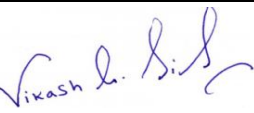


Validation Report for Transition of Component Project Activities from CDM to GS4GG

BASIC INFORMATION

Title and UNFCCC reference number of the programme of activities (PoA)	Improved cookstove program in Bangladesh supported by the Republic of Korea UNFCCC PoA Reference number: 10431 GS Reference number: GS 11570	
Version number of the validation report	02	
Completion date of the validation report	22/09/2023	
Version numbers of the PoA-DD to which this report applies	6.0, 13/09/2023	
Title and reference number of each VPAs to be included	VPA Ref. no.	Title
	GS 11571	GS 11571 Improved cookstove program in Bangladesh supported by the Republic of Korea – CPA 02
	GS 11572	GS 11572 Improved cookstove program in Bangladesh supported by the Republic of Korea – CPA 03
Applied methodologies and standardized baselines for VPA	AMS-II.G., version 08, “Energy efficiency measures in thermal applications of non-renewable biomass”	
Mandatory sectoral scopes	Sectoral Scope 3: Energy demand	
Coordinating/managing entity (CME)	Value Network Venture Advisory services Pte. Ltd.	
Host Parties	People’s Republic of Bangladesh	
Transition Pathway	PoA seeking registration with GS4GG to issue GSVERs only and/or conversion of issued CERs to GSVERs	
Activity Requirements applied	Community Services Activities Requirements	
Product Requirements applied	GHG Emissions Reduction & Sequestration Product Requirements	
SDG Indicators	SDG 1- No Poverty SDG 5- Gender Equality SDG 7- Affordable and Clean Energy SDG 8- Decent Work and Economic Growth SDG 13 - Climate Action SDG 15- Life on Land	
Name and UNFCCC reference number of the VVB	Carbon Check (India) Private Ltd. (E-0052)	
Name, position and signature of the approver of the validation report	 Vikash Kumar Singh, Compliance Officer	

SECTION A. Executive summary

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Purpose and general description

The Co-ordinating Managing Entity “Value Network Venture Advisory services Pte. Ltd, and VPA Implementer “Bangladesh Bondhu Foundation (BBF)” have appointed the VVB, “Carbon Check (India) Private Ltd. (CC IPL)” to perform an independent validation for the transition of the CDM Programme of Activities “Improved Cookstove program in Bangladesh supported by the Republic of Korea (hereafter referred to as “PoA”) to GS4GG along with its included GS 11571 Improved cookstove program in Bangladesh supported by the Republic of Korea – CPA 02, GS 11572 Improved cookstove program in Bangladesh supported by the Republic of Korea – CPA 03.

The PoA involves the replacement of less efficient baseline cooking stoves using woody biomass with biomass-based improved cookstoves (“ICS”). This will result in reduced usage of fuel (biomass) for cooking purposes, contributing to environmental sustainability and community development.

The VPAs are designed to generate emission reductions by the distribution of fuel-efficient wood stoves. The CME and VPA implementer are responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the component project activities.

This report summarises the findings of the validation of the project, performed on the basis of relevant Gold Standard principle and requirements /B01¹/ and applicable UNFCCC guidance, as well as criteria, given to provide for consistent project operations, monitoring and reporting, and compliance with host country criteria and Gold Standard specific criteria. This report contains the findings and resolutions from the validation and a validation opinion thus confirming the project design as documented, is sound and reasonable and meets the stated requirements and identified criteria.

Objective

The purpose of validation is to have a thorough and independent assessment of the proposed project activity against the applicable GS4GG requirements /B01/, CDM requirements, in particular, the project's baseline, monitoring plan and the project's compliance with relevant Gold Standard requirements and host Party criteria. Gold Standard-specific conditions are also validated to confirm that the project design (as documented) is complete, reasonable and meets the stated requirements and identified criteria. Validation is seen as necessary to assure stakeholders about the project's quality and its proposed generation of verified emission reductions (VERs).

Scope

The validation scope is defined as an independent and objective review of the VPAs /05/. The VPA-DDs /05/ are reviewed against the relevant Gold Standard criteria and applicable decisions by the CDM Executive Board, including the approved baseline and monitoring methodology. Based on the recommendations in the Validation and Verification Standard and GS4GG requirements, the validation team employed a rule-based approach, focusing on identifying significant risks for project implementation and generating GS VERs.

The validation is not meant to provide any consulting towards the CME. However, stated requests for clarifications and/or corrective actions may have provided input for the improvement of the project design.

a) ¹ <http://www.goldstandard.org>

While carrying out the validation, CCIPL determines if the project activity complies with the requirements of Gold Standard, specifically the applicability conditions of the selected methodology and assesses the claims and assumptions made in the VPA-DDs /05/ without limitation on the information provided by the project participants.

The report is based on the assessment of the VPA-DDs /01//05/ undertaken through the application of standard auditing techniques including but not limited to document reviews, remote interviews, and stakeholder interviews, review of the applicable/applied methodology and its underlying formulae and calculations.

This report contains the findings and resolutions from the validation and a validation opinion on the proposed VPAs thus confirming the project design as documented, is sound and reasonable and meets the stated requirements and identified criteria.

Conclusion

CC IPL is of the opinion that the VPAs GS 11571 Improved Cookstove program in Bangladesh supported by the Republic of Korea – CPA 02, GS 11572 Improved Cookstove program in Bangladesh supported by the Republic of Korea – CPA 03. As described in the VPA TRF meets all relevant requirements of GS4GG, meets host country criteria and has correctly applied the methodology AMS II.G, version 08 /B02/. Therefore, CCIPL recommends GS4GG for registration of the VPAs.

SECTION B. Validation team

B.1. Validation team, technical reviewer and approver

Carbon Check (India) Private Ltd. has appointed a competent team as per the UNFCCC Accreditation Standard, GS4GG requirements and CCIPL's internal procedures. Further details regarding team competence can be found in Appendix 2. The team is outlined below:

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)
1.	Team Leader/Technical Expert	IR	Sharma	Harish	CC IPL
2.	Team Member	IR	Haldar	Manas	CC IPL
3.	Technical Reviewer	ER	Chakraborty	Shivaji	CC IPL
4.	Trainee Assessor	IR	Kumar	Ajay	CC IPL
5.	Trainee Assessor	IR	Yadav	Shalini	CC IPL

SECTION C. Means of validation

C.1. Desk/document review

>>List of all documents reviewed or referenced during the validation is provided in Appendix 3.

C.2. On-site inspection

GS4GG Programme of Activity Requirements version 2.0 /B01/, VVB requires to conduct an on-site inspection for transition projects. Furthermore, an on-site visit is done for the validation activity. The following activities have been carried out during the on-site visit.

The validation team has carried out on-site interviews to assess the information included in the project design document, and stakeholder consultation report. During the desk review, the relevant records related to project design, implementation and operation were checked, WBT reports of project ICS, stakeholders engaged, implementing agency and onsite beneficiary interviews with stakeholders were taken on sampling basis.

C.3. Interviews

No.	Name	Organization	Date	Topic	Team member
/1/	Ritesh Kumar	CSIPL	05/04/2023 & 06/04/2023	•Discussion on the stated goal and policy of the PoA. •Discussion on the sustainability, environmental impact, local stakeholders meeting procedure, baseline scenario, additionality, monitoring plan, Start date •Discussion on the GS PoA-PDD and VPA-DDs, eligibility criteria and its compliance, ongoing financial need, SDG impact, eligibility criteria for inclusion of VPA in the PoA, safeguarding principles, stakeholder consultations and grievance mechanism in line with GS4GG, requirements.	Harish Sharma, Ajay Kumar, and Manas Halder
/2/	Saket Subham	CSIPL	05/04/2023 & 06/04/2023	Discussion on the GS PoA-PDD and VPA-DDs, eligibility criteria and its compliance, ongoing financial need, SDG impact, eligibility criteria for inclusion of VPA in the PoA, safeguarding principles, stakeholder consultations and grievance mechanism in line with GS4GG, requirements.	Harish Sharma, Ajay Kumar, and Manas Halder
/3/	Mohit Gupta	CSIPL	05/04/2023 & 06/04/2023	Discussion on the SDG impacts, project benefits and stakeholders' consultation.	Harish Sharma, Ajay Kumar, and Manas Halder

/4/	Md. Khalequzzaman	BBF	05/04/2023 & 06/04/2023	Project implementation and operation, monitoring procedure, data and information flow, Quality Assurance – Management and operating system, Monitoring records, MR and ER calculation	Harish Sharma, Ajay Kumar, and Manas Halder
/5/	Animesh Kumar Sarkar	BBF	05/04/2023 & 06/04/2023	Project implementation and operation, monitoring procedure, data and information flow, Quality Assurance – Management and operating system, Monitoring records, MR and ER calculation	Harish Sharma, Ajay Kumar, and Manas Halder
/6/	Ruman Mridha	BBF	05/04/2023 & 06/04/2023	Project implementation and operation, monitoring procedure, data and information flow, Quality Assurance – Management and operating system, Monitoring records, MR and ER calculation	Harish Sharma, Ajay Kumar, and Manas Halder
/7/	Faroque Hossain	BBF	05/04/2023 & 06/04/2023	Discussion on the SDG impacts, project benefits and stakeholders' consultation	Harish Sharma, Ajay Kumar, and Manas Halder
/8/	Md. Ashraful lam	BBF	05/04/2023 & 06/04/2023	Project implementation, sales/distribution records and database management.	Harish Sharma, Ajay Kumar, and Manas Halder
/9/	Mr Faruk Hossain	Partner (stove manufacturer)	05/04/2023 & 06/04/2023	Discussion on safety protocol followed during stove manufacturing.	Harish Sharma, Ajay Kumar, and Manas Halder
/10/	Salma (Sister in law) ID-MAM4-SIR-SER-CHO-D-2860	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/11/	Khodeja Khatun (ID-RSA-SAT-DEB-NOA-D-2985	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/12/	MD. Joinal Abedin (ID-YES5-SIR-	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder

	TAR-SAG-D-290				
/13/	Rabea Khatun (Wife) ID-KJS-SAT-KAL-DEA-D-5542	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/14/	China Begum (mother) ID- AKE1-FAR-SAL-RAM-D-1283	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/15/	Dilif (ID-NA01-NAO-NIA-SRE-D-3643	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/16/	Jannatun (mother) ID-ALI5-CNG-NAW-NAW-D-5198	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/17/	Marafat Ali (Son) ID-HA8-MYM-DHO-GAM-D-134	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/18/	Md. Abue Sama (ID-RIP- SAT-KAL-SON-D-2962	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/19/	Md.Manju miah (ID-sh3-mym-nan-jah-d-713	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/20/	Lucky Begum (wife) ID-MPH1-SIR-ULL-BAR-D-1220	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/21/	Fazlu Ali (ID- SVV-NAT- BAG-DAY-D-1226	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder

/22/	Riyajudin (ID-JAH4-NAO-POR-GHA-D-293)	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/23/	Reni Khatun (Wife) ID-BAD-CNG-SHI-SHA-D-973	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/24/	Kanti Rani (wife) ID-SUH1-NAO-PAT-DIB-D-295	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder
/25/	Sumara (ID-STR-CNG-BHO-BHO-D-239)	End-user	05/04/2023 & 06/04/2023	On-site monitoring survey	Harish Sharma, Ajay Kumar, and Manas Halder

SECTION D. Validation findings

D.1. Proposed VPA(s) for transition from CDM to GS4GG

VPA title and reference number	Version number of the VPA-DDs	Version number of the PoA-DD into which the VPA is included
GS 11571 Improved cookstove program in Bangladesh supported by the Republic of Korea – CPA 02	Version 06, dated 30/06/2023	Version 5.0, Dated 09/05/2023
GS 11572 Improved cookstove program in Bangladesh supported by the Republic of Korea – CPA 03		

D.2. General description of the VPA(s)

Means of validation	DR, I
Conclusion	This is the transition project from CDM to GS4GG. Based on review of the registered CDM CPA-DDs /01/, the validation team confirms that the description of the proposed VPAs is same as that mentioned in the respective CDM CPA-DDs and there is no change in the process and project design. The validation team has reviewed the respective VPA-DDs and is of the opinion that the design of the VPAs is in line with GS4GG Principles and Requirements /B01/.

D.3. Technologies/measures and eligibility under Gold Standard & Project Eligibility criteria

The proposed VPAs, under the PoA "Improved cookstove program in Bangladesh supported by the Republic of Korea " in Bangladesh are small-scale VPAs implemented in Bangladesh. The project is

applying CDM approved methodology AMS-II.G.: “Energy Efficiency Measures in Thermal Applications of Non-Renewable Biomass” (Version 08).

Eligibility under Gold Standard:

CME has defined project eligibility based on GS4GG Principles & Requirements as assessed below:

Project Eligibility Aspects	Eligibility criterion - Required condition	Justification by CME	Assessment by Validation team
Type of project	Eligible projects shall include physical action/implementation on the ground. Pre-identified eligible project types are identified in the Eligibility Principles and Requirements section.	The VPAs are already implemented. The VPAs are already one of the pre-identified types as per section 3.1.1 (b) of GS4GG Community Services Activity Requirements area automatically eligible for Gold Standard Certification as per section 4.1.3 of GS4GG Principles & Requirements.	In the TRF VPA-DDs /05/, the CME has demonstrated that VPAs are already implemented under CDM program. The project involves the dissemination of efficient Improved cookstoves (ICS) in Bangladesh. The ICSs are distributed in rural and urban households to reduce the use of firewood for cooking. The utilization of the systems will reduce the amount of non-renewable biomass wood-based domestic energy needs, which will contribute to a reduction in greenhouse gas (GHG) emissions. The eligibility criteria for the VPAs are defined in accordance with point (b) of section 3.1.1 of GS4GG Community Services Activity requirements version 1.2 /B01/ which states “Project activities that reduce energy requirements as compared to baseline scenario without affecting the level and quality of services or products, where the end-user of the products and services are clearly identified and when the physical intervention is required at the user end”. Therefore, the dissemination of the improved cookstoves will account for the end-use energy efficiency. According to Section 4.1.3. of the GS4GG Principles and Requirements version 1.2 /B01/, “A Project type is automatically eligible for Gold Standard

			Certification if there are Gold Standard approved Activity Requirements and/or Impact Quantification Methodologies associated with it or it's referenced in the Gold Standard Product Requirements". As the VPAs are eligible under GS4GG Community Services Activity Requirements, it is also eligible for the GS4GG certification. Hence validation team confirms that in accordance with the GS Principle and Requirements /B01/, the project is eligible under Gold Standard.
Location of Project	Projects may be located in any part of the world.	Project is within the geographic boundary of Republic of Bangladesh.	Based on the review of section A.2 of the registered CDM CPA-DDs /01/ and VPA TRF /05/, it is confirmed that the boundary of the proposed VPAs lies within the geographical boundary of Republic of Bangladesh. The eligibility criterion for inclusion of corresponding VPAs in the proposed PoA is defined in accordance with point (b) of section 3.1.1 of GS4GG principles and requirements version 1.2. Hence validation team confirms that in accordance with the GS Requirements /B01/, the project is eligible under Gold Standard.
Project Area, Project Boundary and Scale	The Project Area and Project Boundary shall be defined. Projects may be developed at any scale although certain rules, requirements and limitations may apply under specific Activity Requirements, Impact Quantification Methodologies and Products Requirements. In order to avoid double counting the Project	The boundary for the VPAs in terms of a geographical area is defined as the territorial boundary of the Republic of Bangladesh. To avoid inclusion of any stove which is a part of another registered carbon project/ programme, all ICS under these	As per applied methodology, the project boundary is the physical, geographical site of the efficient devices distributed that utilize biomass. Therefore, the project boundary covers each project ICS location. As the project ICS are spread throughout Bangladesh. The project ICS installation point is verified from stove distribution database /10/. The project boundary is correctly identified in accordance with the methodology AMS-II.G 2 .

