




**Validation report form for
Gold Standard Project activity**

BASIC INFORMATION	
Title of the Project Activity (PA)	Smokeless Energy efficient cookstove distribution in rural India-3
GS Reference Number	GS-12019
Version number of the validation report	1.0
Completion date of the validation report	10/11/2023
Version number of PDD to which this validation report applies	Version 04, dated 03/11/2023
Start Date of PA	30/07/2022
Project Participant	Greneity Infocom Service Private Limited
Host Party	India
SDG Targeted:	1.SDG 3: Good health and wellbeing (3.9) 2.SDG 5: Gender equality (5.4.1) 3.SDG 7: Affordable and Clean Energy (7.1) 4.SDG 8: Decent work and Economic Growth (8.5.1) 5.SDG 13: Climate Action (13.2)
Applied methodologies and standardized baselines	Gold Standard Methodology: REDUCED EMISSIONS FROM COOKING AND HEATING: Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC) Version 4.0 dated on 07/10/2021.
Mandatory sectoral scopes	03
Activity Requirements applied	Community Services Activities
Product Requirements applied	GHG Emissions Reduction & Sequestration Product Requirements
Name and UNFCCC reference number of the VVB	E-0052:Carbon Check (India) Private Limited
Name, position and signature of the approver of the validation report	 Amit Anand, CEO

SECTION A.Executive summary

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Purpose and general description

Greneity Infocom Service Private Limited (the PP) has appointed the VVB, Carbon Check (India) Private Ltd. to perform an independent validation of the Gold Standard PA “Smokeless Energy efficient cookstove distribution in rural India-3” in India (hereafter referred to as “PA”). This report summarises the findings of validation of the project, performed on the basis of Gold Standard criteria Gold standard for global goals (GS4GG), as well as criteria 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 project activity involves replacement of less efficient baseline cooking stoves using woody biomass with efficient wood/charcoal cook stoves with single/multiple pans which are more efficient. This will result in reduction in usage of fuel (biomass) for cooking purpose which contributes to environmental sustainability and community development.

The efficient cookstoves are distributed by Greneity Infocom Services Private Limited, in the households of Chhattisgarh, India for the purpose of cooking and other thermal energy needs as confirmed from the site visit and baseline survey report/09/. The number of plants involved in the project activity is cross verified with the data base/05/, undertaking letter submitted by the PP/05//18/ and interview with the PP. The project activity helps in reducing 39,577 tCO₂/year

The project activity has been implemented in households. The PA targets multiple beneficiaries and locations in the Chhattisgarh, India, focus on the rural households. Emission reductions attributable to the PA are additional to any that would occur in the absence of the PA in accordance with the Gold standard for global goals (GS4GG) requirements for additionality. Greenhouse gas (GHG) emission reductions achieved through saving of non-renewable biomass will result in carbon credits following GS certification rules and procedures.

The purpose of validation is to have a thorough and independent assessment of the proposed PA against the applicable GS requirements, in particular, the project's baseline, monitoring plan and the PA's compliance with relevant Gold standard criteria and host Party criteria. These are validated to confirm that the project design, as documented, is sound and reasonable and meets the identified criteria. Validation is a requirement for all Gold Voluntary projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of voluntary emission reductions (VERs).

Location

Host Party(ies): India

Region/State/Province: Chhattisgarh

City/Town/Community: Surajpur district of Chhattisgarh

Scope of the validation

The validation scope is defined as the independent and objective review of the project design document (PDD /01/). The PDD /01/ is reviewed against the relevant criteria (see above) and decisions by the Gold standard, including the approved baseline and monitoring methodology.

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

While carrying out the validation, CCIPL determines if the PA complies with the requirements of the paragraph 37 of the CDM Modalities & Procedures, the applicability conditions of the selected methodology /B03/, guidance issued by the Gold Standard and also assess the claims and assumptions made in the PDD /01/ without limitation on the information provided by the project participants.

Validation Process

The validation consists of the following four phases:

i. A desk review of the project design documents

- A review of the data and information;
- Cross checks between information provided in the PDD /01/ and information from sources with all necessary means without limitations to the information provided by the project proponent;
- Submission of Validation work plan to the PP

ii. Follow-up interviews with project stakeholders

- Interviews with relevant stakeholders in host country with personnel having knowledge of the project development via telephone, email, online etc.;
- Cross checking between information provided by interviewed personnel with all necessary means without limitations to the information provided by the project proponent;

iii. Reference to available information relating to projects or technologies similar projects under validation and review based on the approved methodology /B03/ being applied for the appropriateness of formulae and accuracy of calculations.

iv. The resolution of outstanding issues and the issuance of the final validation report and opinion.

The report is based on the assessment of the PDD /01/ undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to document reviews and stakeholder interviews, review of the applicable/applied methodology /B03/ and their underlying formulae and calculations.

This report contains the findings and resolutions from the validation and a validation opinion on the proposed PA thus confirming the Project design in the documents is sound and reasonable and meets the stated requirements and identified criteria.

Conclusion

The selected baseline and monitoring methodology /B03/ is applicable to the project and correctly applied. Carbon Check (India) Private Ltd. therefore recommends the project to the Gold Standard for registration.

Carbon Check (India) Private Ltd. concludes the validation with a positive opinion that the GS PA “Smokeless Energy efficient cookstove distribution in rural India-3”, as described in the PDD /01/, meets all applicable GS requirements, including those specified in the GS4GG Principles and requirements version 1.2, GS4GG activity requirements version 1.2, GHG Emissions Reduction & Sequestration Product Requirements Version 1.4, meets host country criteria and has correctly applied the methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC) Version 4.0 dated on 07/10/2021”.

SECTION B. Validation team, technical reviewer and approver

B.1. Validation team members

No.	Role	Type of resource	Last name	First name	Affiliation	Involvement in			
						Desk review	On-site inspection	Interview(s)	Validation findings
1.	Team Leader / Local Assessor/ Technical Expert	IR	Mathew	Vijay	CC IPL	X	X	X	X
2.	Trainee Assessor	IR	Suhail K	Muhammed	CC IPL	X	X	X	X
3.	Trainee Assessor	IR	Maria john	Linta	CC IPL	X	X	X	X

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

No.	Role	Type of resource	Last name	First name	Affiliation
1.	Technical reviewer	IR	Singh	Vikash Kumar	CC IPL
2.	Approver	IR	Anand	Amit	CC IPL

Audit Team Experience:

Vijay Mathew: is an appointed Team Leader. He has been involved in carbon offset mechanisms/sustainability standards for more than 14 years. He has completed his Master of Science (M.Sc.) in Energy Systems, Master of Business Administration (M.B.A) and Master of Commerce (M.Com). He has also completed his Post Graduate Diploma in International Business Operations (PGD-IBO) and Post Graduate Diploma in Fire Protection and Safety (PGD-FPS). He is certified Lead Auditor/Assessor in various standards viz. ISO 9001:2015, SA 8000: 2014, ISO 14001:2015, ISO 14064-1:2018, ISO 50001:2018, ISO 45001: 2018 and BS OHSAS 18001: 2007 etc. He has experience in the field of Carbon Offsets both in the regulatory and voluntary front, including project validation. He has participated in GS, VCS, GCC and CDM validations and verifications. He has been involved in verification/validation of more than 100 Carbon offset projects. He has also attended several Gold Standard VVB webinar trainings and GS4GG trainings. He is qualified as technical expert for TA 1.1, 1.2, 3.1,13.1 and 13.2 under CDM SS/TA categorization.

Vikas Kumar Singh: Qualified lead assessor and internal technical reviewer for offset projects validations and verifications under CDM, VCS and Gold Standard (GS) and actively been involved in the validation and verification or internal technical review of more than 500 GHG offset projects. He is qualified as technical expert for TA 1.1,1.2, 3.1,4.1,7.1,13.1,13.2,14.1 and 15.1 under CDM & ISO SS categorisation. He has undergone extensive training in the validation and verification of carbon offset projects including the accreditation requirements for the VVBs. He has also received accreditation from the California Air Resources Board (ARB) under Executive Order H2-13-174 as a GHG offset lead verifier for carbon offsets projects and is a specialist for the livestock protocol. Currently, he is employed with Carbon Check in the capacity of Compliance Officer. He holds a Bachelor of Science degree in Environment & Water Management and Master of Science degree in Environmental Management. He has been involved in number of GS validation and verification projects (as internal technical reviewer and team leader) in the following Gold Standard Projects:

GS 1078, GS 1044, GS 976, GS 850, GS 916 PoA (GS 1231 (VPA 01) GS 1029 (VPA 02), GS 1030(VPA 03), GS 1031(VPA 04) and GS 4364.

He has also attended Several Gold Standard DOE webinar trainings including training on GS4GG.

Muhammed Suhail K: He is appointed as Trainee Assessor and also attended many GS workshops/webinars.

Linta Maria John: She is appointed as Trainee Assessor and also attended many GS workshops/ webinars.

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

Duration of on-site inspection: 12/09/2023 to 13/09/2023				
No.	Activity performed on-site	Site location	Date	Team member
1.	<ul style="list-style-type: none"> •General information about the project. •Barriers faced/overcome in the processes (additionality) •Local Stakeholder consultation processes •Legal/ Statutory Clearances and Agreements Signed 	Chhattisgarh	12/09/2023 to	Vijay

	<ul style="list-style-type: none"> •Baseline determination •Application of appropriate Methodology •Operation and maintenance Procedures •Technical details of project •Data monitoring and storage practices •Calibration and maintenance requirement of the equipment Monitoring Methodology		13/09/2023	Mathew, Muhammed Suhail K & Linta Maria John
2.	Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PDD	Chhattisgarh	12/09/2023 to 13/09/2023	Vijay Mathew, Muhammed Suhail K

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Garg	Ms. Shivani (Managing Director)	Greneity Infocom Service Private Limited	12/09/2023 to 13/09/2023	<ul style="list-style-type: none"> •Discussion on Project Design and eligibility criteria •Proposed Technology to be used in the PA •PP Management System Manual • Discussion on project funding and involvement of any ODA •Discussion on the PA PDD and ER sheet •Discussion on the GS preliminary review comments •Sustainability aspects of the PA SDG impacts 	Vijay Mathew, Muhammed Suhail K & Linta Maria John

2.	Bias	Seetharam	Greneity Infocom Service Private Limited	12/09/2023 to 13/09/2023	Discussion on the implementation procedures and Operation and maintenance.	
3.	Sharma	Mr. Arjun	Greneity Infocom Service Private Limited	12/09/2023 to 13/09/2023	Discussion on the implementation procedures and Operation and maintenance.	Vijay Mathew, Muhammed Suhail K & Linta Maria John
4.	Somaru	Sukhel	Households	12/09/2023 to 13/09/2023	Local stakeholder consultation and Baseline survey of the project activity	Vijay Mathew, Muhammed Suhail K & Linta Maria John
5.	Kevat	Dhanso	Households	12/09/2023 to 13/09/2023	Local stakeholder consultation and Baseline survey of the project activity	Vijay Mathew, Muhammed Suhail K & Linta Maria John
6.	Saruta	Phulbaso	Households	12/09/2023 to 13/09/2023	Local stakeholder consultation and Baseline survey of the project activity	Vijay Mathew, Muhammed Suhail K & Linta Maria John
7.	Pritam	Sandeep	Households	12/09/2023 to 13/09/2023	Local stakeholder consultation and Baseline survey of the project activity	

						Vijay Mathew, Muhammed Suhail K & Linta Maria John
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8.	Yadav	Ramkali	Households	12/09/2023 to 13/09/2023	Local stakeholder consultation and Baseline survey of the project activity	Vijay Mathew, Muhammed Suhail K & Linta Maria John
9.	Sai	Sumar	Households	12/09/2023 to 13/09/2023	Local stakeholder consultation and Baseline survey of the project activity	Vijay Mathew, Muhammed Suhail K & Linta Maria John
10.	Devi	Maniaro	Households	12/09/2023 to 13/09/2023	Local stakeholder consultation and Baseline survey of the project activity	Vijay Mathew, Muhammed Suhail K & Linta Maria John
11.		Krishna	Households	12/09/2023 to 13/09/2023	Local stakeholder consultation and Baseline survey of the project activity	Vijay Mathew, Muhammed Suhail K & Linta Maria John
12.	Rangalal	Singaro	Households	12/09/2023 to 13/09/2023	Local stakeholder consultation and Baseline survey of the project activity	Vijay Mathew, Muhammed Suhail K & Linta Maria John
13.	Sai	Bighani	Households		Local stakeholder	

				12/09/2023 to 13/09/2023	consultation and Baseline survey of the project activity	Vijay Mathew, Muhammed Suhail K & Linta Maria John
14.	Ramvilash	Chndrmuni	Households	12/09/2023 to 13/09/2023	Local stakeholder consultation and Monitoring survey of the project activity	Vijay Mathew, Muhammed Suhail K & Linta Maria John

C.4.Sampling approach

As the target population is homogeneous, PP has used the applied methodology TPDDTEC, the minimum total sample size for usage survey is 100, with at least 30 samples for project technologies of each age being credited. The samples numbers used in baseline survey is generated by random sampling since, the population are homogeneous in nature and size is taken as 100.

