigns have been conducted on 20/11/2023 at Village: Bhaluchuwa and on 21/11/2023 at Village: Parsel Kalan during the current monitoring period. The report of annual hygiene campaigns results has been submitted by CME which has been checked by the VVB and found that households where safe water is distributed full-full the water treatment requirement and all the project users have access to safe water because they have water purifiers. VVB has checked and found in-line with the applied methodology & found acceptable.

12.	SDWS 22: $X_{cleanboil,y}$ Proportion of HWT users, boiling safe water after installation of project technologies /switched back to baseline and start boiling water (Relevant SDG: 13)	Annually	0%	This parameter demonstrates proportion of end users who are still boiling safe water (treated water) after installation of HWT units into their premises. Parameters also covers users who switched back to baseline and start again boiling water for drinking purposes. Therefore, this has been calculated by the CME in project scenario, which has been reflected in the Monitoring/project Surveys conducted during 22/11/2023 to 19/12/2023/22/ & their results were also cross checked by VVB and found applied value acceptable. Further, it was confirmed during on-site inspection & interviews by the end users that, there was no any users are boiling water/switched back to baseline after installation HWT technologies in their premises. Same was found to be consistent with the survey results.
13.	SDWS 25: $HN_{p,y}$ Number individuals per premises /household. (Relevant SDG: 13)	Annually	4.81 Numbers	CME has conducted project survey (conducted together with usage survey) from 22/11/2023 to 19/12/2023. The quantitative average results of project survey established that 4.81 number of individuals are present in the households. This was cross checked and confirmed during on-site visit by VVB and interviews with HWT unit's users.
14.	SDWS 28: $N_{p,y}$ Number of premises where at-least one project technology is present.	Annually	2,010 Numbers	This parameter describes the Number of premises where at-least one HWT units distributed under the current VPA. In this VPA, a total of 2,010 HWT units has been distributed to the households, which was confirmed by VVB against the submitted Project Database/03/, Monitoring survey/22/ which were conducted during 22/11/2023 to 19/12/2023, and also from the monitoring personnel

	(Relevant SDG: 1, 5, 6 & 13)			during the on-site visit and interview's & confirmed that only one HWT unit is distributed per premises, thus total 2,010 premises have been served under current VPA
15.	SDWS 29: $U_{p,y}$ Usage rate of project technology by premises, p (Relevant SDG: 13)	Annually	100 %	This parameter describes usage rate of project technology in premises p during year y. CME has chosen, option 1 (in person surveys of project premises) for parameter Up,y as per applied methodology. Therefore, the monitoring/usage survey/22/ has been conducted from 22/11/2023 to 19/12/2023 and found that usage rate is 100% which were conducted as per usage survey guidelines provided in Annex -1 of the applied methodology/4/ during current monitoring period i.e., from 11/05/2023 to 31/01/2024. Usage rate also been verified and confirmed on sample basis during on-site visit by VVB and interviews with HWT unit's users and found that all users having water filters are using the technologies. Thus, applied valued found acceptable.
16.	SDWS 31: $DP_{p,y}$ Average number of days project technology present in user's premises (Relevant SDG: 12 7 13)	Annually	365 days	This parameter describes the Number of Average days the project technology is present for end-users in the premises p in year y. This has been confirmed from project distribution data base and onsite interviews of HWT unit's user's/stakeholders and thus, applied value 365 days found acceptable.

17.	SDWS 32: $DN_{p,y}$ Average number of individual project technologies present in premises p, in year y (Relevant SDG: 12, 13)	NA	1	This parameter describes average number of individual project technologies present in per premises. As project technology only distributed in households, and only single unit is distributed to each premises which is cross checked and confirmed from submitted HWT distribution records. Further, same was also confirmed by the local stakeholders/users during the on-site inspection and interviews.

The VVB confirms that;

a) The monitoring plan implemented is in line with monitoring plan as included in the MR.
b) The monitoring complies with the requirement of the applied methodology[/6/].
c) The information inflow (from data generation, aggregation, to recording, calculation and reporting) is included above under each parameter and confirms to the requirement of the latest version of Monitoring report[/1/].
d) The values included in the monitoring report and corresponding emission reduction sheets are verified, cross checked and included under each monitoring parameter, wherever appropriate.
e) The findings relevant to each parameter, wherever appropriate are discussed in detail in Appendix 1 of this report.

In summary, the VVB confirms that all the ex-post parameters are monitored in accordance with the monitoring plan as checked during the on-site inspection and applied GS4GG methodology.

Therefore, in VVB's opinion, the adequacy and compliance of the monitoring plan in the Monitoring report was found as per the requirements laid by the monitoring methodology and the VPA-DD[/1/]. The information flow (from data generation, aggregation, to recording, calculation and reporting) is already included under respective parameter above.

In summary, the VVB confirms that all the ex-post parameters are monitored in accordance with the approved monitoring plan and applied methodology.

c. Implementation of Sampling Plan

Due to the extensive distribution of HWT units as a part of this VPA, monitoring of each unit is not economically feasible. Therefore, by CME a simple random sampling approach has been implemented as part of an instance-wide Sampling Plan, aligning with the guidelines outlined in

the document "Sampling and surveys for CDM project activities and programme of activities," version 04.0.
Applus+ team carried out the random sampling from the CME's sample records and checked (using its professional judgment) the acceptability of the data for each record in the CME's sample records. The VVB has determined acceptance sample size based on the "Table 2, Survey and data collection methods and preference for use" of standard "Sampling and surveys for CDM project activities and programmes of activities" version 09.0[/7/].

The primary objective of the Sampling Plan is to achieve an unbiased and reliable estimate of the proportion or mean value of key variables throughout the crediting period. According to the Standard for "Sampling and Surveys for CDM Project Activities and Programme of Activities," Version 4.0 and as per section 4.2 of applied GS methodology "METHODOLOGY FOR EMISSION REDUCTIONS FROM SAFE DRINKING WATER SUPPLY", Version 1.0 stipulates the adoption of a 90/10 confidence/precision level for current project activity which has been chosen by CME.

As per para 28, Standard: Sampling and surveys for CDM project activities and programmes of activities version 9.0, VVB has applied acceptance sampling, to review the data collection and appropriateness of monitoring plan.

As per para 39 of "Standard for Sampling and surveys for CDM project activities and programmes of activities, Version 9.0," *A DOE may select a different sample size than the one indicated in paragraph 32, either by choosing a different value for the consumer risk and producer risk (e.g. 20% for the consumer risk) when applying acceptance sampling or by using another approach, if any of the following conditions apply:*

a) The estimated volume of annual emission reductions of the project activity or the PoA being verified is equal to or less than 100,000 tCO_2e.
b) The security conditions in the project region prevents inspection of many samples (e.g., conflict zones); or
c) The project activity or the PoA is in a least developed country or a host Party with 10 or fewer registered CDM project activities at the end of the monitoring period being verified.