² <http://cdm.unfccc.int/>

	shall not be included in any other voluntary or compliance standards programme unless approved by Gold Standard (for example through dual certification). Also, if the Project Area overlaps with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature, the Project shall demonstrate that there is no double counting of impacts at design and performance certification (for example use of similar technology or practices through which the potential arises for double counting or misestimation of impacts amongst projects)	VPAs have a unique ID number, inscribed on the stove, to uniquely identify the ICS avoiding any double counting and trace its user, later during monitoring and verification.	version 08.0. The project also avoids inclusion of any other registered carbon project by giving all ICS a unique ID number / 12/. Hence the proposed project is a small-scale project under UNFCCC rules. Furthermore, the CME has correctly identified each VPA under the PoA as small-scale in section B.2 of the CDM registered PoA DD /01/. The eligibility criterion for the VPAs is defined in accordance with point (c) of section 3.1.1 of GS4GG principles and requirements version 1.2. Hence validation team confirms that in accordance with the GS Requirements /B01/, the project is eligible under Gold Standard.
Host Country Requirements	Projects shall be in compliance with applicable Host Country's legal, environmental, ecological and social regulations.	The Government of Bangladesh, with a view to conserving and protecting the environment from unplanned development activities, enacted the Environmental Conservation Act (ECA) 1995 which necessitated obtaining an Environmental Clearance Certificate (ECC) from the Department of Environment (DoE) for any industries to be established or projects to be undertaken in Bangladesh (ECA, 1995).	The eligibility criterion of the proposed VPAs is defined in accordance with point (d) of section 3.1.1 of GS4GG principles and requirements version 1.2 /B01/. The same has been validated, the CME is a registered NGO (Reg. No. 3068) as per the "NGO Affairs Bureau" of the Prime Minister's office and thus any project undertaken duly complies with the prevalent legal and social regulations of Bangladesh. Hence validation team confirms that in accordance with the GS Requirements /B01/, the project is eligible under Gold Standard.

		The Environmental Conservation Rules, 1997 outlines the procedures, formalities and requirements for obtaining the ECC for different projects (ECR, 1997). Environmental Impact Assessment (EIA) is one of the necessary documents required to be submitted for getting environmental clearance. However, for improved cookstove EIA is not required as it is not listed in any of the three categories (Green, Orange and Red) of projects that need Environmental Clearance. Thus, the environmental and ecological compliance stands not applicable for the VPA. Further, the CME is a registered NGO (Reg. No. 3068) as per the “NGO Affairs Bureau” of the Prime Minister’s office and thus any project undertaken duly complies with the prevalent legal and social regulations of Bangladesh.	
Contact Details	As part of the Project Documentation the Project Developer shall provide (i) name and (ii) contact details of all Project Participants;	Name and Contact details of Project Participants are given in Appendix 2 of the VPA-DD.	The validation team has reviewed the registered CDM CPA-DDs /01/ and also the TRF VPAs Appendix 2 and confirms that the contact details of the Project Participants is same,

	AND in case of an organisation (iii) the legal registration details and (iv) documentation by the governing jurisdiction that proves that the entity is in good standing (defined as being a legal or other appropriate entity registered in or allowed to operate within the required jurisdiction and with no evidence of insolvency or legal/criminal notices placed against it or any of its Directors). Gold Standard retains the right (at its own discretion) to refuse use of the Standard where reputational concerns are highlighted.		and no change is found during the transition from CDM to GS4GG. The eligibility criterion for the proposed VPAs is defined in accordance with the point GS4GG-VAL-FORM Page 11 of 43 (e) of section 3.1.1 of GS4GG principles and requirements version 1.2.
Legal Ownership	Full and uncontested legal ownership of any Products that are generated under Gold Standard Certification, (for example carbon credits) shall be demonstrated. Where such ownership is transferred from project beneficiaries this must be demonstrated transparently and with full, prior and informed consent (FPIC). Note that for certain Project types there is a requirement for full and uncontested legal land title/tenure to be demonstrated. These are contained within specific Activity or Product Requirements. All projects shall immediately report to Gold Standard any land title/tenure disputes arising.	Criteria for transfer of carbon credit ownership: This is being ensured through relevant provisions in the customer agreements. Also, feedback on this has been collected during PoA design consultation as well as SFR round for the VPA	The validation team through document review found that legal ownership of the GS carbon credit generated from the project is transferred to CME as verified from end-user agreement receipts /06/. The eligibility criterion for proposed VPAs is defined in accordance with point (f) of section 3.1.1 of GS4GG principles and requirements version 1.2. Hence validation team confirms that in accordance with the GS Requirements /B01/, the project is eligible under Gold Standard.

Other Rights	As well as legal title and ownership, the Project Developer shall also demonstrate where required uncontested legal rights and/or permissions concerning changes in use of other resources required to service the Project (for example, access rights, water rights etc.). Any known disputes or contested rights must be declared immediately to Gold Standard by the Project Developer and resolved prior to further project implementation in affected areas.	Not applicable	Not applicable.
Official Development Assistance (ODA) Declaration	All Project Developers applying for project activities located in a country named by the OECD Development Assistance Committee's ODA recipient list and seeking Gold Standard Certification for carbon credits shall declare the Official Development Assistance (ODA) support. The Project Developer shall follow the GHG Emissions Reduction & Sequestration Product Requirements and submit the declaration at the time of Design Certification.	It is confirmed that there is no diversion of ODA. Hence, all VPAs under the PoA are automatically deemed in compliance.	During the validation process, the validation team did not find that there was any diversion of official development assistance (ODA) funding due to the proposed project activity. CME has submitted an authorized ODA Declaration in this respect /11/. The eligibility criterion for the proposed VPAs is defined in accordance with the point (h) of section 3.1.1 of GS4GG principles and requirements version 1.2. Hence validation team confirms that in accordance with the GS Requirements /B01/, the project is eligible under Gold Standard.

Eligibility under Gold Standard Community Services Activity (CSA) Requirements

Project Eligibility Aspects	Eligibility criterion – Required condition	Justification by CME	Assessment by Validation team
Eligible Project Types	All CSA Projects shall lead to climate change mitigation and/or adaptation by providing or improving access to services/resources at	The goal of the VPA is to distribute ICS (improving access to services) for household/SMEs users within the national borders of the Republic of Bangladesh.	In the TRF VPA-DDs /05/ CME has demonstrated that VPAs are already implemented under CDM program. The project involves the dissemination of energy-efficient ICSs in the

	the household or community or institution level. Eligible services include electricity and energy, water and sanitation, waste management, housing, etc.		Bangladesh The ICSSs are distributed inhousehold/SME to reduce the use of firewood for cooking. The utilization of the systems will reduce the amount of non-renewable biomass wood-based domestic energy needs, which will contribute to a reduction in greenhouse gas (GHG) emissions. The eligibility criterion for the proposed VPAs is defined in accordance with para 2.1.2 of Community Services Activity (CSA) Requirements version 1.2. Hence validation team confirms that in accordance with the GS Requirements /B01/, the project is eligible under Gold Standard.
GENERAL ELIGIBILITY CRITERIA - Type of project	(b) End-use energy efficiency: Project activities that reduce energy requirements as compared to baseline scenario without affecting the level and quality of services or products, where the end-user of the products and services are clearly identified and when the physical intervention is required at the user end. For example, efficient cooking, heating, lighting, etc.	The VPA involves distribution of energy efficient ICS to household/SMEs users in Republic of Bangladesh.	Validation team, through On site Visit, document review, confirms that VPA involves distribution of energy efficient ICS to household/SMEs users in Republic of Bangladesh.
GENERAL ELIGIBILITY CRITERIA - PROJECT AREA, BOUNDARY AND SCALE	Project Area and Boundary shall be defined in line with the applicable Impact Quantification Methodologies and Product Requirements. The definition of scale is the same for all Projects,	The project area is point location of ICS beneficiaries in the host country of the VPA. The VPA is a small-scale project with each independent subsystem (in case of this VPA = ICS) contributing to no greater than 1% of the small-scale threshold.	The VPAs are small-scale VPAs, and each unit lies within the small-scale threshold. The project boundary is limited to Republic of Bangladesh and the project area is the point location of the ICS end-users. The eligibility criterion for the proposed VPAs is defined in accordance with para 3.1.2 of Community Services Activity (CSA) Requirements version 1.2.

	except Microscale which is defined as: CSA Project issuing emission reductions less than or equal to 10,000 tCO₂eq per annum CSA Project seeking any Gold Standard Certified Impact or Product other than emission reductions and meeting one of the following criteria: Installed capacity less than equal to 2 MWel /6 MWth that employs renewable energy as the primary technology. Energy savings at a scale of no more than 20 GWh per year where energy efficiency is the primary activity Achieve GHG emissions reductions at a scale of no more than 20,000 tCO₂eq per annum where project activity type is not included in the above two criteria. For the purpose of applying UNFCCC methodologies for quantification of GHG reductions, 'small scale' is defined as in CDM Modalities and Procedures for three project types		Hence the proposed project is a small-scale project under UNFCCC rules. Furthermore, the CME has correctly identified each VPA under the PoA as small-scale in section B.2 of the CDM registered PoA DD/01/. Hence VT confirms that in accordance with the GS Requirements /B01/, the project is eligible under Gold Standard.
GENERAL ELIGIBILIT	Certain Impact Quantification	The baseline has been established using default	Validation team, through document review, confirms

Y CRITERIA Suppressed Demand scenario	methodologies allow projects to account Suppressed Demand scenario when establishing a baseline. In such cases, the application of Suppressed Demand baseline is limited to Small Scale and Microscale Projects. Where a Suppressed Demand baseline is applied, it is not possible to 'stack' Gold Standard Certified Impact Statements or Products as the definition of the baseline may be contradictory.	value of methodology. thus, the suppressed demand scenario is not applicable in establishing the baseline scenario.	that the establishment of the baseline has utilized a default value from the methodology and has not incorporated any suppressed demand.
GENERAL ELIGIBILITY CRITERIA – Legal Ownership	(a) Projects involving the distribution of a large number of devices for services such as heating, cooking, lighting, electricity generation, water treatment technology such as water filter, etc. shall provide a clear description of the ownership of the Products that are generated under Gold Standard Certification all along the investment chain. In line with the FPIC requirement, the proofs that end-users are aware of and willing to give up their rights on Products shall be provided. (b) The transfer of Product ownership shall be discussed during local stakeholder	The ICS owners will be transferring their rights on ownership of carbon credits to CME via the end user agreement /consent form via monitoring app etc (refer Eligibility under GS4GG section above). The same has been discussed during stakeholder consultations	The validation team through document review found that legal ownership of the GS carbon credits generated from the project is transferred to Bangladesh Bondhu Foundation. as verified from end-user agreement receipts /06/. The eligibility criterion for the proposed VPAs is defined in accordance with para 3.1.4 of Community Services Activity (CSA) Requirements, version 1.2 Hence validation team confirms that in accordance with the GS Requirements /B01/, the project is eligible under Gold Standard.

	consultation for projects.		
Additional requirements – Financial Additivity & Ongoing Financial Need	As per GS4GG Principles & Requirements version 1.2, clause 4.1.51, “All Gold Standard Projects (including those that transition from earlier versions) required to demonstrate Financial Additivity, as noted above, shall demonstrate Ongoing Financial Need for such mechanisms.”	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 Additivity at the time of design certification: (a) Positive list (Annex B of this document) (b) Projects located in LDC, SIDS, LLDC (c) Microscale projects As the host country of the project is Bangladesh, which is a LDCs therefore as per para 4.1.9(b) of the CSA requirement, the VPA is automatic addition and it is not required to demonstrate financial additivity. Given, the project is not required to demonstrate financial additivity, there is no requirement to demonstrate ongoing financial need in this project.	Validation team, through document review, confirms that as per GS4GG Community services activity requirements, Version 1.2, Para 4.1.9. As the host country of the project is Bangladesh, which is a LDCs, thus, financial additivity assessment is not required.

Eligibility Criteria for the inclusion of VPAs

No.	Criteria	Required condition	Means of Verification/Supporting evidence for inclusion	Assessment by the validation team
(1)	SDG outcome assessment	The monitoring plan for SDG shall include: GSDM 1.1.1 Average household	The SDG Monitoring plan includes all details	Through the review of VPA-DDs, the validation team confirms that each of the required SDG

		savings i.e., decrease in expenditure on basic service such cooking GSDM 5.4.1 Average time saving associated with cooking and/or fuel collection time. GSDM 7.1.1 Number of beneficiaries: Households GSDG 7.1.2 Proportion of population with primary reliance on clean fuels and technology. GSDM 8.5.1 Total number of jobs. GSDM 15.1.1 Total non-renewable wood fuel saved. GSDM 13.2.1 Amount of GHG emissions avoided or sequestered.		parameters has been included in the monitoring plan of the VPAs /05/.
2.	Safeguarding Principles	Conducted at VPA level	Not applicable	Through the review of VPA-DDs, the validation team confirms, CME has assessed the Safeguarding Principles at VPA level which deemed to be appropriate.

D.4 Demonstration of additionality

Means of validation	DR, I
Conclusion	The registered CDM PoA /01/ has already demonstrated additionality at the time of CDM registration that would systematically demonstrate the additionality of VPAs under the PoA in the inclusion criteria of VPAs.

