

Verification and certification report form for Gold Standard project activities

BASIC INFORMATION					
Title and GS reference number of the project activity	Smokeless Energy efficient cookstove distribution in rural India (GS 12017)				
Scale of the project activity	☐ Large-scale ☐ Small-scale				
Version number of the verification and certification report	03				
Completion date of the verification and certification report	04/10/2024				
Monitoring period number and duration of this monitoring period	02 01/08/2023 to 31/07/2024 (inclusive of both days)				
Version number of the monitoring report to which this report applies	Version 03, dated:- 27/09/2024				
Crediting period of the project activity corresponding to this monitoring period	10/06/2022 to 09/06/2027				
Project representative(s)	Greneity Infocom Service Private Limited				
Host Party	India				
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				
Conditional sectoral scopes, if applicable	-				
Estimated amount of GHG emission reductions or GHG removals for this monitoring duration in the registered PDD	37,452 tCO ₂ e				
Certified amount of GHG emission reductions or GHG removals for this monitoring period	33,153 tCO₂e				
SDG Impacts:	SDG 3: Good health and wellbeing SDG 5: Gender Equality SDG 7: Affordable and Clean Energy SDG 8: Decent work and Economic Growth SDG 13: Climate Action				
Name and UNFCCC reference number of the VVB	E-0052: Carbon Check (India) Private Ltd.				

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Name, position and signature of the approver of the verification and certification report

Sought Ajentalla

Sanjay Kumar Agarwalla, Technical Director

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SECTION A. Executive summary

Carbon Check (India) Private Ltd. (CCIPL) is performing the second periodic verification of the GS project "Smokeless Energy efficient cookstove distribution in rural India" (GS project id: GS 12017) for the period 01/08/2023 – 31/07/2024 (inclusive of both the dates). 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/10/. The number of cookstove involved in the project activity is cross verified with the data base/04/, undertaking letter submitted by the PP/19/ and interview with the PP. The project activity helps in reducing 37,452 tCO2/year (Ex-ante as per the PDD). During the monitoring period the project reduces 33,153 tCO₂e.

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.

Verification is the periodic independent review and ex-post determination of both quantitative and qualitative information by a Validation & verification body (VVB), of the monitored reductions in GHG emissions that have occurred as a result of the project activity during a defined monitoring period.

Certification is the written assurance by a validation & verification body (VVB) that, during a specific period, a project activity achieved the emission reductions as verified.

The objective of this verification was to verify and certify emission reductions reported for the "Smokeless Energy efficient cookstove distribution in rural India" in the host country "India" for the period 01/08/2023 – 31/07/2024 (including both the days).

The purpose of verification is to review the monitoring results and verify that the monitoring methodology was implemented according to the monitoring plan and monitoring data and used to confirm the reductions in anthropogenic emissions by sources, is sufficient, definitive and presented in a concise and transparent manner. CCIPL's objective is to perform a thorough, independent assessment of the registered project activity.

In particular, the monitoring plan, monitoring report and the project's compliance with relevant GS and Host Party criteria are verified in order to confirm that the component project/s has/have been implemented in accordance with the previously registered project design and conservative assumptions, as documented. It is also confirmed if the monitoring plan is in compliance with the registered PDD and the approved monitoring methodology.

Scope:

The scope of the verification is:

- To verify the project implementation and operation with respect to the registered PDD
- To verify the implemented monitoring plan with the registered PDD and applied baseline and monitoring methodology.
- To verify that the actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan.

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- To evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement.
- To verify that reported GHG emission data is sufficiently supported by evidence.

The verification shall ensure that the reported emission reductions are complete and accurate in order to be certified.

Verification process:

The verification comprises a review of the monitoring report /01/ over the monitoring period from 01/08/2023 – 31/07/2024 (inclusive) and based on the registered PDD as part of the monitoring parameters and monitoring plan, emission reduction calculation spreadsheet, monitoring methodology, and all related evidence provided by project participants.

On-site interviews and inspections are also performed as part of the verification process.

Conclusion:

The verification team assigned by the validation & verification body (VVB) concludes that the monitoring report /01/, meet all relevant requirements of the Gold Standard as per the requirements of GS4GG. The verification has been conducted in-line with the GS4GG requirements.

The project activity was correctly implemented according to the selected monitoring methodology, monitoring plan and the PDD /B03/. The monitoring system was installed, maintained in a proper manner, while collected monitoring data allowed for the verification of the amount of achieved GHG emission reductions. The following table provides the resulted emission reduction from the project as verified through the document review and on-site interviews by the verification team.

Vintage	ER (tCO ₂ e)	
01/08/2023- 31/12/2023	13,859 tCO ₂ e	
01/01/2024- 31/07/2024	19,294 tCO ₂ e	
Total for the monitoring period	33,153 tCO₂e	

CCIPL as a Validation & verification body (VVB) is therefore pleased to issue a positive verification opinion expressed in the attached Certification statement.

SECTION B. Verification team, technical reviewer and approver

B.1. Verification team member

No	Role		Last name	First name	Affiliation	In	volve	ment	in
		Type of resource			(e.g. name of central or other office of VVB or outsourced entity)	Desk/document review	On-site inspection	Interviews	Verification findings
1.	Team Leader / Local expert/	IR	Gedam	Pallavi	CCIPL	X	Х	X	X

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Technical				
Expert				

B.2. Technical reviewer and approver of the verification and certification report

No	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)
1.	Technical reviewer	IR	Indumathi	С	CCIPL
2.	Approver	IR	Agrawalla	Sanjay Kumar	CCIPL

Pallavi Gedam: She is qualified as Team Leader in TA 1.2 and 3.1 and involved in various validations and verifications under CDM, VCS and Gold Standard (GS) projects. She has also attended Several Gold Standard DOE webinar trainings including training on GS4GG. She holds a Bachelor of Science degree in Chemistry and Master of Science degree in Environmental Science from University of Mumbai. She also a qualified Lead Auditor in ISO 14001:2015 Environmental Management System. She has been involved in number of GS validation and verification projects (as trainee Assessor) GS10898 PoA (GS 10899 to GS 10921) VPA 001 to VPA 023, GS7776 PoA (GS 10716 (VPA 01), GS 916 PoA, GS5417 (VPA 12) GS 5418 (VPA 13).

Indumathi C: She is appointed Team Leader /Technical Expert for technical area TA 1.1, 1.2,3.1,13.1 & 13.2 and Technical Reviewer. She has actively been involved in the validation and verification or internal technical review of more than 200 GHG offset projects including projects with SDG component She is having more than 13 years of experience, she is certified Energy Manager, Bureau of Energy Efficiency, Govt. of India. She carried out technical reviews for climate change mitigation projects under different carbon credit mechanisms (UNFCCC, Gold Standard and Voluntary Carbon Standard) for various sectors like renewable energy (solar, wind, hydro, biomass), energy efficiency (cook stoves) and waste to energy (biogas).