Surveys:

The field surveys were conducted randomly using the standard questionnaire. The "Random" function of MS Excel was used to generate random numbers for each HWT unit's serial number from the database. The numbers generated were then sorted from lowest to highest and the sequence of first 129 households were used to conduct the survey in the field. Selected households were incorporated under "Monitoring Survey" tab of the submitted excel file of Actual ER calculations. Also, CME has described the sampling method in Section D.4 of the monitoring report. VVB confirms that the size of sample and number of surveys are consistent with the monitoring plan and the Standard.

VVB Sampling:

As the CME has applied VPA level sampling approach and same samples for all the monitoring parameters, hence the VVB applied the acceptance sampling in accordance with the paragraph 28-33 of the "Standard: Sampling and surveys for CDM project activities and programme of activities, version 09". The VVB carried out the random sampling from the CME's sample records and checked (using its professional judgment) the acceptability of the data for each record in the CME's sample records. The VVB has determined acceptance sample size based on the "Table 2. Sample size and acceptance number based on AQL, UQL, and producer and consumer risks" of standard "Sampling and surveys for CDM project activities and programme of activities" version 09.0.

During the on-site inspection of households (physical site visits), a random sampling approach had been used by the VVB to verify the reported values for the monitored parameters MR which are determined through sample survey by CME.

For the determination of VVB's acceptance sample size, VVB has selected the following using its professional judgment in accordance with the para 29 (a) and 30 (a) and (b) of the Standard Sampling and surveys for CDM project activities and programmes of activities Version 09.0. Thus, in order to determine the sample size, the VVB has selected following using its own professional judgement:

1. Acceptable quality level (AQL) - 0.5%
2. Unacceptable Quality Level (UQL) - 20%
3. Producer risk -10%
4. Consumer risk -15%

VVB has determined acceptance sample size for all the sample survey parameters in accordance with para 39, Table 2 Sample size and acceptance number based on AQL, UQL, and producer and consumer risks" of standard "Sampling and surveys for CDM project activity and programme of activities" version 09.0. From the above factors, the VVB determined the minimum sample size (n) as 08 and acceptance number (c) as 0. The sample size used to verify the reported values for the monitored parameters which are determined through sample survey by CME. The VVB has interviewed the HWT units users and filled the VVB survey form to check the acceptability of the data for each record in the CME's sample records/22/. The actual number of sample size where the acceptance survey was done given below:

Parameters	Total Population	CME's sample size	VVB's sample size	Sampling method used
Monitoring parameters as per section E.2 of the MR	Total households using Household Water Treatment (HWT) unit's : 2,010	129	9	Acceptance Sampling based on random selection of households.

Using acceptance sampling approach, VVB checked the CME's samples results (reported in the Monitoring forms & the results of the same) along with the following evidences:

- Physical site visit/ inspection/interviews with the concerned HWT unit's users.
- CME household project database.
- Water Quality Testing from the authorised third-party body (NABL authorised lab).

Following the requirement of the paragraph 28 of Standard *"Sampling and surveys for CDM project activities and programmes of activities" version 09.0*, the acceptability of data in the random sample chosen from the CME's sample records was determined. Based on the number of records where there was agreement, it was determined whether the CME's sample records meet the requirements. The acceptability of the data was based on the VVB's professional judgement in line with the para 28 of the Sampling Standard.

Thus, in VVB's opinion, it could be concluded that objective evidence collection, data generation and recording analysis also considered the views obtained in these interviews and were found to be satisfactory.

d. Compliance with the calibration frequency requirements for measuring instruments

Not Applicable as there are no measuring instruments used for this VPA during the monitoring period.

3.5 SDG Outcomes Monitoring

For Contributions to Sustainable Development

The VVB checked the sustainable development indicator parameters during the on-site inspection.

In summary, it is Applus+ Certification's opinion that the monitoring of SDG parameters is in line with the applicable requirements of the GS4GG guideline.

As per sustainability monitoring plan as reflected in the submitted latest version of MR[1], VVB has evaluated all sustainable development indicators which is as detailed below:

SDG	SDG Impact	Baseline estimate	Project estimate	Net benefit
13	Climate Action: (tCO_2e) Reduction in GHGs emissions	3,155	0	3,155
1	No Poverty: Number of Econeer water filter distributed/operational under the project	0	2,010	2,010
3	Good health and wellbeing: (%) of Household reporting reduction in smoke/PM emissions after they start using the water filter in project scenario	0%	100%	100%
4	Quality Education: Number of training programs/awareness program.	0	2	2
5	Gender Equality: (%) users reporting time saving due to reduction in collected fuel consumption / Water boiling time reduction due to VPA implementation	0%	100%	100%
6	Clean Water and Sanitation: Number of populations have access to improved source of water	0	9,668	9,668
7	Affordable and clean energy: (Number) Number of people/households with access to basic service provided by the distributed project Household Water Treatment Unit's	0	2, 010	2,010
8	Decent work and economic growth: (number) Increased employment opportunities	0	23	23
12	Responsible consumption and production: (tonnes) Reduction in domestic fuel consumption	0	202	202
15	Progress towards sustainable forest management Reduction in consumption of non-renewable biomass.	0	1,676	1,676

Comparison of actual value of outcomes with estimates in VPA-DD:

SDG's	Values estimated in ex ante calculation of VPA-DD for this monitoring period	Actual values achieved during this monitoring period
13: Climate Action: (tCO_2e) Reduction in GHGs emissions	4,186 tCO_2e	3,155 tCO_2e
1: No Poverty: Number of Econeer water filter distributed/operational under the project	2,010 No's	2,010 No's
3: Good health and wellbeing: (%) Perceived health conditions improved by the HWT unit users	100%	100 %
4: Quality Education: Number of training programs/awareness program.	1 No	2 No's
5: Gender Equality: (%) users reporting time saving due to reduction in collected fuel consumption / Water boiling time reduction due to VPA implementation	100%	100 %
6: Clean Water and Sanitation: Number of populations have access to improved source of water	9,668 No's	9,668 No's
7: Affordable and clean energy: (Number) Number of people/households with access to basic service provided by the distributed project Household Water Treatment Unit's	2,010 No's	2,010 No's
8: Decent work and economic growth: (number) Increased employment opportunities	4 No's	23 No's

12: Responsible consumption and production: (tonnes) Reduction in domestic fuel consumption	268 tonnes	202 tonnes
15: Life on land (tonnes) Reduction in consumption of non-renewable biomass	2,225 tonnes	16,76 tonnes

The adequacy and compliance of the monitoring plan in the Monitoring report was found as per the requirements laid by the GS4GG VPA-DD/2/. The information flow (from data generation, aggregation, to recording, calculation and reporting) is already included under respective parameter above. The VVB has verified all the relevant data and corresponding supporting evidence as per the required monitoring frequency and found to be correct and appropriate meeting the requirements of the applied GS4GG methodology/6/ and VPA-DD.

