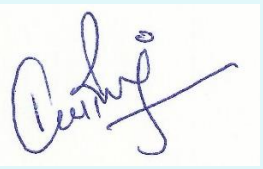
Validation report for GS4GG Programme of Activities

(Gold Standard for the Global Goals)

BASIC INFORMATION		
Title and GS reference number of the program of activities (PoA)	Improved Cookstoves and Safe Water Programme GS 11189	
Version number of the validation report	2.5	
Completion date of the validation report	20/05/2022	
Version number of the PoA-DD to which this report applies	5.0	
Date when PoA-DD was uploaded for global stakeholder consultation	NA	
Coordinating/managing entity (CME)	Impact Carbon	
Host Party	Kenya and Nigeria	
Applied methodologies and standardized baselines	GS Approved Methodology #1: "Technologies and Practices to Displace Decentralized Thermal Energy Consumption" Version 3.1-25/8/2017 GS Approved Methodology #2: "Emission reductions from Safe Drinking Water Supply" Version 1.0 – 03/5/2021	
Mandatory sectoral scopes linked to the applied methodologies	3	
Certification Pathway (Project Certification/Impact Statements & Products)	Impact Statements and Products	
SDG Outcomes	SDG 13: Climate Action	Quantitative Impact
	SDG 1: No Poverty	Qualitative Impact
	SDG 3: Good Health and Well-Being	Qualitative Impact
	SDG 6: Clean water and sanitation for all	Qualitative Impact

	SDG 7: Affordable and Clean Energy	Qualitative Impact
	SDG 8: Decent Work and Economic Growth	Qualitative Impact
	SDG 12: Responsible Consumption and Production	Qualitative Impact
	SDG 15: Life on Land	Qualitative Impact
Regular/Retroactive	Regular	
Name of the VVB	Earthood Services Private Limited	
Name, position and signature of the approver of the validation report	 Dr.Kaviraj Singh Managing Director	

SECTION A. Executive summary

The purpose of the PoA is to provide Improved Cook Stoves (ICS) and low GHG Water Purification technologies (WPS) to households and institutions in Nigeria and Kenya. The PoA is using carbon finance to support local partners engage is different activities like production distribution and maintenance of various product technologies particularly ICS and WPS.

This programme includes technologies, designed to reduce GHG emission and supply safe water to households and institutions, which are efficient and meet the technology and measure requirements of the applied methodologies Emission reduction from Safe Drinking Water Supply Version 1.0 and TPDDTEC Version 3.1/5/.

Introduction of this PoA, will significantly reduce the consumption of non-renewable biomass resources or fossil fuel for cooking purposes as well as eliminate the use of non-renewable resources or fossil fuel for water boiling. The PoA will also improve the indoor air quality and health of women and children as a co-benefit.

The PoA (GS11189) is applying for design certification under GS4GG programme and the Coordinating/managing entity of the PoA is Impact Carbon.

Scope of Validation

The scope of the services provided by the Earthood Services Private Limited is to perform validation of the PoA. The scope of validation is to assess the claims and assumptions made in the programme of activity design document (PoA-DD)/4/ against the GS4GG criteria, UNFCCC criteria, including but not limited to the Gold Standard Principles & Requirements/14/, Gold Standard Programme of Activities Requirements/11/, Gold Standard Community Services Activity Requirements/7/, CDM PS/1/ for PoA, CDM VVS/3/, applied GS impact quantification methodology and other relevant rules and requirements established for Gold Standard.

Validation Process and Methodology

The validation process is undertaken by a competent validation team and involves the following:

- the desk review of documents and evidence submitted by the project participant in context of the GS for GG criteria along with reference CDM rules and guidelines issued by CDM EB,
- undertaking/conducting remote site visit, interview/ interactions with the representative of the project participant,
- reporting audit findings with respect to clarifications and non-conformities and the closure of the findings, as appropriate and
- preparing a draft validation opinion based on the auditing findings and conclusions
- technical review of the draft validation opinion along with other documents as appropriate by an independent competent technical review team finalization of the validation opinion (this report)
- An independent technical review team reviews the validation report made by the validation team. After the final report is accepted by the Technical Reviewer it is then approved by Earthood Services Private Limited which is processed further according to the GS and CDM procedures.

Conclusion

The review of the PoA-DD, supporting documentation and subsequent follow up actions have provided ESPL with sufficient evidence to determine the fulfilment of stated criteria. Earthood is

of the opinion that the PoA "Improved Cookstove and Safe Water Programme" (GS-11189) meets all the GS requirements and has correctly applied the GS approved methodologies Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC), version 3.1 and Emission reduction from Safe Drinking Water Supply Version 1.0 /5/. Therefore, the PoA is recommended to GS for registration following the submission of the validation report.

SECTION B. Validation team, technical reviewer and approver

B.1. Validation team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Validation findings
1.	Team Leader and Meth. Expert	IR	Garg	Shreya	Central office	Y	N	Y	Y
2.	Validator	IR	Vatsa	Vaishali	Central office	Y	N	Y	Y
3.	Technical, Meth Expert (TA 3.1)	IR	Garg	Shreya	Central office	Y	N	Y	Y
4.	Local Expert (Nigeria)	EI	Adeola	Eleri	Central office	N	N	N	Y
5.	Local Expert (Kenya)	EI	Njeri	Virginia	Central office	N	N	N	Y
6.	Validator (Trainee)	IR	Bharti	Abhishek	Central Office	Y	N	N	N

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g.name of central or other office of VVB or outsourced entity)
1.	Technical reviewer	IR	Guleria	Shifali	Central office
2.	Expert to TR	IR	Guleria	Shifali	Central office
3.	Approver	IR	Singh	Kaviraj	Central office

SECTION C. Means of validation

C.1. Desk/document review

The validation of the PoA was performed through the document review including review of PoA-DD /4 / version 5.0 dated 18/05/2022. The validation of the information provided in the PDD was performed by using the various sources of information provided by the project participant.

Additionally, cross checks were performed for information provided in the PoA-DD using information from sources other than the validation sources, the validation team's sectoral or local expertise and, if necessary, independent background investigations.

C.2. On-site inspection

Duration of on-site inspection: NA				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
NA	NA	NA	NA	NA

During the current PoA validation, the on-site visit was not possible due to the outbreak of COVID-19 global pandemic and both Nigeria and Kenya were experiencing high number of COVID-cases/8/ at the time of assessment being carried out. So, the validation team avoided the risk of getting infected during the physical onsite assessment.

It is important to note that the GS4GG has provided alternative measures relating to mandatory on-site visits for VVBs an audit which includes the following:

If site visit cannot be postponed due to significant impact of delaying the site visit on VVB and/or project developer due to timeline/commitment as per validation/verification or GS-VERs delivery agreement, VVB may replace mandatory on-site visits with remote audits.

Therefore, in this validation due to the commitment of the project developer as per the delivery timeline, the site-visit could not be postponed, and the on-site inspection was replaced by remote audit. The remote audit included the interview with the CME representative and the CPA implementer/17/.