SECTION C. Means of verification

C.1. Desk/document review

The verification was performed primarily based on the review of the Monitoring report /01/ and the supporting documentation. This process included review of data and information presented to verify their completeness and review of the monitoring plan and monitoring methodology. Documents reviewed or referenced during the verification are listed in Appendix 3 below.

C.2. On-site inspection

Onsite physical audit has been performed. The Team leader has conducted the on-site inspection and in particular the end user households have been visited.

Furthermore, VVB has considered the Site Visit and Remote Audit Requirements and Procedures, version 2.0/B06/ for conducting the onsite visit. In accordance with the requirements provided in the §3.1.1(b) of the Site Visit and Remote Audit Requirements and Procedures, version 2.0/B0/.

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C.3. Interviews

C.3.										
No.	Last name	Interviewee First name	Affiliation	Date	Subject	Team member				
1.	Garg	Ms.Shivani (Managing Director)	Greneity Infocom Service Private Limited	17/08/2024- 18/08/2024	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 Sustainabilit y aspects of the PA SDG impacts	Pallavi Gedam				
2.	Bias	Seetharam	Greneity Infocom Service Private Limited	17/08/2024- 18/08/2024	Discussion on the implementation procedures and Operation and maintenance.	Pallavi Gedam				
3.	Sharma	Mr. Arjun	Greneity Infocom Service Private Limited	17/08/2024- 18/08/2024	Discussion on the implementation procedures and Operation and maintenance.	Pallavi Gedam				
4.	Yadav	Daulatiya	End Users	17/08/2024	Project survey and KPT of the project activity	Pallavi Gedam				
5.	Yadav	Fulkunwar	End Users	17/08/2024	Project survey and KPT of the project activity	Pallavi Gedam				
6.		Nilkusum	End Users	17/08/2024	Project survey and KPT of the project activity	Pallavi Gedam				
7.		Suresh	End Users	17/08/2024	Project survey and KPT of the project activity	Pallavi Gedam				
8.		Bidur Manikpuri	End Users	17/08/2024	Project survey and KPT of the project activity	Pallavi Gedam				
9.		Hermania	End Users	18/08/2024	Project survey and KPT of the project activity	Pallavi Gedam				
10.		Shanti Sandilya	End Users	18/08/2024	Project survey and KPT of the project activity	Pallavi Gedam				
11.	Singh	Sujata	End Users	18/08/2024	Project survey and KPT of the project activity	Pallavi Gedam				

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12.		Sukhni	End	18/08/2024	Project survey and	Pallavi
			Users		KPT of the project	Gedam
					activity	
13.	Ramkujur	Kendwa	End		Project survey and	Pallavi
			Users	18/08/2024	KPT of the project	Gedam
					activity	
14.		Shampati	End		Project survey and	Pallavi
			Users	18/08/2024	KPT of the project	Gedam
					activity	

C.4. Sampling approach

As the target population is homogeneous, based on the requirements of the TPDDTEC methodology, the Project proponent has conducted 100 random samples for the usage and impact survey. An annual usage survey determines the drop off rates as project technology and users switch back to the baseline technology. The usage parameter will be weighted to be representative of the quantity of project technology in a given project scenario. The minimum total sample size is 100 randomly selected households.

In line with paragraph 26 of the Sampling Standard, the verification team has applied acceptance sampling approach through on-site interviews on the monitoring survey as part of verification. The verification team has chosen acceptance sampling in accordance with paragraph 28 of the sampling standard /B04/.

Applying paragraph 39 (c) of the sampling standard, version 09 /B04/, 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 VVB's sample size Acceptance number (c) thus determined for the sample is 0. However, VVB interviewed 11 monitored households' samples from the monitoring survey done by project participants.

The information provided in the monitoring survey /10/ and KPT have been cross checked during the onsite visit. As a part of acceptance sampling, the Verification team could confirm the monitoring 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 /B04/. During the on-site interviews, the verification team cross-checked these sample documents, and no discrepancies were found in the impact parameters as well. Furthermore, the training & competency of the personnel, who conducted such test were checked. They were also interviewed to ensure that the process, method used, and their competency to confirm such standardised test were appropriately applied. The sampling technique to draw such samples were found adequate and the sample collectors were found competent to perform such task. The 11 KPT households also confirmed that the KPTs were conducted in the households and the results were cross-checked with the households. No discrepant records were observed by the verification team and thus c=0 is met.

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

The VVB had raised Seven (07) clarifications (CLs) and 00 corrective action requests (CARs) and satisfactorily closed.

SECTION D. Verification findings

D.1. Remaining forward action requests from validation and/or previous verifications Not applicable

D.2. Compliance of the project implementation and operation with the registered project design document

Means of	Document Review, Interview
verification	
Findings	CL 02, CL04 has been raised and successfully resolved. Please refer Appendix 4 below.
Conclusion	Verification team confirms that the latest available version of the monitoring report template has been used and the MR is in compliance with the monitoring report form and related monitoring report template guide.
	As verified from on-site interview and third-party survey report /10/, the audit team confirm the project implementation and operation complies with the project design document /B03/. The starting date of operation is 10/06/2022 (Distribution of first batch of ICS with the project activity) which is confirmed from the registered PDD /B03/ and validation report /B03/. The Project activity involves distribution of 11,998 ICS in rural areas of Chhattisgarh. The distribution is done between 10 th June, 2022 to 31 th July, 2022, by Greeneity Infocom Service Private Limited. The project boundary in the registered PDD /B03/ is in line with the actual project boundary.
	CCIPL confirms that the ICS distributed under the project activity are operational through on-site visits and interviews with end users. Each ICS has a unique identification number that was provided in the end user agreement and are correct according to the project database. Each ICS is also physically marked with its unique identification number. Along with the serial number of ICS, model of ICS end username, address, distribution date etc. had also been noted which were found to be consistent on ground.
	It is noted that no changes have been observed or identified, that may impact the additionality. No addition of component nor extension of technology, no addition nor removal of project sites, no change of values of the actual operational parameter relevant to determination of emission reductions which are within the control of the PP; no change has been observed or identified that may impact the scale of the project activity or applicability of baseline and monitoring gold standard methodology "REDUCED EMISSIONS FROM COOKING AND HEATING: Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC)" Version 4.0 /B01/. The operational status of all project ICS, impact on identified SDGs from 01/08/2023 – 31/07/2024 has been taken into consideration.
	Verification team based on review of MR /01/ and provided evidence confirms that the households/end users relinquish their right of carbon credits. Verification has verified the end user agreement/ sales/registration

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certificate /03/ states the rights transfer in the lieu of free operation and maintenance of the plant. Furthermore, the ICS implemented under the project is uniquely identified, thus avoiding any potential double counting. PP has ensured each of the ICS distributed have their UID on them, which will prevent any kind of double counting. This was confirmed during the verification site visits undertaken by VVB. Further, PP has provided an undertaking that same project is not developed under any other GHG programmes /19/.