	As per paragraph 4.1.9 of GS4GG Community services activity requirements, version 1.2, Projects that meet any of the following criteria are considered as deemed additional and therefore are not required to prove Financial Additionality at the time of design certification: (a) Positive list (Annex B of this document) (b) Projects located in LDC, SIDS, LLDC (c) Microscale projects substantiated via section F of the registered CDM CPA-DDs /01/, eligibility criteria #7 in POA-DD which is in accordance with per GS4GG Community services activity requirements, Version 1.2, Para 4.1.9. Additionally, the host country of the project is Bangladesh, which is a LDCs therefore as per para 4.1.9(b) of the CSA requirement, the VPAs qualifies to be automatic additional, and it is not required to further demonstrate financial additionality.
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D.5 Sustainable Development Goals (SDG) outcomes

Means of validation	DR, I		
Conclusion	The VPAs mandatorily contributes to SDG 13 and several other SDGs viz. SDG 5: Gender Equality; SDG 7: Affordable and Clean Energy; SDG 8 - Decent work & economic growth. A detailed assessment has been provided in the table given below.		
	Sustainable Development Goals Targeted	SDG Impact Indicator	Assessment by the validation team
	SDG 1: No Poverty	GSDM 1.1.1 Average household savings i.e., decrease in expenditure on basic service such cooking.	.Reducing cooking time while helping the environment cookstove is an innovative solution that reduces cooking time, also reduces the amount of fuelwood needed. ICS has already been tested and proven to be more efficient than other baseline cookstoves, resulting in a more sustainable and cost-effective solution. With Sustainable Development Goals and save money in the process. The stated SDG indicator has been appropriately selected by the CME.
	SDG 5: Gender Equality	5.4.1 Average time saving associated with cooking and fuel collection	The burden of collecting and/or purchasing fuel often falls on women and children. By reducing fuel collection and cooking time, the VPAs provide

			women in project households with more time to invest in other productive economic development activities. The stated SDG indicator has been appropriately selected by the CME.
	SDG 7: Affordable and Clean Energy	GSDM 7.1.1 Number of beneficiaries: Households 7.1.2 Number of beneficiaries	The VPAs involve the dissemination of clean, modern technology for cooking, by using available energy sources more efficiently. The stated SDG indicator has been appropriately selected by the CME.
	SDG 8: Decent Work and Economic Growth	GSDM 8.5.1 Total number of jobs.	Through the dissemination of ICS, the PoA will bring an employment opportunity to the applied region. The stated SDG indicator has been appropriately selected by the CME.
	SDG 15: Life on Land	GSDM 15.1.1 Total non-renewable wood fuel saved	Through the dissemination of ICS, VPA will bring a reduction in the consumption the non-renewable biomass thereby resulting in emission reductions and restoration The stated SDG indicator has been appropriately selected by the CME.
	SDG 13: Climate Action (mandatory)	GSDM 13.2.1 Amount of GHG emissions avoided or sequestered.	Through the dissemination of improved cookstoves, the VPAs will bring a reduction in the consumption of the non-renewable biomass thereby resulting in emission reductions. The stated SDG indicator has been appropriately selected by the CME.
	The validation team confirms that all the relevant SDG indicators included under the VPAs are in line with the SDG goals and the GS4GG principles and requirements /B01/.		

D.6 Methodological choices/approaches for estimating the SDG Impact

Means of validation	DR,I
Conclusion	SDG 1: No Poverty Applied methodology/approach The proportion of saving i.e., decrease in expenditure on basic service such cooking. Approach: The contribution of the project to SDG 1 will be confirmed by a random sample survey with a representative number of households in which the time savings associated with cooking will be compared to the baseline scenario. It will be checked on whether households achieve money savings associated with cooking using the improved cookstove.
	SDG 5: Gender Equality Applied methodology/approach The proportion of time spent on unpaid domestic and care work, by sex, age and location. Approach: The contribution of the project to SDG 5 will be confirmed by a random sample survey with a representative number of households in which the time savings associated with cooking will be compared to the baseline scenario. It will be checked on whether households achieve time savings associated with cooking using the improved cookstove. Since the cooking is predominantly carried out by women. It is women who can reduce the time spent on unpaid domestic and care work.
	SDG 7: Affordable and Clean Energy Applied methodology/approach Proportion of population with primary reliance on clean fuels and technology Approach: The contribution of the project to GSDM 7.1.1 will be confirmed by the number of beneficiaries (households). The Contribution of the project to GSDG 7.1.2 Proportion of population with primary reliance on clean fuels and technology:
	SDG 15: Life on Land Applied methodology/approach Approach: The contribution of the project to SDG 15 will be to ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands.
	SDG 13: Climate Action For SDG 13, please refer to section B.4.3 of the registered CDM CPA-DDs /01/ and the corresponding validation reports.

	SDG 8: Total number of jobs
	Applied methodology/approach
	Approach: The contribution of the project to SDG 8 will be confirmed by the number of jobs created.
The validation team confirms that the approaches for estimating SDG impacts are in line with the GS4GG Principles and Requirements, version 1.2 /B01/.	

D.7. Data and parameters fixed ex-ante

Means of validation	DR, I	
Conclusion	Ex-ante parameters provided under section B.6.2 of the TRF VPA-DDs/CPA-DD /01/are found to be appropriate and in line with the applied methodology AMS-II. G (version 08) /B02/. Ex-ante parameters of the proposed VPA are as follows:	
	Data/Parameter	HHS _{Baseline}
	Data unit	Taka/Year
	Description	Average household savings/reduced expenditure on basic services in baseline
	Source of data	--
	Value(s) applied	0
	Choice of data or measurement methods and procedures	--
	Purpose of data	SDG 1 Impact calculation
	Additional comment	--
	Data/Parameter	TS _{Baseline}
	Data unit	Hrs/HH/day
	Description	Average time saving associated with cooking and/or fuel collection time in baseline
	Source of data	--
	Value(s) applied	0
	Choice of data or measurement methods	--

	and procedures	
	Purpose of data	SDG 5 Impact calculation
	Additional comment	--
	Data/Parameter	ACS _{Baseline}
	Data unit	%
	Description	Access to affordable and clean energy (% of operating ICS units under Baseline)
	Source of data	--
	Value(s) applied	0
	Choice of data or measurement methods and procedures	--
	Purpose of data	SDG 7 Impact calculation
	Additional comment	--
	Data/Parameter	NBH _{Baseline}
	Data unit	Number
	Description	Total number of beneficiaries (unique households) that were provided access to clean fuels and technologies for domestic cooking in baseline
	Source of data	--
	Value(s) applied	0
	Choice of data or measurement methods and procedures	--
	Purpose of data	SDG 7 Impact calculation

	Additional comment	--
	Data/Parameter	$TJ_{Baseline}$
	Data unit	Number
	Description	Total Number of jobs (male and female) created under Baseline by project activity
	Source of data	--
	Value(s) applied	0
	Choice of data or measurement methods and procedures	--
	Purpose of data	SDG 8 Impact calculation
	Additional comment	--
	Data/Parameter	$NRFC_{Baseline}$
	Data unit	Tonnes of NRB /HH /year
	Description	amount of non-renewable fuel consumption per HH in Baseline
	Source of data	CDM CPA-DD section B.4.2
	Value(s) applied	1.81
	Choice of data or measurement methods and procedures	$NRFC_{Baseline} = B_{old,i,j} * f_{NRB,y}$ Wherein, $B_{old,i,j}$ and $f_{NRB,y}$ are ex-ante fixed parameters
	Purpose of data	SDG 15 Impact calculation
	Additional comment	--
	Data/Parameter	$f_{NRB,y}$

	Data unit	Fraction
	Description	Fraction of woody biomass saved by the project activity in year y that can be established as non-renewable biomass
	Source of data	10431-P1-0001-CP1 registered CPA-DD, section B.4.2, page 8
	Value(s) applied	0.843
	Choice of data or measurement methods and procedures	Calculated as per Tool: Calculation of the fraction of non-renewable biomass, EB 97, Annex 9, in accordance with para 27 – 30 of AMS II.G. version 08.0
	Purpose of data	Calculation of baseline emissions
	Additional comment	As per registered PoA-DD, assessments, information and results established in initial VPA may be used in subsequent VPAs in lieu of conducting fresh assessments at each VPA level in absence of new data.
	Data/Parameter	B _{old,p}
	Data unit	tonnes/person/year
	Description	Annual quantity of woody biomass that would have been used per person in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices
	Source of data	AMS II.G. version 8.0
	Value(s) applied	0.5
	Choice of data or measurement methods and procedures	Default value specified by the methodology.
	Purpose of data	To calculate baseline emission (For parameter B _{old,HH})
	Additional comment	The value may be updated during the crediting period with applicable value from approved standardized baseline. Assessments, information and results established in initial VPAs may be used in subsequent VPAs in lieu of conducting fresh assessments at each VPA level in absence of new data.
	Data/Parameter	N _{p,HH}
	Data unit	Number
	Description	Average number of persons served per household prior to the project implementation

	Source of data	The Bangladesh Multiple Indicator Cluster Survey (MICS) 2019 ³
	Value(s) applied	4.3
	Choice of data or measurement methods and procedures	Published information / literature defining the average household size in the project region
	Purpose of data	To calculate baseline emission (For parameter Bold,HH)
	Additional comment	The MICS carried out in 2019 by Bangladesh Bureau of Statistics (BBS) in collaboration with UNICEF Bangladesh, as part of the Global MICS Programme is the most recent publicly available national report giving household size in Bangladesh
	Data/Parameter	B _{old,HH}
	Data unit	tonnes/household/year
	Description	Annual quantity of woody biomass that would have been used in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices
	Source of data	Calculated or determined using ex-ante baseline surveys/ published information / literature
	Value(s) applied	2.15
	Choice of data or measurement methods and procedures	Calculated as Bold,p * N _{p,HH}
	Purpose of data	To calculate baseline emission (For parameter Bold,i,j)
	Additional comment	Assessments, information and results established in initial may be used in subsequent VPAs in lieu of conducting fresh assessments at each CVPA level in absence of new data. Further as Implementer plans distribution of only one ICS unit per household, Bold,HH = Bold,i,j During the stove installation, the presence of existing project ICS, if any, shall be monitored and in case an existing project ICS is found installed in the same household, the subsequent (second) ICS will not be included in the ER calculations. Alternatively, the presence of multiple project ICS in a household may be determined ex-post during surveys and the total ICS population shall be discounted by the fraction of sampled household found using more than one project ICS
	Data/Parameter	L _{AFy}
	Data unit	Fraction
	Description	Leakage adjustment factor

³ https://www.unicef.org/bangladesh/media/3281/file/Bangladesh%202019%20MICS%20Report_English.pdf

	Source of data	AMS-II.G, ver. 08, paragraph 42(c)
	Value(s) applied	0.95
	Choice of data or measurement methods and procedures	As per the methodology AMS II.G ver 08.0, Gross adjustment factor of 0.95 to account for leakages, in which case surveys are not required
	Purpose of data	Calculation of leakage
	Additional comment	The parameter value is fixed at PoA level.
	Data/Parameter	$EF_{\text{projected fossil fuel}}$
	Data unit	tCO ₂ /TJ
	Description	Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers
	Source of data	AMS-II.G; vers. 08.0 equation (2), page 5
	Value(s) applied	81.6
	Choice of data or measurement methods and procedures	Default value specified by the methodology AMS.II-G ver 08.0, equation (2) on page 5 https://cdm.unfccc.int/methodologies/DB/DP2BYDIV6RTMZPEZ2EDLYGLJ DPSSU3
	Purpose of data	Calculation of baseline emissions
	Additional comment	The parameter value is fixed ex ante at PoA level
	Data/Parameter	NCV_{biomass}
	Data unit	TJ/tonne
	Description	Net calorific value of the non-renewable woody biomass that is substituted
	Source of data	AMS-II.G. ver 08 - Pg 17, data/parameter table 12
	Value(s) applied	0.015
	Choice of data or measurement methods and procedures	IPCC default for wood fuel, 0.015 TJ/tonne, based on the gross weight of the wood that is 'air-dried' may be used if fuel used in project device is also woody biomass.
	Purpose of data	Calculation of baseline emissions
	Additional comment	Fixed at ante for all CPAs.
	Data/Parameter	$\eta_{old,i,j}$
	Data unit	Fraction
	Description	Efficiency of pre - project device, which is a three-stone fire using fuelwood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation

	Source of data	PoA 10431 registered PoA-DD, section I.6.2, page 16				
	Value(s) applied	0.11				
	Choice of data or Measurement methods and procedures	Default value suggested in AMS.II-G ver 08.0 for a three-stone fire using fuelwood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation = 0.10				
		Default value suggested in AMS.II-G ver 08.0 for other types of devices = 0.20				
			Population using Three Stone Fire / conventional stoves	90%	fraction (%)	Country Action plan for clean cookstoves, Nov 2013
			Population using other baseline Cookstoves	10%	fraction (%)	Calculated (100% - 90%)
			Efficiency of Three Stone Fire Stove / conventional stoves	10%	fraction (%)	AMS II.G. default value
			Efficiency of other baseline Cookstoves	20%	fraction (%)	AMS II.G. default value
		Weighted average baseline stove efficiency	11.00%	fraction (%)	Calculated	
Purpose of data	To calculate baseline emission					
Additional comment	Fixed ex-ante for all CPAs following generic CPA 1					

Thus, the data and parameters fixed ex-ante are considered to be accurate and in conformance with the requirements of §197(b) of CDM VVS for PoAs (version 02.0)/B01-1/ GS requirements.

