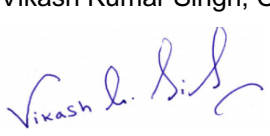




**Verification and certification report form for  
GS project activities  
(Version 03.0)**

*Complete this form in accordance with the instructions attached at the end of this form.*

**BASIC INFORMATION**

<b>Title and GS reference number of the project activity</b>	Title: Household Biogas plants installed in rural areas of Maharashtra GS reference no.: GS 2519
<b>Scale of the project activity</b>	<input type="checkbox"/> Large-scale <input checked="" type="checkbox"/> Small-scale <input type="checkbox"/> Micro-scale
<b>Version number of the verification and certification report</b>	2.1
<b>Completion date of the verification and certification report</b>	15/09/2021
<b>Monitoring period number and duration of this monitoring period</b>	8 <sup>th</sup> monitoring period. Duration: 09/05/2020 to 08/05/2021 (including both days)
<b>Version number of the monitoring report to which this report applies</b>	2.2 of 14/09/2021
<b>Crediting period of the project activity corresponding to this monitoring period</b>	09/05/2012 to 08/05/2022
<b>Project participants</b>	Value Network Ventures Advisory Services Pte. Ltd.
<b>Host Party</b>	India
<b>Applied methodologies and standardized baselines</b>	AMS-I.E: Switch from non-renewable biomass for thermal applications by the user -Version 5.0
<b>Mandatory sectoral scopes</b>	1
<b>Conditional sectoral scopes, if applicable</b>	N/A
<b>Estimated amount of GHG emission reductions or GHG removals for this monitoring duration in the registered PDD</b>	48,551 tCO <sub>2</sub> e
<b>Certified amount of GHG emission reductions or GHG removals for this monitoring period</b>	41,823 tCO <sub>2</sub> e
<b>Name of the VVB</b>	Carbon Check (India) Private Limited
<b>Name, position and signature of the approver of the verification and certification report</b>	Vikash Kumar Singh, Compliance Officer 

## SECTION A. Executive summary

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Carbon Check (India) Private Ltd. (CC IPL) is performing the seventh periodic verification of the GS project "Household Biogas plants installed in rural areas of Maharashtra" (GS project id: GS 2519) for the period 09/05/2019 to 08/05/2020 (inclusive of both the dates). The project activity involves installation and use of household bio-digester units of various sized (2m<sup>3</sup>, 3m<sup>3</sup>, 4m<sup>3</sup> and 6m<sup>3</sup>) which replaces non-renewable firewood used in the absence of bio-digesters. The bio-digesters are based on cattle dung and produced bio-gas is used for cooking purposes. The project involves 12,474 bio-gas units installed in rural areas of Maharashtra commissioned in between January 2009- Dec 2011. However, 84 bio-digesters were removed from the project since 09/05/2016 onwards and the effective number of digesters in the project is 12,390.

### **Verification methodology and process**

The Verification team confirms the contractual relationship signed on the 14/05/2021 between the Carbon Check (India) Private Ltd. (hereafter the "VVB") and the project participant - Value Network Ventures Advisory Services Pte. Ltd. The team assigned to the verification meets the Carbon Check (India) Private Ltd's internal procedures including the UNFCCC requirements for the team composition and competence. CC IPL has conducted a thorough contract review as per UNFCCC and Carbon Check's procedures and requirements.

The verification has been performed as per the requirements described in the Gold Standard for the Global Goals Principles & Requirements (version 1.2) /5/; and CDM VVS for project activities (version 02.0) /9/ and constitutes the review and completion of the following steps:

- Review of the registered PDD (version 03; Dated: 19/05/2014) /2/, including the monitoring plan and the corresponding validation report /7/, the Sustainability Matrix and monitoring data;
- Desk review of the MR, emission reduction spreadsheet
- Review of the applied monitoring methodology "AMS-I.E 'Switch from non-renewable biomass for thermal applications by the user' (version 5.0) /4/;
- Review of any CMP and EB decisions, clarifications and guidance and the Gold Standard Secretariat;
- Off-site assessment (18/06/2021 & 19/06/2021)
- Resolution of CARs and CLs raised during verification
- Issuance of Verification Report

In Carbon Check's opinion, the project activity was correctly implemented according to selected monitoring methodology monitoring plan and the registered PDD /02/. The monitoring data allowed for the verification of the amount of achieved GHG emission reductions. Through document review, off-site interview and video-call, the verification team confirms that the project has resulted in the 41,823 tCO<sub>2</sub>e emission reductions during this 8<sup>th</sup> monitoring period. The GHG emission reductions and non-GHG parameters were correctly calculated/monitored based on the approved monitoring methodology "AMS-I.E, "Switch from non-renewable biomass for thermal applications by the user", (version 5) /04/ and the monitoring plan contained in the registered PDD (version 03; Dated: 19/05/2014) /02/.

**SECTION B. Verification team, technical reviewer and approver****B.1. Verification team member**

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Verification findings
1.	Team Leader/ Technical Expert/ Verifier	IR	Anand	Amit	CC IPL	√	x	√	√

**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	Agarwalla	Sanjay Kumar	CC IPL
2.	Approver	IR	Singh	Vikash Kumar	CC IPL

**SECTION C. Application of materiality**

The threshold of materiality was evaluated based on “Guideline: Application of materiality in verifications” (version 02.0) /13/. It was concluded that the materiality threshold applicable to the project activity based on actual emission reductions achieved is 5% of 41,823 tCO<sub>2</sub>e which is equal to 2,091 tCO<sub>2</sub>e.

In planning the verification, verification team took cognizance of §11 and §12 of the “Guideline: Application of materiality in verifications” (version 02.0) /13/ and a materiality threshold of 2,091 tCO<sub>2</sub>e is determined for the current verification of the project activity.