Verification team has checked the information in the monitoring report /01/ and compared it against the registered PDD /B03/ and found to be consistent.

Verification team confirms that:

- a) The project activity is implemented as per PDD/B03/.
- b) The actual operation of the proposed CDM project activity is in line with the registered PDD /B03/.
- c) It has reviewed the PDD /B03/ including the monitoring plan, the applied monitoring methodology and found that the final MR/01/ for this monitoring period is in line with all the above-mentioned documents.

Since the project is a retroactive project (Start date of the project is 10/06/2022), 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 21/04/2023. stakeholder feedback was from 21/04/2023 to 26/06/2023. However, until 26/06/2023 no comment received.

Verification team of CCIPL based on review of records (grievance book) placed in the Local Panchayat office on-site interviews confirms that a robust and effective grievance addressal mechanism is in place and however, no grievances are reported during the monitoring period.

Verification team of CCIPL based on review of records and on-site interviews confirms that a robust and effective grievance addressal mechanism is in place and however, no grievances were reported during the monitoring period/12/.

In summary, the monitoring period is reasonable, and the operation of the project activity is in accordance with the registered -PDD /B03/.

D.3. Post-registration changes

D.3.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents¹

Not applicable

D.3.2. Corrections

Not applicable

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¹ Other standards, methodologies, methodological tools and guidelines (to be) applied in accordance with the applied(selected) methodologies are collectively referred to as the other (applied) methodological regulatory documents).

D.3.3. Changes to the start date of the crediting period

Not applicable

D.3.4. Inclusion of a monitoring plan

Not applicable

D.3.5. Permanent changes from registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents

Not applicable

D.3.6. Changes to the project design

Not applicable

D.3.7. Changes specific to afforestation and reforestation project activities

Not applicable

D.4. Compliance of the registered monitoring plan with applied methodologies, applied standardized baselines, and other applied methodological regulatory documents

Means of verification	Document Review, Interview
Findings	CL04 has been raised and successfully resolved. Please refer Appendix 4 below.
Conclusion	The verification team has checked the actual monitoring plan against the registered monitoring plan and monitoring methodology and applicable tools. Furthermore, the verification team has checked monitoring system by means of comparison with the information given in the monitoring plan and monitoring methodology. The monitoring plan is completely in accordance with the approved methodology /B01/ applied by the PDD/B03/.

D.5. Compliance of monitoring activities with the registered monitoring plan

D.5.1. Data and parameters fixed ex ante or at renewal of crediting period

Means of verification	Document Review, Interview
Findings	CL05, CL06 has been raised and successfully resolved. Please refer Appendix 4 below.
Conclusion	Verification team confirms that the data and parameters fixed ex ante are in compliance with the registered PDD /B03/ and monitoring plan. Please refer to the Annex 1 for assessment of each parameter.

D.5.2. Data and parameters monitored

Means of verification	Document Review, Interview
Findings	CL07 has been raised and successfully resolved. Please refer Appendix 4 below.
Conclusion	The verification team confirms that the data and parameters monitored are in compliance with the registered PDD /B03/ and the monitoring plan.
	It is confirmed that the verification team assessed the data / information flow from the point of monitoring to emission reduction calculation and found no gap in the same. Please refer to the Annex 4 for assessment of each parameter

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D.5.3. Implementation of sampling plan

Means of verification	Document Revie	ocument Review, Interview								
Findings	CL07 has been below.	raised and succ	cessfully resolved	. Please refer Ap	pendix 4					
Conclusion	As the target por TPDDTEC methology amples for the technology. The quantity of project sample size is 1. In line with para applied acceptamonitoring survacceptance same /B04/.	As the target population is homogeneous, Based on the requirements of the TPDDTEC methodology, the Project proponent has conducted 100 random samples for the usage and impact survey. An annual usage survey determines the drop off rates as project technology and users switch back to the baseline technology. The usage parameter will be weighted to be representative of the quantity of project technology in a given project scenario. The minimum total sample size is 100 randomly selected households. In line with paragraph 26 of the Sampling Standard, the verification team has applied acceptance sampling approach through on-site interviews on the monitoring survey as part of verification. The validation team has chosen acceptance sampling in accordance with paragraph 28 of the sampling standard (B04/.								
	size of 11 house of 11 for was de risk and consur Acceptance nur interviewed 11 n by project partic	Applying paragraph 39 (c) of the sampling standard, version 09 /B04/, 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 VVB's sample size Acceptance number (c) thus determined for the sample is 0. However, VVB interviewed 11 monitored households' samples from the monitoring survey done by project participants. Below parameters has been verified by the VVB during the monitoring survey								
	Parameter	· ·	Frequency	Method of	Target					
		of Parameter		Data Collection	Population					
	U _{p,y}	Usage rate in project scenario p during year y	Annual	Questionnaire re survey conducted among the user households	ICS user households					
	Np,y	Number of project technology-days included in the project database for baseline b/project p pair in year y	Annual	Questionnaire re survey conducted among the user households	ICS user households					

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	Рр,у	Quantity of	Annual-	-Project	ICS user
		fuel		performance	households
		consumed in		field test was	
		project		conducted	
		scenario p			
		during year			
		y, in tonnes,			

The information provided in the monitoring survey /10/ and KPT survey have been cross checked during the onsite visit. As a part of acceptance sampling, the Verification team could confirm the monitoring 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 /B04/.

During the on-site interviews, the verification team cross-checked these sample documents, and no discrepancies were found in the impact parameters as well. Furthermore, the training & competency of the personnel, who conducted such test were checked. They were also interviewed to ensure that the process, method used, and their competency to confirm such standardised test were appropriately applied. The sampling technique to draw such samples were found adequate and the sample collectors were found competent to perform such task. The 11 KPT households also confirmed that the KPTs were conducted in the households and the results were cross-checked with the households. No discrepant records were observed by the verification team and thus c=0 is met.

D.6. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	Document Review, Interview
Findings	-
Conclusion	Not appliable, since there is no monitoring equipment which require calibration as per the monitoring plan. The equipment's used for the monitoring consists of reviewing the documents and on-site interviews.