C.2.1. Interviews with CME and local stakeholders

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Neville	Tim	Impact Carbon (CME)	16/09/2021	PoA Implementation, Operational and Management Framework, stakeholder consultation, Contracts and agreements, legal ownership etc.	Shreya Garg, Vaishali Vatsa
2.	Agulehi	Jerry	Impact Carbon	16/09/2021	PoA Implementation, Operational and Management Framework, Contracts and agreements, legal ownership etc.	Shreya Garg, Vaishali Vatsa
3.	Samuel	Odunaya	Impact Carbon	16/09/2021	Implementation, Distribution records, database management	Shreya Garg, Vaishali Vatsa
4.	Odewole	Olabode	Impact Carbon	16/09/2021	Database management	Shreya Garg, Vaishali Vatsa
5.	Lohia	Rohit	Climate Secure India Private Limited	16/09/2021	PoA-DD, Methodology applicability, Monitoring plan, Sampling methodology, ER calculations	Shreya Garg, Vaishali Vatsa
6.	Kumar	Ritesh	Climate Secure India Private Limited	16/09/2021	PoA-DD, Methodology applicability, Monitoring plan, Sampling methodology, ER calculations	Shreya Garg, Vaishali Vatsa

7.	Turgesen	Mark	Impact Water Kenya	16/09/2021	VPA Implementation, distribution and operational framework, Stakeholder consultation	Shreya Garg, Vaishali Vatsa
8.	Akinyemi	Zacch	Impact Water Nigeria	16/09/2021	VPA Implementation, distribution and operational framework, Stakeholder consultation	Shreya Garg, Vaishali Vatsa
9.	Narvariya	Mohit	Climate Secure India Private Limited	16/09/2021	Data analysis, QA/QC	Shreya Garg, Vaishali Vatsa

C.2.2. Questions asked by Team Members:

a. Role and CME or any other entities in the implementation of PoA

b. Provision to avoid double counting

c. Legal Ownership and Credit ownership

d. Baseline technology / practices and sources of GHG emissions

e. General cooking and boiling water practices in the host country

f. Provision of soliciting feedback from the stakeholders

g. PoA Design, Methodology applicability, Monitoring and Sampling plan

h. Emission reduction algorithms, ex-ante assumptions

i. Grievance Mechanism

C.3. Sampling approach

VVB's sampling approach:

Remote interviews were conducted with the CME representatives on 16/09/2021 and 17/09/2021 to confirm the baseline practices, monitoring system of the PoA, provision to avoid double counting and the provision for soliciting feedback from the stakeholders.

The detailed description of factors considered, while approving the sampling approach applied at the time of validation is as follows:

Risk Category	VVB Assessment

(a) Risks related to the type(s) of project activity/ technology/ geographic location	The two technology types (i.e. water purification devices and improved cookstoves) as well as geographies (i.e. Kenya and Nigeria). The VVB conducted separate remote site visits for WPS VPAs (01-30) in Nigeria and WPS VPAs (31-47) in Kenya. Since ICS VPA (VPA 48) in Nigeria was not implemented (no ICS was distributed) at the time of the audit, hence no physical site visit was required for VPA 48. Desk reviews were conducted for documents of all VPAs to ensure that the information presented therein complied with the requirements and was consistent with other supporting documents / information / observations made during the audit.
(b) Risks related to non-identification of emission and leakage sources	This risk was deemed not present given, the emission and leakage sources are well defined in the methodology. No sources were identified during the audits (including remote site visit) that were not covered in the methodology.
(c) Risks related to double counting, especially in the case of distributed technologies.	The team assessed the system of assigning unique serial numbers on project devices to eliminate any risk of double counting. The complete installation databases for Nigeria and Kenya VPAs was reviewed to check completeness and accuracy of data. It can be confirmed that risk of double counting does not exist and hence no additional sampling measures by VVB team were needed for this risk category. Also, during remote site visits, the presence of serial number of project devices as well their consistency with corresponding project records were cross-verified and was found correct. Also refer section C.4 of VPA validation reports for the sample size determination and sampling approach for remote site visit conducted by VVB.
(d) Uncertainty with respect to the data monitored etc.	The monitoring plan in the VPA-DDs was assessed and found it to be compliant with the monitoring methodology and in accordance to the deviation_184 already approved by GS.

	During the remote site visits, the VVB team further verified the ex-ante factors being fixed in the VPA-DDs with the interviewed samples. The VVB team also reviewed all the baseline survey forms and cross verified the information in the ER calculator and VPA-DDs to be consistent with them. Thus, this risk category is deemed low / negligible by the VVB team.
(e) Risks related to environmental, economic or social safeguards	The VVB team reviewed the safeguarding principles assessment conducted at the POA/VPA level and confirms that no significant risks wrt to environmental, economic or social aspects were identified. During the site visit, the interviewed schools confirmed the positive benefits from the project technologies confirming absence of any significant risks in this category. Thus, this risk category is deemed low / negligible by the VVB team.
(f) Risks on account of previous VPA/CPA having been erroneously included or other VPA/CPA facing significant grievances from local stakeholders or ongoing legal cases for existing CPA/VPA etc".	The VVB assessed compliance with each of the eligibility criteria for each VPA to ensure none of them posed any erroneous inclusion risk. The DC and SFR reports were reviewed by the VVB team to assess any grievance risks. The VVB team also reviewed, GS review feedback forms issued at design consultation stage or preliminary review stage to identify any related risks. During the site visits, the VVB team cross verified with the sampled schools if they had access to the CME customer care contacts to escalate grievances. All sampled users confirmed knowing the customer care contacts as well as the process of raising grievances. Thus, this risk category is deemed low / negligible by the VVB team.

C.4. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Compliance of the PoA-DD with the PoA Design Document	-	-	-
Identification of project type	-	-	-
General description of PoA	CL#01	CAR#01	-
General Eligibility of the PoA under Gold Standard	-	-	-
- Assessment of the eligibility of the PoA under Gold Standard	CL#02	-	-
- Project boundary, sources and GHGs	-	-	-
- Baseline scenario	-	-	-
- Target/Indicator for the SDGs	-	-	-
- Management System	-	-	-
- Application of methodology	-	-	-
- Deviation from methodology and/or methodological tool	-	-	-
- Clarification on applicability of methodology, tool and/or standardized baseline	-	-	-
- Demonstration of additionality	-	-	-
- Eligibility criteria for VPA inclusion	-	-	-
Start date, crediting period type and duration	-	-	-
Safeguarding Principles Assessment	-	-	-
Local stakeholder consultation	-	-	-
Sustainable development co-benefits	-	-	-
Grievance Mechanism	-	-	-
Others	-	-	-
Total	02	01	00

SECTION D. Validation findings

D.1. Compliance of the PoA-DD with the PoA Design Document

Means of validation	The Gold Standard for Global Goals prescribes a template for PoA-DD. Therefore, PP has used the Gold standard for global goals PoA-DD form version 1.1 /10/ which has been issued by Gold Standard on 14/10/2020. In addition, all the GS4GG requirements are included in accordance with the Principles and Requirements version 1.2 /14/.
Findings	No findings were raised.
Conclusion	The final PoA-DD /4/ is found to be in compliance with the applicable latest PoA-DD template/10/ and instructions contained therein.

D.2. Identification of project type

Means of validation	This PoA involves the distribution of Improved Cook Stove (ICS) and installation of safe water technologies (WPS) to the households and institutions in Kenya and Nigeria through the displacement of the baseline practice which involves the burning of non-renewable biomass/fossil fuel. The PoA-DD/4/ employs the GS methodologies includes: 1. Emission reduction form Safe Drinking Water Supply, Version 1.0

	2. Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC), version 3.1/5/.
Findings	No findings were raised
Conclusion	The validation team confirms: • The process undertaken to describe the procedure and completeness of the project is described above. • The type of PoA is confirmed from the information provided in PoA-DD i.e., the PoA will reduce the GHG emission by disseminating safer drinking water. • The validation team confirms that the proposed GS PoA is implementing to reduce GHG emissions thus, meeting the applicability criteria of the applied methodology.