**C.1. Consideration of materiality in planning the verification**

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	Human error in the quantification of emissions (which may be more likely to occur if personnel are unfamiliar with, or not well trained regarding, emissions processes or data recording).	Low	Being 8 <sup>th</sup> verification, the project proponent is familiar with monitoring procedures and data reporting in line with the registered PDD and previous verification and certification reports. The monitoring period is only one year. Hence, the risk level is low.	During off-site interview, the audit team will interview the staffs of the monitoring team and check all records to confirm whether the monitoring plan has been well implemented. The recording of monitoring parameters used for determining the project's baseline emissions are used from third party survey report, statistically approved sampling plan and project installation
2.	Undue reliance on a poorly designed	Low	The project proponent has already established a well-	

	information system, which may have few effective quality controls.		organized monitoring team, monitoring plan, including data collection procedure and QA/QC procedure consistent with registered monitoring plan. The main data parameter to be monitored is operation status of biogas systems which is done through sampling by third party. In addition, PP manages, entire project database to locate and monitor as in when required. Therefore, less likelihood that poor flow of required data can be witnessed. Hence, the risk level is low.	database. The verification team shall review the whole data set of records, and crosschecked against relevant options. The verification team shall interview the staffs of the CDM team and check the relevant records to confirm whether the data collection procedure and QA/QC procedure have been well implemented.
3.	Manual adjustment of otherwise automatically recorded activity levels	N/A	<i>There is no data parameter which needs to adjust manually. Therefore, no risk identified.</i>	

## C.2. Consideration of materiality in conducting the verification

In line with Guidelines for Application of materiality in verifications /13/, a reasonable level of assurance is defined for the verification of the project by complete verification of all the monitoring records was done by the verification team and compared with the values indicated in the emission reduction spread-sheet.

Some inconsistencies were identified and subsequently finding was raised. These findings are detailed in Appendix 4 and they were successfully closed. Therefore, related identified mistakes as listed in findings in Appendix 4 to this report have been determined to be immaterial. And thus, it is confirmed that there are no material errors, omissions or misstatements and a reasonable level of assurance is established

## SECTION D. Means of verification

### D.1. Desk/document review

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The verification was performed primarily based on the review of the Monitoring report /01/, emission reduction worksheet /02/ and 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.



## D.2. On-site inspection

On-site visit is not done for the verification activity due to national and international restrictions on travel due to COVID-19 impact. VVB could not further postpone the site visit due to timeline agreed as per verification contract between VVB and project representative (PP) and PP's VER delivery commitment linked to the verification of the project activity. Therefore, VVB followed GS rule update 'COVID-19: Interim measures' dated 18/12/2020 /15/ and alternate measures are adopted as described below:

The verification team has carried out telephonic and video call interviews with project proponent and end users in order to assess the information included in the monitoring report and monitoring measurement procedures adopted during the monitoring period. During the desk review, the relevant monitoring records in consistent with the registered PDD and corresponding validation report were checked. Previous periodic monitoring report and verification reports, telephonic interview with end users, video call with sample end users and picture of digesters with unique ID and operational status (flame on) were taken. Details obtained are cross checked with third party survey report to cross check consistency of information.

The validation report, previous verification reports were checked, comparing the relevant evidence and interview with the PP representative and operation staff through telephone, Carbon Check has confirmed that the project is implemented in line with the registered PDD during the monitoring period and the monitoring system is in line with the registered PDD and latest MR. There is no change of the project design, construction, operation and monitoring plan.

Telephonic interview was performed by verification team as given in below table.

## D.3. Interviews

No.	Interviewee			Date	Subject	Auditor
	Last name	First name	Affiliation			
1.	Pardhi	Rameswaran	AKKPS	18/06/2021	Project Design, ownership details, carbon credit sharing arrangements, monitoring and reporting arrangements, QA/QC procedures, baseline assessment, project technology	Amit Anand
2.	Garg	Shivani	Representative of VNV	18/06/2021	PDD development, GS requirements, Emission reduction calculations, methodology applicability, start date justification etc.	
3.	Patil	Raju	Field co-ordinator- Maharashtra	18/06/2021	Maintenance, grievance system, field visit etc.	
4.	Prasad	Sanjay	Gramodyog Sansthan	18/06/2021	Details of survey, methodology, survey results, QA/QC procedure etc.	
5.	End users			18/06/2021 & 19/06/2021	Commissioning details, Agreement with project developers, Functioning of	

					biogas systems, sustainability issues, baseline fuel. Post project benefits, Impact on health and livelihood.	
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#### D.4. Sampling approach

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##### PP's sampling approach:

PP has proposed simple random sampling plan using 90/10 as confidence / precision. This is in line with the applied methodology /4/. The sample size for each parameter is determined following guidelines for Sampling and Surveys for CDM Project activities and Programme of Activities Ver. 4.0 (EB86, Annex 4) /10/.

##### CC IPL's verification sampling approach:

CC IPL has considered para 39 (a) of "Standard for Sampling and surveys for CDM project activities and programmes of activities, Version 09.0" for determining the sampling size for VVB /11/. In case of the current verification, the verification team determined the sample size for acceptance sampling by evaluating the following, using its own professional judgment and guidance in the Standard 'Sampling and surveys for CDM project activities and programme of activities' version 08.0 /11/: Considering Acceptable Quality Level (AQL): 0.5%, Unacceptable Quality Level (UQL): 20% and producer risk of 5% and consumer risk of 20% a sample size of 8 was required as per Table 2 in the referred Standard /11/. Acceptance number (c) thus determined for the sample size is 0. CC IPL considered 15 samples from PP's sample record to verify the project activity. The verification team selected random samples from the list of PP's sample bio-digesters. VVB contacted sample users via telephone and videos call to ascertain monitoring results provided by PP and also collected recent photographs of project systems. The biogas system details (unique serial number, date of commissioning, type of biogas system, technology, name of user and address) were checked and found to be consistent with that reported in the installation database. No inconsistency was observed for any of the 15 samples with respect to the observations seen through video call, latest photographs and telephonic interview with end users. This assessment of the selected samples was done to ascertain the implementation status of the project activity w.r.t. the biogas system types, serial number, location etc.

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

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form	--	01	--
Compliance of the project implementation and operation with the registered PDD	01	--	--
Post-registration changes	--	--	--
Compliance of the registered monitoring plan with the methodologies including applicable tools and standardized baselines	--	--	--
Compliance of monitoring activities with the registered monitoring plan	--	01	--
Compliance with the calibration frequency requirements for measuring instruments	--	--	--
Assessment of data and calculation of emission reductions or net removals	--	--	--
Assessment of reported sustainable development co-benefits	--	--	--
Global stakeholder consultation	--	--	--
Others (Supporting documents)	--	--	--
Other (Sustainability Monitoring)	--	--	--
<b>Total</b>	<b>01</b>	<b>02</b>	<b>0</b>

**SECTION E. Verification findings****E.1. Compliance of the monitoring report with the monitoring report form**

<b>Means of verification</b>	Comparing the monitoring report /01/ with the monitoring report form provided by GS
<b>Findings</b>	N/A
<b>Conclusion</b>	CC IPL confirms that the monitoring report version 1.0 of 20/05/2021 and later versions are prepared using GS monitoring report template version 1.1 of 14/10/2020 which is the latest available template and completed with relevant information as per the template requirement.