D.8. Ex-ante estimation of SDG Impact

Means of validation	DR,I			
Conclusion	The validation team confirms that the SDG estimation is in line with the GS4GG Principles and Requirements and the /B01/.			
	Sustainable Development Goals Targeted	SDG Impact Indicator	Calculation	Ex-ante Estimate of net benefit
	1 No Poverty	Indicator: Average household	$HHS_{Project} - HHS_{Baseline}$	10,000 (Taka/Year)

		savings/reduced expenditure on basic services due to the adoption of project technology i.e., improved cookstove,		
	5 Gender Equality.	Indicator: Average time saving associated with cooking time and/or fuel collection time due to adoption of project technology/measures	$TS_{Project} - TS_{Baseline}$	3-4 (Hrs/HH/day)
	7 Affordable and Clean Energy	Indicator: Total number of beneficiaries (unique households) that were provided access to clean fuels and technologies for domestic cooking i.e., total number of beneficiaries (unique households), to whom the project, provided access to improved cook stoves	$NBH_{Project} - NBH_{Baseline}$	2,000,000 Number
	7 Affordable and Clean Energy	Indicator: % of ICS distributed and operating under the project as an indicator of providing clean technology (relative to baseline stoves)	$ACS_{Project} - ACS_{Baseline}$	100 %
	8 Decent Work and Economic Growth	Indicator: Total number of jobs(male/female) generated as a result of the project.	$TJ_{Project} - TJ_{Baseline}$	50 Number
	15 Life on Land	Indicator: Amount of non-	$NRFC_{Baseline} - NRFC_{Project}$	1.22 Tonnes of NRB / HH / year

		renewable biomass Fuel savings in the project		
	13 Climate Action	Amount of GHG emissions avoided or sequestered per year	Refer detailed calculation below	2,566,211 tCO ₂ e

D.9. Monitoring plan

D.9.1. Data and parameters to be monitored

Means of validation	DR, I																				
Conclusion	The monitoring plan presented in section B.7 of the TRF VPA-DDs/CPA-DD comply with the requirements of the TRF PoA-DD and the applied monitoring methodology /B02/. The validation team has verified all parameters in the monitoring plan against the requirements of the methodology and no deviations have been found. The validation team through a document review and interviews with the relevant stakeholders has reviewed the procedures. The information provided has allowed the validation team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of the monitoring plan have been discussed with the CME. The parameters that are to be monitored ex-post are: SDG 1: <table border="1"> <tr> <td>Data/Parameter</td><td>HHS_{Project}</td></tr> <tr> <td>Data unit</td><td>Taka/Year</td></tr> <tr> <td>Description</td><td>Average household savings/reduced expenditure on basic services due to the adoption of project technology i.e., improved cookstove</td></tr> <tr> <td>Source of data</td><td>Ex-post monitoring surveys</td></tr> <tr> <td>Value(s) applied</td><td>10,000</td></tr> <tr> <td>Measurement methods and procedures</td><td>Determined via ex-post monitoring over a sample of project ICS users using a survey questionnaire</td></tr> <tr> <td>Monitoring frequency</td><td>Annual or biennial</td></tr> <tr> <td>QA/QC procedures</td><td>Surveys will be conducted by trained/experienced staff</td></tr> <tr> <td>Purpose of data</td><td>SDG 1 contribution</td></tr> <tr> <td>Additional comment</td><td></td></tr> </table> SDG 5:	Data/Parameter	HHS _{Project}	Data unit	Taka/Year	Description	Average household savings/reduced expenditure on basic services due to the adoption of project technology i.e., improved cookstove	Source of data	Ex-post monitoring surveys	Value(s) applied	10,000	Measurement methods and procedures	Determined via ex-post monitoring over a sample of project ICS users using a survey questionnaire	Monitoring frequency	Annual or biennial	QA/QC procedures	Surveys will be conducted by trained/experienced staff	Purpose of data	SDG 1 contribution	Additional comment	
Data/Parameter	HHS _{Project}																				
Data unit	Taka/Year																				
Description	Average household savings/reduced expenditure on basic services due to the adoption of project technology i.e., improved cookstove																				
Source of data	Ex-post monitoring surveys																				
Value(s) applied	10,000																				
Measurement methods and procedures	Determined via ex-post monitoring over a sample of project ICS users using a survey questionnaire																				
Monitoring frequency	Annual or biennial																				
QA/QC procedures	Surveys will be conducted by trained/experienced staff																				
Purpose of data	SDG 1 contribution																				
Additional comment																					

	Data/Parameter	TS _{Project}
	Data unit	Hrs/HH/day
	Description	Average time saving associated with cooking and/or fuel collection time in project
	Source of data	Ex-post monitoring surveys
	Value(s) applied	3-4
	Measurement methods and procedures	Determined via ex-post monitoring over a sample of project ICS users using a survey questionnaire
	Monitoring frequency	Annual / Biennial
	QA/QC procedures	Surveys will be conducted by trained/experienced staff
	Purpose of data	SDG 5 contribution
	Additional comment	--
SDG 7:		
	Data/Parameter	NBH _{Project}
	Data unit	Number
	Description	Total number of unique households(beneficiaries) that were provided access to clean fuels and technologies for domestic cooking in project
	Source of data	ICS distribution records
	Value(s) applied	2,000,000
	Measurement methods and procedures	--
	Monitoring frequency	Continuous
	QA/QC procedures	
	Purpose of data	SDG 7 contribution
	Additional comment	--
SDG 7:		
	Data/Parameter	ACS _{Project}
	Unit	%
	Description	Access to affordable and clean energy (% of operating ICS units under Project)
	Source of data	Ex-post monitoring surveys
	Value(s) of monitored parameter	100%

	Monitoring equipment	Not applicable
	Measuring/reading/recording frequency	Annual / Biennial
	Calculation method (if applicable)	--
	QA/QC procedures	Surveys will be conducted by trained/experienced staff
	Purpose of data/parameter	SDG 7 contribution
	Additional comments	--
	SDG 8:	
	Data/Parameter	TJ _{Project}
	Unit	Number
	Description	Total Number of jobs (male and female) created under Project-by-project activity
	Source of data	HR records/ Sales and marketing records
	Value(s) of monitored parameter	50
	Monitoring equipment	Not applicable
	Measuring/reading/recording frequency	Annual / Biennial
	Calculation method (if applicable)	
	QA/QC procedures	Not applicable
	Purpose of data/parameter	SDG 8 contribution
	Additional comments	--
	SDG#15	
	Data/Parameter	NRFC _{Project}
	Unit	Tonnes of NRB / HH / year
	Description	amount of non-renewable fuel consumption per HH in Baseline
	Source of data	Calculated

Value(s) of monitored parameter	0.59
Monitoring equipment	Not applicable
Measuring/reading/recording frequency	$NRFC_{Project} = NRFC_{Baseline} * \frac{\eta_{old}}{\eta_{new,i,j}}$ Wherein: η_{old} has been fixed ex-ante $\eta_{new,i,j}$ will be monitored as per section B.5.1 of the CDM CPA-DD
Calculation method (if applicable)	
QA/QC procedures	--
Purpose of data/parameter	SDG 15 Impact calculation
Additional comments	N/A

In summary, the parameter(s) to be monitored have been presented correctly according to requirements and are considered in accordance with the applied methodology /B02/, GS4GG Principles and Requirements /B01/, registered CDM PoA-DD /01/, VPA-DDs.

D.9.2. Sampling Plan and other elements of a monitoring plan

Means of validation	DR, I
Conclusion	The VPAs are already registered under CDM and are seeking transition to Gold Standard. CDM CPA-DDs including the validation reports /01/ may be referred for information related to the sampling plan and other elements of monitoring plan which will be applied by the CME for the monitoring of the proposed GS VPAs.

D.10. Duration and Crediting Period

Means of validation	DR, I		
Conclusion	The VPAs are already registered under CDM. CDM CPA-DDs may be referred to the respective start dates of the CPAs /01/.		
	The crediting period (CP) duration under GS4GG is 10 every 5 years renewal. Hence the crediting period from CDM has been ended and the final crediting period under GS4GG is provided for each of the VPAs below.		
	VPA title	Start/End Dates of crediting period	Length of crediting period
	GS 11571 Improved cookstove program in Bangladesh supported by the Republic of Korea – CPA 02	15/03/2020 – 14/03/2030	10 years - fixed

	GS 11572 Improved cookstove program in Bangladesh supported by the Republic of Korea – CPA 03	15/03/2020 – 14/03/2030	10 years - fixed
The validation team confirms that the crediting period applied are as per GS4GG Principles and Requirements, version 1.2 /B01/.			

D.11. Summary of Safeguarding Principles and Gender Sensitive Assessment

D.11.1. Safeguarding Principles Assessment

Means of validation	DR, I		
Conclusion	Safeguarding principles assessment is conducted at the VPA level. The CME has outlined the assessment of safeguarding principles as per the GS4GG safeguarding principles requirements version 1.2 /B01/ to identify the potential risk and adverse outcome of project activity and to adopt a mitigation strategy to avoid or where avoidance is not possible, minimise identified risks, with the intention to achieve the stated requirement.		
	Safeguarding Principles	Assessment Questions/ Requirements	Validation team assessment
	Principle 1. Human Rights	The Project Developer and the Project shall respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights. The Project shall not discriminate with regards to participation and inclusion	The VPAs involve dissemination of improved cookstove which users are free to choose. This project is a voluntary action by the project developer and no risk and issues to the internationally proclaimed human rights are expected from this project. The VPAs and CME both respect human rights and are not complicit in violence or human rights abuses. No mitigation measure is required. The validation team confirms that VPAs fulfil the GS requirement outlined in paragraph 3.1.1 of the GS4GG safeguarding principles requirements version 1.2 /B01/. The VPAs involve dissemination of improved cookstove which users are free to choose. There is no discrimination against any person or group regarding the possibility to buy a stove. No mitigation measure required. The validation team confirms that PoA fulfils the GS requirement outlined in paragraph 3.1.2 of the

			GS4GG safeguarding principles requirements version 1.2 /B01/.
	Principle 2. Gender Equality	The Project shall not directly or indirectly lead to/contribute to adverse impacts on gender equality and/or the situation of women (a) Sexual harassment and/or any forms of violence against women – address the multiple risks of gender-based violence, including sexual exploitation or human trafficking.	This is not relevant for the project activity.
		(b) Slavery, imprisonment, physical and mental drudgery, punishment or coercion of women and girls.	This is not relevant for the project activity.
		(c) Restriction of women's rights or access to resources (natural or economic).	This is not relevant for the project activity.
		(d) Recognise women's ownership rights regardless of marital status – adopt project measures where possible to support to women's access to inherit and own land, homes, and other assets or natural resources.	This is not relevant for the project activity.
		Projects shall apply the principles of non-discrimination, equal treatment, and equal pay for equal work: (a) Where appropriate for the implementation of a PoA/VPA, paid, volunteer work or community contributions will be organised to provide the conditions for equitable participation of men and women in the identified tasks/activities.	This is not relevant for the project activity.
		(b) Introduce conditions that ensure the participation of women or men in Project activities and benefits based on pregnancy, maternity/paternity leave, or marital status.	This is not relevant for the project activity.
		(c) Ensure that these conditions do not limit the access of women or men, as the case may be, to PoA/VPA participation and benefits.	This is not relevant for the project activity.
		The Project shall refer to the country's national gender strategy or equivalent national commitment to aid in assessing gender risks	This is not relevant for the project activity.

		(where required) Summary of opinions and recommendations of an Expert Stakeholder(s)	This is not relevant for the project activity.
	Principle 3. Community Health, Safety and Working Conditions	The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community	The improved cookstove will help to improve the air quality by reducing air pollution and thus avoids community exposure to increased health risks. The validation team confirms that VPAs fulfil the GS requirement outlined in paragraph 3.3.1 of the GS4GG safeguarding principles requirements version 1.2 /B01/.
	Principle 4.1 Sites of Cultural and Historical Heritage	Does the Project Area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture?	This is not relevant for the project activity.
	Principle 4.2 Forced Eviction and Displacement	Does the Project require or cause the physical or economic relocation of peoples (temporary or permanent, full or partial)?	This is not relevant for the project activity.
	Principle 4.3 Land Tenure and Other Rights	Does the Project require any change, or have any uncertainties related to land tenure arrangements and/or access rights, usage rights or land ownership?	This is not relevant for the project activity.
	Principle 4.4 Indigenous People	Are indigenous peoples present in or within the area of influence of the Project and/or is the Project located on land/territory claimed by indigenous peoples?	This is not relevant for the project activity.
	Principle 5. Corruption	The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects	The VPAs do not in any way promote or complicity corruption. The validation team confirms that VPAs fulfil the GS requirement outlined in paragraph 3.5.1 of the GS4GG safeguarding principles requirements version 1.2 /B01/.
	Principle 6.1 Labour Rights	The Project Developer shall ensure that all employment is in compliance with national labour occupational health and safety laws and with the principles and standards embodied in the ILO fundamental conventions	The VPAs employment in BBF, are in compliance to the provisions of labour legislation in force in Bangladesh i.e. "The Labour Act, 2006, and the "2015 Labour Rules". .The validation team confirms that VPAs fulfil the GS certification

			requirement outlined in paragraph 3.6.1 of the GS4GG safeguarding principles requirements version 1.2 /B01/.
		Workers shall be able to establish and join labour organisations	The CME does not limit any of the employees to form unions or join labour organizations. The validation team confirms that VPAs fulfil the GS certification requirement outlined in paragraph 3.6.1 of the GS4GG safeguarding principles requirements version 1.2 /B01/.
		Working agreements with all individual workers shall be documented and implemented and include: Working hours (must not exceed 48 hours per week on a regular basis), AND Duties and tasks, AND Remuneration (must include provision for payment of overtime), AND Modalities on health insurance, AND Modalities on termination of the contract with provision for voluntary resignation by employee, AND Provision for annual leave of not less than 10 days per year, not including sick and casual leave.	The VPAs do not involve any kind of forced labour or compulsory labour. The CME has submitted HR Policy & Employee Handbook /03/ and also Employee Contract /04/ template in this respect. The validation team confirms that VPAs fulfil the GS requirement outlined in paragraph 3.6.1 (b) of the GS4GG safeguarding principles requirements version 1.2 /B01/.
		No child labour is allowed (Exceptions for children working on their families' property requires an Expert Stakeholder opinion)	The VPAs do not involve any kind of child labour and the CME shall take adequate steps to ensure the age verification process is thoroughly carried out while recruitment. The validation team confirms that VPAs fulfil the GS requirement outlined in paragraph 3.6.2 of the GS4GG safeguarding principles requirements version 1.2 /B01/.
		The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation and reporting of accidents and incidents, and emergency preparedness and response measures	This is not relevant for the project activity.

	Principle 6.2 Negative Economic Consequences	Does the project cause negative economic consequences during and after project implementation?	No negative economic consequences are deemed applicable. This is not relevant for the project activity.
	Principle 7.1 Emissions	Will the Project increase greenhouse gas emissions over the Baseline Scenario?	The project involves dissemination of improved cookstove which will reduce GHG emissions compared to the baseline scenario. This is not relevant for the project activity.
	Principle 7.2 Energy Supply	Will the Project use energy from a local grid or power supply (i.e., not connected to a national or regional grid) or fuel resource (such as wood, biomass) that provides for other local users?	The improved cookstove does not use energy from the local grid or power supply. The cookstove requires firewood as an energy source. The project will reduce fuel resource consumption. The validation team confirms that VPAs fulfil the GS requirement outlined in the GS4GG safeguarding principles requirements version 1.2 /B01/.
	Principle 8.1 Impact on Natural Water Patterns/Flows	Will the Project affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	This is not relevant for the project activity.
	Principle 8.2 Erosion and/or Water Body Instability	Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion?	The project involves dissemination of improved cookstove and does not in any way cause additional erosion and/or water body instability or disrupt the natural pattern of erosion. The VPAs shall result in a reduction in demand for biomass fuel in the region putting less pressure on forests for deforestation and will hence indirectly avoid erosion associated with tree cutting/ felling. The validation team confirms that VPAs fulfil the GS requirement outlined in the GS4GG safeguarding principles requirements version 1.2 /B01/.