D.7. Assessment of data and calculation of emission reductions or net removals

D.7.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	Document Review, Interview	
Findings		
Conclusion	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: The overall GHG reductions achieved by the project activity will be calculated as follows:	
	$ER \ y = \sum b, p \ (N \ b, p, y \times U \ p, y \times SFS \ p, b, y \times NCV \ b, fuel \times (f \ NRB, b, y \times EF \ b, f, CO2 + EF_b, f, nonCO2)) - \sum LE_{p,y}$	
	Where:	

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 ER_{ν} = Emission reduction for total project activity in year y (tCO2e/yr) $\sum b,p$ = Sum over all relevant baseline b/project p pairs =11,998 ICS = Number of project technology-days included in the N b.p.vproject 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 = 11,998 * 366 = 4,391,268 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% $SFS_{p,b,v}$ = 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) 2.43 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) = 0.0156 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. 70% calculated using tool 30 $LE_{p,y}$ = Leakage for project scenario p in year y (tCO2e/yr)

0.95 default value given in methodology.

Emission reductions for this monitoring period (01/08/2023- 31/07/2024):

Vintage	ER (tCO ₂ e)
01/08/2023- 31/12/2023	13,859 tCO₂e
01/01/2024- 31/07/2024	19,294 tCO ₂ e
Total for the monitoring period	33,153 tCO₂e

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D.7.2. Calculation of project GHG emissions or actual net anthropogenic GHG removals by sinks

Not applicable

D.7.3. Calculation of leakage GHG emissions

Means of	Document Review, Interview	
verification		
Findings	-	
Conclusion	According to the registered PDD /B03/, a leakage assessment is only required every two years; however, such a leakage and thus assessment is required for this monitoring period.	
	Project Leakage Assessment Ex post surveys of users and the areas from which this woody biomass is sourced will be used to assess leakage emissions. The following potential leakage sources must be considered: non-project households/users who previously used renewable energy sources use/divert non-renewable woody biomass saved under the project activity. If the leakage assessment identifies an increase in the use of non- renewable woody biomass by non-project households/users that is attributable to project activity, By is adjusted to account for the quantified leakage. To account for leakages, By is multiplied by a net to gross adjustment factor of 0.95, in which case surveys are not required.	
	PP has opted default option, and By is adjusted with adjustment factor of 0.95 to account leakage.	
	Therefore, the net benefit is = 33,153 tCO ₂ e	
	As per the demonstration in the registered PDD /B03/ and MR /01/, the adjustment factor of 0.95 has been accounted for leakage for the monitoring period.	

D.7.4. Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

Means of verification	Document Review, Interview			
Findings				
Conclusion	calculations, all results are verifiable described and based on verifiable accordance with the pre-defined number of ERs achieved during the details of the summary of the emonitoring period, has been provided.	The verification team confirms that all parameters are used correctly in the calculations, all results are verifiable and transparent, all assumptions are described and based on verifiable evidence and calculations are done in accordance with the pre-defined formulae from PDD/B03/. The total number of ERs achieved during the monitoring period is 33,153 tCO2e. The details of the summary of the emission reductions achieved during the monitoring period, has been provided in the table below.		
	Vintage	Vintage ER (tCO ₂ e)		
	01/08/2023— 31/12/2023	13,859 tCO₂e		
	01/01/2024- 31/07/2024	01/01/2024- 31/07/2024 19,294 tCO ₂ e		
	Total for the monitoring period	33,153 tCO₂e		

D.7.5. Comparison of actual SDG Impacts with estimates in registered PDD

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Means of	Document Review, Interview		
verification			

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Findings			
Conclusion	The ex-ante estimate value of the emission reductions for the monitoring period as per the registered PDD /B03/ is 37,452tCO ₂ e and the actual emission reductions achieved for the monitoring period is 33,153 tCO ₂ e. Comparison of the actual GHG emission reductions with the estimates in the included specific PDD/B03/ is given in the below table.		
	SDG	Values estimated in ex ante calculation of PDD	Actual values achieved during this monitoring period
	13	37,452tCO ₂ e	33,153 tCO₂e
	3	Improvement in health and decrease in illness for 100% users	11,998 ICS users now have improved health conditions
	5	Average time of 2hrs, saving associated with cooking time and fuel collection in project	Average time of 2hrs, saving associated with cooking time and fuel collection in project
	7	11,998 ICS users have access users to clean energy	11,998 users are accessed to clean energy source.
	8	10 permanent employments	10 permanent employments
	lower than period. The	the estimate of the PDD / emission reduction calculat	that actual emission reduction is /B03/ for the current monitoring ions provided in the spreadsheet d in line with the PDD /B03/.
		cation took cognizance ond GS4GG Requirements /B	of §9.4.25 GS VVS version 802/.

D.7.6. Remarks on difference from estimated value in registered PDD

Means of verification	Document Review, Interview
Findings	CL 04 has been raised and resolved successfully. Please refer Appendix 4 below.
Conclusion	The ex-ante estimate value of the emission reductions for the monitoring period as per the registered PDD /B03/ is 37,452 tCO ₂ e and the actual emission reductions achieved for the monitoring period is 33,153 tCO ₂ e. For SDG 13, since actual emission reduction is lower than the estimated value and hence it is acceptable to the verification team. The monitoring report /01/ provides reason for decrease in the actual emission reduction and the same was confirmed by the verification team by interviewing the representatives of PP and by reviewing the actual implementation status of the project. For other SDG parameters, PP has provided justification in the Monitoring report and assessment of the same is provided below:

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 SDG 3: The actual value is same as the estimated value, which is deemed appropriate and thus acceptable to the VVB. SDG 5: The actual value is same as the estimated value, which is deemed appropriate and thus acceptable to the VVB.
 SDG 7: The actual value is same as the estimated value, which is deemed appropriate and thus acceptable to the VVB. SDG 8: The actual value is same as the estimated value, which is deemed appropriate and thus acceptable to the VVB. SDG 13: The actual value is lower than the estimated value, which is deemed appropriate and thus acceptable to the VVB.

Means	of	Document Review, Interview		
erification				
indings				
Conclusion		SDG 3: Good health & well being		
		Ex-post Monitoring Survey Records		
		Net Benefit (SDG 3) = HHIHproject - HHIHBaseline		
		(/ 1)		
		Where,		
		HHIHBaseline = % HH reporting improvement in health in baseline		
		HHIHproject = % HH reporting improvement in health in project.		
		For this monitoring period (01/08/2023 to 31/07/2024)		
		Project estimate 11,998 ICS		
		Baseline estimate 0 ICS		
		Net benefit 11,998 ICS		
		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		SDG 5: Gender Equality		
		Ex-post Monitoring Surveys Records		
		Net Benefit (SDG 5) = HHTSProject – HHTSBaseline		
		140		
		Where:		
		HHTS _{Project} = HH reporting time saving from fuel collection due to reduced		
		fuel consumption in project.		
		idei consumption in project.		
		HHTS _{Baseline} = HH reporting time saving from fuel collection due to		
		reduced fuel consumption in baseline		
		For this monitoring period (01/08/2023 to 31/07/2024)		
		Project estimate 2-3 hrs		
		Net benefit 2-3 hrs		
		SDG 7: Affordable and Clean Energy		
		OD O 117 MOI GUIDA GIOGII EIIOI GI		
		Number of beneficiaries household provided access to Improved		
		cook stoves.		