**E.2. Remaining forward action requests from validation and/or previous verifications**

&gt;&gt;

Based on the review of validation report /07/ and previous verification report /14/, no FAR found raised which needed to be addressed during this verification. FAR raised during previous performance review has been addressed as below:

FAR: Over the next monitoring periods, PD shall use a random sample generator or excel function to ensure the objective randomness of samples selected for monitoring surveys.

PD's response: The same has been taken into account while selecting random samples. As explained in section D.4 of the MR, households are selected randomly using random sample number generator (<https://stattrek.com/statistics/random-number-generator.aspx>).

VVB's assessment: VVB confirms that PD has used a random sample generator and accordingly required samples are selected. The details are provided in the MR and survey report which are found consistent. Hence, the FAR has been appropriately taken into consideration.

**E.3. Compliance of the project implementation and operation with the registered project design document**

<b>Means of verification</b>	<p>As verified from off-site interview, photographic evidences and third party survey report, the audit team confirm the project implementation and operation complies with the project design document and transition annex /02/. All the bio-digesters are commissioned between the year 2009 and 2011 which is confirmed from the validation and previous verification report /14/. The first crediting period of the project activity started on 09/05/2012 as per the first verification report and because the project activity has gone in for two-year retroactive credits. The project activity involves 12,390 household bio-digesters of different sizes (2 m<sup>3</sup>, 3 m<sup>3</sup>, 4 m<sup>3</sup> and 6 m<sup>3</sup>) in the state of Maharashtra. The project boundary in the registered PDD /02/ is in line with the actual project boundary.</p> <p>CC IPL has considered 15 bio-digesters more than the required 8 samples as explained in section D.4 above to ascertain accuracy of information. CC IPL confirms the project biogas systems are operating in all samples verified through telephonic interview and video call with end users, each biogas system has unique identification number which has been provided in the end user agreement and are correct as per project database. The unique identification is also marked at each biogas plant physically. Along with the serial number, the biogas technology, end user name, address, commissioning date etc. had also been noted which were found to be consistent on ground.</p> <p>It is noted that no changes have been observed or identified which 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 methodology AMS-I.E version 5 /04/. The operational status of all project bio-digesters, impact on identified SDGs from 09/05/2020 to 08/05/2021 has been taken into consideration.</p>
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<b>Findings</b>	N/A
<b>Conclusion</b>	It is Carbon Check's opinion that the project implementation and operation complies with the project design document.

**E.4. Post-registration changes****E.4.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents<sup>1</sup>**

&gt;&gt;

Not Applicable

**E.4.2. Corrections**

&gt;&gt;

Not Applicable

**E.4.3. Changes to the start date of the crediting period**

&gt;&gt;

Not Applicable

**E.4.4. Inclusion of a monitoring plan**

&gt;&gt;

Not Applicable

**E.4.5. Permanent changes from registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents**

&gt;&gt;

Not Applicable

**E.4.6. Changes to the project design**

&gt;&gt;

Not Applicable

**E.4.7. Changes specific to afforestation and reforestation project activities**

&gt;&gt;

Not Applicable

**E.5. Compliance of the registered monitoring plan with applied methodologies, applied standardized baselines, and other applied methodological regulatory documents**

<b>Means of verification</b>	During this monitoring period, the validated and registered monitoring plan was found to be in accordance with the applied methodology /02/, /04/.
<b>Findings</b>	N/A
<b>Conclusion</b>	All monitoring parameters, monitoring procedures follow the methodology requirements and registered monitoring plan.

**E.6. Compliance of monitoring activities with the registered monitoring plan****E.6.1. Data and parameters fixed ex ante or at renewal of crediting period**

<b>Means of verification</b>	The following ex-ante parameters are considered in the calculation of the emission reductions:				
	DATA/PARAMETER	Source data	of	Reported value for the project	Assessment/Observation

<sup>1</sup> 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).

	Unit		period	
	Total amount of biomass substituted ( $D_y$ )	Registered PDD /02/	2m <sup>3</sup> = 230 kg/month 3m <sup>3</sup> = 334 kg/month 4m <sup>3</sup> = 434 kg/month 6m <sup>3</sup> = 650 kg/month	Since this is the baseline wood consumption taken from baseline survey, this will remain fixed during the crediting period. /02/
	Fraction of Non-Renewable Biomass ( $f_{NRB, y}$ )	Registered PDD /02/	93%	This value is calculated based on the values provided in the forest survey report released by Government of India and fixed during the crediting period.
	Net Calorific Value of non-renewable biomass ( $NCV_i$ )	IPCC /02/	0.015 TJ/tonne	This value has been taken from the IPCC default value as mentioned in the applied methodology /02, /04/.
	Emission Factor ( $EF_{projected\_fossilfuel}$ )	IPCC /02/	81.6 tCO <sub>2</sub> /TJ	This value has been from the applied methodology /02/ /04/
<b>Findings</b>	N/A			
<b>Conclusion</b>	CC IPL is able to confirm that the Data and parameters fixed ex ante have been implemented in full compliance with the registered monitoring plan.			

### E.6.2. Data and parameters monitored

Means of verification	Data/Parameter	Displacement or substitution of the non-renewable woody biomass																						
	Data Unit	kg																						
	Description	Monitoring should confirm the displacement or substitution of the non-renewable woody biomass at each location. The survey confirms displacement or substitution of the non-renewable woody biomass at each location. There has been no switch over to any other renewable biomass. This is also consistent with site visit findings, hence accepted.																						
	Source of data to be used	Survey /12/																						
	Value of monitored parameter for the monitoring period	<table><tr><th>Size</th><th>Before installation of Biogas plants (D<sub>y</sub>)</th><th>After installation of Biogas plants(P<sub>y</sub>) per month</th><th>Amount of firewood displaced (B<sub>y</sub>)</th></tr><tr><td>2</td><td>230</td><td>23</td><td>207</td></tr><tr><td>3</td><td>334</td><td>36</td><td>298</td></tr><tr><td>4</td><td>434</td><td>43</td><td>391</td></tr><tr><td>6</td><td>650</td><td>43.5</td><td>606.5</td></tr></table>			Size	Before installation of Biogas plants (D <sub>y</sub> )	After installation of Biogas plants(P <sub>y</sub> ) per month	Amount of firewood displaced (B <sub>y</sub> )	2	230	23	207	3	334	36	298	4	434	43	391	6	650	43.5	606.5
	Size	Before installation of Biogas plants (D <sub>y</sub> )	After installation of Biogas plants(P <sub>y</sub> ) per month	Amount of firewood displaced (B <sub>y</sub> )																				
2	230	23	207																					
3	334	36	298																					
4	434	43	391																					
6	650	43.5	606.5																					
	Verification team during off-site interview did not find any user who reported firewood consumption during the monitoring period except few reported minimal use during winter season for non-cooking purpose.																							