D.3. General description of PoA

Means of validation	The purpose of the PoA is to provide a safe and secure environment for cooking and safe drinking water by replacing the traditional methods of burning non-renewable biomass/fossil fuel for both cooking and boiling water for drinking purposes. The PoA intends to reduce the GHG emissions caused by the existing use of traditional three stone stove, reduce the incidence of waterborne/airborne illness, reduce the time spent to fetch fuelwood for cooking and purify water by women, and also provides safe air and water to local residents especially women and children. The PoA meets the eligibility criteria of the Gold Standard. The CME for the PoA is Impact Carbon, which distributed the ICS and WPS technologies by actively engaging with the local partners. The technical description of the project activity has been validated by assessing the applied description against the applied methodologies/5/ and during the remote site interviews. All the information was correctly mentioned in the PoA-DD /04/. The summary of the proposed PoA and the technology involved are described in the PoA-DD /04/ with sufficient details and clarity. The accuracy of the PoA description was determined based on the remote interviews with the CME representatives and project personnel as part of validation audit, review of supporting documents (as mentioned in Appendix 3), and interaction with the key personnel. Some of the key technologies that are envisaged to be included under the PoA include the following: **Improved Cookstoves:** The ICS technologies included under the PoA will have a minimum efficiency of 20% and above and will have a life expectancy of 10 years. Examples of improved cooking technologies to be included in the PoA, not limited to, are as follows: 1. Improved biomass cookstoves (wood) 2. Improved biomass cookstoves (charcoal) 3. Improved fossil fuel cookstoves (LPG stoves) 4. Improved fossil fuel cookstoves (Induction stoves) 5. Renewable stoves (solar cookers) 6. Heat retentions cookers/devices etc. **Low GHG Water Purification Technologies:**

	The WPS technologies distributed under the POA will meet the drinking water quality by achieving the water quality defined in the relevant national standards or international guidelines. Examples of WPS technologies to be included in the PoA, not limited to, are as follows: 1. Water filters (ceramic, membrane, sand, activated carbon, etc.) 2. Flocculation biofiltration 3. Flocculation disinfection 4. Flocculation disinfection filtration 5. Ultraviolet (UV) disinfection 6. Solar disinfection 7. Chemical disinfection (bleach, chlorine etc.) 8. Ultrafiltration systems 9. Reverse osmosis systems etc. The specification of the installed technologies under each VPA shall be cross-checked from the manufacturer's specifications at the VPA level. The sustainable development goals and their outcome are transparently discussed under section A.4 of the PoA-DD/4/. The assessment team has checked and reviewed the PoA-DD with supportive evidence and found the details to be correct. The validation team confirmed that the PoA did not receive any ODA to support the development and implementation through a declaration /15/ submitted by the CME. The proposed GS PoA would introduce technologies to reduce the GHG emission from the baseline traditional practices and supply safe water which was found to be in-line with the requirements of the applied methodologies Emission reduction form Safe Drinking Water Supply, Version 1.0 and TPDDTEC version 3.1/5/. VVB has interviewed the CME representative and CME monitoring personnel at the PoA level to understand about the monitoring system and implementation structure of the PoA. The design consultation was conducted between 14/05/2021 to 18/06/2021. The design consultation report has passed the design consultation review and was submitted by CME as evidence/25/. **Sampling Plan:** For ICS technologies, CME will follow sampling procedures given in Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC), version 3.1/5/ for determining the sample size of each parameter. A confidence precision of 90/10 or 90/30 will be ensured by CME for meeting the annual/biennial monitoring criteria. For the WPS technologies, CME will follow sampling procedures given in Emission reductions from Safe Drinking Water Supply" Version 1.0 – 03/5/2021, version1.0/5/ for determining the sample size of each parameter. A confidence precision of 95/10 or 90/10 will be ensured by CME for meeting the annual/biennial monitoring criteria. The sampling approach undertaken by CME is duly explained under section B.7.2 of the VPA-DD/9/, which has been assessed by the validation team and found to be correct and in-line to the standard /11/.
Findings	CL#01 was raised and resolved.

Conclusion	The validation team confirms: a. The process undertaken to validate the accuracy and completeness of the project is described above (under MoV); b. The project description contained in the PoA-DD/04/ of the proposed GS project activity is accurate and complete. c. The remote audit/17/ was conducted by the validation team as described in this report. d. The validation team confirms that the proposed GS PoA meets the eligibility criteria for both Emission reductions from Safe Drinking Water Supply, Version 1.0/5/ and TPDDTEC, Version 3.1/5/. Moreover, the validation team confirms that the description of the proposed GS PoA, as contained in the PoA-DD/04/ sufficiently covers all relevant elements, is accurate and complete and that it provides the reader with a clear understanding of the nature of the proposed GS PoA.

D.4. General Eligibility of the PoA under Gold Standard

D.4.1. Assessment of the eligibility of the PoA under Gold Standard

Means of validation

Paragraph 3 of the GS4GG Principles and Requirements includes the general criteria that applies to all the projects seeking Gold Standard Certification. The demonstration of the PoA meeting the eligibility criteria has been represented below:

Applicability Criteria as per Principles and Requirements	Justification from CME	Means of Validation
a. Types of Project	The PoA includes dissemination of improved cook stoves (ICS) and installation/distribution of low GHG water purification technologies (WPS). The PoA applies GS approved "Technologies and Practices to Displace Decentralized Thermal Energy Consumption" and "Emission reductions from Safe Drinking Water Supply" impact quantification methodologies, for ICS and WPS devices respectively.	The aim of the PoA is to reduce GHG emission and provide safe drinking water to the communities and institutions in Kenya and Nigeria and this is in line with para 4.1.3. of Principles and requirements (Version 1.2)/14/. Since the PoA falls under the category of 'WASH' contributing to climate change mitigations and adaptations benefits, the PoA is eligible to be included under GS4GG. This is in accordance with GS4GG Principles and Requirements paragraph 4.1.3 /14/.

		Hence as per the GS4GG Principles and Requirements version 1.2 section 4.1.3, the PoA becomes automatically eligible.	
	b. Location of Project	The PoA is located in Kenya and Nigeria. Details are provided in Section A.2 of PoA – DD.	According to para 3.1.1 (b) of Principles and Requirements, version 1.2/14/, The project is located in Nigeria and Kenya as confirmed by the VVB during the remote interviews conducted on 16/09/2021-17/09/2021 and an independent platform https://www.latlong.net/.This is in accordance with GS4GG Principles and Requirements paragraph 3.1.1 (b)/14/.
	c. Project Area, Project Boundary and Scale	The boundary for the PoA in terms of geographical area is defined as the territorial boundary of the Kenya and Nigeria. All voluntary programme activities (VPAs) associated with this PoA will be implemented within the geographical boundary of the PoA. The PoA and its associated VPAs (unless approved by Gold Standard) shall not be already included in any other voluntary or compliance standards programme. To avoid inclusion of any ICS and WPS which is a part of another registered carbon project/ programme, all units under this programme shall be associated with a unique logo/brand/ product ID	The project area will be the households/institutions of the communities that will benefit from ICS and WPS technologies under the PoA and the boundary of the PoA will be Kenya and Nigeria. All the VPAs included under the PoA will be confined with in the geographical boundaries prescribed under the PoA. This is in accordance with GS4GG Principles and Requirements paragraph 3.1.1 (c)/14/.

	number / unique household or institutional ID number / Tag number / invoice number / receipt number etc. to uniquely identify each unit distributed/installed to avoid any double counting of ICS/WPS and emission reductions.	
d. Host Country Requirements	The PoA complies with Kenya's and Nigeria's legal, environmental and ecological and social regulations, if any and as applicable.	The PoA introduces clean cooking solutions and safe clean drinking water in Kenya and Nigeria and meets the local regulations as per GS4GG Principles and Requirements /14/. It does not require any consent to operate and is in compliance with legal, environmental & ecological regulations of both countries. This is in accordance with GS4GG Principles and Requirements paragraph 3.1.1 (e)/14/.
e. Contact details	The name and contact details of Project Developer (CME) and entity are given in the Appendix 1 of the PD.	The Project Developer has mentioned all the contact details of the participants involved in the Project under Annex A of the PoA DD/6/. This is in accordance with GS4GG Principles and Requirements paragraph 3.1.1 (f)/14/.
f. Legal Ownership	Criteria for transfer full and uncontested legal ownership of carbon credit from project beneficiaries to CME (Impact Carbon LLC) or CPA Implementer (Impact Water LLC): • For regular cycle VPA, this shall be ensured through relevant provisions for example disclaimer on warranty/information	The Project Developer has full and uncontested legal ownership to the offsets generated by the PoA and this has been confirmed from the sample carbon transfer agreement submitted by the CME/18/. This is in accordance with GS4GG Principles and Requirements paragraph 3.1.1 (f)/14/.