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Net Benefit (SDG 7) = ACSProject - ACSBaseline

Where:

ACS_{Projec}t = Access to affordable and clean energy (Number of operating ICS units under Project)

 $ACS_{Baseline}$ = Access to affordable and clean energy (Number of operating ICS units under Baseline)

For this monitoring period (01/08/2023 to 31/07/2024)

Project estimate	11,998 ICS
Baseline estimate	0
Net benefit	11,998 ICS

SDG 8: Decent Work and Economic Growth

Net Benefit(SDG 8) = EECT_{Project} - EECT_{Baseline}

Where,

EECT_{Project} = Total number of employees by employment contract and employment type as a result of project activity in Project, by gender

EECT_{Baseline} = Total number of employees by employment contract and employment type as a result of project activity in baseline, by gender

For this monitoring period (01/08/2023 to 31/07/2024)

Project estimate	10
Baseline estimate	0
Net benefit	10

The verification took cognizance of §9.4.25 GS VVS version 01.0/B02/and GS4GG Requirements /B02/. The Verification team confirms that the data and parameters monitored related to sustainable development co-benefits are in compliance with the PDD and the monitoring plan /B03/.

SECTION E. Internal quality control

>>

The verification report shall pass a technical review before being submitted to the Gold Standard. The technical review is performed by a technical reviewer qualified in accordance with CCIPL's qualification scheme for validation and verification.

SECTION F. Verification/Certification opinion

>>

Carbon Check (India) Private Ltd. (CCIPL) has performed the 2nd periodic verification of the registered GS Project Activity "Smokeless Energy efficient cookstove distribution in rural India (GS 12017)".

The verification team assigned by the VVB concludes that the project activity as described in the PDD /B03/ and the Monitoring report /01/, meets all relevant requirements of the Gold Standard. The verification has been conducted in-line with the GS4GG requirements project activities.

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Verification methodology and process

The Verification team confirms the contractual relationship signed /14/ between the VVB, Carbon Check (India) Private Ltd. and the Project Participant. The team assigned to the verification meets the CCIPL's internal procedures including the UNFCCC/GS requirements for the team composition and competence. The verification team has conducted a thorough contract review as per UNFCCC and CCIPL's procedures and requirements.

The verification has been performed as per the requirements described in the GS4GG and constitutes the review and completion of the following steps:

- Reviewing the PDD /B03/, including the monitoring plan and the corresponding validation report /B03/;
- Desk review of the MR /01/ and other relevant documents including documents related to the project activities in emission reductions;
- Review of the applied monitoring methodology 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. /B01/:
- On-site inspection (17/08/2024-18/08/2024)
- Resolution of CARs and CLs raised during verification
- Issuance of Verification Report

The project activity was correctly implemented according to selected monitoring methodology, monitoring plan and the registered PDD. The monitoring system was installed, maintained in a proper manner, while collected monitoring data allowed for the verification of the amount of achieved GHG emission reductions. Through the document review and onsite visit interviews, the verification team confirms that the project activity has resulted in the 33,153 tCO₂e emission reductions during the reported monitoring period.

This statement covers verification period from 01/08/2023 to 31/07/2024 (inclusive).

The VVB has raised seven (07) clarifications and 00 corrective action requests, all of which are satisfactorily closed.

The VVB considers necessary to give reasonable assurance that reported GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology and the monitoring plan contained in the registered PDD are fairly stated.

The VVB, hereby certifies that the project activity, achieved emission reductions by sources of GHG equal to 33,153 tCO₂e equivalent and all monitoring requirements have been fulfilled and is substantiated by an audit trail that contains evidence and records.

Vintage	ER (tCO ₂ e)
01/08/2023- 31/12/2023	13,859 tCO₂e
01/01/2024- 31/07/2024	19,294 tCO ₂ e
Total for the monitoring period	33,153 tCO ₂ e

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Appendix 1. Abbreviations

Abbreviations	Full texts
BE	Baseline Emissions
CA	Corrective Action/ Clarification Action
CER	Certified Emission Reduction
CAR	Corrective Action Request
CCIPL	Carbon Check (India) Private Ltd.
CL	Clarification Request
CO ₂	Carbon Dioxide
CO _{2e}	Carbon Dioxide Equivalent
DVR	Draft Verification Report
EB	CDM Executive Board
EF	Emission Factor
FA	Final Approval
FAR	Forward Action Request
FVR	Final Validation Report
GHG	Greenhouse gas(es)
GS	Gold Standard
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
LE	Leakage Emissions
MP	Monitoring Period
MR	Monitoring Report
OSV	On Site Visit
PE	Project Emissions
PP(s)	Project Participant(s)
PRC	Post registration change
QC/QA	Quality Control/ Quality Assurance
TA	Technical Area
TR	Technical Review
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard
VVB	Validation & verification body

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Appendix 2. Competence of team members and technical reviewers

		— CHECI	(—	
Ca	rbon Chec	k (India)	Privat	te Limited
	Certifica	te of Com	petency	
		allavi Geo		
has been qualified as per CCIF				he requirements of CDM AS (V7.0
ISO/IEC1	4065:2020, ISO/IEC 1	7029:2019 and ot	her applicable G	HG programs:
	for the followi	ng functions and red	quirements:	
∨alidator	∨ Verifier	⊠ Team L	eader	☑ Technical Expert
☐ Technical Reviewer	☐ Health Expert	☐ Gender	Expert	☐ Plastic Waste Expert
☐ CCB Expert	☐ Legal Expert	☐ Financi		☐ Environmental, Health and Safety financial matters
⊠ SDG+	⊠ Social no-harm(S+) 🗵 Enviror no-harm(I		
□ Local Expert for India	i	no-namin	,	
	in the fo	ollowing Technical A	reas:	
□ TA 1.1	⊠ TA 1.2	□ TA 2.1	⊠ TA 3.1	□ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	☐ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☐ TA 13.1	☐ TA 13.2
□ TA 14.1	☐ TA 15.1	☐ TA 16.1		
Issue [Date			Expiry Date
5 th Decemb	per 2023		31 st	December 2024
Poiya S	uman		5.	myon Aprovalla-
Ms. Priya Suman		Mr. Sanjay Kumar Agarwalla		
Сопр	iance Officer			Technical Director
Revision date		on History of the document: Summary of changes		
20221		Annual revision		
Jan 2023 Dec 2023	C		Annual revision te due to revisio	n in TA and function
500 2023		ge the templa		