During on-site visits, VVB has checked and confirmed that distributed water filters have a barcode printed along with the sr. no. which is mentioned on the water filter. This barcode when scanned provides the unique serial number for the particular unit and matches with the no. mentioned on the water filter. The cross check against the project database with these serial numbers further confirmed, this ensures that no double counting will occur. Moreover, PP has submitted declaration for no double counting dated 21/03/2024. PP also confirms that VPA/PoA is not registered under VCS (VERRA), CDM (https://cdm.unfccc.int/Projects/projsearch.html) and other registries. Verification team checked the available public information and confirms that VPA/PoA are not registered under other registry.

VVB confirmed during on-site inspection and checked against the grievance book /14/ maintained for the current monitoring period, no comments/feedbacks were received from the local stakeholders except for regular maintenance issues. The water purifier distributed in this project have a unique number, and during use, due to the quality of the water purifier itself, the project owner is responsible for the replacement of parts and other alternative materials to maintain the normal use of the water purifier. The maintenance situation in this monitoring period such as parts replacement were carried out smoothly, without affecting the normal use of the water purifier

Therefore, it is Applus+ Certification's opinion that the monitoring plan is successfully complied with the one mentioned in the latest version of MR/1/ and as far as SDG monitoring is concerned, same is also in line with the requirement of the GS4GG guidelines/7/.

3.6 Assessment of Data and Calculation of Greenhouse Gas Emission Reductions

a) As a result of verification of the ER calculation, the VVB confirms that all the parameters required for the determination of the emission reductions have been included in both initial Monitoring report Version 01.0/1/ & the final Monitoring report Version 02.0/1/ and corresponding ER calculation spreadsheets/4/ are consistent with the applied methodology, "Methodology Emission Reduction from safe drinking water supply", version 1.0 and the monitoring plan contained in the VPA-DD/2/. The relevant parameters are found to be complete in this monitoring period.

After cross-verifying the reported figures with the raw data sources, it could be confirmed that the values of parameters from the raw data sources are consistent with those quoted in the latest version of the Monitoring Report Version 02.0 and corresponding ER calculation spreadsheet.

In accordance with the para 3.6.3 of the applied GS4GG methodology, Emission reductions from safe drinking water supply", version 1.0, the GHG baseline emissions reduction achieved by the VPA in year y shall be calculated as follows:

$$BE_y = EF_b \times (1 - C_b - X_{cleanboil,y}) \times Q_y \times M_{q,\,y}$$

With reference to para 3.6.8 of applied methodology, method 2 has been applied for the calculation for volume of drinking water per premises per day. As current project included only household for distribution of safe drinking water technologies. **Thus, calculation for HWT Technologies are as follows:**

$QPWhh,,$ = min $((qi \times tp,y \times DNp,y), (QPWp \times HNp,y))$
= min ((6 x 5 x 1), (4 x 4.81)) = min (30, 19.24) = 19.24 L/day

Value applied

Parameter	Description	Value	Unit
q_i	Capacity of the HWT or IWT individual project technology (L/h)	6	L/h
tp,y	Usage time of the project technology by premises type p in year y (h/day)	5	h/day
DN_p,y	Average number of individual project technologies in each project premises type p in year y	1	Number of filter/ premises
HN_p,y	Number of individuals per premises type p (e.g. household, school) in year y	4.81	Number of person/premises

QPW_p	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.	4	L/day
η_{wb} - TSF	Efficiency of the stoves for baseline water boiling (%). Weighted average of baseline stove types.	10	%
η_{wb} - LPG	Efficiency of the LPG	57	%

With reference to para 3.6.7 of applied methodology, method 2 has been applied for the calculation for Quantity of Safe drinking water provided by the project in year. As current project included only household for distribution of safe drinking water technologies. **Thus, calculation for HWT Technologies are as follows:**

Quantity of safe drinking water provided by the project Qy is determined as follows:

$$Q_y = \sum_p N_{p,y} \times U_{p.y} \times QPW_{hh,p,y} \times DP_{p,y}$$

Hence, Total Quantity of water in Liter during current monitoring period (Q_y) from 11/05/2023 to 31/01/2024.

Year	Period	Value	Unit
2023	11-05-2023 to 31-12-2023	7,442,089	Liters

Value applied:

Parameter	Description	Value	Unit
N_p,y	Number of premises type *p* with at least one project technology in year *y*	2,010	Number
U_p,y	Usage rate of the project technology by premises type *p* during year *y*	100	%
QPW_{hh},p,y	Volume of drinking water per premises *p* per day in year *y*	20	L/day

DP_p,y	Days the project technology is present for end-users in the premises *p* in year *y*	266	Days

Further, as per para 3.6.2 of applied methodology, specific energy required to boil water using baseline technology ($SE_{w,b,y}$) is determined are as follows:

For traditional stove:
$SE_{w,,}$ = 360.83/η_{wb} = 360.83/10% = 3,608.3 kJ/L

For LPG stove:
$SE_{w,,}$ = 360.83/η_{wb} = 360.83/57% = 633.04 kJ/L

Further, in-line with para 3.6.1 of applied methodology, baseline emission factor shall be calculated are as follows:

$$EF_b = SE_{w,b,y} \times \sum_f x_f \times \left(EF_{b,f,co2} \times f_{NRB,f,y} + EF_{b,f,nonco2}\right) \div 10^9$$

= 3,608.3 x (94.06% x (112 x 89.2% + 9.46)) ÷ 10^9 + 633.04 x (5.94% x (63.1 + 0)) ÷ 10^9
= 3,608.3 x (94.06% x (99.904 + 9.46)) ÷ 10^9 + 633.04 x (5.94% x (63.1)) ÷ 10^9
= 3,608.3 x (94.06% x 109.364) ÷ 10^9 + 633.04 x (5.94% x 63.1) ÷ 10^9
= 37.3 x 10^{-5} tCO_2e/L

Value applied:

Parameter	Description	Value	Unit
$SE_{w,b,y}$	Specific energy required to boil water	3608.3	kJ/L
xf - TSF	Proportion of fuel *f* used in the baseline (fraction determined based on an energy basis)	94.06	%
xf - LPG	Proportion of fuel *f* used in the baseline (fraction determined based on an energy basis)	5.94	%
$EF_{b,f,CO2}$	CO_2 emission factor from use of fuel *f*	112	tCO_2/TJ
$EF_{b,f,CO2}$ - LPG	CO_2 emission factor from use of fuel *f*	63.1	tCO_2/TJ
$EF_{b,f,nonCO2}$	Non-CO_2 emission factor arising from use of fuel *f*, when the baseline fuel *f* is biomass or charcoal. This parameter is omitted when *f* is a fossil fuel.	9.46	tCO_2/TJ
$f_{NRB,f,y}$	Fractional non-renewability status of woody biomass fuel during year *y* (fraction). For biomass, it is the fraction of woody biomass that can be established as non-renewable. This parameter is omitted when *f* is a fossil fuel.	89.2	%

Then-after, with reference to para 3.6.3 of applied methodology baseline emissions are calculated as follows:

$BE_y = EF_b \times (1 - C_b - X_{cleanboil,}) \times Q_y \times M_{q,}$
= 37.3 x 10^{-5} x (1–2.22%-0%) x 7,442,089 x 1
= 2,718 tCO_2e (rounded down value) (for year 2023)

Value applied:

Parameter	Description	Value applied for 2023	Value applied for 2024	Unit
EF_b	Emission factor for the use of fuel to obtain safe water in the baseline	37.3 x 10^{-5}	37.3 x 10^{-5}	tCO_2e/L
C_b	Proportion of project end-users who in the baseline were already using a safe water supply that did not require boiling	2.22	2.22	%
$Xcleanboil,y$	Proportion of project end-users that boil safe water in the project year *y*	0	0	%
Q_y	Quantity of safe drinking water provided by the project in year *y*	7,442,089	1,198,844	L
M_q,y	Modifier for the water quality in year *y*	1	1	(fraction)

Project Emissions:

As per para 3.7.1 of applied methodology Project emissions may result from the operation of new low-emission water treatment technologies, Project emissions (PEy) shall be calculated as follows:

$PE_y = PE_{ff,p,y} + PEec,p,y$

Where:
PE_y = Project emissions in year y (tCO_2e)
$PE_{ff,,}$ = Project emissions from fossil fuel use in year y (tCO_2)

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

As the demonstrated under VPA-DD, project not uses electricity or fossil fuel for operation and uses a zero-emission technology i.e., gravitational water filtering through hollow fibre filters are used.

Thus, the project emissions,
PE_y = 0 tCO_2e.

Leakage Emissions:

As per section B.6.1 of VPA-DD there is no use of non-renewable woody biomass in the project scenario. Thus, Leakage emission during current monitoring period is considered as ZERO.

Hence,
LE_y =0 tCO_2e

Further, with reference to para 3.9.1 of the applied methodology, the emission reductions are calculated as follows:
$ERy = BEy - PEy - LE$

= 2,718 tCO2e -0 tCO2e -0 tCO_2e
= 2,718 tCO_2e (For 2023)

For year 2024, the ER calculations presented were checked to confirm the emission reductions for year 2024 are 437 tCO_2e.

Thus, total emission reductions for the current monitoring period would be 3,155 tCO_2e.

Therefore, VVB confirms that data as taken from the applied methodology and calculation of emission reduction as reflected in the ex-post ER Calculation sheet/4/ are mentioned correctly and are in line with the monitoring plan as mentioned in the MR.

It can also be concluded by VVB that:

a) The complete data set for the monitoring parameters was available as mentioned in the monitoring plan in the corresponding VPA-DD for the duration of 11/05/2023 to 31/01/2024 (inclusive of both the days).
b) The cross checks were undertaken for all the parameters indicated in the respective sections and were found complying with the requirements of the monitoring plan of the corresponding VPA-DD (version 02.0)/2/.
c) Appropriate methods and formulae for calculating baseline emission, project emissions and leakage have been followed which are in accordance with the applied GS4GG methodology.
d) The claimed emission reductions are free from material errors, omissions or misstatements, with a reasonable level of assurance.

3.7 Management and Operational System

The responsibilities of data measurement, collection, verifying, archiving etc. have been clearly defined in the MR/1/ and consistent with the corresponding VPA-DD/2/. The same practice is followed and it is confirmed by the VVB during the on-site inspection. The data related to ER calculation as well as data monitoring, collection process etc. have been internally reviewed by the management of the Monitoring team regularly. The responsibility of each function is consistent with the monitoring plan in the VPA-DD/2/.

The information flow of each parameter has been verified by the assessment team via interviewing with responsible personnel.

It's verified during the on-site inspection, the monitoring procedure as well as the internal quality management and control procedures are stipulated in the VPA-DD. The monitoring personnel have been interviewed by the assessment team and it's confirmed that the monitoring plan is implemented as per the procedure. Also, the training records (training register and attendance

sheet conducted by CME to the beneficiaries)[15] has been checked by the assessment team and it is confirmed that the monitoring personnel are sufficiently trained to perform the monitoring.

All the data and documents, either hard copies or soft copies, will be kept for two years after the end of the last crediting period or the last issuance of GSVERs for this Project, whichever occurs later, as confirmed by the monitoring personnel.

4. REFERENCE

No.	Author	Title	References to the document	Provider
1.	CME	Monitoring Report (Initial)	Version 01.0, dated 12/02/2024	CME
		Monitoring Report (Final)	Version 4.0, dated 11/02/2025	
2.	CME	Initial VPA-DD	Version 1.0, dated 12/06/2023	CME
		Final VPA-DD	Version 4.0, dated 07/02/2025	
		Initial PoA-DD	Version 01.0, dated 05/06/2023	
		Final PoA-DD	Version 03.0 dated 20/09/2024	
3.	CME	CME Household Water Treatment (HWTs) - Distribution Database	-	CME
4.	CME	Ex-Post ER Sheet corresponding to monitoring report (Initial) Ex-Post ER Sheet corresponding to monitoring report (Final)	Version 01.0 Version 03.0	CME
5.	CME	GS4GG Sampling database by CME	Version 01.0	CME
6.	GS4GG	Methodology for Emission Reductions from Safe Drinking Water Supply CDM Tool 30: Calculation of the fraction of non-renewable biomass	Version 01.0 https://globalgoals.goldstandard.org/429-ee-sws-emission-reductions-from-safe-drinking-water-supply/ https://cdm.unfccc.int/methodologies	Public
7.	GS4GG	**GS4GG Activity Requirements:** • PROGRAMME OF ACTIVITY REQUIREMENTS • PRINCIPLES & REQUIREMENTS • COMMUNITY SERVICE ACTIVITY REQUIREMENTS	 Version 2.1 Version 1.2 Version 1.2	Other