	Principle 9.1 Landscape Modification and Soil	Does the Project involve the use of land and soil for the production of crops or other products?	This is not relevant for the project activity.
	Principle 9.2 Vulnerability to Natural Disaster	Will the Project be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?	This is not relevant for the project activity.
	Principle 9.3 Genetic Resources	Could the Project be negatively impacted by or involve genetically modified organisms or GMOs (e.g., contamination, collection and/or harvesting, commercial development, or take place in facilities or farms that include GMOs in their processes and production)?	This is not relevant for the project activity.
	Principle 9.4 Release of pollutants	Could the Project potentially result in the release of pollutants to the environment?	This is not relevant for the project activity.
	Principle 9.5 Hazardous and Non-hazardous Waste	Will the Project involve the manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials?	This is not relevant for the project activity.
	Principle 9.6 Pesticides & Fertilisers	Will the Project involve the application of pesticides and/or fertilisers?	Not applicable
	Principle 9.7 Harvesting of Forests	Will the Project involve the harvesting of forests?	The VPAs involve reduction of fuelwood consumption therefore it will positively support the forest resources. The validation team confirms that VPAs fulfil the GS requirement outlined in the GS4GG safeguarding principles requirements version 1.2 /B01/.
	Principle 9.8 Food	1. Does the Project modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	This is not relevant for the project activity.
	Principle 9.9 Animal husbandry	Will the Project involve animal husbandry?	This is not relevant for the project activity.
	Principle 9.10 High Conservation Value Areas and Critical Habitats	Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified?	This is not relevant for the project activity.
	Principle 9.11 Endangered Species	Are there any endangered species identified as potentially being present within the Project	This is not relevant for the project activity.

	boundary (including those that may route through the area)?	
	AND/OR Does the Project potentially impact other areas where endangered species may be present through transboundary affects?	
The validation team confirms that the safeguarding principles assessment is undertaken at VPA level, and the assessment has been addressed by the CME in accordance with the GS requirement outlined in the GS4GG safeguarding principles requirements version 1.2 /B01/. Based on the assessment of safeguarding principles, the validation team concludes that no mitigation measures are required to the monitoring plan.		

D.11.2. Assessment that project complies with GS4GG Gender Sensitive requirements

Means of validation	DR, I		
Conclusion	Eligibility criteria	CME justification	Validation team assessment
	Is there a possibility that the VPAs might reduce or put at risk women's access to or control of resources, entitlements and benefits?	The VPAs does not limit women access to or control of resources, entitlements and benefits. On the contrary, the VPA ameliorates the living condition of women by freeing them from the burden of biomass fuel collection, decreasing smoke levels and incidence of respiratory illness relative to cooking on traditional biomass stoves using solid biomass fuel.	The VPAs do not reduce or put at risk women's access to or control of resources, entitlements and benefits. The VPAs involve the distribution of improved cookstoves which benefit the women by reducing their time and effort to collect fuelwood and also reduce the indoor air pollution levels thereby improving the condition of women.
	Is there a possibility that the VPAs can adversely affect men and women in marginalised or vulnerable communities (e.g., potential increased burden on women or social isolation of men)?	The VPAs does not result in any increased burden on women or the social isolation of men. The VPA ameliorates the living condition of women by freeing them from the burden of biomass fuel collection as well as saving cooking time	The VPAs involve the distribution of improved cookstoves and do not adversely affect men and women in marginalized or vulnerable communities (e.g., potential increased burden on women or social isolation of men). The VPAs uplift the status of both men and women through time and money savings and through better utilization of resources.
	Is there a possibility that the VPAs might not take into account gender roles and	The VPAs ameliorates the living condition of women by freeing them from the burden of fuelwood collection and offering them	The VPAs involve the distribution of improved cookstoves which benefit women by reducing the time and effort to collect

	the abilities of women or men to participate in the decisions / designs of the project's activities (such as lack of time, child-care duties, low literacy or educational levels, or societal discrimination)?	fast cooking time. Any time savings will be used by the women for more productive work or child-care duties.	fuelwood and also reduce the indoor air pollution levels thereby improving the condition of women.
	Does the PoA take into account gender roles and the abilities of women or men to benefit from the Project's activities (e.g., Does the PoA / VPAs criteria ensure that it includes minority groups or landless peoples)?	The VPAs does not delimits its access to minority groups or landless people	The VPAs do not restrict minority groups or landless people in any way.
	Does the VPAs design contribute to an increase in women's workload that adds to their care responsibilities or that prevents them from engaging in other activities	The VPAs reduces women's workload by freeing them from the burden of fuelwood collection and increasing the speed of cooking, allowing more time for alternative activities	The VPAs involve the distribution of improved cookstoves which benefit the women by reducing the time and effort to collect fuelwood and also reduce the indoor air pollution levels thereby improving the condition of women.
	Would the VPAs potentially reproduce or further deepen discrimination against women based on gender, for instance, regarding their full participation in design and implementation or access to opportunities and benefits?	The VPAs is not expected to reproduce / deepen discrimination against women. In fact, as listed above, the VPA offers multiple benefits and opportunities to women	The VPAs will not reproduce or deepen the discrimination against them and will rather uplift them by reducing the time and effort to collect fuelwood and also reduce the indoor air pollution levels
	Would the VPAs potentially limit women's ability to use, develop and protect natural resources, taking into account	The VPAs is not expected to limit women' ability to use, develop or protect natural resources. In fact, as listed above, the VPA offers multiple benefits and opportunities to women to	The VPAs will not potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and priorities of women and men in

	different roles and priorities of women and men in accessing and managing environmental goods and services?	avoid deforestation resulting in the protection of forests	accessing and managing environmental goods and services
	Is there a likelihood that the proposed VPAs would expose women and girls to further risks or hazards?	The VPAs does not expose women or girls to further risks or hazards. By providing access to clean and safe cooking technology, the VPAs reduces the risk to health due to IAP.	The VPAs do not in any way expose women and girls to further risks or hazards and would rather uplift them by reducing the time and effort to collect fuelwood and also reduce the indoor air pollution levels.
The validation team confirms that the VPAs are in line with the country policies and as assessed above, all the conditions related to Gender-Sensitive requirements have been addressed. The validation team confirms that the VPAs comply with all the GS4GG Gender-Sensitive Requirements.			

D.12. Summary of stakeholder mitigation measures

Means of validation	DR, I
Conclusion	The PoA is already registered under CDM (UNFCCC Ref. No. PoA 10431 registered on 23/06/2018) and is seeking transition under GS4GG. No physical meeting were conducted for the identified gaps. An SFR round for the identified gaps was conducted from 18/05/2022 to 19/07/2022.. CME carried out LSC to cover all the identified gaps between CDM and GS4GG. There has been no substantial change to the design of the PoA during the GS transition process and all the key aspects related to the PoA are the same as those incorporated under CDM. Section F.1 of the CDM PoA-DD /01/ can be referred for details of the solicitation of comments from local stakeholders. In line with the PoA transition checklist, the CME has conducted a stakeholder feedback round (SFR) for a group of 2 VPAs after conducting LSC for transition to GS4GG The SFR was initiated from 18/05/2022 for the two-month period till 19/07/2022. SFR was conducted by inviting the stakeholders through email and phone. A non-technical summary and questionnaire form to submit feedback was shared with all the identified stakeholders. The assessment team has checked the stakeholder report /09/ which includes the means of project non-technical summary, draft LSC report and the LSC Summary Report. The stakeholder report has been assessed to confirm that the feedback round has been conducted in line with the GS4GG Principles and Requirements and Stakeholder Consultation and Engagement requirements /B01/.

D.13. Final continuous input/ grievance mechanisms

Means of validation	DR, I
Conclusion	The CME has maintained an elaborate grievance mechanism and a convenient method has been set up to gauge the response of the relevant stakeholders. A grievance expression process book has been placed at the office of branch office/other active locations in various district in Bangladesh to allow the stakeholders to share their feedback. The end users can also revert to the salesperson (representative of distribution/retail partners etc.) in case of any

	feedback / complaints with the product post distribution. The end-users have also been provided with the contact number and email id of the CME to submit their grievances. Office Address: Bangladesh Bondhu Foundation(BBF) H#3/2(1st floor), Block#B Lalmatia, Mohammadpur Dhaka-1207, Bangladesh The grievance mechanism established by the CME is in line with the GS4GG Principles and Requirements /B01/.
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SECTION E. Internal quality control

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The final validation report has passed a technical review before submission. The technical review was performed by a technical reviewer qualified in accordance with CCIPL's qualification scheme for CDM validation and verification and GS4GG requirements.

SECTION F. Validation opinion

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The Co-ordinating Managing Entity "Value Network Venture Advisory services Pte. Ltd.", and VPA implementer "Bangladesh Bondhu Foundation" have appointed the VVB "Carbon Check (India) Private Ltd. (CCIPL)" to perform an independent validation from CDM to GS4GG of the Programme of Activities "Improved cookstove program in Bangladesh supported by the Republic of Korea (hereafter referred to as "PoA") and for the included GS 11571 Improved cookstove program in Bangladesh supported by the Republic of Korea – CPA 02 and GS 11572 Improved cookstove program in Bangladesh supported by the Republic of Korea – CPA 03. This report summarises the findings of the validation of the project, performed on the basis of Gold Standard criteria for transition, as well as criteria are given to provide for consistent project operations, monitoring and reporting. This report contains the findings and resolutions from the validation and a validation opinion.

The report is based on the assessment of the project design document undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to document reviews, stakeholder interviews, review of the applicable/applied methodology and its underlying formulae and calculations.

The Validation team confirms the contractual relationship signed on 03/02/2023 in between the VVB, Carbon Check (India) Private Ltd. and the CME, (Value Network Venture Advisory services Pte. Ltd.) and VPA implementer "Bangladesh Bondhu Foundation" /02/. The team assigned to the validation meets the Carbon Check (India) Private Ltd.'s internal procedures including the UNFCCC and Gold Standard requirements for the team composition and competence. The validation team has conducted a thorough contract review as per UNFCCC and Carbon Check's procedures and requirements.

The VPAs aims to distribution of biomass based improved cookstoves ("ICS") to households / SMEs in Bangladesh. The use of this technology will enable households to switch low-efficiency energy devices for cooking higher efficiency, clean, safe, and less polluting, cooking fuel. The utilization of the systems will reduce/replace the amount of non-renewable fuelwood domestic energy needs, which will contribute to a reduction in greenhouse gas (GHG) emissions. The proposed VPAs apply the approved CDM methodology AMS-II.G.: "Energy Efficiency Measures in Thermal Applications of Non-Renewable Biomass" (Version 8) /B02/. This methodology is applicable because the programme will involve the displacement of thermal energy consumption (non-renewable

biomass/fuelwood) with Improved Cooking stoves (ICS), devices. The project meets all relevant host Country criteria and Gold Standard requirements.

The validation is based on the information made available to the validation team and the engagement conditions detailed in this report. The only purpose of this report is its use during the registration with GS4GG to issue GSVERs while maintaining the CDM registration. Carbon Check cannot be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

During validation, a total of 13 findings were raised for each of VPAs i.e. VPA01 and VPA02 which include:

VPA01

12 Corrective Action Requests (CARs)

01 Clarification Requests (CLs)

VPA02

11 Corrective Action Requests (CARs)

02 Clarification Requests (CLs)

And, from the Preliminary Performance review round, 1 CAR and 1 FAR were open, which have been successfully closed.

All the raised findings have been resolved by the CME. Please refer to Appendix 4 for further details.

Carbon Check (India) Private Ltd. concludes the validation with a positive opinion that the GS VPAs (GS 11571, GS 11572), as described in the VPA-DDs (Version 6, dated 30/06/2023), meets all CDM requirements, including those specified in the GS4GG requirements /B01/, relevant methodologies, tools and guidelines and article 12 of the Kyoto Protocol, paragraph 37 of the CDM modalities and procedures and the subsequent decisions by the COP/MOP and CDM Executive Board and Gold Standard Requirements.

The selected GS methodology (AMS-II.G.: “Energy Efficiency Measures in Thermal Applications of Non-Renewable Biomass” (Version 08) /B02/ is applicable to the project and correctly applied. Carbon Check (India) Private Ltd., therefore, recommends the project for the Gold Standard Registry for registration.