		cards, product packaging, customer agreements / sales receipts / consent form or may be collected via monitoring app (mobile or web-based, for example) etc. or collecting stakeholder feedback collected during local stakeholder consultation (LSC) • For retroactive VPA, this shall be ensured through relevant provisions for example disclaimer on warranty cards, product packaging, customer agreements / sales receipts/ consent form or may be collected via monitoring app (mobile or web-based, for example), etc. or stakeholder feedback collected during Stakeholder Feedback Round (SFR).	
	g. Other rights	Not applicable	Not applicable
	h. Official Development Assistance (ODA) Declaration	No ODA is involved in the PoA and its associated VPAs. A declaration is being submitted by CME.	It has been confirmed from the ODA declaration/15/ letter that no Official Development Assistance has been sought by the PoA. This is in accordance with GS4GG Principles and Requirements paragraph 3.1.1 (h)/14/.
	i. Suppressed demand	Not applicable in PoA level. It will be discussed in each VPA.	Suppressed demand has been considered and accounted at VPA level.
Findings	CL#02 has been raised and resolved		
Conclusion	The VVB has accepted and validated the general eligibility criteria that applies to all PoAs seeking Gold Standard Certification. The eligibility of the PoA is found to be valid in accordance with the section 3.1.1 of GS4GG principles and requirements version 1.2/14/.		

D.4.2. Project boundary, sources and GHGs

Means of validation	The project boundary basically defines the physical and geographical boundary of the project facility and it is well defined in the PoA-DD/4/(section B3). The project boundary includes the address of the households where ICS units are provided and the point location of safe water supplying devices which are within Kenya and Nigeria. Therefore, the project boundary covers all the points of ICS units and WPS devices at all the locations. The project boundary is clearly defined in the PoA-DD/4/ as per the methodology.
Findings	No findings.
Conclusion	The project boundary is completely depicted in the PoA-DD/04/ and is validated by the validation team. Also, according to the validation team the sources and gases that are accounted are found to be appropriate according to the project activity. As per the remote audit assessment: • The project boundary is found to be in-line as mentioned in the PoA-DD

D.4.3. Baseline scenario

Means of validation	Approved baseline and methodologies applied under this PoA are Emission reduction from Safe Drinking Water Supply Version 1.0/5/ and TPDDTEC Version 3.1/5/ which are approved under GS4GG programme. The purpose of the PoA is to provide clean cooking solutions and safe drinking water within the host countries Kenya and Nigeria. This project comprises of multiple technologies designed to provide fresh and clean air (indoor) and to supply safe water to households and institutions which are efficient and meet the technologies and measure requirements of the applied methodologies/5/. In line with the applied methodologies, the baseline scenario is "A baseline scenario is defined by the typical baseline fuel consumption patterns in a population that is targeted for adopting the new project technology.". During the interview with the end-users, it was confirmed that the fuel used in the traditional method of cooking and water treatment was non-renewable biomass / fossil fuel. It was also validated that the use of baseline technologies was not safe as well as it was labour intensive and time consuming. The prevailing conditions of hygiene and sanitation is increasing the burden of disease in Kenya as per the KENYA ENVIRONMENTAL SANITATION AND HYGIENE POLICY 2016-2030. The assessment team has reviewed the PoA-DD in line with the applied methodologies and it is confirmed that the CME has correctly identified the baseline scenario.
Findings	No findings were raised.
Conclusion	The validation team based on the description provided above with regard to the assessment of the requirements confirms that: (a) All the assumptions and data used by the project participants are listed in the PDD/04/ and or annexures, including their references and sources;

	(b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PoA-DD/4/. (c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable. (d) Relevant national and/or sectoral policies and circumstances are considered and listed in the PoA-DD/4/. (e) The approved baseline methodologies correctly applied to identify the most plausible baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed PoA. The validation team confirms that it has taken other steps and other sources of information used to cross-check the information contained in the PoA-DD/04/, wherever applicable, as listed above.

D.4.4. Target/Indicator for the SDGs

Means of validation

ELIGIBILITY PRINCIPLES

Sustainable Development Goals Targeted	Most relevant SDG Target	SDG Impact Indicator (Proposed or SDG Indicator)	VVB Assessment
SDG 13: Climate Action (mandatory)	Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities.	Reduce emission from traditional methods of cooking and water boiling by non-renewable biomass/fossil fuel in countries– Kenya and Nigeria.	The indicators chosen by CME was found complying to the guidelines of methodologies/5/ and GS5GG Principles and Requirements /14/. The PoA-DD/4/ has enough provisions to monitor and measure the Impact appropriately.
SDG 1: No Poverty	By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as	1.4.1 Proportion of population living in households with access to basic services	

		access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	**Indicator:** Total number of premises with atleast one WPS / ICS distributed / installed under the project.	
	SDG 3: Good Health and Well-Being	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.	3.9.1 - Mortality rate attributed to household and ambient air pollution **Indicator:** % Of users reporting reduction in smoke, PM, soot emissions after shifting to the project ICS 3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services **Indicator:** % of users reporting reduction in incidence of diarrhoea and water borne diseases etc. after shifting to the project WPS	

SDG: 6 Clean Water and sanitation	By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1 Proportion of population using safely managed drinking water services **Indicator:** % of WPS distributed / installed providing safe drinking water quality.	
SDG: 7 Affordable and Clean Energy	By 2030, ensure universal access to affordable, reliable and modern energy services	7.1.2 Proportion of population with primary reliance on clean fuels and technology **Indicator:** % users reporting an operational ICS/WPS in PoA	
SDG: 8 Decent Work and Economic Growth	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities **Indicator:** Number of male / females employment created by PoA	
SDG: 12 Responsible Consumption and Production	By 2030, achieve the sustainable management and efficient use of natural resources	12.2.2 - Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP **Indicator:** Average % fuel savings reported by users in the PoA after shifting to ICS	

	SDG: 15 Life on Land	By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.	15.2.1-Progress towards sustainable forest management **Indicator:** Wood fuel eq savings reported by user in the PoA after shifting to ICS	
Findings	No findings.			
Conclusion	The assessment team confirms that the project is eligible for GS4GG as per the requirements of GS4GG.			

D.4.5. Management System

Means of validation	The Management plan is explained in section B.1 of the PoA-DD/04/ is correctly applied to the PoA. The monitoring plan has been found to be in compliance with the requirements of the applied methodologies mentioned in the PoA-PDD/5/. The roles & responsibility of both CME & VPA implementers are well defined. CME's role is primarily with the documentation at both PoA & VPA level, training of the Implementers (Every 2 years) in both host countries of Kenya and Nigeria as confirmed during the remote interviews with the CME's team. The Implementation of the PoA will follow the following management and operational System: 1. The Program Manager, Impact Carbon and external experts/consultant will be involved in the process of inclusion of new VPAs in the PoA. The Program Manager will conduct technical review of the VPAs being included in the PoA. 2. The Program Manager along with external expert/consultant will ensure that any VPA included in the PoA, is not registered either as a CDM project activity or included as a CPA in another registered CDM PoA earlier to ensure that there is no double counting of any VPA in the PoA. 3. The Program Manager will be responsible for keeping records and implement a documentation control process for each VPA under the PoA. 4. CME will ensure that end users are aware of, and have agreed, that their unit (ICS/WPS) is being subscribed to the PoA. Awareness and agreement are secured through informational material / trainings / social media or in contractual agreements.