		• VALIDATION/VERIFICATION BODY REQUIREMENTS • VALIDATION & VERIFICATION STANDARD • GS4GG Safeguarding Principles & Requirements • GHG Emissions Reduction & Sequestration Product Requirements • Sampling and surveys for CDM project activities and programmes of activities	Version 2.0 Version 1.0 Version 1.2 Version 2.3 version 09.0	
8.	CME	Sample copies of end user agreement between Beneficiaries & CME (with the project start date 11/05/2023)	-	CME
9.	CME	Carbon credit rights transfer Agreement signed between the CME and the beneficiaries	Dated 11/05/2023	CME
10.	CME	GS4GG Preliminary Review Request form	Dated 01/08/2023	CME
11.	CME	Water Quality Test (by third party NABL approved lab) – Ashwamedh Engineers and Consultants.	Dated 12/11/2023 to 19/12/2023	CME
12.	CME	KML file of the project implemented location	-	CME
13.	CME	fNRB calculation sheet	-	CME
14.	CME	Continuous Grievance Register	-	CME
15.	CME	• Training/Awareness programs conducted by CME for beneficiaries • Photographic Evidences of training & Awareness programs	Covering monitoring period 11/05/2023 to 31/01/2024	CME

		• Employment Records provided by CME (on sample basis)	Covering monitoring period 11/05/2023 to 31/01/2024	
16.	Excellent Bio Research Solutions Private Limited	Lab test reports of sources available in baseline	-	CME
17.	CME	Technical specifications of the Household Water Treatment Unit's (HWTs) including its design lifetime HWTs photographs	-	CME
18.	CME	• CME agreement with distribution agency- for distribution & maintenance of HWTs (EKIESL and AARANSH AGRO TECH) • Service Agreement between CME (EKIESL) and GHG Emission Reduction Technologies Private Limited.	Dated 12/04/2023 Dated 18/03/2023	CME
19.	CME	• ODA declaration for the Programme of Activity • ODA declaration for VPA-1(12220)	Dated 26/03/2024 Dated 31/05/2023	CME
20.	CME	Local stakeholder consultation report held at VPA level along including attendance sheet, invitation letters, feedback forms and minutes of meeting		CME
21.	CME	No Double counting declaration from CME that VPA is neither registered as GS or CDM project activities, included in another registered PoAs, nor the project activities that have been de-registered	Dated 21/03/2024	CME

22.	CME	• Monitoring/Usage/Project Survey sheets and the corresponding results and Monitoring Survey Forms • VVB monitoring survey form/Questionnaire • Baseline Survey sheets	Dated 22/11/2023 to 19/12/2023 - Dated 28/02/2023 to 04/03/2023	CME
23.	CME	Stakeholder Consultation Report	Dated 12/06/2023, Version 01.0	CME

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5. FINAL VERIFICATION STATEMENT

Applus+ Certification has been appointed by EKI Energy Services Limited to perform the first verification of the PoA titled "Global Household Water Treatment Technology dissemination project" & the corresponding VPA titled "GS12219 VPA-1 Water filter project in Dindori, Madhya Pradesh, India".

The management of EKI Energy Services Limited is responsible for the preparation of the GHG emissions data & reported GHG emissions reductions on the basis set out within the project's Monitoring Plan in the VPA-DD Version 2.0 and the applied GS4GG methodology Methodology for Emission Reductions from Safe Drinking Water Supply version 1.0.

Our verification approach was based on the requirements as defined in the Gold Standard for Global Goals (GS4GG). Our approach is rule-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. The VVB therefore confirms that:

- The VPA is operated as planned and described in the GS4GG VPA-DD version 02.0;
- The monitoring plan is as per the applied methodology;
- The monitoring in Monitoring Report is as per the corresponding GS4GG VPA-DD, Version 2.0 and the monitoring plan as described in the same;
- The development and maintenance of records and reporting procedures are in accordance with the registered monitoring plan;
- The GHG emission reductions are calculated without material misstatements.

In our opinion, the GHG emission reductions for PoA "Global Household Water Treatment Technology dissemination project" & the real case VPA titled "GS12219 VPA-1 Water filter project in Dindori, Madhya Pradesh, India" for the monitoring period 11/05/2023 to 31/01/2024 (Both days included) as reported in Monitoring Report prepared on the basis of the project's Monitoring Plan are fairly stated.

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Date: 12/02/2025

Lead Auditor/Technical Expert: Mr. Deepak Pundlik

Tech. Reviewer: Mr. Simon Shen

Approver *(Applus+ Certification VVB Technical Manager)*

Mr.Agustín Calle de Miguel

ASSESSMENT TEAM	
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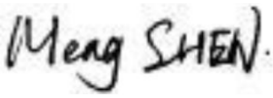
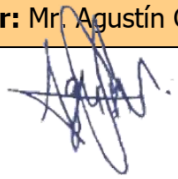
Signature: 	Signature: 
Approver: Mr. Agustín Calle de Miguel	
Signature: 	

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Appendix 1: Corrective Action Request/Clarification Request/Forward Action

Table 1: Clarification Requests (CL/CRs) from this verification:

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	01
Raised by:	VVB	Ref. to checklist in GS4GG FVeR:	-
Description of the audit finding		Date:	01/03/2024

Under KPI Table & section A of submitted Monitoring Report:

1. In KPI table, applied methodology observed to be inconsistent with mentioned as per GS project portal https://registry.goldstandard.org/projects/details/4212. Clarification required for observed inconsistency.
2. In KPI Table, KPI table, for "product requirements applied", check box observed to be un marked. Kindly clarify
3. In table 1, Claimed "SDG performance Indicator Number" observed to be missing for SDG 7, SDG 5, SDG 1, SDG 13, SDG 8, SDG 9, 12 and 15. Further, claimed SDG numbers under monitoring report observed to be inconsistent with VPA-DD, version 1.0. Kindly clarify
4. In section A.2, If geographical location associated with current VPA is only limited to Dindori, Madhya Pradesh why demonstration for complete host country India has been provided. Kindly clarify.

Project Participant's response	Date:	16/04/2024

1. The applied methodology has been corrected in the GSF Registry
2. Appropriate checkbox has been marked as checked
3. SDG indicators has been demarcated in the MR as per the VPA DD.
4. Geographical boundary has been revised in the MR as per real case VPA

Documentation provided as evidence by Project Participant

MR Version 02

Auditor's assessment comment	Date:	12/05/2024

Under KPI Table & section A of submitted Monitoring Report version 2.0;

1. The nomenclature of the applied methodology i.e. METHODOLOGY FOR EMISSION REDUCTIONS FROM SAFE DRINKING WATER SUPPLY, Version: 1.0 has now been rectified from the CME's end on the GS4GG project portal, which is now reflecting with the correct methodology name. Hence, this part is CL is closed.
2. As checked by VVB, it was found that CME has now marked check box under "Product requirement applied" with GHG Emissions Reduction & Sequestration in the KPI table on the cover page, which is acceptable. Hence, this part of CL is closed.