Appendix 1. Abbreviations

Abbreviations	Full Texts
CAR	Corrective Action Request
CC IPL	Carbon Check (India) Private Ltd.
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CO₂	Carbon Dioxide
CO_{2e}	Carbon Dioxide Equivalent
CSA	Community Services Activity
EB	CDM Executive Board
EF	Emission Factor
FAR	Forward Action Request
FVR	Final Validation Report
GS	Gold Standard
GS4GG	Gold Standard for the Global Goals
GHG	Greenhouse gas(es)
GWh	Giga Watt Hour
ICS	Improved Cook Stove
IPCC	Intergovernmental Panel on ClimateChange
MWh	Mega Watt Hour
OSV	On Site Visit
PoA	Programme of Activities
QC/QA	Quality control/Quality assurance
Registry	Gold Standard/MarkitRegistry
SD	Sustainable Development
SDG	Sustainable Development Goal
SFR	Stakeholder Feedback Round
TA	Technical Area
TR	Technical Review
UNFCCC	United Nations Framework Convention on ClimateChange
VER	Verified Emission Reductions
VPAs	Voluntary Project Activities
VVS	Validation and Verification Standard

Appendix 2. Competence of team members and technical reviewers


Carbon
 CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Mr. Harish Sharma

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

☒ Validator	☒ Verifier	☒ Team Leader	☒ Technical Expert
☐ Technical Reviewer	☐ Health Expert	☐ Gender Expert	☐ Plastic Waste Expert
☒ SDG+	☒ Social no-harm(S+)	☒ Environment no-harm(E+)	☐ CCB Expert
☐ Financial Expert	☒ Local Expert for India		

in the following Technical Areas:

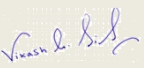
☒ TA 1.1	☒ TA 1.2	☐ TA 2.1	☒ TA 3.1	☐ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	☐ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☒ TA 13.1	☐ TA 13.2
☐ TA 14.1	☐ TA 15.1			

Issue Date

1st January 2023

Expiry Date

31st December 2023



Mr. Vikash Kumar Singh
Compliance Officer



Mr. Amit Anand
CEO

CCIPL_FM 7.9 Certificate of Competency_V2.1_012023



Carbon Check (India) Private Limited

Certificate of Competency

Mr. Manas Halder

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC 14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

- | | | | |
|---|---|--|--|
| ☒ Validator | ☒ Verifier | ☐ Team Leader | ☒ Technical Expert |
| ☐ Technical Reviewer | ☐ Health Expert | ☐ Gender Expert | ☐ Plastic Waste Expert |
| ☐ SDG+ | ☐ Social no-harm(S+) | ☐ Environment no-harm(E+) | ☐ CCB Expert |
| ☐ Financial Expert | ☒ Local Expert for India and Bangladesh | | |

in the following Technical Areas:

- | | | | | |
|----------------------------------|--|----------------------------------|---|----------------------------------|
| ☐ TA 1.1 | ☒ TA 1.2 | ☐ TA 2.1 | ☒ TA 3.1 | ☐ TA 4.1 |
| ☐ TA 4. n | ☐ TA 5.1 | ☐ TA 5.2 | ☐ TA 7.1 | ☐ TA 8.1 |
| ☐ TA 9.1 | ☐ TA 9.2 | ☐ TA 10.1 | ☒ TA 13.1 | ☐ TA 13.2 |
| ☐ TA 14.1 | ☐ TA 15.1 | | | |

Issue Date

1st January 2023

Expiry Date

31st December 2023



Mr. Vikash Kumar Singh
Compliance Officer



Mr. Amit Anand
CEO



Carbon Check (India) Private Limited

Certificate of Competency

Mr. Shivaji Chakraborty

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC 14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

- | | | | |
|--|--|---|--|
| ☐ Validator | ☐ Verifier | ☐ Team Leader | ☒ Technical Expert |
| ☒ Technical Reviewer | ☐ Health Expert | ☐ Gender Expert | ☐ Plastic Waste Expert |
| ☒ SDG+ | ☒ Social no-harm(S+) | ☒ Environment no-harm(E+) | ☐ CCB Expert |
| ☒ Financial Expert | ☒ Local Expert for India | | |

in the following Technical Areas:

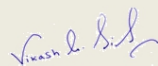
- | | | | | |
|--|--|----------------------------------|--|----------------------------------|
| ☒ TA 1.1 | ☒ TA 1.2 | ☐ TA 2.1 | ☒ TA 3.1 | ☐ TA 4.1 |
| ☐ TA 4. n | ☐ TA 5.1 | ☐ TA 5.2 | ☐ TA 7.1 | ☐ TA 8.1 |
| ☐ TA 9.1 | ☐ TA 9.2 | ☐ TA 10.1 | ☐ TA 13.1 | ☐ TA 13.2 |
| ☐ TA 14.1 | ☐ TA 15.1 | | | |

Issue Date

1st January 2023

Expiry Date

31st December 2023



Mr. Vikash Kumar Singh
Compliance Officer



Mr. Amit Anand
CEO

Appendix 3. Documents reviewed or referenced

Ref no.	Reference Document
/01/	CDM registered PoA-DD version 4.0 (CDM PoA Ref. No. 10431) - CDM PoA 10431-Transition-request-form v5.0 09052023_TR_R1_Response - PoA GS11570 VPAs GS (11571-11572) Monitoring Report MP1 v4.0 30062023_TR_R1_Response (4) - PoA GS11570 VPAs GS (11571-11572) ER Sheet MP1 v2.0 16052023 - GS 11571 Improved cookstove program in Bangladesh supported by the Republic of Korea – CPA 02 - GS 11572 Improved cookstove program in Bangladesh supported by the Republic of Korea – CPA 03
/02/	Letter of engagement in between Carbon Check and CME for validation.
/03/	Employee list
/04/	Employment Contracts on (sample base)
/05/	PoA GS11570_VPA01(GS11571)_TRF_V6.0 30062023_TR_R1_Response PoA GS11570_VPA02(GS11572)_TRF_V6.0 30062023_TR_R1_Response
/06/	Sample End user Agreement receipts
/07/	Sample Stove Photographs with unique ID
/08/	a. GS 11570 Design Consultation Report v2.0 18102022
/09/	Design Consultation and Stakeholder Consultation Report
/10/	Stove distribution database
/11/	ODA Declaration
/12/	ICS a unique ID number

Background Documents:

Ref no.	Reference Document
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/B01/	a) GS4GG “Principles & Requirements”, version 1.2 b) GS4GG “Programme Of Activity Requirements”, version 02 c) GS4GG “Community Services Activity Requirements”, version 1.2 d) GS4GG “GHG Emissions Reduction & Sequestration Product Requirements, version 2.0 e) GS4GG “Safeguarding Principles & Requirements”, version 1.2 f) GS4GG “Stakeholder Consultation Requirements”, version 2.1
/B02/	CDM methodology: AMS-II.G.: “Energy Efficiency Measures in Thermal Applications of Non-Renewable Biomass” Version 08
/B03/	Template of Gold Standard for the Global Goals Key Programme Information & Programme Design Document (PoA-DD) on The Gold Standard website
/B04/	Websites referred : a) http://www.goldstandard.org b) http://cdm.unfccc.int/

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

For VPA 01:

CLs from this verification

CL ID	1	Section no.	Key project info	Date: 01/05/2023
Description of CL				
It has been observed that name of CME and PP mentioned in the registered CDM CPA is not matching with the entities mentioned in the transition request form. CME to justify the ownership/transfer of rights with documentary evidence.				
Project participant response				Date: 09/05/2023
As per PoA Requirements, version 2.0, clause 8.11.1 c), the CME for a transitioning PoA may differ from that specified in the corresponding CDM PoA-DD. Thus, for the GS4GG PoA, Value Network Venture Advisory Services Pte. Ltd. shall serve as the CME, with KICC and BBF listed as Project participants (PP).				
Further as per the above clause, in such cases, a clarification request is required to be submitted to GS before initiating such process. It is worthy to note, that this requirement came into force on 03/08/2022. However, the Stakeholder Feedback Rounds for the VPA was initiated before the requirement came into force.				
Lastly, the GS is deemed to be informed of this change during the preliminary review. This issue was discussed during the VPA preliminary review of the VPA and the change of CME has already been approved by GS4GG during the closure of preliminary review (refer Comment/Request "Others" which refers to the design consultation review feedback for PoA wherein this has been discussed and approved by GS)				
The documentation provided by project participant				
GS11570_POA Design Consultation Review_ROUND II_FINAL_03112022				
GS11571_Preliminary Review_ROUND II_FINAL_03112022				
GS VVB assessment				Date: 12/06/2023
Based on CME's response, it is understood that according to the para 8.11.1 (c) of Programme of Activity Requirements, version 2.0, the CME for a transitioning PoA may differ from the entity specified in the corresponding CDM PoA-DD. Value Network Venture Advisory services Pte. Ltd. shall serve as the CME, with KICC and BBF listed as Project participants (PP). VVB has further assessed the PoA Design Consultation Review report and found that the said change has already been accepted during design consultation.				
#CL 01 is closed.				

Corrective action required (CARs)

CAR ID	1	Section no.	Cover page	Date: 01/05/2023
Description of CAR				
CME to remove the PoA ID from the heading of Cover page of the transition request form-CPA.				
Project participant response				Date: 09/05/2023
The same has been corrected.				
Documentation provided by project participant				
PoA GS11570_VPA01(GS11571)_TRF_V4.0 09052023				
GS VVB assessment				Date: 12/06/2023
CME has updated the cover page and changes are reflected in the updated VPA Cover Page.				
CAR # 01 is Closed.				

CAR ID	2	Section no.	TRF	Date: 01/05/2023
Description of CAR				
CME to choose the correct option for "Transition Approval Procedure" in section TRF. 3 Transaction Checklist of the VPA01				
Project participant response				Date: 09/05/2023
The appropriate option (1.3) has now been selected in "Transition Approval Procedure" in section TRF. 3				
Documentation provided by project participant				
PoA GS11570_VPA01(GS11571)_TRF_V4.0 0905202				
GS VVB assessment				Date: 12/06/2023
CME has updated the Section of Transition Approval Procedure" in section TRF. Changes reflected under section 1.3 of TRF.				
CAR # 02 is Closed.				

CAR ID	3	Section no.	TRF	Date: 01/05/2023
Description of CAR				
All the points of the stakeholder consultation requirement checklist should be filled.				
Project participant response				Date: 09/05/2023
The same has been corrected.				
The documentation provided by project participant				
PoA GS11570_VPA01(GS11571)_TRF_V4.0 0905202				
GS VVB assessment				Date: 12/06/2023
Missing information has been updated under the section.10 stakeholder consultation requirement checklist of TRF.				
CAR # 3 is Closed.				

CAR ID	4	Section no.	A.1	Date: 01/05/2023
Description of CAR				
In section A.1, the purpose and general description of the project need to be filled				
Project participant response				Date: 09/05/2023
In the table TRF.2 Transition project information; under section "Declaration", CME has opted "option 1". As per the same, the CME shall include only that information in the TRF, which has not been validated/verified being part of CDM CPA-DD. Thus, the purpose and general description of the CPA need not be included in the TRF section A.1.				
Documentation provided by project participant				
GS VVB assessment				Date: 12/06/2023
In TRF 2 of the transition DD, CME has selected option 1, therefore CME has opted to include the information that has not been validated/verified as part of CDM PoA -DD. For the information, CME has transparently referred the section A.1 of CDM CPA-DD 10431-P1-0002-CP1				
#CAR 04 is Closed.				

CAR ID	5	Section no.	A.1 (A.1.1)	Date: 01/05/2023
Description of CAR				
In line with general eligibility criteria 3.1.1 (e) of GS4GG Principles & Requirements, CME to share the PP's legal registration documents.				
Project participant response				Date: 09/05/2023
The legal registration documents of the PP (BBF and KICC) are being submitted.				
Documentation provided by project participant				
KICC Corporate Identity document BBF - Certificate of Registration				
GS VVB assessment				Date: 12/06/2023
CME has Submitted the BBF - Certificate of Registration and KICC Corporate Identity document cross-verified and found ok. Hence CAR is Closed.				

CAR ID	6	Section no.	A.1 (A.1.1)	Date: 01/05/2023
Description of CAR				
In line with general eligibility criteria 3.1.1 (e), (f), and (h) of GS4GG Principles & Requirements, CME to share the supportive documents				
Project participant response				Date: 09/05/2023
The appropriate documents pertaining to the requirements mentioned in the aforesaid eligibility criteria and their reference are mentioned below.				
Criteria		Documents/Reference		
3.1.1 (e) Contact Details		Refer the following: cover letter approved during the preliminary review containing the necessary contact details. Legal registration documents submitted in response to the CAR ID 5.		
3.1.1 (f) Legal Ownership		Refer to clause 11 of the sample end user/customer agreement being submitted as a response to the CAR ID 12.		
3.1.1 (h) ODA Declaration		Already Submitted as a part of the initial submission.		
The documentation provided by the project participant				
-				
GS VVB assessment				Date: 12/06/2023
CME has provided appropriate justification in line with GS4GG Principles & Requirements version 1.2. Hence CAR is Closed.				

CAR ID	7	Section no.	B.6	Date: 01/05/2023
Description of CAR				
GSDG 7.1.2 is to be calculated by dividing the total population reporting any cooking from the number of people using clean fuel technology. CME to update the equation accordingly in section B.6.1				
Project participant response				Date: 09/05/2023
The equation in section B.6.1 is used to calculate the net benefit for achieving SDG 7.1.2. This is done by subtracting the percentage of operating ICS in the baseline scenario (ACSBaseline) from percentage of operating ICS in the project scenario (ACSPProject). The value of ACSBaseline shall always be 0 as no improved stove usage is applicable to baseline. The value for the ACSPProject is determined during ex post monitoring on a sampling basis, which involves dividing the number of users for whom the ICS was found to be "in-use" by the total number of users who were provided with ICS. The proportion thus obtained, appropriately reflects the percentage of the population having access to clean cooking. Therefore, updating the equation for SDG 7.1.2. is deemed not necessary.				
Documentation provided by project participant				
PoA GS11570_VPA01(GS11571)_TRF_V4.0 0905202				
GS VVB assessment				Date: 12/06/2023
VVB assessed that the equation presented in section B.6.1 serves its intended purpose of calculating the net benefit for achieving SDG 7.1.2. It achieves this by subtracting the percentage of operating Improved Cook Stoves (ICS) in the baseline scenario (ACSBaseline) from the percentage of operating ICS in the project scenario (ACSPProject). On the other hand, the value for ACSPProject is determined during ex post monitoring on a sampling basis. This involves dividing the number of users who were found to be actively using the ICS by the total number of users who received the ICS. This proportion effectively reflects the percentage of the population with access to clean cooking. Considering the current equation's methodology, which captures the relevant data during ex post monitoring, we find that it appropriately reflects the proportion of the population benefiting from clean cooking access. CAR # 7 is closed.				

CAR ID	8	Section no.	B.6.2	Date: 01/05/2023
Description of CAR				
In section B.6.2, the table for ex-ante fixed parameter SDG 13 is incomplete. CME to update the VPA DD appropriately.				
Project participant response				Date: 09/05/2023
In the table TRF.2 Transition project information; under section "Declaration", CME has checked "option 1" that permits the CME to include only that information in the TRF that has not been validated/verified as part of CDM CPA-DD. The ex-ante fixed parameters have already been mentioned in B.4.2 of the registered CDM CPA-DD. Therefore, citing these again is deemed not required.				
The documentation provided by project participant				
-				
GS VVB assessment				Date: 12/06/2023
The SDG 13 table provided in section B.6.2 is empty without providing any justification. For avoiding any confusion during future verifications either the parameters need to be included in relevant section or otherwise the reference of already validated CPA need to be provided. Moreover, Choice of data or Measurement methods and procedures need to be provided for all data and parameters fixed ex ante.(section B.6.2). CAR # 8 is open.				
Project participant response				Date: 13/06/2023
The reference to section B.4.2 of the validated CPA is already included in the table for SDG13. The choice of data, measurement methods and procedures have been specified for relevant parameters as applicable.				
The documentation provided by project participant				
PoA GS11570_VPA01(GS11571)_TRF_V5.0 13062023				
GS VVB assessment				Date: xx/xx/xx
In the table TRF.2 Transition project information; under section "Declaration", CME has checked "option 1" that permits the CME to include only that information in the TRF that has not been validated/verified as part of CDM CPA-DD. The ex-ante fixed parameters have already been mentioned in B.4.2 of the registered CDM CPA-DD which were further checked by VVB from registered CPA-DDs and found to be appropriate. CAR is closed				

CAR ID	9	Section no.	B.6.4	Date: 01/05/2023
Description of CAR				
The headings and serial numbers of the template should not be changed. CME shall correct the serial number of headings as per the template.				
Project participant response				Date: 09/05/2023
The required correction has been made.				
The documentation provided by project participant				
PoA GS11570_VPA01(GS11571)_TRF_V4.0 0905202				
GS VVB assessment				Date: 12/06/2023
CME has made the correction, and updates reflected in revised section B.6.4 of VPA DD. CAR is closed.				