In line with paragraph 26 of the Sampling Standard, the validation team has applied acceptance sampling approach through remote interviews on the baseline survey as part of validation. The project participant had applied sampling approach to determine the baseline, a representative baseline survey /10/ was conducted by the representatives of Project participant. The validation team has chosen acceptance sampling in accordance with paragraph 28 of the sampling standard /B08/.

Applying paragraph 39 (c) of the sampling standard, version 09 /B08/, a sample size of 11 households was chosen (with no discrepant records). A sample size of 11 for was determined, based on an AQL of 0.5% and UQL of 20%; producer risk and consumer risk of 10 % each in determining the DOE's sample size Acceptance number (c) thus determined for the sample is 0. However, DOE interviewed 11 and 2 non monitored households' samples from the baseline survey done by project participants.

The information provided in the baseline survey /10/ and KPT have been cross checked during the Onsite visit. As a part of acceptance sampling, the Validation team could confirm the baseline survey data /10/ with no discrepant records. Thus, PP's set of records has been accepted in line with § 33 of the sampling standard, version 09 /B08/.

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

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Project design document	-	-	-
Identification of project type	-	-	-
Description of project activity	1	1	-
Management system	-	-	-
Start date, crediting period type and duration	-	1	-

Environmental impacts	-	-	-
Local stakeholder consultation	1	-	-
Application and selection of methodologies and standardized baselines	-	1	-
-Application of methodologies and standardized baselines	-	-	-
-Deviation from methodology and/or methodological tool	-	-	-
-Clarification on applicability of methodology, tool and/or standardized baseline	-	-	-
-Project boundary, sources and GHGs	-	1	-
-Baseline scenario	-	-	-
-Demonstration of additionality	-	-	-
-Proof of Project eligibility	-	-	-
-Safeguarding Principles Assessment	-	-	-
-Estimation of emission reductions or net anthropogenic removals	-	-	-
-Monitoring plan	-	1	-
Sustainable development co-benefits	1	2	-
Stakeholder Inputs & Grievance Mechanism	1	-	-
Others (GS Preliminary review)	4	5	-
Total	8	12	-

SECTION D.Validation findings

D.1.Project Activity

D.1.1. Project design document

Means of validation	DR,I
Findings	-
Conclusion	<p>The PDD for the project activity “Smokeless Energy efficient cookstove distribution in rural India-3”, in India, version 03 of 16/08/2023, submitted by Greneity Infocom Service Private Limited. has been the basis for the validation process.</p> <p>Validation team confirms that the PDD is prepared using GS4GG PDD template version 1.3 of 14/04/2023 which is the latest and correct template to use and hence, this requirement has been appropriately met.</p>

D.1.2. Identification of project type

Means of validation	DR,I
Findings	-
Conclusion	<p>The project falls under - Type II – Energy Efficiency Improved Projects as ICS stoves results into savings of wood as compared to the baseline scenario to meet the thermal energy needs of households of Chhattisgarh in India.</p> <p>CC IPL based on review of PDD, and interviews confirms that the proposed GS PA complies with Community Services Activity Requirements V1.2 and it is not A/R PA. The assessment in compliance with § 6.3.17 of GS Validation and Verification Standard V1.0 /B02/ and GS4GG requirements /B01/.</p>

D.1.3. Description of PA

Means of validation	DR,I
Findings	CAR 06 and CL 06 had been raised in this regard and successful resolved. Please refer appendix 4 for details.

Conclusion

The description of the project activity contained in the PDD /01/ is transparent, detailed and provides a clear overview of the project. Its content was confirmed by means of document review /01/ and interviews to validate the accuracy and completeness of the project description.

The project involves distribution of fuel-efficient improved cook stoves (ICS) in Chhattisgarh, India. Under this project activity 10,500 ICS were distributed in the state of Chhattisgarh, India. The implementation schedule is provided in the PDD. The project results in reducing the amount of non-renewable biomass used for cooking. Through reduction in non-renewable biomass consumption, the programme will decrease greenhouse gas emissions. The - natural draft ICS will burn the wood efficiently, which improves the thermal energy direct to the pot, so conserving non-renewable biomass. Section A.1. of the GS PDD contains a clear summary description of the projects. The completeness and accuracy of the project description was validated through onsite interviews and through the desk review of the PDD /1/ & supporting documents.

The project involves dissemination of ICS, which has higher thermal efficiency of (34%) that is achieved through optimizing the dimensions of the combustion chamber and effective air flow to aid complete combustion of biomass. Thermal efficiency of the ICS is verified through the efficiency test certificate /03/ and found to be in line with the methodology requirements/B03/. The project activity follows the host country rules and regulations.

The project is envisaged to distribute ICS in rural households in the states of Chhattisgarh in India. The distribution of ICS started from 30/7/2022 /06/ onwards with a target of 10,500 in total. In accordance with § 7.5.1 of Validation and verification standard V1.0 /B02/ and § 2.1.1 of the GS4GG PA requirements the validation team has assessed the geographical boundary of the PA. This was as checked and confirmed by reviewing the PDD /01/ and on-site visit. Review of PDD reveals the definition of the boundary for the PA in terms of a geographical area has been transparently defined, and used in establishing the boundary of the PA.

The PP has taken into consideration all applicable national and/or sectoral policies and regulations within that chosen boundary. This conforms to the requirement of Validation and verification standard V1.0 /B02/. and GS4GG PA requirements. /B05/

As per the GS4GG clause 4.1.39 and 4.1.40 (principle and requirement) states '4.1.39 The Project start date is the earliest date on which the Project Developer has committed to expenditures related to the implementation of the Project. This does not include the purchase or option to purchase the land upon which a Project is intended to take place. Examples of the start date may include the date on which contracts have been signed for equipment or construction/operation services required for the Project. Minor pre-project expenses, such as the contracting of services/payment of fees for feasibility studies or preliminary surveys, shall not be considered in the determination of the start date as they do not necessarily indicate the commencement of implementation of the Project. For distributed technology projects, the start date is the date of implementation of the first unit under the project.'. As this project activity involves the distribution of technology the start date is the implementation of the first unit under the project /06/. It has been verified that 30/7/2022 is the date on which the PP has distributed the first ICS under the project activity which represents and justifies the start date of the project activity. It has been noted that the project is a retroactive project which means the Stakeholder Consultation (1st round) is conducted after the Project Start Date (clause 4.1.42 under principle and requirement).

The stakeholder consultation was done on 26/06/2023 as per the PDD /01/. Clause 4.1.49 (principle and requirement) states 'Retroactive Projects shall submit the required documents for Preliminary Review (time of first submission) within 1 year

	<p>of the Project Start Date'. I, e., 30/7/2022 and the submission of the documents for preliminary Review is completed before 29/07/2023 and the project listed on 29/06/2023, hence the complied to the GS requirements. Therefore, project start date cannot be prior to 21/05/2023 as per GS requirement for retroactive projects. In that way the start date of 30/7/2022 for this retroactive project meets the GS requirements. The first ICS was distributed on 30/7/2022 was verified by the validation team /25/ and confirms the start date to be accurate.</p> <p>Fixed crediting period has been chosen for the project, starting from 30/7/2022 or from the date prior to two years from the date of registration with GS registry whichever is later. Since, it is the retroactive project, PP has chosen the period 2 years prior to the date of registration. This is in line with GS requirements.</p> <p>PA using Gold Standard Methodology: REDUCED EMISSIONS FROM COOKING AND HEATING: Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC) Version 4.0 /B03/. This conforms to the requirement of GS requirements.</p> <p>From the desk review of PDD /01/ and interviews of the PP representatives, it is revealed that this Project does not involve any ODA funding. Thus, the validation team considers no ODA funding has been involved under this Project. This is further confirmed by the undertaking /19/ provided by the PP.</p> <p>Based on assessment above, CCIPL confirms that the description of the proposed CDM PA in the PDD is accurate and complete and it provides an understanding of the PA, and the project is in line with the applied methodology /B03/ and GS4GG requirements /B01/.</p>
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D.1.4. Management system

Means of validation	DR,I
Findings	--
Conclusion	<p>Validation team reviewed the PDD /01/ confirms that clear and transparent information about responsibilities, records handling, training, technical review procedures, record keeping, documentation control and measures for continual improvements. The same has been confirmed during the on-site visit interviews with representatives of PP and document review /01/. The validation team concludes that the operational and management plan described in the PDD /01/ is complete. This is deemed appropriate by the validation team. Greneity Infocom Service Private Limited is the Project Participants (PP) of this PA. Greneity Infocom Service Private Limited is the entity which communicates with the Gold Standard/SustainCert act as a Project developer. Their Roles & Responsibilities/ Competencies have been provided in the section B of the GS PDD.</p> <p>Validation team confirms the compliance of the requirements of Validation and verification standard V1.0 /B02/ and GS4GG requirements /B01/.</p>

D.1.5. Start date and duration of PA

Means of validation	DR, I
Findings	CAR 12 has been raised in this regard and successfully resolved. Please refer appendix 4 for details
Conclusion	As per the GS4GG clause 4.1.39 and 4.1.40 (principle and requirement) states '4.1.39 The Project start date is the earliest date on which the Project Developer has committed to expenditures related to the implementation of the Project. This does not include the purchase or option to purchase the land upon which a Project is intended to take place. Examples of the start date may include the date on which contracts have been signed for equipment or construction/operation services required for the Project. Minor pre-project expenses, such as the contracting of

	<p>services/payment of fees for feasibility studies or preliminary surveys, shall not be considered in the determination of the start date as they do not necessarily indicate the commencement of implementation of the Project. For distributed technology projects, the start date is the date of implementation of the first unit under the project.' As this project activity involves the distribution of technology the start date is the implementation of the first unit under the project /06/. It has been verified that 30/7/2022 is the date on which the PP has distributed the first ICS under the project activity which represents and justifies the start date of the project activity. The validation team also reviewed the PDD /01/ and found that the duration of the PA is 5 years crediting period twice renewable. In this case the start date is the date of distribution of first ICS unit under the project /06/.</p> <p>Based on the above assessment, the validation team concludes that the description and determination of the start date of the proposed PA is in conformance with the requirements of Validation and verification standard V1.0 /B02/ and GS4GG requirements /B01/.</p>
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D.1.6. Environmental impacts

Means of validation	DR,I
Findings	--
Conclusion	<p>The project does not have any negative environmental impact and does not require any specific licence/approval from host country. Other positive environmental impacts are discussed in section D.3 below.</p> <p>Therefore, validation team confirms that the project does not result any negative environmental and social impact and meets the sustainable development criteria as defined by GS requirements.</p>

D.1.7. Local stakeholder consultation

Means of validation	DR,I
Findings	CL 05 had been raised in this regard and successfully resolved. Please refer appendix 4 for details
Conclusion	<p>The local stakeholder consultation is conducted following guideline as outlined in GS4GG 'stakeholder consultation & Engagement procedure, requirement and guidelines and a stakeholder consultation report is prepared /15/. VVB cross checked the information provided in the stakeholder report during document review.</p> <p>The stakeholder meetings were held on 26/06/2023 at community hall Village Bagdarri, Jamgala, Lakhanpur, Surguja, India.</p> <p>The stakeholders were invited via local newspaper advertisement, notice in public places and personal invitations and the documents were made available to the VVB. The same was also confirmed from stakeholders during site visit. All the steps found were performed as per the guideline. No negative comment or grievance was recorded during the stakeholder meeting. VVB also noted during the site visit that no negative comments from stakeholders from the project activity. It is also noted that a continuous grievance mechanism as detailed during stakeholder meetings is found in practice at site. Stakeholders are found aware of continuous grievance mechanism system. It is also noted from PP, the feedback round as required under the GS started immediately after the end of the stakeholder meeting and stakeholders were asked to provide feedback to the concerned personnel within 2 months after the stakeholder report is circulated. Email to relevant stakeholders along with the project documents are circulated on 25/05/2023. stakeholder feedback was from 25/05/2023 to 26/06/2023. However, until 26/06/2023 no comment received. Since a continuous grievance mechanism is in place the feedback round meets the GS4GG requirements.</p> <p>Validation team has checked the supportive document i.e., Minutes of LSC meeting, public invitation, personal invitations, Email to stakeholders, Attendance sheet, LSC evaluation forms and photos /15/ to confirm the LSC and</p>

found in line with the GS4GG STAKEHOLDER CONSULTATION AND ENGAGEMENT REQUIREMENTS.