3. In table 1, CME has revised claimed "SDG performance Indicator Number" for all the claimed SDGs i.e. SDG 1, SDG 3, SDG 4, SDG 5, SDG 6, SDG 7, SDG 8, SDG 13, SDG 12 & SDG 15 in the revised version, which is in line with the UN SDG goals (refer: https://unstats.un.org). Hence, this part of CL is closed.
4. Under the section A.2 of the submitted revised MR v2.0, it was checked and found by the VVB that CME has revised the geo-coordinates associated with the current real case VPA, which has been cross checked by VVB through the GPS software i.e. Google Earth which was found to be consistent. Hence, this part of CL is closed.

CL Closed.

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	02
Raised by:	VVB	Ref. to checklist in GS4GG FVeR:	-
Description of the audit finding		Date:	01/03/2024

Under section B of submitted Monitoring Report:

1. Who is responsible for replacing Membrane Module of filter every week. Kindly clarify? Operation and Maintenance agreement shall be required and submit supportive for continuous maintenance under current monitoring period.
2. CME shall furnish records for Maintenance activity carried out under the current monitoring period

Project Participant's response	Date:	16/04/2024

1. The membranes need to be washed on weekly or fortnightly basis. There is no need of replacement of membranes on weekly basis.

   The CME is having an agreement with Distribution Agency i.e. Aaransh Agro Tech who are responsible for day-to-day operations and maintenance of the disseminated water filters.

2. The membranes are having a life of 10000 litres or 2 years and accordingly the replacement or maintenance schedule will be followed on regular basis.

Documentation provided as evidence by Project Participant

MR Version 02

Distribution agency agreement

Auditor's assessment comment	Date:	12/05/2024

Under section B of submitted Monitoring Report version 2.0:

1. CME has submitted supporting document titled "Distribution & Monitoring Agreement" which is duly signed between CME & Distribution Agency (Aaransh Agro Tech) on 12/04/2023 to VVB. This was checked and it was found that the distributor is only

responsible for the maintenance of water filter for 10 years from the distribution date which is acceptable to the VVB. Hence, this part of CL is closed.

2. CME has submitted technical Specification Manual for life of water filter provided by Manufacturer (GHG Reductions Technologies Pvt. Ltd.), which confirms the life time of the membranes i.e. 2 years. Since the current monitoring period is from 11/05/2023 to 31/01/2024 and the distribution of the filters have started from 11/05/2023 which explains that no maintenance required for current monitoring period. Therefore, acceptable to VVB. Hence, this part of CL is closed.

CL 02 is closed.

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	03
Raised by:	VVB	Ref. to checklist in GS4GG FVeR:	-
Description of the audit finding		Date:	01/03/2024

Under section C of submitted Monitoring Report:

1. Is their emergency contact number /manual has been given to users to contact CME. Kindly confirm and Clarify.
2. Submit copy of training manual followed by field staff to train water filter users.

Project Participant's response	Date:	16/04/2024

1. Emergency contact numbers are mentioned on filter body and user manual and access is being given to the beneficiaries
2. Training manuals are submitted by CME

Documentation provided as evidence by Project Participant

1. Filter manual
2. Training manuals

Auditor's assessment comment	Date:	12/05/2024

Under section C of submitted Monitoring Report version 2.0:

1. The emergency contact number for repair and maintenance of the water filters has been mentioned on filter body and user manual which was provided to the CME during distribution, which was also cross checked during the on-site inspection. Same was found consistent when confirmed by the local stakeholders. Hence, this part of CL is closed.

2. CME has now submitted training manual followed by field staff also checked training snapshot which is found consistent. Hence, this part of CL is closed.

CL is closed.

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Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	04
Raised by:	VVB	Ref. to checklist in GS4GG FVeR:	-
Description of the audit finding		Date:	01/03/2024

Under section D.2 of submitted Monitoring Report:

1. Ex-ante values are applied for "Data & parameters monitored", for parameters monitored under current monitoring period. Kindly clarify.
2. For SDWS 19, Under the submitted VPA-DD, for VPA -1 specifically estimated calculation done on the basis of 2000 numbers of water filter. Kindly clarify the "difference" in number's
3. For SDWS 19, CME shall clarify how it's ensured that 100 perc of household's have reduction in smoke /PM emissions along with comparison with baseline
4. For SDWS 30, Why ex-ante value applied under "data and parameters monitored" kindly clarify and submit records of project survey a& demonstrate how applied value has been concluded.
5. Kindly submit Sale and Distribution records.

Project Participant's response	Date:	16/04/2024

1. Typographical error has been corrected
2. Typo error has been fixed in MR Version 02 and correct number is being reflected
3. For SDWS 19 the users confirmed that less pollution and health risks after use of HWT units has been observed as per the monitoring survey and thus the same has been taken into consideration.
4. Typo error has been corrected in MR Version 02
5. Distribution records has been submitted to the VVB

Documentation provided as evidence by Project Participant

MR Version 02

Distribution records

Monitoring survey records

Water filter distribution records

Auditor's assessment comment	Date:	14/04/2024

Under section D.2 of submitted Monitoring Report version 2.0:

1. In the above-mentioned section of the revised MR, Ex-post values are now added in the respective parameter tables, which are also consistent with the values as calculated in the Ex-post ER Calculation sheet. Thus, found consistent. this part of CL is closed.

2. SDWS 19 describes the SDG parameters which is now in line with the applied methodology, same has been corrected in the MR and made in line with the corresponding VPA-DD. therefore this point is closed. 3. As checked by the VVB for the parameter SDWS 19, the monitoring survey as submitted by CME was checked and it was also confirmed by the stakeholders during the on-site inspection that 100 % of Household reporting reduction in smoke/PM emissions after they started using the water filter in project scenario. Hence this part of CL is closed. 4. The chosen option for SDWS 30 has now been mentioned in the updated MR, wherein the option 3 (default value of 5 hrs), same has also been reflected clearly in the usage survey sheet provided by the CME, hence this part of CL is closed. CL closed.