	5. Each VPA implementer will collect and report the required data as much as possible to effectively monitor the emission reductions of each VPA in accordance with the monitoring plan in the VPA-DD. 6. The CME will provide guidance/training/instructions to customer engagement staff to collect requisite data at the point of delivery. Records of trainings will be maintained by the Program Manager. The customer engagement staff will compile the list of units installed/distributed along with required end user / baseline information and will transfer the same to the electronic database management system at regular intervals, which will be managed at CME/VPA Implementer office by Program Manager. 7. The program manager will operate and manage the electronic database with information on all or a fraction of units (representative of population) installed/distributed under the PoA, as received from the customer engagement. The database will contain the following information for each product: a) Receipt / invoice number b) Address and contact details (name and phone number if available) of the end user10 c) Date of installation/distribution d) Type of user (household or institution or community) e) Technology type (ICS, WPS etc.) f) Unique ID number 8. The CME will ensure that there is no double counting of any unit in the electronic database by means of the unique ID that will be uniquely associated with each unit. Internal audit will be conducted at every 2 years to review the performance of all the components of the VPAs. The validation team confirms that the points identified by the CME and as mentioned in the PoA-DD/04/was found to be in-line with the PoA management in place at the project . SDGs will be monitored at PoA level mentioned in section A.4 of PoA-DD/4/.
Findings	No findings
Conclusion	The validation team confirms: • The clear division of responsibilities will lead to successful delivery of the project. • The PoA-DD/4/ ensure any potential gaps during or after the installations will be monitored & tracked by VPA implementers. • The CME will be able to implement the Management plan. • The VPA implementers will execute the PoA on the Host countries.

D.4.6. Application of methodology

Means of validation	The PoA has applied the GS4GG approved methodologies: 1. Emission reduction from Safe Drinking Water Supply, Version 1.0/5/ 2. Technologies and Practices to Displace Decentralized Thermal Energy Consumption (Version 3.1)/5/

	Compliance of monitoring plan with respect to the monitoring methodologies/5/ has been reviewed by the document review, review of the data and information presented, review of the monitoring plan, monitoring methodologies including the applicable tool(s), evaluation of data management and the quality assurance and quality control system. It will be further cross-checked at the VPA level that each VPA included in the PoA complies with all the requirements stated in the applied methodology. Methodological Tools and Guidelines that are applicable in this PoA are: Methodological Tools: • CDM Tool 21 – Demonstration of additionality of small-scale project activities version 13.1(https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-21-v13.1.pdf) Guidelines: • Usage rate requirements: Technologies and practices to displace decentralized thermal energy consumption, published on 27/10/2020 (https://globalgoals.goldstandard.org/ru-2020-usage-rate-requirements- technologies-and-practices-to-displace-decentralized-thermal-energy-consumption/) • Requirements And Guidelines: Usage Rate Monitoring, version 2.0, published on 27/10/2020 (https://globalgoals.goldstandard.org/407g-ee-ics- tpddtec-usage-guidelines/)
Findings	No findings.
Conclusion	The Validation team confirms the application of the approved methodologies which includes Emission reduction from Safe Drinking Water Supply, Version 1.0/5/ and Technologies and Practices to Displace Decentralized Thermal Energy Consumption, Version 3.1/5/ and confirms that no deviation to the methodology was observed.

D.4.7. Deviation from methodology and/or methodological tool

Means of validation	Compliance of monitoring plan with respect to the monitoring methodologies/5/ has been reviewed by the document review, review of the data and information presented, review of the monitoring plan, monitoring methodologies including the applicable tool(s), evaluation of data management and the quality assurance and quality control system. The applicability of the methodologies were found to be fulfilled, no deviation from methodologies was observed.
Findings	No finding was raised
Conclusion	The validation team confirms that no deviation from the selected methodologies were applied in the validation of the proposed GS PoA.

D.4.8. Clarification on applicability of methodology, tool and/or standardized baselines

Means of validation	The validation team did not find any event/observation, which may raise concern about the applicability or application of the methodologies on the PoA.

Findings	No finding was raised.
Conclusion	The validation team confirms that no clarification was needed on the selected methodologies.

D.4.9. Eligibility criteria for inclusion

Means of validation

The eligibility criteria for the inclusion of VPA in the PoA is as follows:

Applicability Criteria as per methodology	Justification from PP	MoV
Technology	**For ICS** Each VPA will employ efficient cookstove technologies. ICS Technologies utilizing new biomass feedstock are not included. The cookstove technologies will meet minimum criteria as outlined below: Thermal efficiency equal to or greater 20% The technologies each will have continuous useful energy outputs of less than 150kW per unit **For WPS** Project technology performance level (HWT and IWT): It shall be demonstrated based on report of laboratory testing or official notification that the project technology or equipment achieves either (i) compliance with the national standard or guideline for household drinking water treatment technology, or (ii) the performance target classification 3-star or 2-star level, meaning "Comprehensive	The purpose of the PoA is to provide clean cooking solutions and safe drinking water within the host countries Kenya and Nigeria and each installed / distributed units will have unique ID. (i) Technical specification of all ICS and WPS devices shall be recorded and made available for cross-checks. The entire database will be made available to confirm that if the cookstove technologies are meeting the minimum criteria of thermal efficiency equal to or greater than 20% and each technology will have energy outputs of less than 150kW per unit. (ii) The database will also include information on the WPS and it will be confirmed that the WPS technology will either meet the compliance with the national standard or guideline for household drinking water treatment technology, or the performance target classification 3-star or 2-star level, meaning "Comprehensive

		Protection," as per the WHO International Scheme to Evaluate Household Water Treatment Technologies (World Health Organization, 2011).	Protection," as per the WHO International Scheme to Evaluate Household Water Treatment Technologies (World Health Organization, 2011).
	Location	Each VPA will be located within the physical/geographical boundary of the PoA.	Each VPA will be located within the physical/geographical boundary of the PoA. All the ICS and WPS devices are installed/distributed with the territorial boundary of Kenya and Nigeria.
	Additionality	Each VPA will satisfy the criteria for demonstrating additionality through one of the following options: **Option 1:** As per Activity Requirement: As per GS4GG Community services activity requirements, Version 1.2, Para 4.1.9, Projects that meet any of the following criteria are considered as deemed additional and therefore are not required to prove Financial Additionality at the time of design certification: (a) Positive list (Annex B of this document) (b) Projects located in LDC, SIDS, LLDC (c) Microscale projects **Option 2**: CDM Barrier • Para 12 and 13 of Tool 19 (version 9.0); or • Para 10/Figure 1 of Tool 21 (Version 13.1); or Para 11 of Tool 21 (Version 13.1)	The requirement would be assessed at VPA level as additionality is being demonstrated at the VPA-level (would be required to demonstrate compliance under the positive list).

	De-Bundling	As per GS4GG Programme of activities requirements section 10.1.1, de-bundling provisions do not apply to Voluntary PoAs.	Not applicable
	Double Counting	Each VPA will utilize identifiers for every appliance under the PoA to show that the appliance belongs to that specific PoA. The unique identifier will be designating each appliance as part of the PoA, and CME master distribution/ installation records will ensure each sale is credited under only a single VPA.	As started in the monitoring plan each device will be provided with a UID (unique identification number). This would help in avoiding the double counting and will ensure that one device has been taken into account only once for emission reduction calculation. Thus, this approach was found to be appropriate and acceptable.
	History	V/CPAs are neither registered as project activities with other offset Schemes, included in other registered PoAs, nor the project activities that have been Deregistered, unless transitioning to GS from other standard.	VPAs included under this PoA will be independent with no relation to any other PoA registered under CDM or GS. For this CME has provided Declaration showing this project is implemented independently unless transitioning to GS from other standard/24/.
	Start Date	Each VPA will prove that the start date of the VPA is on or after the start date of the PoA, or state that the VPA is claiming credits retroactively. As the project involves distribution / installation of WPS & ICS (distributed technology) the start date is the date of implementation of the first unit under the project.	Start date of each VPA included under this PoA, can be retraced from the Sales receipt or installation database/19/, where the records of sale/installation of first unit of ICS or WPS has been mentioned.
	Crediting Period	Each VPA will have a renewable crediting period	All the VPAs will have Crediting Period and its duration, start date of the crediting period can be on or after the implementation of the sale/installation of first unit of ICS/WPS.