		Therefore, conservatively the use of firewood has been considered to calculate net fuel save.
Monitoring equipment		Not applicable as it is based on survey method.
Accuracy of the monitoring equipment		Not applicable
Measuring/Reading/Recording frequency		Annual
Calculation method (if applicable)		Not applicable
Data/Parameter		Checking of sampled biogas plants
Data Unit		%
Description		Monitoring consist of checking of representative sample, to ensure that biodigesters operating or are replaced by an equivalent in service appliance. The survey confirms functionality of biogas plants.
Source of data to be used		Survey /12/
Value of monitored parameter for the monitoring period		100%. Verification team interviewed 15 samples (more than the required sample as per sampling standard) and confirm that all 15 biogas plants were 100% functional. Therefore, the results of survey to confirm 100% plants are functional is correct as per sampling rule. Hence, results are accepted.
Monitoring equipment		Not applicable as it is based on survey method.
Accuracy of the monitoring equipment		Not applicable
Measuring/Reading/Recording frequency		Annual
Calcualtion method (if applicable)		Not applicable
Data/Parameter		Amount of firewood saved under the project activity that is used by non-project households/users
Data Unit		Tonne/year
Description		In order to assess the leakages specified under paragraph 10 of AMS IE, version 05, monitoring shall include data on the amount of woody biomass saved under the project activity that is used by non-project households/users (who previously used renewable energy sources.
Source of data to be used		Survey. However, since PP adopted as default approach, survey did not capture this parameter.
Value of monitored parameter for the monitoring period		During this monitoring period leakage is accounted considering default factor as per applied methodology. Hence, survey did not capture the parameter. This parameter is applicable for accounting leakage emissions which is accounted applying default leakage factor (0.95) during this monitoring parameter.
Monitoring equipment		Not applicable
Accuracy of the monitoring equipment		Not applicable

	Measuring/Reading/Recording frequency	Annual
	Calculation method (if applicable)	Not applicable
<b>Findings</b>	CL 1 was raised to provided third party survey report and sample maintenance records along with employment records applicable for the monitoring period which PP has provided and found to be consistent with the MR. CAR 1 was raised to correct table 1 of the MR and section F of the MR which PP has updated correctly and hence CAR is closed.	
<b>Conclusion</b>	Carbon Check is able to confirm that the monitoring has been implemented in full compliance with the registered monitoring plan and all the parameters listed in the registered monitoring plan have been completely monitored.	

### E.6.3. Implementation of sampling plan

Means of verification	According to the standard for sampling and survey /11/ and related guidelines /10/ the sampling plan was determined at the time of project registration and applied during the monitoring.																									
	<ul style="list-style-type: none"><li>- Sampling method: Simple random sampling method is adopted as the target population are of homogeneous. The sample size is determined by the requirement to achieve 90/10 in line with the methodology for annual survey. Sampling approaches may follow the Guideline “Sampling and surveys for CDM project activities and programme of activities” for calculation of sample size.</li><li>- Data to be collected: Number of project devices of type i and operating in year y.</li><li>- Implementation plan: Annual.</li></ul>																									
	During the actual monitoring period the sampling plan has been implemented for:																									
	<ul style="list-style-type: none"><li>- Sampling method: The sample size included all households and was randomly sampled from a list of all the project biogas system in the project. The target population is the 12,390 biogas systems. The sampling frame is homogenous within itself, with respect to service level, established ex-ante baseline and user characteristics. PP has first determined target sample number of 67 biogas systems as below:</li></ul>																									
	The total sample size has been derived using equation para 12 of appendix 1, EB 86 Annex 4, Guidelines for Sampling and Surveys for CDM Project activities and Programme of Activities Ver. 4.0. /10/. The expected parameter values (mean, standard deviation and proportion) have been taken as per para 12 of appendix 1, EB 86 Annex 4 /10/.																									
	$n \geq \frac{1.645^2 N \times p(1 - p)}{(N - 1) \times 0.1^2 \times p^2 + 1.645^2 p(1 - p)}$																									
	Total Population (N) is 12,390, expected proportion is taken 80% and accordingly, sample size (n) come out to be 67. On a conservative side 77 biogas systems are considered for survey.																									
	The 77 sample are divided as per below structure:																									
	<table><tr><th>Sizes</th><th>No. of Biogas plants</th><th>Proportion</th><th>No. of samples</th><th>Actual Sample number</th></tr><tr><td>2 m3</td><td>5198</td><td>42%</td><td>28</td><td>30</td></tr><tr><td>3 m3</td><td>7026</td><td>57%</td><td>38</td><td>40</td></tr><tr><td>4 m3</td><td>143</td><td>1%</td><td>1</td><td>5</td></tr><tr><td>6 m3</td><td>23</td><td>0.19%</td><td>0.12</td><td>2</td></tr></table>	Sizes	No. of Biogas plants	Proportion	No. of samples	Actual Sample number	2 m3	5198	42%	28	30	3 m3	7026	57%	38	40	4 m3	143	1%	1	5	6 m3	23	0.19%	0.12	2
	Sizes	No. of Biogas plants	Proportion	No. of samples	Actual Sample number																					
2 m3	5198	42%	28	30																						
3 m3	7026	57%	38	40																						
4 m3	143	1%	1	5																						
6 m3	23	0.19%	0.12	2																						
The list of project biogas plants are segregated respective to its size and a random number is assigned for each biogas plant. Then random sample number generator																										

	( <a href="https://stattrek.com/statistics/random-number-generator.aspx">https://stattrek.com/statistics/random-number-generator.aspx</a> ) is used to get the required samples for each of the biogas size as per above table. The selection of samples are random and representative of the entire population. It is also noted the survey result shows 100% operational status of biogas plants and hence desired precision has been achieved.
<b>Findings</b>	CAR 2 was raised and closed as discussed in Appendix 4 of this report.
<b>Conclusion</b>	Carbon Check confirms that the sampling size and the method of off-site assessment was in line with the requirements of the sampling standard.