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	01
Raised by:	VVB	Ref. to checklist in GS4GG FVeR :	-
Description of the audit finding		Date:	01/03/2024
Under KPI Table & section A of submitted Monitoring Report: 1. CME shall submit supportive for imparted trainings during current monitoring period and also submit employment record's specifically pertaining to manufacturing. 2. In section A.1, CME Shall made correction for incorporated value over the crediting period based on modification in Estimated ER spreadsheet. 3. In section A.3, Kindly update with latest version of GS4GG guidelines for GHG Emission Reduction & Sequestration Product Requirements 4. CME Shall submit supportive documents for claimed all SDGs under the current monitoring report.			
Project Participant's response		Date:	16/04/2024
1. Training records has been submitted with DVR Response 2. Modified values have been reported in MR Version 02 3. Latest version of GHG Emission reduction and sequestration has been updated 4. Supporting evidences of all the SDG's has been submitted to the VVB			
Documentation provided as evidence by Project Participant			
Training records MR Version 02 Documentary evidences for SDG claims			
Auditor's assessment comment		Date:	15/05/2024

Under KPI Table & section A of submitted Monitoring Report version 2.0:

1. CME has submitted supporting documents for claimed SDGs such as training record dated 20/11/2023 as well as salary slip as employment record of the employees covering the current monitoring period. Hence, this part of CAR has been closed.
2. Under section A.1, estimated Emission reduction values are now updated based on the rectified values of the ex-ante ER Calculation, which is found to be consistent as checked by the VVB. Hence, this part of CAR has been closed.
3. Section A.3 of the revised MR has now been updated with the latest version of GS4GG guidelines i.e. GHG Emission Reduction & Sequestration Product Requirements v2.3, which is in line with the one on GS portal. Therefore, this part of CAR is closed.
4. Supporting evidences such as employment records, employee salary slips, training records conducted by CME, monitoring & project survey and their results etc. have been provided to VVB, which confirms the values of the claimed SDGs, as assessed by the VVB. Therefore, this part of CAR is closed.

   CAR closed.

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	02
Raised by:	VVB	Ref. to checklist in GS4GG FVeR:	-
Description of the audit finding		Date:	01/03/2024

Under section B of submitted Monitoring Report:

1. In section B.1, Manufacturer certificate of specifications for equipment and supply agreement signed between CME & manufacturer shall be required for further assessment.
2. In section B.1, Supporting Documents for the key events incorporated under the table shall be required.

Project Participant's response	Date:	16/04/2024

1. Manufacturer specifications and agreement with CME has been submitted
2. Supporting evidences of the key events has been submitted to the VVB

Documentation provided as evidence by Project Participant
Manufacturer declaration
Agreement with CME and manufacturer
Supporting evidences for key events

Auditor's assessment comment	Date:	16/05/2024

Under section B of submitted Monitoring Report version 2.0:

1. Technical specifications of the water filter as provided by the manufacturer as well as titled "Distribution & Monitoring Agreement" which is duly signed between CME &

Distribution Agency (Aaransh Agro Tech) on 12/04/2023 has been submitted to the VVB, which confirms all the technical details of the water filter and the maintenance charge of the same is handled by the distributor. Same is found acceptable therefore this part of CL is closed. 2. Section B.1 of the MR contains the detailed chronology of the VPA implementation, supporting of which such as preliminary review report by GS4GG, baseline survey & monitoring survey records, VPA start date, LSC docs etc. have been provided and found to be consistent with the information in the MR. therefore this part is closed. CAR closed.

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	03
Raised by:	VVB	Ref. to checklist in GS4GG FVeR:	-
Description of the audit finding		Date:	01/03/2024
Under section C of submitted monitoring report 1. CME shall submit declaration for no double counting considering current monitoring period.			
Project Participant's response		Date:	16/04/2024
No double accounting declaration submitted			
Documentation provided as evidence by Project Participant			
No double accounting declaration			
Auditor's assessment comment		Date:	16/05/2024
No Double Counting undertaking dated 21/03/2024 duly signed by CME has been submitted to VVB, which is acceptable. Hence this part of CAR is closed. CAR closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	04
Raised by:	VVB	Ref. to checklist in GS4GG FVeR:	-
Description of the audit finding		Date:	01/03/2024

Under section D.2 of submitted Monitoring Report:

1. For SDWS 18, CME shall submit filtered water samples test records as per the mentioned frequency. And also clarify how these samples has been selected from the total number filters (2010 NOs) distributed under current project activity.
2. For SDWS 19, Direct values incorporated under the submitted actual ER spreadsheet, kindly submit monitoring survey results from which applied value has been concluded.
3. Kindly submit the Monitoring Survey report to verify the applied for parameter SDWS 19.
4. CME shall submit the records for male /female employees covering current monitoring period.
5. For SDWS 20, Kindly submit the supportive documents for Hygiene campaigns organised during current monitoring period.
6. For SDWS 29, Kindly submit the spreadsheet of usage survey conducted under current monitoring period and demonstrate how 100 perc usage rate has concluded.
7. For SDWS 30, CME shall demonstrate leakage emissions during current monitoring period and how 0 has been concluded as applied value.

Project Participant's response	Date:	16/04/2024

1. Filter water test reports has been submitted to the VVB.
2. MR Version 02 has been revised and the actual values obtained from monitoring survey has been taken into consideration
3. Monitoring survey reports submitted
4. Employment records for the complete monitoring period has been submitted
5. WASH survey was done during monitoring survey and the copies of the same has been submitted to the VVB
6. Usage survey was done during monitoring survey and the copies of the same has been submitted to the VVB
7. As per the applied methodology leakage emission are considered as 0, however on a conservative side 5% emission reductions has been reduced from the emission reductions as leakage.

Documentation provided as evidence by Project Participant

MR Version 02

Monitoring survey reports

Employment records

Auditor's assessment comment	Date:	18/05/2024

Under section D.2 of submitted Monitoring Report version 2.0:

1. CME has submitted water filter test reports, moreover it has now been explained in the MR that sampling has been done as per the applied CDM sampling guidelines, which is found acceptable. Therefore, this part is closed.

2. SDWS 19 i.e. SDG values are now been incorporated in the MR as per the values obtained in the Ex-post ER Calculation sheet, which is consistent. Therefore, this part is closed.
3. Monitoring survey reports and their results have been submitted to VVB, which confirms the SDG values calculated in the ex-post ER Sheet and correspondingly in the MR. hence this part of CAR is closed.
4. Employment records covering the SDG 8 has been submitted to VVB, which confirms the employed no as 23. Hence acceptable, therefore this part of CAR is closed.
5. WASH records are also submitted by CME which confirms the conduction of Hygiene campaigns carried out among project safe water end users which are conducted in line with the WHO/UNICEF Joint Monitoring Programme, for the current monitoring period. Thus this part is closed.
6. Usage survey sheet has now been submitted to VVB, which confirms that the resulting value after calculation in the ER Sheet is consistent with the one in MR, i.e. option 1 considered as per the applied methodology, hence acceptable to VVB. Therefore, this part is closed.
7. The chosen option for SDWS 30 has now been mentioned in the updated MR, wherein the option 3 (default value of 5 hrs), same has also been reflected clearly in the usage survey sheet provided by the CME, hence this part of CAR is closed

CAR closed.