	Public Funding	Each VPA will confirm that it is not receiving funding dedicated as Official Development Assistance (ODA) through a two-stage process. The first stage is a statement by the VPA Implementer if it is receiving public funding from an Annex 1 Parties to the United Nations Framework Convention on Climate Change (UNFCCC) or Official Development Assistance (ODA) funding. If the VPA is receiving public funding second statement is required from the founder affirming that the public funding does not result in the diversion of ODA.	There is no Public Funding involved in the inclusion of VPAs, this can be verified from the ODA declaration /15/ form submitted by the VPA Implementer.
	CME Approval	Each VPA will prove it has received the approval of the CME of the PoA.	To verify the CME's approval for the VPA inclusion a letter of approval has been submitted along with VPA inclusion report/21/.
	Methodology	**For ICS** Each VPA will apply the GS methodology: "Technologies and practices to displace decentralize thermal energy consumption", Version 3.1 and adhere to all applicability conditions and other requirements of the methodology **For WPS** Each VPA will apply the GS methodology: "Emission Reductions from safe drinking water supply" Version 1.0 and adhere to all applicability conditions and other requirements of the methodology	VPA has followed the "Technologies and practices to displace decentralize thermal energy consumption", Version 3.1/5/ for ICS and Emission Reductions from safe drinking water supply" Version 1.0/5/ for WPS and all the detailed fact are as per the guidelines of the methodologies/5/ mentioned above.

	Target Group	The target group of the PoA, and each included VPA, are households and/or institutions:	Target population of installation/distribution of each unit of ICS/WPS in mentioned in the electronic database/19/ shared by the CME provided information consistent to the DDs/04/.
	Sampling	Each VPA will adhere to the sampling requirements stipulated in "Standard for Sampling and surveys for CDM project activities and programmes of activities" version 09.0.	Sampling plan for each technologies are mentioned in their respective VPA-DDs/04/.
	Stakeholder Consultation and Environmental Analysis	Each VPA will conduct a Local Stakeholder Consultation / SFR and adhere to the Environmental Impact Analysis requirements of the host country	EIA is not mandatory for ICS and WPS in the Kenya and Nigeria as confirmed from the respective local experts. For stakeholder consultation, CME has shared the Local Stakeholder consultation report/17/.
	VER Ownership	Each VPA will assure ownership of the VERs is secured by the CME	Carbon Title Transfer agreement between CME and end-user has been provided to verify the claims of VER ownership. End-Users are being made aware about this title transfer at the time of sale of ICS/WPS units.
	Meth threshold	Each WPS VPA will ensure that it will meet the small-scale thresholds and remain within those thresholds throughout the crediting period	To be assessed at VPA level for small scale VPAs.
	SDG outcome assessment	The monitoring plan for SDG shall include: 1. Reduction in smoke, PM, soot emissions after shifting to the project ICS 2. Reduction in incidence of diarrhoea and water borne diseases etc. after shifting to the project WPS	To be assessed at VPA level for the SDG outcome as VPA-DD will include the monitoring plan for each SDG.

		3. Number of ICS/WPS distributed and operating. 4. Total Number of WPS distributed/installed under the project and % of WPS distributed/installed provide safe drinking water quality 5. Number of male/female persons hired. 6. Fuel savings reported by users in the PoA after shifting to ICS	
	Safeguarding Principles	The CME shall conduct the Safeguarding Principles Assessment as per the Safeguarding Principles & Requirements at the VPA/CPA equivalent level.	To be assessed at the VPA level as per the VPA-DD.
	Retroactive VPAs	Retroactive VPAs that are submitted to GS /SustainCert at a date later than one year from the VPA start date shall not be eligible for Gold Standard Certification.	To be assessed at later stage as retroactive VPAs shall be included after the GS/SustainCert preliminary review.
	CER Labelling	Projects in other standards seeking labelling of CERs under GS4GG shall demonstrate compliance with section 2.0, Annex B of GHG Emissions Reduction and Sequestration Product Requirements	To be assessed at the VPA level as per the VPA-DD.
	Conditions to be met in multi-country PoAs	Not applicable. Although the PoA is multi-country, a VPA shall remain limited to a singular country in the PoA and shall not include more than one country in the VPA boundary.	To be assessed at the VPA level as per the VPA-DD.
Findings	No finding		

Conclusion	The validation team has cross checked the parameters and values related to the emission reduction and confirmed that justification of the mentioned values is correct.

D.5. Demonstration of additionality

Means of validation	As per the applied methodologies Emission reduction from Safe Drinking Water Supply, Version 1.0/5/, TPDDEC Ver 3.1/5/, and As per GS4GG Community services activity requirements, Version 1.2/7/, Para 4.1.9, Projects that meet any of the following criteria are considered as deemed additional and therefore are not required to prove Financial Additionality at the time of design certification: (a) Positive list (Annex B of this document) (b) Projects located in LDC, SIDS, LLDC (c) Microscale projects The assessment team has reviewed the details provided in PoA-DD and without the carbon revenue/incentive, CME cannot proceed with the project/implementation of the VPAs. Hence, it was confirmed that the additionality will be demonstrated at the VPA level in-line to the requirements stated in the community service requirements version 1.2/14/ and additionality of the first VPA will be applicable for rest all the VPA present in the same country.
Findings	None.
Conclusion	The validation team confirms that all the documented evidence listed and reviewed during the validation process are found correct and is able to confirm that: a) The GS benefits were considered necessary in the decision to undertake the project as a proposed project activity. b) All the assumptions and data used by the project participants are listed in the PoA-DD/4/, including their references and sources; c) All underlying assumptions are appropriate and reasonable in context of the project activity d) The capacity and technology details are correct and in line with the requirements for Auto additional projects.

D.6. Start date, crediting period type and duration

Means of validation	The start date of the PoA is 02/07/2021 as this was the date when the Design Consultation report was first submitted to GS4GG/25/. The operational lifetime of the project is 20-years. The lifetime of the project is checked from the technical details as provided by supplier and the details are found correct and consistent/4/.
Findings	No findings were raised.
Conclusion	The project start date as stated in PoA-DD/4/ has been validated as per the definition of start date given in the CDM glossary terms. • A crediting period of 5 years has been selected by the CME. • The expected lifetime of the project is indicated in the PoA-DD that of 20 years.

D.7. Safeguarding Principles Assessment

Means of validation	The Safeguarding Principles Assessment has been undertaken by the CME at the VPA level. Please refer to the VPA inclusion report for detailed assessment/21/.
Findings	No findings were raised
Conclusion	This project has only positive impacts on the environment. Both Social and environmental aspects are properly discussed in the VPA Validation report/21/.

D.8. Summary of Stakeholder consultation

Means of validation	The CME has conducted consultation at both PoA and VPA level. At the PoA level the CME has conducted the design consultation. As per clause 6.1.2 of the GS4GG Programme of Activity Requirements" V1.2, for the PoA level consultation, CME conducted the mandatory Design Consultation to obtain the feedback from relevant stakeholders. Given clause 6.1.2 does not mandate a live meeting for PoA level consultation, hence the design consultation was conducted virtually (by inviting feedback via email, phone calls and whatsapp messages) on 14/05/2021 with the 30 days of gap for receiving comments, review and feedback up till 18/06/2021 with additional 5 days for the stakeholders to respond/26/. Latest PoA-DD and Design Consultation Report have been provided for the better clarification. The design consultation has been approved GS already. The PoA-DD is found consistent with the information stated in the design consultation report. For VPA level consultation, under eligibility criteria #14 in the PoA-DD, CME has clearly stated that that both SC and SFR shall be conducted at VPA level to meet stakeholder consultation requirement as per GS4GG guidelines for the VPAs to be included in the PoA. For details related to VPA level consultation refer validation report for the VPAs.
Findings	No finding
Conclusion	The Validation team confirmed that the CME has conducted the mandatory design consultation as part of PoA level consultation in compliance with applicable consultation GS4GG stakeholder consultation requirements.