CAR ID	10	Section no.	B.6.4	Date: 01/05/2023
Description of CAR				
The data/parameter nomenclature of SDG 5, 7, 8, and 15 of section B.6.4 shall be made consistent with section B.6.2 and B.7.1.				
Project participant response				Date: 09/05/2023
Data/parameter nomenclature of SDG 5, 7, 8, and 15 have been made consistent throughout the VPA-DD				
Documentation provided by project participant				
PoA GS11570_VPA01(GS11571)_TRF_V4.0 0905202				
GS VVB assessment				Date: 12/06/2023
Changes are reflected in the Revise document. CAR #10 is Closed.				

CAR ID	11	Section no.	B.7	Date: 01/05/2023
Description of CAR				
It is observed that the data and parameters required for the quantification of ER are not mentioned in the monitoring plan. CME shall update all the data and parameters in the TRF VPA DD.				
Project participant response				Date: 09/05/2023
In the table TRF.2 Transition project information; under section "Declaration", CME has checked "option 1" that permits the CME to include only that information in the TRF that has not been validated/verified as part of CDM CPA-DD. The parameters to be monitored for the quantification of ER has already been mentioned in B.5.1 of the registered CDM CPA-DD. Therefore, citing these again is deemed not required.				
Documentation provided by project participant				
GS VVB assessment				Date: 12/06/2023
The SDG 13 table provided in section B.7 is not filled completely without providing any justification. For avoiding any confusion during future verifications either the parameters need to be included in relevant section or otherwise the reference of already validated CPA need to be provided. Moreover, QA/QC procedures need to be mentioned for all data and parameters of section B.7. CAR # 11 is open.				
Project participant response				Date: 13/06/2023
The reference to section B.5.1 of the validated CPA is already included in the table for SDG13.				
The QA/QC procedures have been specified for relevant parameters as applicable.				
Documentation provided by project participant				
PoA GS11570_VPA01(GS11571)_TRF_V5.0 13062023				
GS VVB assessment				Date: 30/06/2023
VVB has assessed that In the table TRF.2 Transition project information; under section "Declaration", CME has opted "option 1". As per the same, the CME shall include only that information in the TRF, which has not been validated/verified being part of CDM CPA-DD. Thus, the PO has opted to refer the already validated and verified information from the registered CDM POA/CPA DD. CAR # 11 is closed.				

CAR ID	12	Section no.	C	Date: 01/05/2023
Description of CAR				
In CPA DD the expected start date of 15/03/2020 has been mentioned, CME to clarify the actual start date with documentary evidence.				
Project participant response				Date: 09/05/2023
The actual start date of the CPA is 15/03/2020 and is now mentioned in section C.1.1. of the VPA-DD. The end user agreement indicating the installation date (15/3/2020) of the first ICS under VPA 01 (GS 11571) is being submitted as the documentary evidence for the start date of the crediting period of the VPA.				
Documentation provided by project participant				
PoA GS11570_VPA01(GS11571)_TRF_V4.0 0905202 End User/ Customer Agreement				
GS VVB assessment				Date: 12/06/2023
Proof of the start date has been submitted by CME i.e the consent letter signed by the end-user on 15/05/2015 CAR # 12 is closed.				

Open Likely CARs From GS Preliminary Review Round

CAR ID	1	Section no.	Likely CARs	Date: 01/05/2023
Description of CAR				
CME to clarify how the CARs raised during the Design consultation review is being addressed. Likely CAR #1: As the product ownership is transferred from project beneficiaries (e.g., distributed technology projects) a sample proof (e.g., carbon waiver form) that end-users are aware of and willing to give up their rights on Products shall be submitted by the PD/CME. Likely CAR #2: PD shall have the opinions of an expert stakeholder been provided for the following: Principle 4.1 Sites of Cultural and Historical Heritage Principle 4.2 Forced Eviction and Displacement Principle 4.3 Land Tenure and Other Rights Principle 4.4 Indigenous Peoples Principle 8.1 Impact on Natural Water Patterns/Flows Principle 8.2 - Erosion and/or Water Body Instability Principle 9.10 - High Conservation Value Areas and Critical Habitats Principle 9.11 - Endangered Species Likely CAR # 3: In section H.4 of the generic CPA of the CDM registered PoA-DD, the CPA is required to state the installed capacity of (number of ICS installed) the CPA shall be limited to in units. However, the transitioned VPA-DD nor the CDM-CPA has not stated the estimated number of ICS required reach the small-scale threshold. CME to estimate.				
Project participant response				Date: 09/05/2023
Likely CAR #1 The sample user agreement form is being submitted as a carbon-waiver form. Refer to the clause 11 of the sample end user/customer agreement being submitted as a response to the CAR ID 12. Likely CAR #2: The version 1.2 of the "Safeguarding Principles & Requirements" clause 2.14 requires categorizing the relevance of the identified risks as "yes", "potentially" or "no". Under the category "Yes" the requirements are deemed applicable and adherence needs to be justified. Under the category "potentially", requirements are deemed applicable, but adherence justification is optional. Under the category "No", requirements are deemed not relevant. For all the principles cited above, the relevance category has been justified as "No" and hence these requirements are not deemed relevant. Seeking opinion from an expert on these is therefore not deemed applicable considering the project's technology/measure. Likely CAR #3: Firstly, the registered PoA-DD clearly states in section I.2, page 9, that CPAs with micro-scale units are not required to demonstrate compliance with applicable methodology threshold. Accordingly, the registered CPA-DD, in section F, eligibility criteria # 7 established that the units under the CPA qualify as micro-scale units. Thus, the CPA-DD did not need to estimate the number of units for reaching the methodology threshold at aggregate level. Secondly, the generic CPA-DD (section H.4) only requires specifying the number of ICS units to be installed in the CPA with no relevance to the small-scale threshold. This was provisioned to allow specific CPAs to estimate the ex-ante ERs over the crediting period. The CDM CPA 10431-P1-0002-CP1, CPA-DD in section A.3 duly specifies the number of ICS under the CPA to be 2 million accordingly. Thus, this likely CAR is not relevant.				
Documentation provided by project participant				

GS VVB assessment	Date: 12/06/2023
Likely CAR #1: Proof of the start date has been submitted by CME i.e the consent letter signed by the end-user on 15/05/2015. Likely CAR 01 is closed. Likely CAR #2: VVB assessed the response provided by CME regarding the categorization of risks and the relevance of requirements outlined in version 1.2 of the "Safeguarding Principles & Requirements," specifically clause 2.14. According to the clause, risks are categorized as "yes," "potentially," or "no" based on their relevance. CME has justified the relevance category as "No" for all the principles mentioned above, indicating that these requirements are not deemed relevant to the project. Consequently, seeking an expert opinion on these requirements is considered unnecessary, given the technology and measure employed by the project. Considering the provided justification and the project's specific technology and measure, VVB find that the categorization of risks and the determination of relevance as "No" aligns with the requirements specified in version 1.2 of the "Safeguarding Principles & Requirements." Therefore, based on VVB's assessment, concur with CME's position that seeking an expert opinion on these requirements is not applicable in this case, as they are not deemed relevant to the project's technology and measure. Likely CAR # 2 is closed. Likely CAR #3: Upon assessing the response provided by CME, VVB has carefully reviewed the relevant sections and information presented. The response addresses two key points regarding the methodology threshold and the number of units specified in the registered CPA-DD. Firstly, it is stated that the registered PoA-DD explicitly indicates in section I.2, page 9, that CPAs with micro-scale units are not required to demonstrate compliance with the applicable methodology threshold. This provision is in line with the eligibility criteria #7 established in section F of the registered CPA-DD, which confirms that the units under the CPA qualify as micro-scale units. Consequently, the estimation of the number of units for reaching the methodology threshold at an aggregate level was not necessary for the CPA-DD. Secondly, it is mentioned that the generic CPA-DD (section H.4) only requires the specification of the number of ICS units to be installed in the CPA, without any relevance to the small-scale threshold. This provision allows specific CPAs to estimate the ex-ante Emission Reductions (ERs) over the crediting period. In the case of the CDM CPA 10431-P1-0002-CP1, the CPA-DD in section A.3 appropriately specifies the number of ICS units under the CPA as 2 million. Likely CAR # 3 is closed.	

Open FARs From GS Preliminary Review Round

Open FARs from GS Preliminary Review Round				
FARs ID	1	Section no.	FAR	Date: 01/05/2023
Description of CAR				
CME to clarify how the FAR raised during the Design consultation review is being addressed. FAR#3. All the safeguarding principles assessment shall be supported with evidence/references/expert's opinion. The PP shall provide them with GS VVB validation. FAR#5. The CME shall conduct the Safeguarding Principles & Requirements assessment at the VPA/CPA equivalent level as per Principles & Requirements and Paragraph 4.7.1 of Programme of Activity Requirements vr 2.0.				
Project participant response				Date: 09/05/2023
FAR#3 : refer response to CAR ID 14 (likely CAR #2) above. FAR#5 The Safeguarding Principles & Requirements assessment has been conducted at VPA level.				
Documentation provided by project participant				
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GS VVB assessment				Date: 12/06/2023
FAR#3: Closed FAR#5: CME has conducted an evaluation of the safeguarding principles and their assessment at the VPA level. VVB has reviewed this assessment and determined that it aligns with the expected standards and requirements. FAR#5 is Closed				

For VPA 02:

CLs from this verification

CL ID	1	Section no.	TRF	Date: 01/05/2023
Description of CL				
It has been observed that the names of CME and PP mentioned in the registered CDM CPA do not match the entities mentioned in the transition request form OF VPA02. CME to justify the ownership/transfer of rights with documentary evidence				
Project participant response				Date: 09/05/2023
As per PoA Requirements, version 2.0, clause 8.11.1 c), the CME for a transitioning PoA may differ from that specified in the corresponding CDM PoA-DD. Thus, for the GS4GG PoA, Value Network Venture Advisory services Pte. Ltd. shall serve as the CME, with KICC and BBF listed as Project participants (PP).				
Further as per the above clause, in such cases, a clarification request is required to be submitted to GS before initiating such process. It is worthy to note, that this requirement came into force on 03/08/2022. However, the Stakeholder Feedback Rounds for the VPA was initiated before the requirement came into force.				
Lastly, the GS is deemed to be informed of this change during the preliminary review. This issue was discussed during the VPA preliminary review of the VPA and the change of CME has already been approved by GS4GG during the closure of preliminary review (refer Comment/Request "Others" which refers to the design consultation review feedback for PoA wherein this has been discussed and approved by GS)				
The documentation provided by project participant				
GS11570_POA Design Consultation Review_ROUND II_FINAL_03112022				
GS11572_Preliminary Review_ROUND II_FINAL_03112022				
GS VVB assessment				Date: 12/06/2023
Based on CME's response, it is understood that according to the para 8.11.1 (c) of Programme of Activity Requirements, version 2.0, the CME for a transitioning PoA may differ from the entity specified in the corresponding CDM PoA-DD. Value Network Venture Advisory services Pte. Ltd. shall serve as the CME, with KICC and BBF listed as Project participants (PP). VVB has further assessed the PoA Design Consultation Review report and found that the said change has already been accepted during design consultation.				
#CL 01 is closed.				

CL ID	2	Section no.	B.6	Date: 20/04/2023
Description of CL				
Provided web link is for CPA 02, however, this link refers to CPA 03. CME to clarify and provide the Correct link.				
Project participant response				Date: 09/05/2023
The weblink for CPA 03 has now been provided.				
The documentation provided by project participant				
PoA GS11570_VPA02(GS11572)_TRF_V4.0 0905202				
GS VVB assessment				Date: 12/06/2023
CME has updated the correct weblink CL # 02 is Closed.				

Corrective action required (CARs) (VPA 02)

CAR ID	1	Section no.	TRF	Date: 01/05/2023
Description of CAR				
CME to need correct the reference ID. In KPI Section mentioned CPA 02 Reference ID in CPA3				
Project participant response				Date: 09/05/2023
The reference ID has now been rectified.				
Documentation provided by project participant				
PoA GS11570_VPA02(GS11572)_TRF_V4.0 0905202				
GS VVB assessment				Date: 12/06/2023
Changes have been reflected in revised PoA GS11570_VPA02(GS11572)_TRF_V4.0. CAR is Closed.				

CAR ID	2	Section no.	TRF	Date: 01/05/2023
Description of CAR				
In KPI Section mentioned CPA 02 Weblink in CPA3. CME to need correct the same under section TRF.2				
Project participant response				Date: 09/05/2023
The correct weblink for CPA 03 has now been provided.				
Documentation provided by project participant				
PoA GS11570_VPA02(GS11572)_TRF_V4.0 0905202				
GS VVB assessment				Date: 12/06/2023
CME has updated the changes and provided the correct Weblink. CAR # 02 is closed.				

CAR ID	3	Section no.	TRF	Date: 20/04/2023
Description of CAR				
CME to choose the correct option for "Transition Approval Procedure" in section TRF.1. 3 Transaction Checklist of the VPA02				
Project participant response				Date: 09/05/2023
The appropriate option (1.3) has now been selected in "Transition Approval Procedure" in section TRF. 3				
Documentation provided by project participant				
PoA GS11570_VPA02(GS11572)_TRF_V4.0 0905202				
GS VVB assessment				Date: 12/06/2023
CME has updated the Section of Transition Approval Procedure" in section TRF. Changes are reflected under section 1.3 of TRF. CAR # 03 is Closed.				

CAR ID	4	Section no.	A.1	Date: 01/05/2023
Description of CAR				
The reference ID provided for the CPA3 is incorrect however it's a reference for CPA 2. CME to correct the same under section A.				
Project participant response				Date: 09/05/2023
Correct reference ID is now provided.				
Documentation provided by project participant				
PoA GS11570_VPA02(GS11572)_TRF_V4.0 0905202				
GS VVB assessment				Date: 12/06/2023
CME has Updated the ID in Section of A.1 and cross-verified it. CAR # 4 Closed.				