Since the project is a retroactive project (Start date of the project is 30/7/2022), PP has conducted integrated stakeholder consultation and stakeholder feedback round as per the requirement of para 6.1.4 of GS4GG STAKEHOLDER CONSULTATION AND ENGAGEMENT REQUIREMENTS Version 2.1 which is found acceptable. An Email to relevant stakeholders along with the project documents are circulated on 25/05/2023. stakeholder feedback was from 25/05/2023 to 26/06/2023. However, until 26/06/2023 no comment received.

D.1.8. Application of methodologies and standardized baselines

Means of validation	The small-scale project activity utilizes Gold Standard Methodology: REDUCED EMISSIONS FROM COOKING AND HEATING: Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC) Version 4.0 /B03/.		
	Under section B.2 of the PDD /01/, project has been assessed for all the applicability conditions of the applied methodology.		
	No	Applicability conditions in Version 4 of TPDDTEC	Characteristics of the project activity
1.	This methodology is applicable, (a) The technology used for the project scenario has predictable performance in it is proven to be efficient and durable under field conditions with the rated thermal efficiency at least 20%.	The technology used for the project is suitable for the field conditions with the 34 % efficiency. Hence, this applicability condition is met.	Validation team has checked the technology description from the PDDs /02/, site visit and technical specifications of project technology /03/. Validation team has found the eligibility criteria is met.
2.	(b) The technologies each have continuous useful energy outputs of less than 150kW per unit defined as the total useful energy delivered from start to end of operation of a unit divided by time of operation). For technologies or practices that do not deliver thermal energy in the project scenario but only displace thermal energy supplied in the baseline scenario, the 150kW threshold applies	The distributed ICS have continuous useful energy outputs of less than 150kW per unit. Hence, this applicability condition is met.	Validation team has checked the ER sheet /02/ where the threshold has been calculated by the PP and found that the same is in less than 150 kW per unit. Validation team has found the eligibility criteria is met.

	to the displaced baseline technology.		
3.	(c) A project proponent implements the small-scale activity. The individual households and institutions do not act as project proponents.	The individual households does not act as project proponents and have signed agreement with the PP where in all the rights have been transferred to the PP in the lieu of free cookstove received. Hence, this applicability condition is met.	Validation team has checked the agreement with PP and end user /09/. Found that the end user has transferred their rights of carbon credits to PP in lieu of free cookstoves received. Validation team has found the eligibility criteria is met.
4.	(d) the project developer must design incentive mechanism(s), which should be effective as fast as possible, for the elimination of inefficient baseline stoves that are replaced by the project cooking devices and describe the incentive mechanism(s) in the PDD/VPA-DD at the time of validation.	Each end users included in the project activity has received the cookstove free of cost. Also, free operation and maintenance will be provided to the end users in the lieu of transferring the carbon rights. Each end user will have access to smoke free environment compared to the baseline scenario. Hence, this applicability condition is met.	Validation team has checked the agreement with PP and end user /09/. Found that the end user has transferred their rights of carbon credits to PP in the lieu of free cookstoves received. Validation team has found the eligibility criteria is met.
5.	(e) To avoid double counting or double claiming, the project developer must: i. clearly communicate its ownership rights and intention of claiming the emission reductions resulting from the project activity to the following parties by contract or clear written assertions in the transaction paperwork: all other project participants; project technology manufacturers; and retailers of the project technology or the renewable fuel in use; and	(e)- (i) Each user shall sign an agreement at that time of stove installation transferring the ownership of credits from user to Greneity infocom Service Pvt Ltd. Each ICS has Unique Identification number to avoid double counting. All ICS under this project activity shall be provided with unique serial number and address of the ICS tracing its location. The ICS serial number, end user information will be collected at the time of installation (by relevant entity), and	UIDs provided by the PP to the ICS was found to be unique for each of the end user and could be traced form the ICS user database provided by the PP/05/. UIDs were listed in the HHs user database for each of the end user listed. No repetitive entries were observed in the end user database. Validation team has checked the agreement with PP and end user /09/. Found that the end user has transferred their rights of carbon credits to PP in lieu of free cookstoves received. Further, PP

	<p>ii.inform and notify the end users that they cannot claim emission reductions from the project, and</p> <p>iii.exclude from the project activity, cooking devices included in any other voluntary market or CDM project activity/PoA, and strive not to displace the cooking devices of another CDM or voluntary project/PoA. See data and parameters not monitored, Avoidance of double counting or double claiming with other mitigation actions, for details on this demonstration.</p>	<p>recorded in a database by the PP.</p> <p>(ii) The End user has signed an agreement with Greneity Infocom Service Pvt Ltd, wherein it is clearly mentioned that the end user cannot claim emission reduction from the project activity.</p> <p>(iii) The project activity is a new project activity and is not a part any other voluntary market or CDM project activity/PoA, and strive not to displace the cooking devices of another CDM or voluntary project/PoA.</p> <p>Hence, this applicability condition is met.</p>	<p>has communicated the same during the local stakeholder meeting.</p> <p>PP has also provided declaration that the project activity is not a part of any other GHG programme /18/.</p> <p>VVB by means of onsite visit audit interviews confirms that the proposed method for distribution of project devices includes the method to avoid double counting of emission reductions such as unique identifications of product, end-user details (name, address etc) and unique GPS referenced location. Therefore, the VVB confirms that the record keeping system will eliminate double counting. Validation team has found the eligibility criteria is met.</p>
	<p>6. f) Project activities making use of solid fossil fuel in the project scenario or other improved fossil fuel cookstoves meeting certain conditions described in the footnote to Table 1 (e.g. switch from three-stone fire biomass stoves to LPG stoves) may only claim emission reductions for energy efficiency improvement aspect and shall assume the same baseline and project fuel for emission reduction calculations.</p>	<p>Fuel remains same in both baseline and project scenario, i.e. firewood. Hence, this applicability condition is met.</p>	<p>The validation team by means of on-site visit interviews confirms that Fuel remains same in both baseline and project scenario, i.e. firewood. Validation team has found the eligibility criteria is met.</p>

	7.	(g) Project activities making use of a new solid biomass feedstock in the project situation (e.g. switch to green charcoal or renewable biomass briquettes) must comply with relevant specific requirements for biomass related project activities, as defined in the latest version of the Community Services Activity Requirements. The specific requirements apply to both plantations established for the project activity and/or existing plantations that will supply biomass feedstock.	Not applicable for the project activity.	Not applicable
	8.	(h) Adequate evidence is supplied to demonstrate that indoor air pollution (IAP) levels are not worsened compared to the baseline, and greenhouse gases emitted by the project fuel/stove combination are estimated with adequate precision. Furthermore, for projects where cooking will move from outdoor to indoor or where the project technology reduces ventilation (for example, changing from a stove with chimney to improved stove with no chimney), indoor air pollution (IAP) levels shall not worsen in the project compared to the baseline, including PM 2.5 and carbon monoxide (CO)	(h) Project activity involves distribution of MNRE approved model of ICS wherein manufactures specification meets the BIS level and confirms that IAP level will not be worsened in the project scenario. Hence, this applicability condition is met.	VVB has checked the manufactures specification and MNRE approval and found that this same is compiling to the requirement of methodology.

	emissions. This may be demonstrated before project Design Certification or during project operation using the certification resulting from of a manufacturer's test, report of field testing of the technology's PM 2.5 and carbon monoxide (CO) emissions, report of lab testing of the technology, or results of modelling of the technology's operation under field conditions. If none of these are available, reference from published literature or report by independent agencies may be used as evidence, provided it is not more than 5 years old.		
Findings	CAR 07 was raised in this regard and successfully resolved. Please refer appendix 4 for details		
Conclusion	CC IPL hereby confirms that the selected baseline and monitoring methodology has been approved by Gold standard, and is applicable to the Project, which complies with all the applicability conditions therein and the selected version is valid at the time of submission of the proposed project activity.		

D.1.9. Deviation from methodology and/or methodological tool

Means of validation	No deviation from the applied methodology or methodological tool is applied in the project activity.
Findings	N/A
Conclusion	N/A

D.1.10. Clarification on applicability of methodology, tool and/or standardized baseline

Means of validation	No clarification on the applied methodology or methodological tool is applied in the project activity
Findings	N/A
Conclusion	N/A

D.1.11. Project boundary, sources and GHGs

Means of validation	The project boundary basically defines the physical and geographical boundary of the project facility, and it is well defined in the PDD/01/ (section B.3). The project boundary covers Chhattisgarh state of India. Therefore, the project boundary covers all the points where all the ICS devices supplied in the host countries of India. The project boundary is clearly defined in the PDD/1/ in-line to the methodology/B03/.
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	Emissions sources included in the project boundary have been appropriately included in the PDD/1/. CO ₂ , CH ₄ and N ₂ O emissions due to use of non-renewable biomass in the traditional stove for baseline scenario (for all the project locations) and the project scenario has reduced emissions, thus CO ₂ ,CH ₄ and N ₂ O are included.
Findings	CAR 08 had been raised in this regard and successfully resolved. Please refer appendix 4 for details
Conclusion	The project boundary confirmed during the on-site visit along with the documentary evidence was found in conformance with the applied baseline methodology. All sources of GHG emissions required by the methodology have been included in the project boundary and are justified in reference to the project activity. There are no project emissions/leakage emissions of any sort which are not addressed by the applied methodology occurring because of the project activity. There are no project emissions/leakage emissions of any sort which are not addressed by the applied methodology occurring because of the project activity.