## E.7. Compliance with the calibration frequency requirements for measuring instruments

<b>Means of verification</b>	There is no monitoring equipment involved in monitoring of the required parameters. Hence, no calibration requirement applicable for the project activity.
<b>Findings</b>	N/A
<b>Conclusion</b>	N/A

## E.8. Assessment of data and calculation of emission reductions or net removals

### E.8.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

<b>Means of verification</b>	<p>As per the registered PDD /02/ and the Methodology applied /04/ emission reductions are calculated as per equation 1 of the methodology as below:</p> $ER_y = B_y * f_{NRB, y} * NCV_{biomass} * EF_{projected\_fossilfuel}$ <p>Where,</p> <p><b>B<sub>y</sub></b> = is the quantity of woody biomass that is substituted or displaced in tonnes</p> <p><b>f<sub>NRB, y</sub></b> = is the fraction of woody biomass used in the absence of the project activity in year y that can be established as non-renewable biomass using survey methods or government data or approved default country specific fraction of non-renewable woody biomass (f<sub>NRB</sub>) values available on the CDM website. In this case f<sub>NRB, y</sub> is fixed ex-ante to be 93% as verified from registered PDD and validation report /02/,/07/.</p> <p><b>NCV<sub>biomass</sub></b> = is the Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.015 TJ/tonne)</p> <p><b>EF<sub>projected_fossilfuel</sub></b> = is the emission factor for the substitution of non-renewable woody biomass by similar consumers. Use a value of 81.6 tCO<sub>2</sub>/TJ.</p> <p>'B<sub>y</sub>' is calculated by multiplying the number of appliances with the estimated average annual consumption of woody biomass per appliance (tonnes/year). The average annual consumption of woody biomass is estimated by survey methods as explained in section E.6.2 above. This is found to be in-line with the applied methodology /04/ and registered PDD /02/.</p> <p>Accordingly, the baseline emissions for project activity for the monitoring period from 09/05/2020 to 08/05/2021 is calculated to be 44,025 tCO<sub>2e</sub>.</p>
<b>Findings</b>	N/A
<b>Conclusion</b>	CC IPL confirms that baseline emissions have been appropriately calculated and are consistent with site visit observations, the applied methodology, registered PDD and the previous verification reports /01/, /02/, /04/, /07/.

### E.8.2. Calculation of project GHG emissions or actual net anthropogenic GHG removals by sinks

<b>Means of verification</b>	Project emissions are already discussed in above section E.8.1.
<b>Findings</b>	N/A
<b>Conclusion</b>	CC IPL confirms that project emissions have been appropriately calculated and are consistent with off-site assessment, the applied methodology and registered PDD /02/, /03/, /04/.



**E.8.3. Calculation of leakage GHG emissions**

<b>Means of verification</b>	<p>As per the methodology Leakage related to the non-renewable woody biomass saved by the project activity shall be assessed based on ex post surveys of users and the areas from which this woody biomass is sourced (using 90/30 precision for a selection of samples). The following potential source of leakage shall be considered:</p> <p>'The use/diversion of non-renewable woody biomass saved under the project activity by non-project households/users that previously used renewable energy sources. If this leakage assessment quantifies an increase in the use of non-renewable woody biomass used by the non-project households/users, that is attributable to the project activity, then By is adjusted to account for the quantified leakage. Alternatively, By is multiplied by a net to gross adjustment factor of 0.95 to account for leakages, in which case surveys are not required.</p> <p>Accordingly, PP has multiplied By with 0.95 to account leakage which results leakage to be 2,202 tCO<sub>2e</sub>.</p>
<b>Findings</b>	N/A
<b>Conclusion</b>	CC IPL confirms that leakage emissions are accounted corrected in the estimation of emission reduction as per the applied methodology.

**E.8.4. Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks**

<b>Means of verification</b>	<p>Emission Reductions:</p> <p>The emission reductions in this monitoring period are:</p> $ER_y = BE_y - PE_y - L_y$ <p>Where,</p> <p>ER<sub>y</sub> is the total emission reductions of the project activity during the year y in tCO<sub>2e</sub>;</p> <p>BE<sub>y</sub> is the baseline emissions for the project activity during the year y in tCO<sub>2e</sub>;</p> <p>PE<sub>y</sub> is the emissions for the project activity during the year y in tCO<sub>2e</sub>;</p> <p>LE<sub>y</sub> is the leakage emissions for the project activity during the year y in tCO<sub>2e</sub>.</p> <p>As explained in section E.8.1 above, the resulted Baseline emissions (BE<sub>y</sub>) for the monitoring period is 44,025 tCO<sub>2</sub>. Similarly as explained in section E.8.2 and section E.8.3 project emission is zero for the monitoring period and leakage emissions are accounted to be 2,202 tCO<sub>2</sub> for the monitoring period. Hence, resulted emission reduction for the monitoring period is 41,823 tCO<sub>2</sub> (rounddown value).</p>
<b>Findings</b>	N/A
<b>Conclusion</b>	The data presented in the monitoring report /01/ and emission reduction worksheet /03/ were assessed by reviewing in detail project documentation, collection of monitored data, observation of established monitoring and reporting practices and assessment of the reliability of monitoring equipment. Sufficient evidences were presented and verified by CC IPL for the reported emission reductions as listed above.

**E.8.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD**

<b>Means of verification</b>	The emission reductions from the project for the monitoring period as reported in the monitoring report revision 2.2 of 14/09/2021 /01/ is equivalent to 41,823 tCO <sub>2e</sub> . The reported emission reductions are 14% lower than the estimated emission reduction of 48,551 tCO <sub>2e</sub> for the period as per the registered PDD /03/.
<b>Findings</b>	N/A
<b>Conclusion</b>	The emission reduction calculations provided in the spreadsheet /03/ have been verified to be correct and in line with the registered PDD /02/.

**E.8.6. Remarks on difference from estimated value in registered PDD**

<b>Means of verification</b>	Cross checking calculation and monitored results and comparing the achieved
------------------------------	---

	emissions with estimated ex-ante.
<b>Findings</b>	N/A
<b>Conclusion</b>	Since, there are still some firewood consumption by project bio-digester users, the same is accounted as leakage emissions as per the applied methodology. Hence, achieved emission reduction is 14% less

#### E.8.7. Actual GHG emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

<b>Means of verification</b>	GHG emission reductions or net GHG removals by sinks reported up to 31 December 2012	GHG emission reductions or net GHG removals by sinks reported from 1 January 2013 onwards
	NA	41,823 tCO <sub>2e</sub>
	Year-wise break-up of emission reductions:	
	Year	Emission Reductions (tCO <sub>2e</sub> )
	09/05/2020 to 31/12/2020	27,156 tCO <sub>2e</sub>
<b>Findings</b>	01/01/2021 to 08/05/2021	14,667 tCO <sub>2e</sub>
	N/A	
<b>Conclusion</b>	The emission reduction calculations provided in the spreadsheet /03/ have been verified to be correct and in line with the registered PDD /02/, also the values are consistently reported in the MR for this monitoring period.	