D.9. Sustainable development co-benefits

Means of validation	The project will positively contribute to the following SDG's 1. SDG 1- No Poverty: By the implementation of this PoA population of the benefiting countries will have the access to basic services and reduced financial burden of diseases which were emerging from the traditional techniques of cooking and drinking water habits. 2. SDG 3- Good health and well-being: PoA implementation would reduce incidences of water-borne illness and breathing related problems within the host countries of Kenya and Nairobi. The reduction of smoke levels in the indoor would also promote good health and well-being. 3. SDG 6- Availability of Water & Sanitation: By implementing the PoA the locals will get clean & safe drinking water. 4. SDG 7- Affordable and Clean Energy: By the implementation of PoA, population of Kenya and Nairobi will have the access to clean, affordable and safe mode of energy and eliminate the dependency over fossil fuel for cooking and boiling water for drinking. 5. SDG 8- Decent Work and Economic Growth: 6. SDG 12- Responsible Consumption and Production: By the implementation of PoA, population of Kenya and Nairobi shall become sensitive towards Natural Resources and this achieved the sustainable management and efficient use of natural resources. 7. SDG 13- Climate action: The PoA will reduce the GHG emissions by replacing the traditional/inefficient way of purifying water by burning of non-renewable biomass in host countries of Kenya & Nigeria. 8. SDG 15- Life on Land: The PoA promotes the sustainable management of all kinds of forest resource and halted the deforestation providing time to forest for self-restoration. The contribution of the project towards these SDG's has been clearly in the PoA-DD/4/. The assessment team has checked the details during remote site audit and found that the details and related impacts as discussed are correct.
Findings	No findings were raised.
Conclusion	SDG impacts are well discussed in the PoA-DD/4/. The validation team confirms the technology which is implemented reflects the good practice in the host countries also contributing to sustainable development of the host country.

D.10. Grievance Mechanism at PoA Level

Means of validation	The continuous Input or Grievance Expression Process Books is part of the project implementation and will be made available at various distribution sites. The stakeholder also has the option of contacting the CME via post or email to details provided below: **Impact Carbon Kenya** PO Box 1903-00606, Nairobi, House #44, Muthithi Road Westlands, Nairobi, PO Box: 1903-00606 **Impact Carbon Nigeria** Plot 61, Adekunle Fajuyi Street, G.R.A. Ikeja. Lagos Nigeria **Email:** info@impactcarbon.org
Findings	No findings were raised.
Conclusion	The Grievances are discussed in the PoA-DD/4/. The validation team confirms the expression book which is available in all sites & a working email ID, reflects the good practice in the host countries

SECTION E.Internal quality control

The draft validation report prepared by the validation team was reviewed by an independent technical review team to confirm if the internal procedures established and implemented by ESPL were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the applicable CDM and GS4GG rules/requirements. The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team were independent of the validation team.
The technical review process may accept or reject the validation opinion or raise additional findings in which case these must be resolved before requesting for registration. The technical review process is recorded in the internal documents of ESPL, and the additional findings get included in the report.

The final report approved by the technical reviewer is authorized by Managing Director and issued to CME and/or submitted for request for registration, as appropriate on behalf of ESPL.

SECTION F.Validation opinion

ESPL was contracted by Impact Carbon for validation of the PoA "Improved Cookstove and Safe Water Programme"/4/. The validation was performed on the basis of rules and requirements defined by UNFCCC for the CDM project activities and GS4GG rules and requirements/14/.

The PoA involves distribution of technologies that will provide clean cooking solutions & safe water to the locals of Kenya and Nairobi as they are the host countries. The reduction in the amount of fuel consumption by the not burning non-renewable/fossil fuel biomass to cook and purify water, reduces CO2 emissions that are real, measurable and mainly helps in mitigating climate change while providing clean cooking solutions & safe drinking water. The project correctly applies baseline and methodologies that includes Emission reduction from Safe Drinking Water Supply, Version1.0/5/ and TPDDTEC Version 3.1/5/ and is assessed against latest valid GS4GG requirements/14/.

The proposed GS PoA is likely to achieve the anticipated emission reductions stated in the PoA-DD provided the underlying assumptions do not change.

ESPL has informed the project participants of the validation outcome through the draft validation report.

ESPL applied the following validation process and methodology using a competent validation team;

- the desk review of documents and evidence submitted by the project participant in context of the reference GS4GG and CDM rules and guidelines issued by CDM EB and GS secretariat,
- undertaking/conducting remote site visit, interview or interactions with the representative of the project participant,
- reporting audit findings with respect to clarifications and non-conformities and the closure of the findings, as appropriate and
- preparing a draft validation opinion based on the auditing findings and conclusions

The review of the PDD, supporting documentation, subsequent follow-ups actions (interviews) has provided ESPL with sufficient/insufficient evidence to determine the fulfilment of stated criteria.

Appendix 1. Abbreviations

Abbreviations	Full texts
General	
BE	Baseline Emission
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Request
CO2	Carbon di oxide
CP	Crediting Period
DR	Desk Review
EB	Executive Board
ESPL	Earthood Services Private Limited
FAR	Forward Action Request
GHG	Green House Gas
GSC/GSP	Global Stakeholder Consultation Process
GSGG	Gold Standard for the Global Goals
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
LoA	Letter of Approval/Authorization
LSC	Local Stakeholder Consultation Process
MoC	Modalities of Communication
MoV	Means of Validation

MP	Monitoring Plan
N2O	Nitrous Oxide
PCP	Project Cycle Procedure
PE	Project Emission
PoA DD	Programme of Activities Design Document
PP	Project Participant
PS	Project Standard
RFR	Request for Registration
tCO2e	Tonnes of Carbon di oxide equivalent
UNFCCC	United Nations Framework Convention on Climate Change
V	Version
VVS	Validation and Verification Standard

Appendix 2. Competence of team members and technical reviewers

COMPETENCE STATEMENT			
Name	Shreya Garg		
Country	India		
Education	M.Sc. (Climate Science & Policy), TERI University		
Experience	6 Years +		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS.I.A., AMS.I.C., AMS.I.D., AMS.I.F., AMS.II.D., AMS.II.G., AMS.II.J., AMS.III.AV., ACM0002, ACM0012		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (TA 1.2, TA 3.1)		
Reviewed by	Abhishek Mahawar	**Date**	01/03/2018
Approved by	Ashok Gautam	**Date**	01/03/2018

Name	Vaishali Vatsa		
Education	M.Sc. (Environmental Studies and Resource Management), TERI University		
Experience	4 months		
Field	Climate Change		
Approved Roles			
Team Leader	NO		
Validator	Yes		
Verifier	Yes		
Methodology Expert	NO		
Local expert	NO		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert (X.X)	NO		
Trainee	NO		
Reviewed by	Shreya Garg	**Date**	30/12/2019
Approved by	Anshika Gupta	**Date**	02/01/2020

Name	Abhishek Bharti		
Education	MA (Environmental Studies), University of Delhi B.Sc (Physics and Electronics)		
Experience	2 months		
Field	Environment		
Approved Roles			
Team Leader	No		
Validator	No		
Verifier	No		
Methodology Expert	No		
Local expert	No		
Financial Expert	No		
Technical Reviewer	No		
TA Expert	No		
Trainee (Validator/Verifier)	Yes		
Reviewed by	Deepika Mahala	**Date**	14/06/2021
Approved by	Ashok Kumar Gautam	**Date**	14/06/2021