D.1.11.1. Baseline scenario

Means of validation	DR, I
Findings	-
Conclusion	<p>PP has applied an approved baseline and methodology TPDDTEC Version 4/7/ which is approved under GS4GG programme.</p> <p>The purpose of the PA is to introduce energy-efficient, biomass fuel- based cookstoves (technology/measure) or Improved Cookstoves (ICS) within Chhattisgarh, India. This project comprises of technologies designed to provide ICS to households which are efficient and meet the technology and measure requirements of the applied methodology TPDDTEC Version 4/7/. In line with the applied methodology, the baseline scenario is “A baseline scenario is defined by the typical baseline fuel consumption patterns in a population that is targeted for adopting the new project technology.”</p> <p>The baseline described in the PD complies with the requirements of the methodology, as the energy baseline is the existing level of consumption of non-renewable biomass used by the cooking systems currently in use and which is used in the absence of the project activity.</p> <p>VVB based on review of the PDD/01/ confirms that the documentary evidence used in determining the above baseline scenarios are relevant, and correctly quoted and interpreted in the project description. The baseline scenario for the applied methodology were also confirmed through onsite interviews with the end users of technologies and representatives of PP.</p> <p>VVB confirms that the baseline scenario opted by the project activity is in accordance with the requirements of the applied methodology /B02/ and is justified.</p> <p>Validation team confirms that the baseline scenario is identified as per the applied methodology. All data parameters are used correctly while estimating the baseline emissions. The baseline scenario represents the most possible scenario in absence of the project activity. The same is also justified in section B.4 of PDD. This is in conformance with §12.1.5 (b) of GS4GG Project Activity requirements version 1.2.</p>

D.2.1. Demonstration of additionality

Means of validation	DR,I
Findings	-
Conclusion	The project proponent has demonstrated the additionality as per the Gold Standard Methodology: REDUCED EMISSIONS FROM COOKING AND HEATING: Technologies and Practices to Displace Decentralized Thermal Energy

	<p>Consumption (TPDDTEC) Version 4.0 dated on 07/10/2021. As per paragraph 3.3.2 of the methodology states that “The project developer shall demonstrate additionality prior to project registration by conforming to additionality requirements of one of the options below;</p> <ul style="list-style-type: none"> a. Applicable GS4GG Activity Requirements; b. CDM Tool 01 - Tool for the Demonstration and Assessment of Additionality; c. CDM Tool 19- Demonstration of additionality of microscale project activities; (not applicable to Gold Standard microscale projects) d. CDM Tool 21 – Demonstration of additionality of small-scale project activities; (applicable to small-scale projects only) e. An approved Gold Standard VER additionality tool <p>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:</p> <ul style="list-style-type: none"> (a) Positive list (Annex B of this document) (b) Projects located in LDC, SIDS, LLDC (c) Microscale projects <p>PP has demonstrated additionality as per paragraph 1.1.3 of Annex B – Positive list of GS4GG Community services activity requirements, version 1.2, Project activities solely composed of isolated units where the users of the technology/measure are households or communities or institutions and where each unit results in ≤ 600MWh of energy savings per year or ≤ 600 tonnes of emission reductions per year are deemed automatically additional. As per clause 3.5.1.5 of GS4GG principles and requirements a retroactive project must submit project documents within one year of the project start date. PP has submitted initial project documents on 30/7/2022 to GS. Therefore, the prior consideration is met for the project activity as per GS4GG rules. Ongoing Financial Need: As per clause 3.5.2.2 of GS4GG principles and requirements/B01/, the proposed project activity falls under the ‘Positive List’ and hence under Principle 5 – Financial Additionality & Ongoing Financial Need, the project is considered deemed additional and therefore not required to prove Financial Additionality at the time of Design Certification.</p> <p>This is in conformance with the requirements of the gold standard validation and verification standard v1/B02/ and GS4GG requirements/B01/.</p>
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D.2.2. Proof of project eligibility

<p>Means of validation</p>	<p>GENERAL ELIGIBILITY CRITERIA:</p> <p>Eligible Project Types: As per section 4.1.3 of the GS4GG Principles and Requirements document states following for automatic eligibility for a project “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.” The Gold Standard has published Community Services Activity Requirements; therefore, the project activity falls under the list of Pre-identified eligible project and is automatically eligible for Gold standard certification. The project type is installation biogas plant, which is eligible under community service activity requirements. Therefore, the project is automatically eligible for GS certification.</p> <p>Location of the Project: The project’s host Party is in the states of Chhattisgarh, India and eligible as per Gold Standard.</p> <p>Project Area, Project Boundary and Scale: Project boundary geographical area is defined as the territorial boundary in the various districts of the state Chhattisgarh, India. Project activity falls under small scale project activity. Emission reductions achieved under the small-scale programme is less than 60,000 tCO₂e/year. The project falls under End use energy Efficiency with emission reductions 39,577tCO₂.. Hence, the project qualifies for small scale projects.</p>
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Host Country Requirements: The project's host Party is India and eligible as per Gold Standard requirements. The project does not have any negative environmental impact and does not require any specific licence/approval from host country, Moreover, there are no legal, environmental, ecological and social regulations /law that mandatorily enforces the implementation of the project activity. Hence, host country criteria in regards compliance with applicable Host Country's legal, environmental, ecological and social regulations is meet. The proposed project activity is deemed to be eligible under gold standard GS4GG.

Contact Details: Project contact details has been given in Appendix 1 of the PDD.

Legal Ownership: Legal ownership of the GS carbon credit generated from the project activity is transferred to Greneity Infocom Service Private Limited as verified from end user agreements /08/. Greneity Infocom Service Pvt Ltd will have the carbon credit ownership in lieu of free distribution of cookstove to the end users/08/.

Other Rights: Not applicable. The project is implementation as per individual users choice and hence no other rights are required.

Official Development Assistance (ODA) Declaration: The project does not involve any ODA. This has been also supported with declaration of ODA as per GS requirement /19/.

Eligibility under Gold Standard Community Services Activity (CSA) Requirements

Eligible Project Types : As per section 2.1.2 of GG4GG Community Services Activity Requirements ver.1.2 document states that "All CSA Projects shall lead to climate change mitigation and/or adaptation by providing or improving access to services/resources at the household or community or institution level. Eligible services include electricity and energy, water and sanitation, waste management, housing, etc.". The project type is distribution of ICS, which is eligible under community service activity requirements. Therefore, the project is automatically eligible for GS certification.

GENERAL ELIGIBILITY CRITERIA - Type of project:- As per section 3.1.1 (b) of GG4GG Community Services Activity Requirements ver.1.2. The project type is distribution of ICS, which is eligible under community service activity requirements. Therefore, the project is automatically eligible for GS certification.

GENERAL ELIGIBILITY CRITERIA – Project Area, Boundary and scale: Project boundary geographical area is defined as the territorial boundary in various districts of the state Chhattisgarh, India. Project activity falls under small scale project activity. Emission reductions achieved under the small-scale programme is less than 60,000 tCO₂e/year. The project falls under End use energy Efficiency with emission reductions 39,577 tCO₂ and eligible for small-scale programme as per Gold Standard.

GENERAL ELIGIBILITY CRITERIA – Legal Ownership: Legal ownership of the GS carbon credit generated from the project activity is transferred to Greneity Infocom Service Private Limited as verified from end user agreements /08/. Greneity Infocom Service Pvt Ltd will have the carbon credit ownership in lieu of free distribution of cookstove to the end users/08/.

Therefore, the proposed project activity is deemed to be eligible under gold standard GS4GG

GS4GG Gender Sensitive requirements

The project directly benefits to women and women's rights. The project directly contributes towards the national mission for empowerment of women through

	<p>improvement of health and attaining vision for empowerment of women under national policy for women 2016 (Women participation will be ensured in the efficient use and spreading the use of solar energy, biogas, smokeless chulas and other technological applications to have positive influence on their life styles and a long term impact on meeting sustainable development goals).In summary, the project takes care of gender equality and women.</p> <p>Under section D.2 of the GS PDD /01/, PP has provided the assessment that project complies with 'gender sensitive' requirements which is found correct and deemed acceptable. The same was also verified during the onsite visit with stakeholder interview.</p> <p>Therefore, the proposed project activity is deemed to be eligible under gold standard GS4GG.</p>
Findings	-
Conclusion	CCIPL confirms that the project is eligible for GS4GG as per requirements of GS4GG.

D.3. Safeguarding Principles Assessment

Means of validation	<p>PP has done the safeguarding principles assessment analysis and presented assessment in the GS PDD /01/. The assessment has been performed in accordance with requirements prescribed in the GS4GG Principles & Requirements, Version 1.2 & Safeguarding Principles & Requirements, Version 1.2.</p> <p>The detailed assessment of safeguarding principle is provided in Appendix 5 below:</p>
Findings	-
Conclusion	Validation team has carried out on site interviews to cross check the safeguarding principle assessment conducted by the PP. GS VVB has also reviewed the initial GS local stakeholder consultation report/16/ and GS4GG PDD /01/ and found that the PP has assessed all the required critical safeguarding principle in project activity. It has been found that the PA fulfil all the principles like Human Rights, Labor standards, environment protection, and anti-corruption. Validation assessment has been provided in the below Appendix 5.

D.4. Estimation of emission reductions or net anthropogenic removals

Means of validation	<p>As per “Gold standard Methodology REDUCED EMISSIONS FROM COOKING AND HEATING: Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC) Version 4.0 dated on 07/10/2021, the baseline emissions (BE_y) are calculated as:</p> <p>The overall GHG reductions achieved by the project activity will be calculated as follows:</p> $ER_y = \sum_{b,p} (N_{b,p,y} \times U_{p,y} \times SFS_{p,b,y} \times NCV_{b,fuel} \times (f_{NRB,b,y} \times EF_{b,f,CO2} + EF_{b,f,nonCO2})) - \sum LE_{p,y}$ <p>Where:</p> <p>ER_y = Emission reduction for total project activity in year y (tCO₂e/yr)</p> <p>$\sum_{b,p}$ = Sum over all relevant baseline b/project p pairs</p>
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=10,500 ICS

$N_{b,p,y}$ = Number of project technology-days included in the project database for baseline b/project p pair in year y (days)

sales/distribution database for project scenario p against baseline scenario b in year y

= 10,500 * 365

= 51,10,000 days

$U_{p,y}$ = Cumulative Usage rate for technologies in project scenario p in year y (fraction)

based on cumulative adoption rate and drop off rate revealed by usage surveys (fraction)

= 100%

$SFS_{p,b,y}$ = Specific fuel savings for an individual project technology of baseline b/project p pair in year y (mass or volume units/technology*day) (Refer to Section 4.1 | below for further details)

2.45 tonnes/HH/yr calculated

$NCV_{b,fuel}$ = Net calorific value of the fuel(s) that is substituted or reduced in baseline b (TJ/mass or volume units)

= 0.015 Default value

$f_{NRB,b,y}$ = Fractional non-renewability status of woody biomass fuel during year y (fraction). For biomass, it is the fraction of woody biomass that can be established as non-renewable. This parameter is omitted when f is a fossil fuel.

85% calculated using tool 30

$EF_{b,f,CO2}$ = CO₂ emission factor from use of fuel f (tCO₂/TJ)

For woodfuel it is 112 tCO₂/TJ default value

$EF_{b,f,nonCO2}$ = Non-CO₂ emission factor arising from use of fuel, when the baseline fuel f is biomass or charcoal (tCO₂e/TJ). This parameter is omitted when f is a fossil fuel.

9.46 tCO₂e/TJ (AR5 GWP) default value

$LE_{p,y}$ = Leakage for project scenario p in year y (tCO₂e/yr)

0.95 default value given in methodology.

Emission reductions:

ER_y= 39,577 tCO₂e/year

Fraction of woody biomass used in the absence of the project activity in year y that can be established as non-renewable biomass ($f_{NRB,y}$) is determined as per methodological tool 'Calculation of the fraction of non-renewable biomass' version

04 as follows:

The fraction of woody biomass that can be established as non-renewable, is:

$$fNRB = (NRB) / (NRB + RB)$$

fNRB = Fraction of non-renewable biomass (fraction or %)

NRB = Quantity of non-renewable biomass (t/yr)

RB = Quantity of renewable biomass (t/yr)

Estimation of consumption of woody biomass (H/Bold,total) is done following paragraph 11 (a) of the tool 'Official Statistics'.

As per the tool 30 version 4, page number 5 states that "The total consumption of woody biomass (H) is calculated using the following equation,

$$H = HW \times N + CE + NE$$

accounting for all consumption within the applicable area (not only wood fuel but also timber and industrial consumption)"

As per Forest Survey of India report 2019, annual wood fuel consumption in household sector for the state of Chhattisgarh = 87,304,092.5 (Ton/year).

As per Forest Survey of India report 2011, non-domestic wood consumption (Annual fuelwood consumption in household sector and consumption of wood in House construction, Furniture and Agriculture) = 990 (ton/year).

Parameters	Values applied	Source	VVB assessment
HW	87304092.5 tons	INDIA STATE OF FOREST REPORT 2019 - Volume I - Chapter 10 People & Forests;	VVB has cross checked the values with the report and found that the same being consistent and in line with the Tool30, version04
N	1	"N" is already being considered in "HW"; hence 1 is used for inclusion in the formula.	Acceptable
CE	0	Since data do not provide clear information to demonstrate that the values are only for commercial purpose and do not include household consumption, the project applied a conservative value of 0.	Conservative approach, hence acceptable
NE	990 tons	INDIA STATE OF FOREST REPORT 2011 Chapter 7 Socio-Economic Contribution	Values are now considered annually. PP has taken the proportionate value of

		of Forests: Production and Consumption of Forest Resources in India	Chhattisgarh and arrived at the value. Same is acceptable.
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Procedure to estimate RB:

Renewable biomass (RB) in the country/region/area is estimated using the equation below:

$$RB = \sum (MAI_{forest,i} \times (F_{forest,i} - P_{forest})) + \sum (MAI_{other,i} \times (F_{other,i} - P_{other}))$$

Where:

MAI_{forest,i} = Mean Annual Increment of woody biomass growth per hectare in subcategory i of forest areas (t/ha/yr).