CAR ID	5	Section no.	A.1.1	Date: 01/05/2023
Description of CAR				

In line with general eligibility criteria 3.1.1 (e) of GS4GG Principles & Requirements, CME will share the PP's legal registration documents.	
Project participant response	Date: 09/05/2023
The legal registration documents of the PP (BBF and KICC) are being submitted.	
Documentation provided by project participant	
KICC Corporate Identity document BBF - Certificate of Registration	
GS VVB assessment	Date: 12/06/2023
CME has Submitted the BBF - Certificate of Registration and KICC Corporate Identity document cross-verified and found ok. Hence CAR is Closed.	

CAR ID	6	Section no.	A.1.1	Date: 01/05/2023
Description of CAR				
In line with general eligibility criteria 3.1.1 (e), (f), and (h) of GS4GG Principles & Requirements, CME to share the supportive documents.				
Project participant response				Date: 09/05/2023
The appropriate documents pertaining to the requirements mentioned in the aforesaid eligibility criteria and their reference are mentioned below.				
Criteria		Documents/Reference		
3.1.1 (e) Contact Details		Refer the following: cover letter approved during the preliminary review containing the necessary contact details. Legal registration documents submitted in response to the CAR ID 5.		
3.1.1 (f) Legal Ownership		Refer to the clause 11 of the sample end user/customer agreement being submitted as a response to the CAR ID 12.		
3.1.1 (h) ODA Declaration		Already Submitted as a part of initial submission.		
Documentation provided by project participant				
GS VVB assessment				Date: 12/06/2023
CME has provided appropriate justification in line with GS4GG Principles & Requirements version 1.2. Hence CAR # 6 is Closed.				

CAR ID	7	Section no.	A.1.1	Date: 01/05/2023
Description of CAR				
CME to provide supporting evidence of Feedback.				
Project participant response				Date: 09/05/2023
Stakeholder feedback forms are being submitted.				
Documentation provided by project participant				
Stakeholder feedback forms				
GS VVB assessment				Date: 12/06/2023
CME has Submitted the Stakeholder feedback forms and cross-verified it. CAR # 7 is Closed.				

CAR ID	8	Section no.	B.6	Date: 01/05/2023
Description of CAR				
GSDG 7.1.2 is to be calculated by dividing the total population reporting any cooking from the number of people using clean fuel technology. CME to update the equation accordingly in section B.6.1				
Project participant response				Date: 09/05/2023
The equation in section B.6.1 is used to calculate the net benefit for achieving SDG 7.1.2. This is done by subtracting the percentage of operating ICS in the baseline scenario (ACSBaseline) from percentage of operating ICS in the project scenario (ACSPROJECT). The value of ACSBaseline shall always be 0 as no improved stove usage is applicable to the baseline. The value for the ACSPROJECT is				

determined during ex-post monitoring on a sampling basis, which involves dividing the number of users for whom the ICS was found to be "in-use" by the total number of users who were provided with ICS. The proportion thus obtained, appropriately reflects the percentage of the population having access to clean cooking. Therefore, updating the equation for SDG 7.1.2. is deemed not necessary.

Documentation provided by project participant

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GS VVB assessment

Date: 12/06/2023

VVB assessed that the equation presented in section B.6.1 serves its intended purpose of calculating the net benefit for achieving SDG 7.1.2. It achieves this by subtracting the percentage of operating Improved Cook Stoves (ICS) in the baseline scenario (ACSBaseline) from the percentage of operating ICS in the project scenario (ACSProject). On the other hand, the value for ACSProject is determined during ex post monitoring on a sampling basis. This involves dividing the number of users who were found to be actively using the ICS by the total number of users who received the ICS. This proportion effectively reflects the percentage of the population with access to clean cooking.

Considering the current equation's methodology, which captures the relevant data during ex post monitoring, we find that it appropriately reflects the proportion of the population benefiting from clean cooking access.

CAR # 8 is closed.

CAR ID	9	Section no.	B.6.2	Date: 01/05/2023
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Description of CAR

In section B.6.2, the table for ex-ante fixed parameter SDG 13 is incomplete. CME to update the VPA DD appropriately.

The headings and serial numbers of the template should not be changed. CME shall correct the serial number of headings as per the template.

The data/parameter nomenclature of SDG 5, 7, 8, and 15 of section B.6.4 shall be made consistent with section B.6.2 and B.7.1.

Project participant response

Date: 09/05/2023

In the table TRF.2 Transition project information; under section "Declaration", CME has checked "option 1" that permits the CME to include only that information in the TRF that has not been validated/verified as part of CDM CPA-DD. The ex-ante fixed parameters have already been mentioned in B.4.2 of the registered CDM CPA-DD. Therefore, citing these again is deemed not required.

The same has been rectified.

The nomenclature/notation of Data/parameter for SDG 5, 7, 8, and 15 have been made consistent throughout the VPA-DD.

Documentation provided by project participant

PoA GS11570_VPA02(GS11572)_TRF_V4.0 0905202

GS VVB assessment

Date: 12/06/2023

The SDG 13 table provided in section B.6.2 is empty without providing any justification. For avoiding any confusion during future verifications either the parameters need to be included in relevant section or otherwise the reference of already validated CPA need to be provided. Moreover, Choice of data or Measurement methods and procedures need to be provided for all data and parameters fixed ex ante.(section B.6.2). CAR # 9 (1) is open.

CME has made the correction, updates reflected in revised section B.6.4 of VPA DD. CAR is closed. Changes are reflected in the Revise document. CAR is Closed.

Project participant response

Date: 13/06/2023

The reference to section B.4.2 of the validated CPA is already included in the table for SDG13.

The choice of data, measurement methods and procedures have been specified for relevant parameters as applicable.

Documentation provided by project participant

PoA GS11570_VPA02(GS11572)_TRF_V5.0 13062023

GS VVB assessment

Date: XX/XX/XX

In the table TRF.2 Transition project information; under section "Declaration", CME has checked "option 1" that permits the CME to include only that information in the TRF that has not been

validated/verified as part of CDM CPA-DD. The ex-ante fixed parameters have already been mentioned in B.4.2 of the registered CDM CPA-DD which were further checked by VVB from registered CPA-DDs and found to be appropriate. CAR is closed

CAR ID	10	Section no.	B.7	Date: XX/XX/XX
Description of CAR				
It is observed that the data and parameters required for the quantification of ER are not mentioned in the monitoring plan. CME shall update all the data and parameters in the TRF VPA DD				
Project participant response				Date: 09/05/2023
In the table TRF.2 Transition project information; under section "Declaration", CME has checked "option 1" that permits the CME to include only that information in the TRF that has not been validated/verified as part of CDM CPA-DD. The parameters to be monitored for the quantification of ER has already been mentioned in B.5.1 of the registered CDM CPA-DD. Therefore, citing these again is deemed not required.				
Documentation provided by project participant				
-				
GS VVB assessment				Date: XX/XX/XX
The SDG 13 table provided in section B.7 is not filled completely without providing any justification. For avoiding any confusion during future verifications either the parameters need to be included in relevant section or otherwise the reference of already validated CPA need to be provided. Moreover, QA/QC procedures need to be mentioned for all data and parameters of section B.7. CAR # 10 is open.				
Project participant response				Date: 13/06/2023
The reference to section B.5.1 of the validated CPA is already included in the table for SDG13. The QA/QC procedures have been specified for relevant parameters as applicable.				
Documentation provided by project participant				
PoA GS11570_VPA02(GS11572)_TRF _V5.0 13062023				
GS VVB assessment				Date: 30/06/2023
VVB has assessed that In the table TRF.2 Transition project information; under section "Declaration", CME has opted "option 1". As per the same, the CME shall include only that information in the TRF, which has not been validated/verified being part of CDM CPA-DD. Thus, the PO has opted to refer the already validated and verified information from the registered CDM POA/CPA DD. CAR # 10 is closed.				

CAR ID	11	Section no.	C	Date: 01/05/2023
Description of CAR				
In CPA DD the expected start date of 15/03/2020 has been mentioned, CME to clarify the actual start date with documentary evidence.				
Project participant response				Date: 09/05/2023
The actual start date of the CPA is 15/03/2020 and is now mentioned in section C.1.1. of the VPA-DD. The end user agreement indicating the installation date (15/3/2020) of the first ICS under VPA 01 (GS 11571) is being submitted as documentary evidence for the start date of the crediting period of the VPA.				
Documentation provided by project participant				
PoA GS11570_VPA02(GS11572)_TRF _V4.0 0905202 Customer/End user agreement				
GS VVB assessment				Date: 12/06/2023

Proof of the start date has been submitted by CME i.e the consent letter signed by the end-user on 15/05/2015
 CAR # 11 is closed.

Open CARs From GS Preliminary Review Round

CAR ID	1	Section no.	Likely CARs	Date: 01/05/2023
Description of CAR				
CME to clarify how the CARs raised during the Design consultation review is being addressed. Likely CAR #1: As the product ownership is transferred from project beneficiaries (e.g., distributed technology projects) a sample proof (e.g., carbon waiver form) that end-users are aware of and willing to give up their rights on Products shall be submitted by the PD/CME. Likely CAR #2: PD shall have the opinions of an expert stakeholder been provided for the following: Principle 4.1 Sites of Cultural and Historical Heritage Principle 4.2 Forced Eviction and Displacement Principle 4.3 Land Tenure and Other Rights Principle 4.4 Indigenous Peoples Principle 8.1 Impact on Natural Water Patterns/Flows Principle 8.2 - Erosion and/or Water Body Instability Principle 9.10 - High Conservation Value Areas and Critical Habitats Principle 9.11 - Endangered Species Likely CAR # 3: In section H.4 of the generic CPA of the CDM registered PoA-DD, the CPA is required to state the installed capacity of (number of ICS installed) the CPA shall be limited to in units. However, neither the transitioned VPA-DD nor the CDM-CPA stated the estimated number of ICS required to reach the small-scale threshold. CME to estimate.				
Project participant response				Date: 09/05/2023
Likely CAR #1 The sample user agreement form is being submitted as a carbon-waiver form. Refer to the clause 11 of the sample end user/customer agreement being submitted as a response to the CAR ID 12. Likely CAR #2: The version 1.2 of the "Safeguarding Principles & Requirements" clause 2.14 requires to categorize the relevance of the identified risks as "yes", "potentially" or "no". Under category "Yes" the requirements are deemed applicable and adherence needs to be justified. Under category "potentially", requirements are deemed applicable but adherence justification is optional. Under category "No", requirements are deemed not relevant. For all the principles cited above, the relevance category has been justified as "No" and hence these requirements are not deemed relevant. Seeking opinion from an expert on these is therefore not deemed applicable considering the project's technology/measure. Likely CAR #3: Firstly, the registered PoA-DD clearly states in section I.2, page 9, that CPAs with micro-scale units are not required to demonstrate compliance with applicable methodology threshold. Accordingly, the registered CPA-DD, in section F, eligibility criteria # 7 established that the units under the CPA qualify as micro-scale units. Thus, the CPA-DD did not need to estimate the number of units for reaching the methodology threshold at aggregate level. Secondly, the generic CPA-DD (section H.4) only requires specifying the number of ICS units to be installed in the CPA with no relevance to the small-scale threshold. This was provisioned to allow specific CPAs to estimate the ex-ante ERs over the crediting period. The CDM CPA 10431-P1-0003-CP1, CPA-DD in section A.3 duly specifies the number of ICS under the CPA to be 2 million accordingly. Thus, this likely CAR is not relevant.				
GS VVB assessment				Date: 12/06/2023
Likely CAR #1: Proof of the start date has been submitted by CME i.e the consent letter signed by the end-user on 15/05/2015. Likely CAR 01 is closed. Likely CAR #2: VVB assessed the response provided by CME regarding the categorization of risks and the relevance of requirements outlined in version 1.2 of the "Safeguarding Principles & Requirements," specifically clause 2.14. According to the clause, risks are categorized as "yes," "potentially," or "no" based on their relevance. CME has justified the relevance category as "No" for all the principles mentioned above, indicating that these requirements are not deemed relevant to the project. Consequently, seeking an expert				

opinion on these requirements is considered unnecessary, given the technology and measure employed by the project. Considering the provided justification and the project's specific technology and measure, VVB find that the categorization of risks and the determination of relevance as "No" aligns with the requirements specified in version 1.2 of the "Safeguarding Principles & Requirements." Therefore, based on VVB's assessment, concur with CME's position that seeking an expert opinion on these requirements is not applicable in this case, as they are not deemed relevant to the project's technology and measure. Likely CAR # 2 is closed.

Likely CAR #3: Upon assessing the response provided by CME, VVB has carefully reviewed the relevant sections and information presented. The response addresses two key points regarding the methodology threshold and the number of units specified in the registered CPA-DD.

Firstly, it is stated that the registered PoA-DD explicitly indicates in section I.2, page 9, that CPAs with micro-scale units are not required to demonstrate compliance with the applicable methodology threshold. This provision is in line with the eligibility criteria #7 established in section F of the registered CPA-DD, which confirms that the units under the CPA qualify as micro-scale units. Consequently, the estimation of the number of units for reaching the methodology threshold at an aggregate level was not necessary for the CPA-DD.

Secondly, it is mentioned that the generic CPA-DD (section H.4) only requires the specification of the number of ICS units to be installed in the CPA, without any relevance to the small-scale threshold. This provision allows specific CPAs to estimate the ex-ante Emission Reductions (ERs) over the crediting period. In the case of the CDM CPA 10431-P1-0002-CP1, the CPA-DD in section A.3 appropriately specifies the number of ICS units under the CPA as 2 million.

Likely CAR # 3 is closed.

Open FARs From GS Preliminary Review Round

FARs ID	1	Section no.	FAR	Date: 01/05/2023
Description of CAR				
CME to clarify how the FAR raised during the Design consultation review is being addressed.				
FAR#3. All the safeguarding principles assessment shall be supported with evidence/references/expert's opinion. The PP shall provide them with GS VVB validation.				
FAR#5. The CME shall conduct the Safeguarding Principles & Requirements assessment at the VPA/CPA equivalent level as per Principles & Requirements and Paragraph 4.7.1 of Programme of Activity Requirements vr 2.0.				
Project participant response				Date: 09/05/2023
FAR#3 : refer response to CAR ID 14 (likely CAR #2) above.				
FAR#5 The Safeguarding Principles & Requirements assessment has been conducted at VPA level.				
Documentation provided by project participant				
PoA GS11570 VPA02(GS11572) TRF V4.0 0905202				
GS VVB assessment				Date: 12/06/2023
FAR#3: Closed				
FAR#5: CME has conducted an evaluation of the safeguarding principles and their assessment at the VPA level. VVB has reviewed this assessment and determined that it aligns with the expected standards and requirements.				
FAR#5 is Closed				