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	05
Raised by:	VVB	Ref. to checklist in GS4GG FVeR:	-
Description of the audit finding		Date:	01/03/2024

Under section D.4 of the submitted Monitoring Report:

1. Sampling guidelines are not consistent with applied under the VPA-DD. Corrective action shall be required
2. Records for water quality test shall be required

Project Participant's response	Date:	16/04/2024

1. Sampling guidelines has been corrected
2. Water quality test reports has been submitted

Documentation provided as evidence by Project Participant

Revised MR

Water quality test reports

Auditor's assessment comment	Date:	16/05/2024

1. Reference of Sampling guidelines i.e. Guidelines for sampling and surveys for CDM project activities and programmes of activities", Version 09.0 has now been updated in the revised MR version 2.0.
2. Water quality test report as sampled and finalized by Ashwamedh Engineers & Consultants dated 07/11/2022 has been submitted to VVB, values of which are found

to be consistent as mentioned in the revised MR and corresponding survey sheets. Hence this part of CAR is closed. CAR closed.

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	06
Raised by:	VVB	Ref. to checklist in GS4GG FVeR:	-
Description of the audit finding		Date:	01/03/2024
Under section E.1 of the submitted Monitoring Report, CME shall incorporate para reference, applied meth name, version etc while referring equations for calculating baseline and project outcomes. in line with GS4GG applied methodology.			
Project Participant's response		Date:	16/04/2024
MR Version 02 has been revised as per the comment raised			
Documentation provided as evidence by Project Participant			
MR Version 02			
Auditor's assessment comment		Date:	17/05/2024
Section E.1 of the MR version 2.0 has been revised while updating the exact para references of the applied methodology and tool, and also updating the equation no's applied for the calculation of baseline, project emissions, which are found to be consistent as cross checked from the applied methodology. Hence acceptable to VVB. CAR closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	07
Raised by:	VVB	Ref. to checklist in GS4GG FVeR:	-
Description of the audit finding		Date:	01/03/2024
Under section G.1 of the submitted Monitoring Report, Kindly submit records of Grievance book /feedback book and include comments or feedback during the current verification.			
Project Participant's response		Date:	16/04/2024
Grievance copy has been submitted with DVR Response			
Documentation provided as evidence by Project Participant			
Grievance copy			
Auditor's assessment comment		Date:	17/05/2024
A copy of Grievance register as maintained at CME's office has been submitted by CME, wherein it was found that no such complaint has been raised by any stakeholder for the current monitoring period, hence this part of CAR is closed. CAR closed.			

Open likely CAR & FAR from Previous Design review & last performance review

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Type:	☐ CAR ☐ CL/CR ☒ FAR	Number:	
Raised by:	VVB	Ref. to checklist in GS4GG FVeR:	
Description of the audit finding		Date:	XX/XX/XXXX
N/A			
Project Participant's response		Date:	
Documentation provided as evidence by Project Participant			
Auditor's assessment comment		Date:	

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Appendix 2: Audit Team CVs

Name	SHORT CV. BACKGROUND INFORMATION
Mr. Deepak Pundlik	Mr. Deepak Pundlik has an experience in climate change, waste management and environmental management. After completing Masters in Environment Sciences from Pune university, He has worked in waste management field. As a GHG consultant, He handled projects under renewable energy, waste management sectors during his stint with companies - MITCON and Thermax. Post Thermax, Deepak was involved in organic farming research project with Tata Institute of Social Sciences. As a GHG auditor, He has validated/verified projects under CDM/VCS/GS and GCC mechanisms from renewable energy, energy demand, waste management sectors. Mr. Deepak Pundlik is based in Pune, India. He participates as a Lead Auditor and Technical Expert for the assessment. Currently he is associated with True Quality Certifications Private Limited (Applus+ Certification's Outsourced Entity).
Mr. Amit Rai	Mr. Amit Rai, has done Bachelor of Technology in Electrical & Electronics Engineering from Dr. A.P.J. Abdul Kalam Technical University, India and Government Certified Competency Class – I, Electrical Supervisor from Government of National Capital Territory of Delhi, India. He has more than (7) years of working experience in different organizations like Sunrator Technologies, Sun Source Energy Private Ltd. (SHV Energy Group, Singapore) & KBS Certification Services Private Ltd. (UNFCCC's – DOE), In the area of Renewable Project Management, Execution, Designing & Climate Change Services. Currently he is associated with True Quality Certifications Private Limited (Applus+ Certification's Outsourced Entity) and empaneled with Applus+ Certification to carry out GHG audits in the aforementioned schemes. Mr. Amit Rai is based in Delhi, India.
Ms. Shruti Shrivastava	Ms. Shruti Shrivastava holds a Master's degree in Environmental Sciences from Amity University, Noida completed in 2021, and completed Bachelor's in Zoology Honors. She has a working experience of over two years in the climate change field. Currently, she is associated with True Quality Certifications Pvt. Ltd. (An Outsourced entity for LGAI Technological Center, S.A. (Spain) since March 2023, wherein she has been involved in supporting Audit teams for the validation & verification of Project activities (renewable & non-renewable projects) under different GHG schemes such as CDM, VCS, GS & GCC. She started working professionally in the field from October 2021. Ms. Shruti Shrivastava is based in Indore, India. She participates as an auditor in trainee for the current assessment.

Mr. Simon Shen	Mr. Simon Shen (Master's Degree in Thermal Energy Engineering, Bachelor's Degree in Environmental Engineering) is an Auditor appointed by Applus+ Certification (LGAI Technological Center, S.A) for the GHG project assessment, auditing and technical review. He worked with TUV SUD for 3.5 years and holds experience as GHG Auditor and ISO 9001/14001. Since 2014, Mr. Simon Shen works as an external individual in Applus+ Certification (LGAI Technological Center, S.A). He holds experience in CDM/GS4GG/VCS project assessment and technical reviews for the sectoral scopes 1.1/1.2/3.1/13.1/13.2. At the time, he participated in plenty of Chinese CCER audits and enterprises carbon emissions verifications. Mr. Simon Shen has extensive experience also as former Applus+ Shanghai CDM Technical Manager. Mr. Simon Shen is based in Shanghai, China. Mr. Simon Shen may participate as part of the Technical Review experts' panel