MAI_{other,i} = Mean Annual Increment of woody biomass growth per hectare in subcategory i of other wooded land areas (t/ha/yr). This value is not considered due to non-availability of data.

F_{forest,i} = Extent of forest in sub-category i (ha). India state of forest report, 2021 has been referred for this parameter.

F_{other,i} = Extent of other wooded land in sub-category i (ha). This is not used following footnote 4 of the tool.

P_{forest} = Extent of non-accessible area (e.g. protected area where extraction of wood is prohibited, geographically remote area) within forest areas (ha). This parameter is optional and not considered.

P_{other} = Extent of non-accessible area (e.g. protected area where extraction of wood is prohibited, geographically remote area) within other wooded land areas (ha). This parameter is optional and not considered.

i = Sub-category i of forest areas and other wooded land areas

Parameters	Values applied	Source	VVB assessment
MAI _{forest,i} ; MAI _{other,i}	2.1ton/hect are/year	2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories – Table. TABLE 4.9 (UPDATED) ABOVE-GROUND NET BIOMASS GROWTH IN NATURAL FORESTS;	Value is acceptable as sourced from IPCC which is in line with the TOOL 30 version 04. Same is conservative
F _{forest,i} ; F _{other,i}	6,314,000h 1000h	Page number 291 of India State of Forest Resources 2021, chapter 13	VVB has cross checked the values with the report and found that the same being consistent and in line with theTool30, version04
P _{forest,i} ; P _{other,i}	0	Tool 30, version 04	This parameter is optional as per the Tool 30 version04, hence acceptable

Therefore, Renewable biomass (RB) = 1,24,03,894

The fraction of woody biomass that can be established as non-renewable, is:

$$f_{NRB} = (NRB) / (NRB + RB)$$

i.e. NRB = 7,49,01,188

	fNRB = 85.7% rounded down to 85%
Findings	-
Conclusion	Based on the calculations and results presented in the sections above the implementation of the project activity will result in an average ex-ante estimation of emission reduction conservatively calculated to be 39,577 tCO ₂ e per year. The calculation of the emission reductions has been ensured by the validation team based on the VER calculation sheet./02/.

D.5. Monitoring plan

Means of validation	Data and parameters fixed ex-ante:				
		Data/parameter	Unit	Value applied	Assessment
	1	CO ₂ emission factor arising from use of fuel type <i>i</i> in baseline scenario (EF _{b,f,CO2})	tCO ₂ /TJ	112	Default value as given in the applied methodology is used for the project activity. Hence accepted /B03/.
	2	Non-CO ₂ emission factor arising from use of fuel type <i>i</i> in baseline scenario (EF _{b,f,non_CO2})	tCO ₂ e/TJ	9.46	Default value as given in the applied methodology is used for the project activity. Hence accepted /B03/.
	3	Net calorific value of the fuel type <i>i</i> used in the baseline (NCV _{b,f})	TJ/ton	0.0156	Default value as given in the applied methodology is used for the project activity. Hence accepted /B03/.
	4	Fractional of non-renewable biomass used in the baseline (f _{NRB,b,f,y})	%	85	f _{NRB} is calculated for Chhattisgarh following procedure outlined in the applied methodology and as per the latest Tool 30 version 04. Recent data referred in Forest Survey of India report 2019 has been used. The value is fixed for the entire crediting period. The f _{NRB,y} calculation is demonstrated in section D.4 of this report.
	5	Average annual consumption of woodfuel per household before start of project activity (P _{b,y})	ton/person/year	0.74	The baseline fire-wood consumption is as per third party baseline fuel test/10/, Validation team verified survey records with KPT/11/. Therefore, the results of baseline survey is considered reliable.
	6	Number of project technology-days included in the project database for	days	10,500x365	The calculation of the parameter has been clearly demonstrated in the ER sheet/02/ and was

	baseline b/project p pair in year y ($N_{b,p,y}$)			found to be in-line with the applied methodology/2/.
7	Leakage in project scenario p during year y	tCO _{2e} per year	0.95	Default value as given in the applied methodology is used for the project activity. Hence accepted /B03/.

Data and parameters to be monitored:

	Parameter	Description/Assessment
1	Quantity of fuel consumed in project scenario p during year y, in tonnes, and as derived from the statistical analysis conducted on the data collected during the project performance field tests ($P_{p,y}$)	To be monitored at least once in every two years applying similar method like Kitchen Performance Test. Project developer shall only account only those users/households who uses firewood for cooking in baseline. Therefore, this shall be monitored among project users and accordingly accounted in emission reduction calculations. The annual consumption of woody biomass per household in the pre-project devices during the project activity from the end users from supply point to cross check the monitored results. The samples to be selected from those households who uses fuelwood for cooking.
2	Specific fuel savings for an individual project technology of baseline b/project p pair in year y ($SFS_{b,p,y}$)	In line with the methodology, the SFS under method 1 is calculated from $P_{b,y}$, and $P_{p,y}$.
3	Usage rate in project scenario p during year y determined on a sampling basis	To be monitored at least once in every two years. Monitoring consists of Sampling surveys (telephonic / physical) and record the continued operation of project devices. The usage rate will be calculated for each age using simple random sampling. The samples to be selected from the Annual usage survey.
4	Number of project technology-days included in the project database for baseline b/project p pair in year y	To be monitored continuously. Number of ICS distributed per household will be monitored continuously through the total number of ICS listed in the Monitoring database.
5	% of household reporting time savings Hours saved daily from reduced fuel collection	To be monitored annually. The percentage of households reporting reduced fuel collection need while cooking on the ICS will be chosen from the Ex-post monitoring survey on a sample basis.
6	Number of beneficiaries household under project	To be monitored at least once in every two years. Number of ICS distributed under the project activity. The samples to be selected from the ICS distribution record.
7	Total no of employment generated	To be monitored annually Number of people employed for ICS distribution,

		logistics, monitoring & management. 10 permanent employment is cross checked through HR records/13/.
	8	Number of beneficiaries feeling improvement in health To be monitored at least every two years. The number of people with improved health and decreased illness will be tracked through interviews with end users. The samples will be chosen from those databases.
Findings	CAR 10 and CAR 11 had been raised in this regard and successfully resolved. Please refer appendix 4 for details	
Conclusion	CC IPL confirms that the monitoring plan mentioned in the PDD is in accordance with the requirements mentioned in the monitoring methodology and the local regulatory requirements, as well the monitoring arrangements described in the monitoring plan are feasible within the project design. CC IPL is of the opinion that the monitoring plan will give opportunity for real measurement of achieved emissions reductions for the crediting period.	

D.6.Sustainable development co-benefits

Means of validation		Parameter	Description/Assessment
	1.	Good health and well-being (SDG 3)	Mitigation Measure: Air Quality/ Reduction in health problems Way of monitoring: • How: Operational status of biogas plants, incidents of health problems due to indoor air quality, publicly available information may be referred. • When: Annually or biannually • Who: Third party survey
	2.	Affordable and Clean Energy (SDG 7)	Mitigation Measure: Number of households with access to clean energy. Way of monitoring: • How: Survey to confirm if plants were working. • When: Annually or biannually • Who: Third Party survey
	3.	Decent Work and Economic Growth (SDG 8)	Monitoring parameter: Employment generation from the project and quality trainings to employees Way of monitoring: PP shall keep employment records, payment records, training records as part of monitoring this parameter.
	4.	Gender Equality (SDG 5)	Mitigation Measure: Number of households with access to clean energy. Way of monitoring: • How: Survey to confirm Hours saved daily from reduced fuel collection • When: Annually or biannually • Who: Third Party survey
Mechanism to input continuous grievances:			

	As part of continuous grievance mechanism PP has highlighted the mechanism in stakeholder consultation report and also in the PDD. A grievance register shall be kept at panchayat office to record any grievance raised by stakeholders. Since, the project is retroactive project implementation is already, and no comments received yet. The stakeholders found aware of the grievance mechanism system. Therefore, the continuous grievance input mechanism is in place.
Findings	CAR 09 and CL 07 had been raised in this regard and successfully resolved. Please refer appendix 4 for details
Conclusion	CC IPL confirms that sustainability monitoring plan and indicators included in the PDD confirm to the sustainable development requirements of GS4GG.

D.7. Stakeholder Inputs & Grievance Mechanism

Means of validation	<p>Discussion of continuous input /grievance mechanism</p> <p>As part of the grievance mechanism in place, the local stakeholders are encouraged to approach the PP through the following avenues i.e., in-person, and telephone to express their grievance, if any. Through meeting agenda review and discussion with PP validation team understand that PP had discussed environmental and social aspects of project activity along with sustainability goals selected by project activity with local stakeholders.</p> <p>The project proponent informed the users about the input and grievance mechanism. They were informed about the maintenance of a grievance expression book which would be maintained to have a continuous account of stakeholder's feedback. Grievance Expression Process Book have been located at panchayat offices as the stakeholders' chosen places. All the sites are appropriate publicly accessible location where local stakeholders can provide their feedback about the project.</p>
Findings	-
Conclusion	The validation team has checked the corresponding documents /17/ and found in line with the GS4GG requirements. The validation team confirms that the project activity meets the Gold Standard requirements for stakeholder feedback/ grievance mechanism.

SECTION E. Internal quality control

>>

The final validation report has undergone a technical review and quality review before being submitted to the project participant and Gold Standard. A technical reviewer qualified in accordance with CC IPL's qualification scheme for CDM/GS validation and verification performed the technical review.

SECTION F. Validation opinion

>>

The VVB (Carbon Check (India) Private Ltd.) hereafter referred to as CC IPL, has been appointed by Greneity Infocom Service Private Limited (the PP) to perform validation of their PA "Smokeless Energy efficient cookstove distribution in rural India-3". The validation was performed on the basis of the UNFCCC criteria for the Clean Development Mechanism and GS4GG requirements. The scope of the validation is defined as an independent and objective review of the project design document (PDD) /01/, meets all applicable GS requirements, including those specified in the CDM Project Standard for PA /B02/, GS4GG Principles and requirements version 1.2 and other relevant GS4GG applicable rules /B01/, relevant methodology /B03/, tools and guidelines and article 12 of the Kyoto Protocol, paragraph 37 of CDM modalities and procedures, subsequent decisions by the COP/MOP and CDM Executive Board. The project's baseline establishment and monitoring plan and other relevant documents. The information in these documents is reviewed against Gold standard Validation and Verification Standard V1 /B02/, Kyoto Protocol requirements, CDM Modalities & Procedures and subsequent decisions and guidance by the COP/MOP and CDM Executive Board and GS4GG requirements.

The report is based on the assessment of the PDD /01/ undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to document reviews, stakeholder interviews, review of the applicable/applied methodology /B03/ and their underlying formulae and calculations.

The Validation team confirms the contractual relationship signed between the VVB, CCIPL and Greneity Infocom Service Private Limited. The team assigned to the validation meets the CCIPL internal procedures including the UNFCCC requirements for the team composition and competence. The validation team has conducted a thorough contract review as per UNFCCC and CCIPL's procedures and requirements.

Validation methodology and process

The validation has been performed as per the requirements described in the Gold Standard for the Global Goals Principles & Requirements (version 1.2); and Gold standard validation and verification standard V1 /B02/ and constitutes the review and completion of the following steps:

- Desk review of the PDD /01/, and ER spread sheet /02/
- Review of the applied monitoring methodology TPDDTEC Version 4.0" /B03/
- Onsite interview (12/09/2023 to 13/09/2023)
- Issuance of Draft Validation Report
- Resolution of CARs and CLs raised during verification
- Issuance of Final Validation Report.

The PA will result in emissions reductions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the PA is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the PA.

The validation did not reveal any information that indicates that the PA can be seen as a diversion of ODA funding /19/.

The PDD /01/ contains monitoring plan for the monitoring of the emission reductions from the PA. The monitoring arrangement described in the monitoring plan is feasible within the project design and its CCIPL's opinion that the project participants are able to implement the monitoring plan.