#### E.9. Assessment of reported sustainable development co-benefits

<b>Means of verification</b>	<b>Data variable</b>	<b>Source of Data</b>	<b>Reported value for the project period</b>
	Air Quality	Results of ambient air quality measurements as detailed in the third party survey report /12/	100% positively responded for improved air quality. 95% positively responded for improved health from diseases related to smoke.
	<b>Assessment</b>		
	Third party survey was conducted by Gramodyog Sansthan /12/ to check whether biogas plants were working and proper functioning of biodigester will confirm the air quality is improved compared to baseline situation. Survey confirmed 100% sampled bidigesters were functioning during the monitoring period. Further, 100% end users confirmed positively benefited from air quality improvement and 95% positively responded for improved health from diseases related to smoke. In addition, VVB's sample record also showed all plants are functional which implies that all plants are functional during the monitoring period. Hence, it is confirmed that air quality is improved compared to baseline situation.		
	<b>Data variable</b>	<b>Source of Data</b>	<b>Reported value for the project period</b>
	Livelihood of the poor	Third party survey report /12/	Effective utilization of cow dung by all 12,390 users of bio-digesters. 100% users positively responded for improved livelihood.
	<b>Assessment</b>		
	Cattle dung is primarily fed in biodigestors, hence reduction in open decay of cattle dung. Confirmed from third party survey report and consistent with site visit observations. In addition 100% end users positively confirmed improvement in		

	livelihood due to implementation of the project activity.		
	Data variable	Source of Data	Reported value for the project period
	Access to clean and affordable energy	Third party survey report /12/	All 12,390 biogas plants are working
	<b>Assessment</b>		
	Biogas plant owners are not utilizing firewood to suffice their entire thermal needs. The minimum firewood as used has been accounted as leakage in emission reduction calculation. The third party survey confirms functioning of all surveyed biogas plants and also all sample plants considered during off-site interview were found functioning. Hence the project activity is contributing to overall positive impact to the access of clean and affordable energy.		
	Data variable	Source of Data	Reported value for the project period
	Quantitative employment and income generation	Salary vouchers /16/ issued to the project employees and AKKPS employee database /17/	20 persons have been employed and retained in different category (skilled/unskilled/temporary) by AKKPS for the project activity.
	<b>Assessment</b>		
	Salary vouchers issued to the project employees /16/ and AKKPS employee list /17/ confirms employment generation by the project activity. Also, AKKPS has engaged site supervisors which is shown in the plant database list. Site supervisors along with supporting technicians are engaged for any operation and maintenance of bio-digesters under their jurisdiction. The records of employment by AKKPS, site supervisors, technicians and survey work order etc. reveals quantitative employment and income generation from the project activity. It is also noted that on an average employees are paid INR 11,000/- per month which is above the minimum wages determined for the state.		
	<b>Continuous grievance/input mechanism:</b> As part of continuous grievance/input mechanism it is noted that PP has provided details of responsible person to contact at each site (site supervisors) and register to record any input. The same is confirmed during off-site interview with end users and they found aware of the mechanism. The verification team checked the records and found that only minor issues related to biogas performance recorded from users which were resolved proactively. Therefore, the continuous grievance/input mechanism found to be effective.		
<b>Findings</b>	N/A		
<b>Conclusion</b>	CC IPL confirms that monitoring of all the sustainable development monitoring parameters during this monitoring period is in line with registered PDD and GS4GG transition annex and are consistent with off-site assessment and the previous verification report /01/, /07/, /14/.		

#### E.10. Global stakeholder consultation

<b>Means of verification</b>	Not Applicable
<b>Findings</b>	Not Applicable.
<b>Conclusion</b>	Not Applicable.

#### SECTION F. Internal quality control

>> The final verification report passed a technical review before being submitted to the client for forward submission to GS. A technical reviewer qualified in accordance with CC IPL's qualification scheme for CDM validation and verification performed the technical review.

## SECTION G. Verification opinion

>> Carbon Check (India) Private Ltd. (CC IPL) has performed the 8<sup>th</sup> verification of the GS Project Activity "Household Biogas plants installed in rural areas of Maharashtra" in India having GS reference number GS 2519.

The verification team assigned by the VVB concludes that the project activity as described in the registered PDD (version 03; dated 19/05/2014) /02/ and the monitoring report (version 2.2 dated 14/09/2021) /01/, meets all relevant GS4GG requirements for project activity and UNFCCC requirements. The verification has been conducted in-line with the GS4GG requirements and requirements of VVS for CDM project activities (version 02.0) /09/.

### Verification methodology and process:

The verification team confirms the contractual relationship signed on 14/05/2021 between the VVB, Carbon Check (India) Private Ltd. and Project Participants (Value Network Venture Advisory Services Pte. Ltd.). The team assigned to the verification meets the CC IPL's internal procedures including the UNFCCC requirements for the team composition and competence. The verification team has conducted thorough review as per GS4GG, UNFCCC and CC IPL's procedures and requirements.

The verification has been performed as per the requirements described in the GS4GG requirements /05/ and constitutes the review and completion of the following steps:

- Reviewing the registered PDD (version 03; dated 19/05/2014) /02/;
- Receipt of the MR (version 1.0 dated 20/05/2021 and later versions) /01/;
- Desk review of the MR /01/ and other relevant documents;
- Review of the applied monitoring methodology (AMS-I.E, version 04) /04/;
- Review of any CMP and EB decisions, clarifications and guidance;
- Off-site assessment (18/06/2021 to 19/06/2021);
- Resolution of CARs and CLs raised during verification;
- Issuance of Verification Report

The project activity was correctly implemented according to the selected monitoring methodology and registered PDD /02/. Through document review and off-site visit assessment, the verification team confirms that the project activity has resulted in 41,823 tCO<sub>2</sub>e emission reductions during this eight monitoring period.