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Carbon Check (India) Private Limited

Certificate of Competency

Ms. Indumathi C

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 follow	ing functions and re	equirements:	
☑ Validator	☑ Verifier	⊠ Team	Leader 2	☑ Technical Expert
☑ Technical Reviewer	☐ Health Expert	☐ Gende	r Expert	☑ Plastic Waste Expert
☐ CCB Expert	☐ Legal Expert	⊠ Financ		☐ Environmental, Health and Gafety financial matters
⊠ SDG+	☑ Social no-harm(S+) 🛭 Enviro	nment	,
■ Local Expert for India	and Sri Lanka	no nami	,	
	in the fo	ollowing Technical .	Areas:	
⊠ TA 1.1	⊠ TA 1.2	☐ TA 2.1	⊠ TA 3.1	□ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	□ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☑ TA 13.1	☑ TA 13.2
☐ TA 14.1	☐ TA 15.1	☐ TA 16.1		
Issue Date			E	xpiry Date
5 th December 2023			31 st D	ecember 2024
Briga Suman			Sow	you Generalla
Ms. Priya Suman Compliance Officer				Sanjay Kumar Agarwalla Technical Director
	Revision	History of the doc	ument:	
Revision da	te	Sı	ımmary of changes	S
20221			Annual revision	

Revision date	Summary of changes	
20221	Annual revision	
Jan 2023	Annual revision	
Dec 2023	Change in the template due to revision in TA and function	

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CCIPL_FM 7.9 Certificate of Competency_V4.0_112023

1 Please refer to previous version of FM 7.9 for the revision history

Appendix 3. Documents reviewed or referenced

S. No.	Document	
	a) Monitoring Report (Version 01 dated 06/07/2024)	
/01/	b) Monitoring Report (Version 02 dated 07/09/2024)	
	c) Monitoring Report (Version 03 dated 27/09/2024)	
/02/	Emission reductions sheet (Corresponding to /01/, /02/ & /03/)	
/03/	Distribution records including sample sales receipt	
/04/	Evidence for the cookstove distributed under the project	
/05/	Evidence of Carbon Credits waiver	
/06/	Evidence for the random sample generator for the parameters opted for sampling/survey.	
/07/	Initial Sample size calculation sheet along with actual samples conducted and the reliability assessment.	
/08/	Evidence for unique identification number under the project	
/09/	Records of monitoring Survey of the project and cookstove user survey	
/10/	Third party survey report	
/11/	Employment records	
/12/	The grievance register applicable for the monitoring period	
/13/	Monitoring log books	
/14/	Verification contract between VVB & PP	
/15/	Cookstove Service Records	
/16/	Training records	
/17/	Salary slips	
/18/	Monitoring Survey Forms	
/19/	Contract between PP and third party for monitoring survey	
/20/	Monitoring survey Questionnaire template	
/21/	Sampling Calculator for sample size, and precision level	

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Background Documents

Ref no.	Reference Document		
/B01/	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.		
/B02/	Gold Standard Principles and Requirements version 1.2, dated 24/10/2019		
	2. GS Validation & Verification standard version 1.0, dated 06/03/2023		
	Community Services Activity Requirements (version 1.1) under GS4GG https://globalgoals.goldstandard.org/200-gs4gg-community-services-activity-requirements/		
/B03/	Registered PDD, Version 6.0 and corresponding Validation Report		
/B04/	Standards a) CDM Sampling Standard, version 09.0 b) Guidelines for Sampling and Surveys for CDM Project activities and Programme of Activities Ver. 4.0. c) CDM validation and verification standard for project activities, version 04.0		
/B05/	IPCC 2006, volume 2, chapter 1		
/B06/	Site Visit and Remote Audit Requirements and Procedures, version 2.0 dated 30/05/2023		
/B07/	Validation and Verification Standard for PoAs, version 03.0 Project Standard for PoAs, version 03.0 Project Cycle Procedure for PoAs, version 03.0		
/B08/	Monitoring Report for 1st MP, Version 02 dated 21/12/2023 Verification report for 1st Monitoring period version 01 dated 22/10/2023		

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

Table 1. FARs from this verification

FAR ID	Section r	0.	Date:	
Descripti	on of CAR			
NA				
PP respo	nse		Date:	
	·			
Documentation provided by the CME				
VVB assessment Date:			Date:	

Table 2. CLs from this verification

 CL ID
 01
 Section no.
 MR
 Date: 04/09/2024

Description of CL

In KPI Table of the MR, below observation need to be fulfilled as per the Template filling guideline;

- 1) PP to check the Index page of the MR template
- 2) PP to try to maintain the same font and font size throughout the MR.
- 3) All Dates must be in the following format: DD/MM/YYYY

Project participant response

- 1) PP has included the Index page in revised MR.
- 2) PP has corrected the same in new MR.
- 3) Now all dates has been revised in stated format In MR version 2.

Documentation provided by project participant

VVB assessment Date: 10/09/2024

PP has submitted the revised MR, KPI table has been made inline with the MR filling guideline, this has been checked and deemed to be appropriate. Hence CL 01 is closed.

Date: 07/09/2024

CL ID 02 **Section no.** MR **Date**: 04/09/2024

Description of CL

PP in Emission reduction sheet mentioned the implementation schedule which represent every month 11998 ICS distributed, However MR states 11,998 for this monitoring period. PP to clarify the same.

Project participant response Date: 07/09/202

Total 11,998 ICS's had been distributed in this project during first year of monitoring period and no further ICS's been added to the project in current monitoring period. In MR it states that 11998 are been working in good condition for all those months covered in 2nd Monitoring period.

Documentation provided by project participant

VVB assessment Date: 10/09/2024

PP has submitted the MR and the justification provided by the PP is deemed to acceptable to the verification team, and the same has been observed during the on-site visit conducted by VVB. Hence CL 02 is closed.

 CL ID
 03
 Section no.
 MR
 Date: 04/09/2024

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Description of CL

Under section D.2 of the MR, under SDG 5 PP has mentioned 2-3hr, however in section E.4 SDG 5 is mentioned as 2 hrs. PP is requested to maintain the consistency within the documents.

Date: 07/09/2024

Date: 07/09/2024

Date: 07/09/2024

Project participant response

Section D.2 and E.4 has been corrected now in revised MR.

Documentation provided by project participant

VVB assessment Date: 10/09/2024

PP has submitted the revised MR, Section D.2 has been rectified, this has been checked and deemed to be appropriate by the verification team. Hence CL03 is closed.

 CL ID
 04
 Section no.
 MR
 Date: 04/09/2024

Description of CL

Under section D.3 of the MR, PP needs to add the Value obtained last monitoring period.

Project participant response

Section D.3 has been revised in new version of MR.