Carbon Check (India) Private Ltd. concludes the validation with a positive opinion that the GS PA "Smokeless Energy efficient cookstove distribution in rural India-3", as described in the PDD /01/, meets all applicable CDM/GS requirements, including those specified in the CDM Project Standard for PA /B03/, GS4GG PA requirement /B01/ relevant methodology /B02/ 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.

Carbon Check (India) Private Ltd., therefore, requests the registration of the project activity as a GS PA with Gold Standard.

Appendix 1. Abbreviations

Abbreviations	Full Texts
BE	Baseline Emission
CAR	Corrective Action Request
CCIPL	Carbon Check (India) Private Ltd.
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CER	Certified Emission Reduction
CER	Certified Emission Reduction
CL	Clarification Request
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
COP/MOP	Conference of Parties/ Meeting of Parties
DNA	Designated National Authority
DR	Document Review
EB	Executive Board
EIA	Environmental Impact Assessment
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse Gas
GS	Gold Standard
GS4GG	Gold Standard for global goals
GWh	Giga Watt Hours
I	Interview
IPCC	Intergovernmental Panel on Climate Change
kW	Kilo Watt
kWh	Kilo Watt Hours
LE _y	Leakage
LoA	Letter of Approval
LSC	Local Stakeholder Consultation
LS	Local Stakeholder
MoV	Means of Validation
MOC	Modalities of Communications
NA	Not applicable
NGO	Non-Government Organisation
ODA	Official Development Assistance
OSV	On Site Visit
PE	Project Emission
PA	Project Activity
PDD	Project Design Document
PP	Project Participant
PS	Project Standard
PCP	Project Cycle Procedure
SD	Sustainable Development
T	Tonne
UNFCCC	United Nations Framework Convention on Climate Change
VPA	Voluntary Project Activity
VVS	Validation and Verification Standard
VVB	Validation and Verification Body

Appendix 2. Competence of team member and technical reviewers



Carbon Check (India) Private Limited

Certificate of Competency

Mr. Vijay Mathew

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:

<input checked="" type="checkbox"/> Validator	<input checked="" type="checkbox"/> Verifier	<input checked="" type="checkbox"/> Team Leader	<input checked="" type="checkbox"/> Technical Expert
<input checked="" type="checkbox"/> Technical Reviewer	<input type="checkbox"/> Health Expert	<input type="checkbox"/> Gender Expert	<input type="checkbox"/> Plastic Waste Expert
<input checked="" type="checkbox"/> SDG+	<input checked="" type="checkbox"/> Social no-harm(S+)	<input checked="" type="checkbox"/> Environment no-harm(E+)	<input type="checkbox"/> CCB Expert
<input checked="" type="checkbox"/> Financial Expert	<input checked="" type="checkbox"/> Local Expert for India		

in the following Technical Areas:

<input type="checkbox"/> TA 1.1	<input checked="" type="checkbox"/> TA 1.2	<input type="checkbox"/> TA 2.1	<input checked="" type="checkbox"/> TA 3.1	<input type="checkbox"/> TA 4.1
<input type="checkbox"/> TA 4. n	<input type="checkbox"/> TA 5.1	<input type="checkbox"/> TA 5.2	<input type="checkbox"/> TA 7.1	<input type="checkbox"/> TA 8.1
<input type="checkbox"/> TA 9.1	<input type="checkbox"/> TA 9.2	<input type="checkbox"/> TA 10.1	<input checked="" type="checkbox"/> TA 13.1	<input checked="" type="checkbox"/> TA 13.2
<input type="checkbox"/> TA 14.1	<input type="checkbox"/> TA 15.1			

Issue Date 1 st January 2023	Expiry Date 31 st December 2023
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 Mr. Vikash Kumar Singh Compliance Officer	 Mr. Amit Anand CEO
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CCIPL_FM 7.9 Certificate of Competency_V2.1_012023



Carbon Check (India) Private Limited

Certificate of Competency

Mr. Vikash Kumar Singh

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:

- | | | | |
|--|--|---|--|
| <input checked="" type="checkbox"/> Validator | <input checked="" type="checkbox"/> Verifier | <input checked="" type="checkbox"/> Team Leader | <input checked="" type="checkbox"/> Technical Expert |
| <input checked="" type="checkbox"/> Technical Reviewer | <input type="checkbox"/> Health Expert | <input type="checkbox"/> Gender Expert | <input checked="" type="checkbox"/> Plastic Waste Expert |
| <input checked="" type="checkbox"/> SDG+ | <input checked="" type="checkbox"/> Social no-harm(S+) | <input checked="" type="checkbox"/> Environment no-harm(E+) | <input checked="" type="checkbox"/> CCB Expert |
| <input checked="" type="checkbox"/> Financial Expert | <input checked="" type="checkbox"/> Local Expert for India, South Africa, and Spanish speaking countries | | |

in the following Technical Areas:

- | | | | | |
|---|---|----------------------------------|---|---|
| <input checked="" type="checkbox"/> TA 1.1 | <input checked="" type="checkbox"/> TA 1.2 | <input type="checkbox"/> TA 2.1 | <input checked="" type="checkbox"/> TA 3.1 | <input checked="" type="checkbox"/> TA 4.1 |
| <input checked="" type="checkbox"/> TA 4. n | <input type="checkbox"/> TA 5.1 | <input type="checkbox"/> TA 5.2 | <input checked="" type="checkbox"/> TA 7.1 | <input type="checkbox"/> TA 8.1 |
| <input type="checkbox"/> TA 9.1 | <input type="checkbox"/> TA 9.2 | <input type="checkbox"/> TA 10.1 | <input checked="" type="checkbox"/> TA 13.1 | <input checked="" type="checkbox"/> TA 13.2 |
| <input checked="" type="checkbox"/> TA 14.1 | <input checked="" type="checkbox"/> TA 15.1 | | | |

Issue Date
1st January 2023

Expiry Date
31st December 2023

Mr. Amit Anand
CEO

Appendix 3. Documents reviewed or referenced

S. No.	Document
/01/	GS PDD for the project activity a. "Smokeless Energy efficient cookstove distribution in rural India-3" dated 06/07/2023. b. "Smokeless Energy efficient cookstove distribution in rural India-3" dated 03/11/2023
/02/	<ul style="list-style-type: none"> • Emission reduction calculation spread sheet correspond to /01-a/ • Emission reduction calculation spread sheet correspond to /01-b/
/03/	Technical specifications of the ICS Duttu Chulah including the life span.
/04/	GS11656_GS4GG_Preliminary Review
/05/	Project activity data base including unique identification of each of the ICS period
/06/	Evidence for the start date of the project activity (Commissioning Certificate)
/07/	Company registration certificate from the PP
/08/	Declaration on double counting, target group and distribution mechanism.
/09/	Agreement between Greneity Infocom Service Pvt Ltd, and end user for carbon right transfer
/10/	Baseline Survey report
/11/	Baseline Survey results and survey questionnaires.
/12/	Declaration from the project proponent that the project is not creating any other form of environmental credit under any specific program and not claim carbon credits any other scheme after Registration of the project under GS.
/13/	HR employment records (contractual and permanent)
/14/	Training Records of project staff at site
/15/	<p>Local stakeholders Consultation.</p> <ul style="list-style-type: none"> • Minutes of local stake holder consultation process • Invitation to stakeholders • Email Invitation to stakeholders • Attendance sheet of LSC • LSC evaluation forms • Photos <p>Non-technical description</p>
/16/	Sample sales records/registration form for the distributed ICS.
/17/	Procedure for Grievance Mechanism
/18/	Declaration from the project proponent that the project has not or shall not claim carbon credits any other scheme after Registration of the project under GS.
/19/	Declaration for non-receiving of ODA for project

Background documents

S. No.	Document
/B01/	<ul style="list-style-type: none"> •GS4GG Principles & requirements version 1.2 •GS4GG Safeguarding principles & requirements version 1.2 •GS4GG Stakeholder-Consultation requirements version 1.2 •GS4GG Gender-Equality-Requirements-Guidelines version 1.1 •GS4GG Community Services Activity Requirements (version 1.2)
/B02/	<ul style="list-style-type: none"> •CDM VVS for PA (version 03.0) •CDM PS for PA (version 03.0) •CDM PCP for PA (version 03.0)
/B03/	<p>Applied baseline and monitoring methodologies and Tools</p> <ul style="list-style-type: none"> •Gold Standard Methodology: REDUCED EMISSIONS FROM COOKING AND HEATING: Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC) Version 4.0 dated on 07/10/2021. •Tool 30: Calculation of the fraction of non-renewable biomass, version 03.
/B04/	Site Visit And Remote Audit Requirements And Procedures version 1 dated 17/11/2021
/B05/	GS4GG Project of Activity requirements version 1.2
/B06/	GHG Emissions Reduction & Sequestration Product Requirements, version 2.1 dated 24/02/2022
/B07/	<ul style="list-style-type: none"> •Template Key Project Information & Project Design Document (PDD), version 1.2 dated 14/10/2020 •TEMPLATE GUIDE Key Project Information & Project Design Document v.1.2
/B08/	<ul style="list-style-type: none"> •“Standard for sampling and surveys for CDM project activities and programme of activities” (version 09.0) •Guidelines for sampling and surveys for CDM project activities and Programme of Activities (version 04)

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

Table 1. CARs from this validation

CAR ID	01	Section no.	Preliminary review	Date: 13/09/2023
Description of CAR				
During the preliminary review of the project, FAR#1 was raised by GS as follows: "PD shall provide evidence for start date as the project is retroactive".				
Project participant response				Date: 14/09/2023
PP has submitted the commissioning/registration agreement between end user and PP.				
Documentation provided by project participant				
commissioning/registration agreement				
VVB assessment				Date: 16/09/2023
PP has provided commissioning/registration agreement between end user and PP. The same found to be appropriate. Hence, CAR 01 is closed.				

CAR ID	02	Section no.	Preliminary review	Date: 13/09/2023
Description of CAR				
During the preliminary review of the project, FAR#2 was raised by GS as follows: "All the safeguarding principles assessment shall be supported with evidence/references/expert's opinion. The PP shall provide them to VVB at the time of validation".				
Project participant response				Date: 14/09/2023
All the safeguarding principles has been revised in the revised PDD				
Documentation provided by project participant				
Revised PDD				
VVB assessment				Date: 16/09/2023
PP has revised all the safeguarding principles in PDD and found to be appropriate. Hence, CAR 02 is closed.				

CAR ID	03	Section no.	Preliminary review	Date: 13/09/2023
Description of CAR				
During the preliminary review of the project, FAR#3 was raised by GS as follows: FAR 3. PD shall upload a signed "Terms of Use" document on SC app at the time of validation. VVB to check. FAR 4. It is observed that, there 2 projects by the same PD at same location, therefore geocoordinates of the location of the projects shall be clearly provided and PD shall explain how double counting will be prevented.				
Project participant response				Date: 14/09/2023
1. Terms of Use" has been uploaded in the SC app 2. States are same but districts are different in both the projects. Geocoordinates of the location has been provided and to avoid the double counting each ICS,s have Unique id.				
Documentation provided by project participant				
Screenshot of the SC app				

VVB assessment	Date: 16/09/2023
PP has uploaded "Terms of Use" in SC app and the same is confirmed by VVB. Further PP has provided the Geocoordinates of the location of ICS, the same found to be appropriate. Hence, CAR 03 is closed.	

CAR ID	04	Section no.	Preliminary review	Date: 13/09/2023
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Description of CAR

During the preliminary review of the project, 8 FARs were raised to the VVB by GS as follows:
 FAR 1. VVB shall validate the start date of the project.
 FAR 2. VVB shall validate the carbon rights system in place and determine if stakeholders are aware of the rights and the transfer process.
 FAR 3. VVB shall check on the Stakeholders Feedback Round process and the comment received.
 FAR 4. VVB shall confirm that all attendees of LSC meeting were invited further for feedback/comment during SFR
 FAR 5. VVB shall validate the start date of the project.
 FAR 6. VVB shall ensure that Validation is completed within two years of the date of Listing.
 FAR 7. The project is claiming more than three SDGs therefore, VVB shall check its relevance and assess targets/indicators for SDGs.
 FAR 8. VVB to check and confirm the location of Grievance Mechanism book.
 FAR 9. It is observed that there are 2 project by same PD at same location therefore, VVB shall check double counting and report the same in the FVR.