The break-up of emission reduction up to 09/05/2020 and 08/05/2021 onwards as verified during the course of verification are as below:

Vintage	Emission reductions (tCO <sub>2</sub> e)
09/05/2020 to 31/12/2020	27,156
01/01/2021 to 08/05/2021	14,667

CC IPL therefore pleased to issue a positive verification opinion expressed in the attached Certification statement.

## SECTION H. Certification statement

>> It is CC IPL's opinion that the GHG emission reductions stated in the monitoring report, version 2.2 dated 14/09/2021 for project activity, "Household Biogas plants installed in rural areas of Maharashtra" for period 09/05/2020 to 08/05/2021 (Inclusive of both the dates) are fairly stated. The GHG emission reductions were calculated correctly based on the approved monitoring methodology, AMS-I.E, version 05. Hence, CC IPL able to certify that the emission reductions from the project during the monitoring period 09/05/2020 to 08/05/2021 (Inclusive of both the dates) amount to 41,823 tCO<sub>2</sub>e.

## Appendix 1. Abbreviations

Abbreviations	Full texts
<b>AKKPS</b>	Aadivasi Khadi Avom Krishi Parishchan Sansthan
<b>CDM</b>	Clean Development Mechanism
<b>CEE</b>	Central Environmental Authority
<b>CAR</b>	Corrective Action Request
<b>CC IPL</b>	Carbon Check (India) Private Ltd.
<b>CL</b>	Clarification Request
<b>CO<sub>2</sub></b>	Carbon Dioxide
<b>CO<sub>2</sub>e</b>	Carbon Dioxide Equivalent
<b>DR</b>	Document review
<b>VVB</b>	Designated Operational Entities
<b>DVR</b>	Draft Validation Report
<b>EB</b>	CDM Executive Board
<b>EF</b>	Emission Factor
<b>EI</b>	External individual
<b>ER</b>	Emission Reduction
<b>FA</b>	Final Approval
<b>FAR</b>	Forward Action Request
<b>FVR</b>	Final validation Report
<b>FSR</b>	Feasibility Study Report
<b>GHG</b>	Greenhouse gas(es)
<b>GSF</b>	Gold standard Foundation
<b>GS4GG</b>	Gold standard for Global Goals
<b>I</b>	Interview
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>IR</b>	Internal resource
<b>MH</b>	Maharashtra
<b>MW</b>	Mega Watt
<b>MWh</b>	Mega Watt hours
<b>PDD</b>	Project Design Document
<b>PP</b>	Project Participant
<b>OSV</b>	On Site Visit
<b>QC/QA</b>	Quality control /Quality assurance
<b>SS</b>	Sectoral Scope
<b>TA</b>	Technical Area
<b>TR</b>	Technical Review
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>VER</b>	Verified Emission Reduction
<b>VVB</b>	Validation and Verification Body
<b>VVS</b>	Validation and Verification Standard

## Appendix 2. Competence of team members and technical reviewers



### Carbon Check (India) Private Ltd.

#### Amit Anand

has been qualified as per CCIPL's internal qualification procedures, in accordance with requirements of Accreditation Standard (version 07.0):

For following functions:

Validator	<input checked="" type="checkbox"/>	Team Leader	<input checked="" type="checkbox"/>	Technical reviewer	<input checked="" type="checkbox"/>
Verifier	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>	Local Assessor <sup>1</sup>	<input checked="" type="checkbox"/>

In the following Technical Areas:

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

Mr. Vikash Kumar Singh  
Compliance Officer

Date of Approval  
24/12/2020

Valid Till  
24/12/2021

#### Revision History of the Document

26/12/2014	Initial Adoption
24/12/2015	Annual Revision
20/01/2016	Interim Revision for office address change
23/12/2017	Annual Revision
24/12/2017	Annual Revision
24/12/2018	Annual Revision
24/12/2019	Annual Revision
01/03/2020	Interim Revision for office address change
01/09/2020	Interim Revision for CCIPL logo change
24/12/2020	Annual Revision

<sup>1</sup> India and South Africa

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## Carbon Check (India) Private Ltd.

### Sanjay Agarwalla

has been qualified as per CCIPL's internal qualification procedures, in accordance with requirements of Accreditation Standard (version 07.0):

For following functions:

Validator	<input checked="" type="checkbox"/>	Team Leader	<input checked="" type="checkbox"/>	Technical reviewer	<input checked="" type="checkbox"/>
Verifier	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>	Local Assessor <sup>1</sup>	<input checked="" type="checkbox"/>

In the following Technical Areas:

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

Mr. Vikash Kumar Singh  
Compliance Officer

Mr. Amit Anand  
CEO

Date of Approval  
24/12/2020

Valid Till  
24/12/2021

#### Revision History of the Document

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24/12/2017	Annual Revision
24/12/2018	Annual Revision
24/12/2019	Annual Revision
01/03/2020	Interim Revision for office address change
01/09/2020	Interim Revision for CCIPL logo change
24/12/2020	Annual Revision

<sup>1</sup> India

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### Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	VNV Advisory Services	Monitoring report for the project activity 'Household Biogas plants installed in rural areas of Maharashtra' covering period 09/05/2020 to 08/05/2021	Version 01 of 20/05/2021, version 2.0 of 01/06/2021, version 2.1 of 26/08/2021, version 2.214/09/2021	PP
2	VNV Advisory Services	a) Registered PDD for the project activity 'Household Biogas plants installed in rural areas of Maharashtra' b) Transition review feedback	Version 03 of 19/05/2014  Feedback dated 01/08/2018	PP
3	VNV Advisory Services	Emission reduction worksheet 'GS VER_2519_v1_MP8'	Version 01 of 20/05/2021, version 2.0 of 01/06/2021	PP
4	UNFCCC	Small-scale Methodology AMS-I.E 'Switch from non-renewable biomass for thermal applications by the user'	Version 05	Publicly available
5	Gold Standard	Gold Standard for the Global Goals Principles & Requirements	Version 1.2 of 23/10/2019	Publicly available
6	Gold Standard	Gold Standard for the Global Goals CS Activity Requirements	Version 1.1 of March 2018	Publicly available
7	DNV	Validation report "Household Biogas plants installed in rural areas of Maharashtra" in India	Revision 02 of 22/05/2014	PP
8	GS	Performance review covering monitoring period 09/05/2019 to 08/05/2020 for the project GS 2519		PP
9	UNFCCC	CDM validation and verification standard	Version 02	Publicly available
10	UNFCCC	Guidelines for Sampling and Surveys for CDM Project activities and Programme of Activities	Ver. 4.0 (EB86, Annex 4)	Publicly available
11	UNFCCC	Standard for Sampling and surveys for CDM project activities and programmes of activities	Version 09	Publicly available
12	Gramodyog Sansthan	Biogas Usage Survey Report in selected districts of Maharashtra	March 2021	PP
13	UNFCCC	Guideline: Application of materiality in verifications	Version 2 of 20/02/2015	Publicly available
14	Carbon Check	Verification report for the project 'Household Biogas plants installed in rural areas of Maharashtra' covering monitoring period from 09/05/2019 to 08/05/2020	Version 2.1 of 19/10/2020	PP
15	Gold Standard	COVID-19: Interim Measures	Dated 18/12/2020 valid until 30/06/2021	Publicly available
16	AKKPS	Salary vouchers issued to the project employees during the period May 2020 to April 2021	Salary receipts	PP
17	AKKPS	Employee list for the year 2020-2021	Employee list	PP