Documentation provided by project participant

VVB assessment Date: 10/09/2024

PP has submitted the revised MR, section D.3 has now be provided with the values from the last monitoring period as per the template requirement. This has been checked and deemed to be appropriate to the verification team. Hence CL 04 is closed.

 CL ID
 05
 Section no.
 MR
 Date: 04/09/2024

Description of CL

Under section E.2 of the MR, the section is left empty, PP is request to adhere the MR filling guideline and complete the section.

Project participant response

Section E.2 of the MR has been revised now

Documentation provided by project participant

VVB assessment Date: 10/09/2024

PP has submitted the revised MR, Section E.2 has been updated as per the template requirements. This has been checked by the verification team. Hence CL05 is closed.

CL ID 06 **Section no.** MR **Date**: 04/09/2024

Description of CL

PP to submit the SDG calculation sheet for this monitoring period and ex-ante calculation for this monitoring period.

Project participant response Date: 07/09/2024

All documents have been provided by PP now.

Documentation provided by project participant

VVB assessment Date: 10/09/2024

PP has submitted the SDG calculation sheet and ex-ante calculation sheet for this monitoring period, this has been checked by the verification team. Hence CL06 is closed.

 CL ID
 07
 Section no.
 MR
 Date: 04/09/2024

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Description of CL

PP to provide the below documents;

- Monitoring survey forms
- KPT results files
- Evidence of SDGs claimed
- End user agreement related to the transfer of carbon credits.
- Sampling Calculator for sample size, and precision level
- Evidence for random selection
- Training records
- Employment records
- Cookstove Service Records
- Grievance register

Project participant response

Date: 07/09/2024

All the above supported documents have been provided in Zip folder.

Documentation provided by project participant

VVB assessment Date: 10/09/2024

PP has submitted the above requested documents; this has been checked by the verification team. Hence CL 07 is closed.

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Annex 1: Assessment of data and parameters fixed ex-ante at the time of validation

Relevant SDG Indicator	SDG 13, Climate action
Parameter	EF _{b,f,CO2}
Data unit	tCO ₂ /TJ
Default values used	112 tCO ₂ /TJ
Purpose of data	Estimation of Baseline
Source of verification of the source	Default Value from the methodology, Technologies and
	Practices to Displace Decentralized Thermal Energy
	Consumption (TPDDTEC)
Relevant SDG Indicator	SDG 13, Climate action
Parameter	EF _{b,f,non_CO2}
Data unit	tCO ₂ /TJ
Default values used	9.46 tCO2e/TJ (AR5 GWP)
Purpose of data	Estimation of Baseline
Source of verification of the source	IPCC default value /B05/
Relevant SDG Indicator	SDG 13, Climate action
Parameter	f _{NRB,y}
Data unit	Percentage
Default values used	70%
Purpose of data	Estimation of Baseline
Source of verification of the source	Calculated
Relevant SDG Indicator	SDG 13, Climate action
Parameter	NCV _{biomass}
Data unit	TJ/tonne
Default values used	0.0156
Purpose of data	Calculation of Baseline emissions
Source of verification of the source	IPCC default value for wood/B05/
Relevant SDG Indicator	SDG 13, Climate action
Parameter	P _{b,y}
Data unit	tonnes/person/year
Default values used	0.74
Purpose of data	Estimation of Baseline
Source of verification of the source	Baseline Survey
Relevant SDG Indicator	SDG 13, Climate action
Parameter	N _{b,p,y}
Data unit	days
Default values used	365
Purpose of data	Estimation of Baseline
Source of verification of the source	Baseline Survey

Parameter LE_{p,y}

SDG 13, Climate action

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Relevant SDG Indicator

Data unit	tCO₂e per year
Default values used	0.95
Purpose of data	Estimation of Baseline
Source of verification of the source	Default Value from the methodology, Technologies and
	Practices to Displace Decentralized Thermal Energy
	Consumption (TPDDTEC)

Annex 2: Assessment of data and parameters monitored

Monitoring Parameter Requirement	Assessment/ Observation by the VVB
Relevant SDG Indicator	SDG 13
	Indicator 13.2.1 "Amount of CO2e emissions reduced by
Data / Davismatow	the project per year"
Data / Parameter:	Specific fuel savings for an individual project technology
(as in monitoring plan of PDD):	of baseline b/project p pair in year y (SFS _{b,p,y})
Unit	tonnes/household/year
Measuring frequency/Time Interval:	The value is calculated
Reported value	2.43
Verified Source of Data	SFS under method 1 is calculated from Pb,y, Pp,y.
	Pb,y (Quantity of fuel that is consumed in baseline scenario b during year y) has been determined by conducting baseline survey & KPT at the targeted population. (Fixed)
	Pp,y (Quantity of fuel that is consumed in project scenario p during year y) has been determined by conducting Project performance field tests (PFT) at the targeted population
Is measuring and reporting frequency	Yes
in accordance with the monitoring	
plan and monitoring methodology?	
(Yes / No)	
Assessment of details of monitoring equipment, its specification and calibration as per the requirements of registered PDD:	NA
Does the data management (from data generation to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, the data management ensures correct transfer of data and reporting of emission reductions and all necessary QA/QC processes are in place
In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?	NA

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Monitoring Parameter Requirement	Assessment/ Observation by the VVB
Relevant SDG Indicator	SDG 13
	Indicator 13.2.1 "Amount of CO2e emissions reduced by
Data / Parameter:	the project per year" Quantity of fuel consumed in project scenario p during
(as in monitoring plan of PDD):	year y, in tonnes, and as derived from the statistical
(as in monitoring plan of PDD).	analysis conducted on the data collected during the
	project performance field tests (P _{p,y})
Unit	tonnes/household/year
Measuring frequency/Time Interval:	Annual
Reported value	1.07
Verified Source of Data	Value obtained from monitoring survey KPT of samples
	/09/
Is measuring and reporting frequency	Yes
in accordance with the monitoring	
plan and monitoring methodology?	
(Yes / No)	
Assessment of details of monitoring	NA
equipment, its specification and	
calibration as per the requirements of registered PDD:	
Does the data management (from data	Yes, the data management ensures correct transfer of
generation to emission reduction	data and reporting of emission reductions and all
calculation) ensure correct transfer of	necessary QA/QC processes are in place
data and reporting of emission reductions	
and are necessary QA/QC processes in place?	
In case only partial data are available	NA
because activity levels or non-activity	
parameters have not been monitored in	
accordance with the registered	
monitoring plan, has the most	
conservative assumption theoretically	
possible been applied or has a request for deviation been approved?	
deviation been approved:	