Project participant response	Date: 14/09/2023
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Registration agreement has been submitted
 Registration agreement as well as evaluation forms distributed amongst stakeholder during meeting clearly states about the carbon right transfer
 VVB has evaluated the procedure of conducting stakeholder consultation and feedback round and found that same is in line with GS requirements.
 During on site validation/verification visit, VVB interviewed local stakeholders and found they were aware about the feedback process and they have no negative feedback about the project activity
 PP has selected the start date as 1st ICS distribution date under the project activity which is in line with the GS4GG requirements. Further, PP has submitted evidence registration/commissioning certificate of the 1st ICS distributed under the project activity.
 Project has been listed on 29/06/2023
 VVB has evaluated the SDGs claimed and found it in line with the project activity
 VVB has visited local supervisor office and found Grievance Mechanism book was placed to register the feedback

Documentation provided by project participant
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VVB assessment	Date: 16/09/2023
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PP has provided Registration agreement, documents related to local stakeholders. The details of local stakeholder meeting are also confirmed from the on-site visit. feedback process and grievance mechanism procedures where active, SDGs claimed were in line with the project activity, the same has been confirmed from the on-site visit. Further PP has provided all the documents mentioned above and the same is accepted by the VVB. Hence, CAR 04 is closed.

CAR ID	05	Section no.	Key project information	Date: 13/09/2023
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Description of CAR

1. Please provide the target name for SDG 5,7,8,12 and 13 as per Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. Please correct the same in B.6 as well and please provide details in both sections inline.	
2. As per, Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, 5.4.1 refers to "Proportion of time spent on unpaid domestic and care work, by sex, age and location". In the PDD, it is provided as average time saving associated with cooking and /or fuel collection time. PP is requested to correct the same.	
Project participant response	Date: 14/09/2023
1.All the SDGs claimed are now revised in the latest PDD	
2.SDG 5 is now revised in the latest PDD	
Documentation provided by project participant	
-	
VVB assessment	Date: 16/09/2023
PP has revised all the SDGs in the PDD as per the above request and found to be appropriate. Therefore, VVB has accepted the same. Hence, CAR 05 is closed.	

CAR ID	06	Section no.	A	Date: 13/09/2023
Description of CAR				
1. PP is requested to provide the location details consistently in all sections (village names).				
2. In section A.1.1, PO is requested to provide the rules, laws and regulations applicable in order to prove the project is not enforced by law.				
3. Maps included have to follow paragraph 8 of guidelines in template guide, i.e., the maps should include, Name of the project ,ID of the project ,Legend, Printing date, Scale, Direction of North, GPS coordinate system (e.g. WGS 84), GPS grid Infrastructure (roads, houses, etc.) and rivers, Information on the satellite or aerial picture (date, resolutions, data source). PP is requested to comply to the same.				
4. In A.3 of PDD, PP is requested to include all information essential to understand the purpose of the project and how it reduces GHG emissions and/or contributes to SDGs.				
5. PP is requested to justify the scale referring to the applied Activity Requirements in section A.4 of PDD.				
Project participant response				Date: 14/09/2023
1. Since there are large number of villages covered under project activity and it would be difficult to mention in the PDD, hence detailed project database has been submitted which includes the complete details of the ICS users.				
2. Section A.1.1 of the PDD is revised				
4. Section A.3 of the PDD is revised				
5. Section A.4 of the PDD is revised				
Documentation provided by project participant				
-				
VVB assessment				Date: 16/09/2023
PP has revised the location details and same is consistent throughout the PDD.				
PP has provided the rules, laws and regulations in section A.1.1 of the PDD.				
PP has revised section A.2 of the PDD and complied with paragraph 8 of guidelines in template guide.				
Further PP has revised section A.3 and A.4 of the PDD as per the request. All the revisions found to be appropriate. Hence, CAR 06 is closed.				

CAR ID	07	Section no.	B.2	Date: 13/09/2023
Description of CAR				

1. The applicability conditions mentioned in section B.2 of PDD have to be in line with that of the Methodology. PP is requested to make it consistent. Further, the Justification for criteria e is not provided against clause e (ii & iii). PP is requested to provide the eligibility criteria and its justification as per the methodology clause. Also, the applicable conditions towards the safeguard's requirement are not justified.
2. 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. PP is requested to provide the same.
3. For the applicability condition b, in section B.2, the Justification provided is not appropriate. The ICS capacity is to be less than 150 kW. PP is requested to correct the same.
4. For the ICS, this may be demonstrated before project Design Certification or during project operation using the certification resulting from of a manufacturer's test, report of field testing of the technology's PM 2.5 and carbon monoxide (CO) emissions, report of lab testing of the technology, or results of modelling of the technology's operation under field conditions, as per methodology.

Project participant response		Date: 14/09/2023
<ol style="list-style-type: none"> 1. Section B.2 of the PDD is revised 2. Registration/commissioning agreement has been provided which states about the carbon right transfer 3. Section B.2 is revised 4. Manufacturers specification is provided 		
Documentation provided by project participant		
-		
VVB assessment		Date: 16/09/2023
PP has provided commissioning agreement and manufacture specification documents. Further, PP has revised section B.2 of the PDD. The document provided and the revision made is found to be appropriate. Hence, CAR 07 is closed.		

CAR ID	08	Section no.	B.3	Date: 13/09/2023
Description of CAR				

1. In section B.3, Where the baseline fuel is woody biomass (including charcoal), the project boundary also includes the area within which this woody biomass is grown and collected, according to the methodology. PO is requested to correct the same. The project boundary sections needs to be inline with the requirement of section 3.1 of the methodology.

2. Where possible, PP is requested to present a flow diagram of the project boundary based on the description provided in Technologies and/or measures above (a list of the facilities, systems and equipment that will be installed and/or modified by the project) in section B.3.

3. In section B.3, the table is to be inline with the table 2 of the section 3.2 of the methodology and PP is requested to comply to the same.

Project participant response	Date: 14/09/2023
1. Section B.3 is now revised 2. flow diagram of the project boundary is now included in the revised PDD 3. Section B.3 is revised in the latest PDD	
Documentation provided by project participant	
-	
VVB assessment	Date: 16/09/2023
PP has revised the flow diagram of the project boundary and section B.3 of the PDD. The revisions found to be appropriate and acceptable by the VVB. Hence, CAR 08 is closed.	

CAR ID	09	Section no.	B.6	Date: 13/09/2023
Description of CAR				
1. In B.6 of PDD, for SDG number 7, 8,13 the SDG impact indicator provided is not accurate and PP is requested to correct the same. PP is requested to provide the SDG name and indicators correctly in all relevant sections.				
Project participant response				Date: 14/09/2023
1. Section B.6 of the PDD is revised				
Documentation provided by project participant				
-				
VVB assessment				Date: 16/09/2023
PP has revised the section B.6 of the PDD as per above request. The revisions found to be appropriate and acceptable by the VVB. Hence, CAR 09 is closed.				

CAR ID	10	Section no.	B.6.1 of PDD	Date: 13/09/2023
Description of CAR				
1. In different sections, different SDG goals and indicators are mentioned. Please make it consistent throughout the document for all the applied SDGs. 2. The equation provided under SDG 13 table in the section is not inline with the methodology. PP is requested to clarify the same. 3. For the calculation and equations, PP is requested to mention the method opted for the calculation. Further, the justification of the use of this method.				

PP response	Date:
1. PDD is now revised and all the SDGs claimed are now consistent 2. Section B.6 is now revised 3. Method 1 of the applied methodology has been adopted to calculate the emission reductions and same is now mentioned in the revised PDD	
Documentation provided by PP	
VVB assessment	Date:
PP has revised the section B.6 and all the SDGs claimed are now consistent across the PDD. Further PP has mentioned about the method which has been used for calculating the emission reductions. The revisions found to be appropriate and acceptable by the VVB. Hence, CAR 10 is closed	

CAR ID	11	Section no.	B.6.2 of PDD	Date: 13/09/2023
Description of CAR				
1. In the table provided in section B.6.2, for the row “Source of data”, ensure that the source of data are provided so that they can be reviewed; The name and reference of the supporting documentation must match the quoted source for easy traceability during certification. PP is requested to consider the same for all the parameters provided in this section. 2. For the value given for parameter, EF_{b,f,non_CO_2} , two default values are present in the methodology and PP is requested to justify the choice of the value chosen. 3. PP has provided the parameter name as $NCV_{b,f}$, whereas in methodology, it is $NCV_{b,fuel}$. PP is requested to correct the same. 4. PP is requested to make the data, description, source, QA/QC procedures in line with methodology for all the parameters.				
PP response				Date: 14/09/2023
1. Section B.6.2 is now revised 2. For parameter EF_{b,f,non_CO_2} , PP has chosen AR5 value. 3. PDD is now revised 4. PDD is now revised				
Documentation provided by PP				
VVB assessment				Date: 16/09/2023
PP has provided source of data, value of EF_{b,f,non_CO_2} , corrected the parameter name, made the date, description, source, QA/QC procedures in- line with methodology for all the parameters. Further PP has clearly defined the ex-ante and are ex-post parameters in the section B.6.2 of the PDD. The revisions are found to be appropriate and acceptable by the VVB. Hence, CAR 11 is closed.				

CAR ID	12	Section no.	C	Date: 13/09/2023
Description of CAR				
1. In section C.1.1, State (and supply a copy where relevant) the evidence proving				

this date. As per GS4GG Principle 4, Justify if the project is regular, or retroactive and ensure KPI table matches.	
2.In section C.1.2, Specify in years and months how long the project will be active.	
PP response	Date: 14/09/2023
1. Registration/commissioning agreement has been provided 2. Section C.1.2 has been revised in the latest PDD	
Documentation provided by PP	
VVB assessment	Date: 16/09/2023
PP has provided the commissioning agreement and revised the section C.12 of the PDD as per the request. The same found to be appropriate and acceptable to the project verification team. Hence, Car 12 is closed.	

Table 2.CLs from this validation

CL	01	Section no.	Preliminary Review	Date: 13/09/2023
Description of CAR				
During the preliminary review of the project, CL#1 was raised by GS as follows: PD shall submit the fNRB report and demonstrate that it was calculated following the latest version of fNRB tool using the most recent available data				
Project participant response				Date: 14/09/2023
1. All the supporting documents have been submitted				
Documentation provided by project participant				
-				
VVB assessment				Date: 16/09/2023
PP has submitted the fNRB report and clearly demonstrated the calculation which was done using latest version of fNRB tool and most recent available data. The same found to be appropriate and acceptable by the VVB. Hence, CL 01 is closed.				

CL	02	Section no.	Preliminary Review	Date: 13/09/2023
Description of CAR				
During the preliminary review of the project, CL#2 was raised by GS as follows: PD shall submit the baseline survey result and demonstrate how the baseline survey was conducted with representative samples for the project boundary				
Project participant response				Date: 14/09/2023
1. Baseline Survey results have details of the sample size has been submitted. Sample size approach has also been provided in the revised PDD				
Documentation provided by project participant				
-				
VVB assessment				Date: 16/09/2023
PP has submitted baseline survey result and Sample size approach has also been provided in the revised PDD. The same found to be appropriate and acceptable by the VVB. Hence, CL 02 is closed.				

CL	03	Section no.	Preliminary Review	Date: 13/09/2023
Description of CAR				
During the preliminary review of the project, CL#3 was raised by GS as follows: PD to explain how the start date for crediting period was selected.				
Project participant response				Date: 14/09/2023

Start date i.e. 30/7/2022 has been selected based upon first ICS distribution date	
Documentation provided by project participant	
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VVB assessment	Date: 16/09/2023
PP has chosen the start date based upon first ICS distribution date i.e., 30/7/2022 . The same found to be appropriate and acceptable by the VVB. Hence, CL 03 is closed.	

CL	04	Section no.	Preliminary Review	Date: 13/09/2023
Description of CAR				
During the preliminary review of the project, CL#4 was raised by GS as follows: Please provide more details on the location of the project activity in GS-PDD.				
Project participant response				Date: 14/09/2023
Detailed database with the location details has been provided				
Documentation provided by project participant				
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VVB assessment				Date: 16/09/2023
PP has provided the details of location of the project activity in detail in the PDD. The same found to be appropriate and acceptable by the VVB. Hence, CL 04 is closed.				