Name	Ms. Adeola Ijeoma Eleri		
Country	Nigeria		
Education	Certificate in Energy and Sustainable Development (IIIEE, Sweden) M.Sc. (Environmental Biology) B.Sc. (Microbiology)		
Experience	8 Years		
Field	Climate Change, Energy & Environment		
Approved Roles			
Team Leader	NO		
Validator	NO		
Verifier	NO		
Methodology Expert	NO		
Local expert	YES (Nigeria)		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert	NO		
Reviewed by	Abhishek Mahawar	**Date**	01/03/2018
Approved by	Ashok Kumar Gautam	**Date**	01/03/2018

Competence Statement	
Name	Shifali Guleria

Education	M.Sc. (Environmental Studies and Resource Management), TERI University		
Experience	2+ year		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	YES (AMS-I.A., AMS-II.G., AMS-III.A.V., AMS-I.D, ACM0002)		
Local expert	YES		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (1.2, 3.1)		
Reviewed by	Shreya Garg	**Date**	09/07/2020
Approved by	Ashok Gautam	**Date**	09/07/2020

Appendix 3. Documents reviewed or referenced

S.No.	Author	Title	References to the document	Provider
1.	UNFCCC	Standard: CDM PS	Ver. 3.0	Others
2.	UNFCCC	Standard: CDM PCP	Ver. 3.0	Others
3.	UNFCCC	Standard: CDM VVS	Ver. 3.0	Others
4.	Impact Carbon	PoA-DD	Version 5.0 dated 18/05/2022	CME
5.	Gold standard	TPDDTEC Emission reduction from Safe Drinking Water Supply	Version 3.1 Version 1.0	Others
6.	GS4GG	GS4GG Stakeholder consultation and engagement requirements	Version 1.2 Dated Oct 2019	Others
7.	GS4GG	Community Services Activity Requirements	Version 1.2 Dated Oct 2019	Others
8.	CNN	Link: https://edition.cnn.com/interactive/2020/health/coronavirus-maps-and-cases/	Last accessed: 05/10/2021	Others
9.	Impact Carbon	VPA-DD	Version:5.0 Dated: 18/05/2022	CME
10.	UNFCCC	CDM PoA-DD Forms	Version 1.1	Others

11.	GS4GG	Gold Standard Programme of Activities Requirements,	Version 2	Others
12.	GS4GG	Interim Measures	Version 3.0	Others
13.	UNFCCC	Standard for Sampling and surveys for CDM project Activities	Version: 9.0	CME
14.	GS4GG	Principles and requirements for GS4GG	Version 1.2	Others
15.	Impact Carbon	ODA Declaration	Dated: 30/07/2021	CME
16.	UNFCCC	Standard for Sampling and surveys for CDM project Activities	Version: 9.0	Others
17.	Impact Carbon	Local Stakeholder/online visit	Dated: 31/08/2021	CME
18.	Impact Carbon	Carbon transfer agreement between and end-users	-	CME
19.	Impact Carbon	Distribution database	-	CME
20.	IPCC	2006 IPCC default values	2006	Others
21.	ESPL	VPA inclusion reports (Kenya and Nigeria)	17/12/2021 Version 2.0	Others
22.	Impact Carbon	VPAs exclusiveness declaration	-	CME
23.	Impact Carbon	Declaration showing this project as no new registration	-	CME
24.	Impact Carbon	Declaration showing this project is implemented independently.	-	CME
25.	Impact Carbon	Design Consultation Report	02/07/2021	CME
26.	Impact Carbon	Stakeholder Consultation Report	14/05/2021	CME

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

Table 1. Remaining FAR from validation and/or previous verification

~~**FAR ID**~~	~~01~~	~~**Section no.**~~	~~E.2~~	~~**Date :** DD/MM/YYYY~~
~~**Description of FAR**~~				
~~**Project participant response**~~				~~**Date :** DD/MM/YYYY~~
~~**Documentation provided by project participant**~~				
~~**VVB assessment**~~				~~**Date:** DD/MM/YYYY~~

Table 2. CL from this verification

CL ID	01	**Section no.**	D.3	**Date :** 24/09/2021
Description of CL				
CME is requested to provide the following pending documents for the assessment: 1. Declaration for lifespan of the WPS system whether it is for filter or complete system 2. Confirmation by CME that the PoA is voluntary action 3. Agreement between CPA Implementer and CME 4. CME declaration (Declaration by the CME that VPA is not included in any other PoA) 5. CME approval letter 6. Stakeholder consultation report 7. Usage Survey sheet 8. PoA Preliminary review form				
Project participant response				**Date :** 24/10/2021
All requested documents are being submitted				
Documentation provided by project participant				
1. Declaration for lifespan of the WPS system 2. Confirmation by CME that the PoA is voluntary action 3. Agreement between CPA Implementer and CME 4. CME declaration (Declaration by the CME that VPA is not included in any other PoA) 5. CME approval letter 6. Stakeholder consultation report 7. Usage Survey Form template 8. GS4GG PoA Preliminary review feedback form from Sustaincert				
VVB assessment				**Date:** 29/10/2021
PD has provided all the documents required for assessment. Thus, CL#01 stands closed.				

CL ID	02	**Section no.**	D.4.1.	**Date :** 06/12/2021
Description of CL				
Footnote 12 of the PoA-DD states that "It may not be possible to collect end user details for all ICS distributed under a VPA". However, CME has not provided any reason for why this might happen. According to the footnote 31 of the applied methodology TPDDTEC Version 3.1, the required data shall be maintained for all end users except in cases where this is justified as not feasible. CME is requested to further clarify.				
Project participant response				**Date :28/03/2022**

As specified in the footnote 31 of the methodology, the ICS sales under the PoA will be happening through sales and distribution partners (distributors/retailors etc) in market stalls or shops where the retailer cannot reasonably be expected to collect customers names and addresses during busy times. Hence footnote 12 of the PoA-DD provides provision to ensure that end user data being collected remains representative of the project population in such cases.
Documentation provided by project participant
-
DOE assessment **Date:** 10/12/2021
CME has added footnote 12 which states that end user details will be collected for as many end users as of same extent with the representative sampling. Thus, CME will ensure capturing the required details for the end-users. CL#02 stands closed.

Table 3. CAR from this verification

CAR ID	01	**Section no.**	D.3.	**Date :** 23/09/2021
Description of CL				
1. Safeguarding principles and requirements in para 2.1.4 states that a non-exhaustive list of assessment questions set out against each Principle is provided. The Project shall provide responses to these questions, including justifications for responses as below: 'Yes' – Meaning that the risk or expected issue identified in the assessment question is relevant to the Project and context. The Requirements apply and adherence shall be demonstrated. All information must be included in the Monitoring & Reporting Plan and future Monitoring Reports. 'Potentially' – Meaning that the risk or expected issue may be relevant at some point in the Project's cycle but is not necessarily relevant now and/or may never arise. The Requirements apply but the Project Developer may justify why these Requirements do not need to be demonstrated as being met. 'No' – Meaning that the risk or expected issue is not relevant to the Project. Justification shall be provided to support this conclusion, with evidence provided where required. CME shall respond to each of the assessment question accordingly as states against each kind of response.				
Project participant response				**Date : 24/10/2021**
Safeguarding principles assessment has been updated accordingly.				
Documentation provided by project participant				
VVB assessment				**Date: 29/10/2021**
PD has updated the safeguarding principles assessment in-line to the template guidelines. Thus, CAR#01 stands closed.				

Table 4. FAR from this validation

~~**FAR ID**~~	~~01~~	~~**Section No.**~~	~~D.7.~~	~~**Date :06/12/2021**~~
~~**Description of FAR**~~				
~~**Project participant response**~~				~~**Date :** DD/MM/YYYY~~
~~**Documentation provided by project participant**~~				
~~**VVB assessment**~~				~~**Date:** DD/MM/YYYY~~