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

**Table 1. Remaining FAR from validation and/or previous verifications**

<b>FAR ID</b>	01	<b>Section no.</b>		<b>Date:</b> 27/05/2021
<b>Description of FAR</b>				
Over the next monitoring periods, PD shall use a random sample generator or excel function to ensure the objective randomness of samples selected for monitoring surveys.				
<b>Project participant response</b>				<b>Date:</b> 01/06/2021
The same has been taken into account while selecting random samples. As explained in section D.4 of the MR, households are selected randomly using random sample number generator ( <a href="https://stattrek.com/statistics/random-number-generator.aspx">https://stattrek.com/statistics/random-number-generator.aspx</a> ).				
<b>Documentation provided by project participant</b>				
<i>Updated MR</i>				
<b>VVB assessment</b>				<b>Date:</b> 22/06/2021
VVB confirms that PD has used a random sample generator and accordingly required samples are selected. The details are provided in the MR and survey report which are found consistent. Hence, the FAR has been appropriately taken into consideration.				

**Table 2. CL from this verification**

<b>CL ID</b>	01	<b>Section no.</b>	E.5	<b>Date:</b> 27/05/2021
<b>Description of CL</b>				
<ol style="list-style-type: none"> <li>1. Kindly clarify with evidence if there is any VER delivery commitment linked to the verification activity?</li> <li>2. Kindly provide third party survey report and its supporting documents.</li> <li>3. Kindly provide sample maintenance records applicable for the monitoring period and grievance register copy.</li> <li>4. Kindly provide employment records applicable for the monitoring period.</li> </ol>				
<b>Project participant response</b>				<b>Date:</b> 01/06/2021
<ol style="list-style-type: none"> <li>1. Yes, PP has ERPA to deliver VER from the project by October 2021.</li> <li>2. Third party survey report is now submitted.</li> <li>3. Maintenance records and grievance register copy is submitted in sample basis</li> <li>4. Employees as per previous year are retained during this MP as well. Records for the same is submitted now.</li> </ol>				
<b>Documentation provided by project participant</b>				
<i>Records as per above comment</i>				
<b>VVB assessment</b>				<b>Date:</b> 22/06/2021
VVB notes PP's delivery commitment from the ERPA executed and hence did not postpone the site visit. The survey report, periodic maintenance records and employment records confirm PP's claim for the monitoring period to be correct. Hence, CL is closed.				

**Table 3. CAR from this verification**

<b>CAR ID</b>	01	<b>Section no.</b>	E.3	<b>Date:</b> 27/05/2021
<b>Description of CAR</b>				
<ol style="list-style-type: none"> <li>1. Under table 1 of the MR, under SDG 3 achieved value is reported as '100% responded positively'. PP is requested to clarify whether the result is for all three parameters of the SDG?</li> <li>2. Section F of the MR needs explanation on safeguarding reporting during the monitoring period in consistent with the registered GS passport/transition annex.</li> </ol>				
<b>Project participant response</b>				<b>Date:</b> 01/06/2021
<ol style="list-style-type: none"> <li>1. Table 1 of the MR is updated with more clarity on monitoring SDGs</li> <li>2. Section F of the MR is further elaborated.</li> </ol>				
<b>Documentation provided by project participant</b>				
<i>Updated MR</i>				

<b>VVB assessment</b>	<b>Date:</b> 22/06/2021
PP has done necessary corrections in the updated MR and hence CAR is closed.	

<b>CAR ID</b>	02	<b>Section no.</b>	E.6.2	<b>Date:</b> 27/05/2021
<b>Description of CAR</b>				
1. The random sample identification details are not provided in the MR. Sample list and results are not provided in the ER sheet. 2. The monitoring report does not specify whether desired confidence/precision has been achieved from the sampling considered by PP in survey 3. Vintage wise emission reductions achieved during the monitoring period is not provided in the ER sheet				
<b>Project participant response</b>				<b>Date:</b> 01/06/2021
1. <i>The random sample identification details are provided in the Survey report which has been submitted. MR is also elaborated in brief.</i> 2. <i>The updated monitoring report states the achieved precision from sample results which is within 10%.</i> 3. <i>Vintage wise emission reductions are now provided.</i>				
<b>Documentation provided by project participant</b>				
<i>Updated MR and ER sheet.</i>				
<b>VVB assessment</b>				<b>Date:</b> 22/06/2021
The samples are selected randomly using statistical online software and accordingly the samples are selected. Details are cross checked and found to be correct. The achieved precision found to be within 10% and hence sampling meets the 90/10 confidence precision. Vintage wise emission reductions are provided correctly in MR and ER sheet. Hence, CAR is closed.				

Table 4. FAR from this verification

<b>FAR ID</b>		<b>Section No.</b>		<b>Date:</b> DD/MM/YYYY
<b>Description of FAR</b>				
<i>No FAR raised</i>				
<b>Project participant response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by project participant</b>				
<b>VVB assessment</b>				<b>Date:</b> DD/MM/YYYY

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**Document information**

<i>Version</i>	<i>Date</i>	<i>Description</i>
03.0	31 May 2019	Revision to: <ul style="list-style-type: none"><li>• Ensure consistency with version 02.0 of the “CDM validation and verification standard for project activities” (CDM-EB93-A05-STAN);</li><li>• Make structural and editorial improvements.</li></ul>
02.1	11 January 2018	Editorial revision to correct the numbering of appendices in the instructions.
02.0	31 October 2017	Revision to align with the requirements of the “CDM validation and verification standard for project activities” (version 01.0).
01.0	23 March 2015	Initial publication.

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