Monitoring Parameter Requirement	Assessment/ Observation by the VVB
Relevant SDG Indicator	SDG 13
	Indicator 13.2.1 "Amount of CO2e emissions reduced by
	the project per year"
Data / Parameter:	Usage rate in project scenario p during year y
(as in monitoring plan of PDD):	determined on a sampling basis $(U_{p,y})$
Unit	Fraction (or %)
Measuring frequency/Time Interval:	Annual
Reported value	0.90
Verified Source of Data	Value obtained from monitoring survey of samples /09/

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Is measuring and reporting frequency	Yes
in accordance with the monitoring	
plan and monitoring methodology?	
(Yes / No)	
Assessment of details of monitoring	NA
equipment, its specification and	
calibration as per the requirements of	
registered PDD:	V th d-t
Does the data management (from data generation to emission reduction	Yes, the data management ensures correct transfer of
generation to emission reduction calculation) ensure correct transfer of	data and reporting of emission reductions and all necessary QA/QC processes are in place.
data and reporting of emission reductions	necessary Q/VQO processes are in place.
and are necessary QA/QC processes in	
place?	
In case only partial data are available	NA
because activity levels or non-activity	
parameters have not been monitored in	
accordance with the registered	
monitoring plan, has the most	
conservative assumption theoretically possible been applied or has a request for	
deviation been approved?	
adviation book approved:	

Monitoring Parameter Requirement	Assessment/ Observation by the VVB
Relevant SDG Indicator	SDG 13
	Indicator 13.2.1 "Amount of CO2e emissions reduced by
	the project per year"
Data / Parameter:	Number of project technology-days included in the
(as in monitoring plan of PDD):	project database for baseline b/project p pair in year y
	(Np,y)
Unit	Days
Measuring frequency/Time Interval:	continuous
Reported value	366
Verified Source of Data	Value obtained from monitoring survey of samples /09/
Is measuring and reporting frequency	Yes
in accordance with the monitoring	
plan and monitoring methodology?	
(Yes / No)	
Assessment of details of monitoring	NA
equipment, its specification and	
calibration as per the requirements of	
registered PDD:	Vac the data management analyse segment transfer of
Does the data management (from data generation to emission reduction	Yes, the data management ensures correct transfer of data and reporting of emission reductions and all
calculation) ensure correct transfer of	necessary QA/QC processes are in place.
data and reporting of emission reductions	necessary q, v q o processes are in place.
and are necessary QA/QC processes in	
place?	
In case only partial data are available	NA
because activity levels or non-activity	
parameters have not been monitored in	
accordance with the registered	

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monitoring	plan,	has	the	most
conservative				-
possible beer	n applie	d or has	a requ	uest for
deviation bee	n appro	oved?		

Monitoring Parameter Requirement	Assessment/ Observation by the VVB
Relevant SDG Indicator	SDG 05
Data / Parameter:	Average time saving associated with cooking time and
(as in monitoring plan of PDD):	fuel collection in project (HHTS _{Project})
Unit	Hrs/HH/day
Measuring frequency/Time Interval:	Annual
Reported value	2-3
Verified Source of Data	Monitoring survey Questionnaire/20/
Is measuring and reporting frequency	Yes
in accordance with the monitoring	
plan and monitoring methodology?	
(Yes / No)	
Assessment of details of monitoring	NA
equipment, its specification and	
calibration as per the requirements of registered PDD:	
Does the data management (from data	Yes, the data management ensures correct transfer of
generation to emission reduction	data and reporting of emission reductions and all
calculation) ensure correct transfer of	necessary QA/QC processes are in place
data and reporting of emission reductions	
and are necessary QA/QC processes in	
place? In case only partial data are available	NA .
because activity levels or non-activity	IVA
parameters have not been monitored in	
accordance with the registered	
monitoring plan, has the most	
conservative assumption theoretically	
possible been applied or has a request for deviation been approved?	

Monitoring Parameter Requirement	Assessment/ Observation by the VVB
Relevant SDG Indicator	SDG 08
Data / Parameter: (as in monitoring plan of PDD):	Total number of employees by employment contract and employment type (Number of person (male and female) hired under project) (EECT _{Project})
Unit	Number
Measuring frequency/Time Interval:	Annual
Reported value	10
Verified Source of Data	Value obtained from employment records /11/
Is measuring and reporting frequency	Yes
in accordance with the monitoring	
plan and monitoring methodology?	
(Yes / No)	
Assessment of details of monitoring equipment, its specification and	NA

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calibration as per the requirements of registered PDD:	
Does the data management (from data generation to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, the data management ensures correct transfer of data and reporting of emission reductions and all necessary QA/QC processes are in place
In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?	NA

Monitoring Parameter Requirement	Assessment/ Observation by the VVB
Relevant SDG Indicator	SDG 7
Data / Parameter:	Number of beneficiaries household under project
(as in monitoring plan of PDD):	(AACS _{HH})
Unit	Number
Measuring frequency/Time Interval:	At least once in two years
Reported value	11,998
Verified Source of Data	ICS distribution record/04/
Is measuring and reporting frequency	Yes
in accordance with the monitoring	
plan and monitoring methodology?	
(Yes / No)	
Assessment of details of monitoring	NA
equipment, its specification and	
calibration as per the requirements of	
registered PDD: Does the data management (from data	Yes, the data management ensures correct transfer of
generation to emission reduction	data and reporting of emission reductions and all
calculation) ensure correct transfer of	necessary QA/QC processes are in place
data and reporting of emission reductions	7 3 3 3 4
and are necessary QA/QC processes in	
place?	
In case only partial data are available	NA
because activity levels or non-activity	
parameters have not been monitored in accordance with the registered	
monitoring plan, has the most	
conservative assumption theoretically	
possible been applied or has a request for	
deviation been approved?	

Monitoring Parameter Requirement	Assessment/ Observation by the VVB
Relevant SDG Indicator	SDG 3
Data / Parameter:	HHIH _{hh} (3.9.1)
(as in monitoring plan of PDD):	

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Unit	Number
Measuring frequency/Time Interval:	Annual
Reported value	11,998
Verified Source of Data	Value obtained from ICS user survey /09/.
Is measuring and reporting frequency	Yes
in accordance with the monitoring	
plan and monitoring methodology?	
(Yes / No)	
Assessment of details of monitoring	NA
equipment, its specification and	
calibration as per the requirements of	
registered PDD:	Voc. the data management anguras correct transfer of
Does the data management (from data generation to emission reduction	Yes, the data management ensures correct transfer of data and reporting of emission reductions and all
calculation) ensure correct transfer of	necessary QA/QC processes are in place
data and reporting of emission reductions	
and are necessary QA/QC processes in	
place?	
In case only partial data are available	NA
because activity levels or non-activity	
parameters have not been monitored in	
accordance with the registered monitoring plan, has the most	
conservative assumption theoretically	
possible been applied or has a request for	
deviation been approved?	

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