CL ID	05	Section no.	Key project information	Date: 13/09/2023
Description of CAR				
<ol style="list-style-type: none"> 1. In Key Project information section, PP is requested to confirm if the project representative and project developer is provided correctly. 2. PP have not mentioned if the methodology used is from GS/CDM. 3. A project is a regular cycle if stakeholder consultation (1st round) has been conducted before the project start date. The stakeholder date is 05/06/2022 and start date is 30/7/2022 . Please clarify if the project is regular or retroactive. 4. PP is requested to confirm the location of the project activity and make consistent throughout the PDD. The location of the project activity in section E.1 of the PDD is not consistent. 5. As per the details in the preliminary review, the applied methodology in the PDD is not consistent. PP is requested to clarify the same and make it consistent. Further, the PP is requested to demonstrate the correct emission reduction equation w.r.t to the applied methodology. 				
Project participant response				Date: 14/09/2023
<ol style="list-style-type: none"> 1. KPI is now revised in the PDD 2. KPI is now revised in the PDD 3. Project is retroactive and stakeholders' meeting details are now corrected in the revised PDD 4. same has been revised in PDD. 				
Documentation provided by project participant				
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VVB assessment	Date: 16/09/2023
<p>1.PP has clearly mentioned the project representative and project developer in the KPI of the PDD.</p> <p>2.PP has mentioned the source of used methodology.</p> <p>3.Project is retroactive and stakeholders' meeting details are now clearly mentioned in the revised PDD.</p> <p>Further PP has revised the location and emission reduction and found to be consistent across the PDD.</p> <p>All the revisions found to be appropriate and acceptable by the VVB. Hence, CL 05 is closed.</p>	

CL ID	06	Section no.	A	Date: 13/09/2023
Description of CAR				
1.PP is requested to provide evidence for listing of the project activity with Gold Standard.				
Project participant response				Date: 14/09/2023
1. Screenshot of the SC app has been provided 2.				
Documentation provided by project participant				
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VVB assessment				Date: 16/09/2023
PP has provided the Screenshot of the SC app, which includes the details of listing of the project activity with Gold Standard. The same found to be appropriate and acceptable by the VVB. Hence, CL 06 is closed.				

CL ID	07	Section no.	B.6	Date: 13/09/2023
Description of CAR				
1.Project owner is requested to provide Credible evidence for each of the applied SDGs for the project activity.				
Project participant response				Date: 14/09/2023
1.All the credible evidences for each SDG claims are submitted.				
Documentation provided by project participant				
-				
VVB assessment				Date: 16/09/2023
PP has provided the all the credible evidence w.r.t the SDG claims for this project activity. The same found to be appropriate and acceptable by the VVB. Hence, CL 07 is closed.				

6. FARs from this validation

Not Applicable

Appendix 5: SAFEGUARDING PRINCIPLES & REQUIREMENTS

Assessment Questions/	Justification of Relevance	How Project will achieve	Mitigation Measures	VVB Assessment
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Requirements	(Yes/potentially/no)	Requirements through design, management or risk mitigation.	added to the Monitoring Plan (if required)	
Principle 1. Human Rights				
<p>1.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</p> <p>2.The Project shall not discriminate with regards to participation and inclusion</p>	No	<p>The PP will 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 Right. The project will not discriminate with regards to participation and inclusion</p> <p>The PP does n ot discriminate with regars to participation and inclusion</p>	Not required	<p>The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative/employee and stakeholders were interviewed during the onsite visit audit to confirm the same.</p>
Principle 2. Gender Equality				
<p>1.The Project shall not directly or indirectly lead to/contribute to adverse impacts on gender equality and/or the situation of women</p> <p>2.Projects shall</p>	No	<p>The PP activity does not endorse any form of discrimination based on gender. ICS will be distributed to all willing customers within the project boundary. The project will have a positive impact on women considering that they will spend less time on</p>	Not required	<p>The project directly benefits to women and women's rights. The project directly contributes towards the national mission for empowerment of women through improvement of health and attaining vision for empowerment of women under national policy for women 2016 (Women participation</p>

<p>apply the principles of nondiscrimination, equal treatment, and equal pay for equal work</p> <p>3.The Project shall refer to the country's national gender strategy or equivalent national commitment to aid in assessing gender risks</p> <p>4.(where required) Summary of opinions and recommendations of an Expert Stakeholder(s)</p>		<p>cooking or fuel procurement and will be able to cook in cleaner environment.</p>		<p>will be ensured in the efficient use and spreading the use of solar energy, biogas, smokeless chulas and other technological applications to have positive influence on their life styles and a long term impact on meeting sustainable development goals).In summary, the project takes care of gender equality and women rights.</p>
<p>Principle 3. Community Health, Safety and Working Conditions</p>				
<p>1.The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community</p>	<p>No</p>	<p>ICS distributed under project reduce exposure to harmful indoor air pollutants and smoke levels. This can lead to a reduction of respiratory illness compared to cooking on traditional biomass stoves using solid biomass fuel</p>	<p>Not required</p>	<p>The project biogas system does not involve any hazardous material during construction and its operation. With the biogas system, users have access to cleaner fuel compared to firewood. In addition, firewood based cooking system has high indoor air pollution and a risk to fire-hazard. In comparison to that, biogas is clean</p>

				<p>smokeless fuel, and due to its maintained pressure, there is no risk of any fire hazard or accident from the project activity. Hence, the project only leads to safe working conditions and improved in health of end users. The parameter 'Improvement in health and decrease in illnesses' under this principle shall be monitored by PP at least once in two years.</p>
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?	No	Not relevant	not required	<p>The project is implemented in existing households where the fire-wood usage is replaced with biogas as fuel. This does not involve any damage to cultural heritage or displacement and resettlement and rights of indigenous people. The project activity takes place in households. Hence, this parameter is safeguarded by the project activity.</p>
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)?	No	Not relevant	not required	<p>The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative/employee and stakeholders were interviewed during the onsite visit audit to confirm the same.</p>

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? For Projects involving land use tenure, are there any uncertainties with regards to land tenure, access rights, usage rights or land ownership?	No	Not relevant	not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative/employee and stakeholders were interviewed during the onsite visit audit to confirm the same.
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?	No	Not relevant	not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative/employee and stakeholders were interviewed during the onsite visit audit to confirm the same.
Principle 5. Corruption				
1.The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects	No	PP is not complicit in any form of direct or indirect corruption.	Not required	The project involves installation of household biogas plants in rural households which does not require any specific permit or approval from any authority. The end users as owner of biogas system is taking part in the project activity with agreement to project developer to share benefits from the project to be developed as GS project. Once,

				<p>commissioned the system runs successfully upto its lifetime with proper maintenance. Greneity has agreed for regular operation and maintenance of each project biogas system as confirmed during onsite visit and interview with end users. Therefore, the project does not have any scope for corruption or corrupt practice. The principle is safeguarded by the project activity.</p>	
Principle 6.1 Labour Rights					
7.	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	No	<p>The PP does not involve any forced labour and PP will ensure that all employment is in compliance with local labour regulations and laws.</p> <p>The PP puts no constrains /limitation on employees to form a union.</p>	Not required	<p>Labour rights & negative economic consequences: The project is not labour intensive as it doesn't involve major construction works, employing labours is not within the scope of the project. Trained RETs with the help of trained technical staff installed ICS and once commissioned, only periodic maintenance is needed which is done by trained technical personnel. Therefore, there is no forced labour or child labour involved in the project activity. India (host country) has set of rules and acts in place for the protection of labour and employee. Therefore, the safeguarding principle under discussion will not</p>
8.	Workers shall be able to establish and join labour organisations				
9.	Working agreements with all				

<p>individual workers shall be documented and implemented and include:</p> <p>a) Working hours (must not exceed 48 hours per week on a regular basis), AND</p> <p>b) Duties and tasks, AND</p> <p>c) Remuneration (must include provision for payment of overtime), AND</p> <p>d) Modalities on health insurance, AND</p> <p>e) Modalities on termination of the contract with provision for voluntary resignation by employee, AND</p> <p>f) Provision for annual leave of not less than 10 days per year, not</p>		<p>The PP do not promote and not complicit in child labour</p> <p>Not relevant</p>		<p>have negative impact.</p>
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<p>including sick and casual leave.</p> <p>10. No child labour is allowed (Exceptions for children working on their families' property requires an Expert Stakeholder opinion)</p> <p>11. 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</p>				
Principle 6.2 Negative Economic Consequences				
<p>1. Does the project cause negative economic consequences during and after project implementation?</p>	<p>No</p>	<p>No negative economic consequences are deemed applicable</p>	<p>Not required</p>	<p>The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative/ employee and stakeholders were interviewed during the onsite visit audit to</p>

				confirm the same.
Principle 7.1 Emissions				
Will the Project increase greenhouse gas emissions over the Baseline Scenario?	No	The project reduces the GHG emission relative to baseline scenario	Not required	The project being implementation of household biogas system replaces fire-wood which leads to overall emission reductions. The energy supply is not hampered compared to baseline.
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?	No	The project will reduce fuel resource consumption instead	Not required	The justification provided by PP was foundadequate based on the sectoral expertise of validation team. Further PP representative/ employee and stakeholders were interviewed during the onsite visit audit to confirm the same
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?	No	Not applicable	Not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative /employee and stakeholders were interviewed during the onsite visit audit to confirm the same.
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?	No	The project shall result in reduction in demand of biomass fuel in the region putting less pressure of forests for deforestation	Not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative

Is the Project's area of influence susceptible to excessive erosion and/or water body instability?		and will hence indirectly avoid erosion associated with tree cutting/felling.		/employee and stakeholders were interviewed during the onsite visit audit to confirm the same.
Principle 9.1 Landscape Modification and Soil				
Does the Project involve the use of land and soil for production of crops or other products?	No	Not applicable	Not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative /employee and stakeholders were interviewed during the onsite visit audit to confirm the same.
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?	No	Not applicable	Not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative /employee and stakeholders were interviewed during the onsite visit audit to confirm the same.
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	No	Not applicable	Not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative /employee and stakeholders were interviewed during the onsite visit audit to confirm the same.

processes and production)?				
Principle 9.4 Release of pollutants				
Could the Project potentially result in the release of pollutants to the environment?	No	Not applicable	Not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative /employee and stakeholders were interviewed during the onsite visit audit to confirm the same.
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?	No	Not applicable	Not required	The project involves use of household biogas systems which does not involve any landscape modification or leads to vulnerable natural disasters. It also does not involve any manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials. It leads to negligible pollution (air pollution due to firing of firewood) compared to baseline scenario as the project technology replaces firewood consumption compared to baseline scenario. Hence, the principle is safeguarded by the project activity.
Principle 9.6 Pesticides & Fertilisers				
Will the Project involve the application of pesticides and/or fertilisers?	No	Not applicable	Not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team.

				Further PP representative /employee and stakeholders were interviewed during the onsite visit audit to confirm the same.
Principle 9.7 Harvesting of Forests				
Will the Project involve the harvesting of forests?	No	Not applicable. The project does not involve harvesting of forests. the PP shall result in reduction demand of biomass fuel in the region putting less pressure of forests for deforestation and will hence indirectly avoid erosion associated with tree cutting/ felling.	Not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative /employee and stakeholders were interviewed during the onsite visit audit to confirm the same.
Principle 9.8 Food				
Does the Project modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	No	Not applicable	Not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative /employee and stakeholders were interviewed during the onsite visit audit to confirm the same.
Principle 9.9 Animal husbandry				
Will the Project involve animal husbandry?	No	Not applicable	Not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative /employee and stakeholders were interviewed during the

				onsite visit audit to confirm the same.
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?	No	Not applicable	Not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative /employee and stakeholders were interviewed during the onsite visit audit to confirm the same.
Principle 9.11 Endangered Species				
a. Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)? b. Does the Project potentially impact other areas where endangered species may be present through transboundary affects?	No	Not applicable.	Not required	The justification provided by PP was found adequate based on the sectoral expertise of validation team. Further PP representative /employee and stakeholders were interviewed during the onsite visit audit to confirm the same.