

PROJECT REVIEW REPORT

This project review report includes findings raised during Verra’s review of the project specified below. The VVB must address the findings before the project request can be considered for approval by Verra. The project review report will be made publicly available on the Verra Registry. Confidential information may be provided in separate attachments.

Project ID	2922
Project Name	IMPROVED COOKSTOVES FOR COMMUNITIES
Review Type	Registration and Issuance
Program(s)	VCS Program
Verification Period	20 November 2021 to 31 December 2022
Project Proponent	Outreach Projects Pvt. Ltd.
Methodology	VMR0006.: Methodology for Installation of High Efficiency Firewood Cookstoves” (Version 1.1)
VVB	LGAI Technological Center, S.A. (Applus+ Certification)
Assessment Criteria	VCS Standard, v4.4
Date of First Issue	06 September 2023
Review Conclusion	Approved
Date of Final Issue	09 January 2024

FINDINGSs

1 Lack of assessment and clarity on determination of f_{NRB}		
<p><u>Issue</u></p> <ol style="list-style-type: none"> The information regarding how f_{NRB} has been calculated in line with Tool 30 is missing in section 5.4 of Joint Project Description and Monitoring Report (Joint PD-MR). Methodological CDM Tool 30 version 4 has been applied to calculate an ex-ante parameter f_{NRB}. However, some data source in the f_{NRB} calculation sheet is not accessible (e.g. “Table - 10.3, India State of Forest Report, 2019” in cell F118 of the f_{NRB} sheet) and the VVB does not provide information on how it has validated the compliance of the f_{NRB} calculation with the methodological CDM Tool 30. Further, Tool 30 version 4 requires a comparison of the f_{NRB} achieved with those from other literature. It is not clear how this comparison has been made in line with para. 6(b) of Tool 30 version 4. <p><u>Action Required</u></p> <ol style="list-style-type: none"> The VVB must ensure the PP includes details of how the f_{NRB} was calculated and how it complies with the provisions of TOOL30 in section 5.4 of Joint PD-MR. The VVB must clarify how it has validated the compliance of the calculated $f_{NRB,y}$ with the methodological CDM Tool 30. The VVB must ensure to provide the comparison on the values achieved and those reported. The VVB must ensure to provide an assessment on the influence the factors mentioned could have in the value achieved of Fraction of non-renewable biomass. The VVB must ensure to provide further analysis with other relevant scientific literature. 	<p>Round 1</p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> PP had included the calculation of the parameter f_{NRB} in the section 5.4 of the updated Joint PD&MR. The method used to calculate f_{NRB} is as per the steps provided in the latest version of the tool 30. The different parameters used for determining the values of f_{NRB} has been cross verified from the data sources. For most of the parameters latest available data of Forest Survey of India (year 2021 and 2019) has been employed. For determining the mean annual increment parameter, the IPCC default for the major tree species has been used. And for determining the value of number of household consuming fuelwood, latest report of National Family Health Survey for India has been used. All the documents/reports (from where the values are referred) are made available by the PP to VVB as the official website of Forest Survey of India is not working form last few weeks. In comparison of the derived value and the reported value, the derived value is much higher to that of reported, but there are lot of uncertainty in the model for determination of the f_{NRB} value followed by the literature. Details are provided in the section 3.4.6 of the assessment report. Therefore, VVB finds the derived value to be appropriate as it has been determined by all the steps mentioned in the Tool 30 version 04.0. The factors significantly influencing the value of f_{NRB} in our project area include the heavy reliance of the local population on forest resources for their daily energy 	<p>Closed</p>

<p><u>Program Rule(s)</u> Methodological CDM Tool 30 version 4; Section 6.1 of VCS Joint PD&MR Template, v4.2; Section 3.16 of VCS Standard v4.4.</p>	<p>needs, particularly for cooking and heating. Approximately 65% of the project area’s population, primarily residing in rural areas, still depends on traditional biomass cookstoves fueled by wood harvested directly from the nearby forests. In fact, according to National Family Health Survey – 5 an estimated 57% of the population relies on traditional woodfuel-based cookstoves.</p> <p>This high dependence on forest resources for energy, coupled with the substantial woodfuel consumption in the region, has a high impact on the f_{NRB} value. The statistics clearly indicate a significant demand for woodfuel sourced from the local forests, which, in turn, substantiates the reported value provided by the PP. The reported value aligns with the observed high woodfuel consumption in the area and, thus, appears appropriate in light of these influencing factors.</p> <p>5. The VVB conducted a detailed analysis of the project’s f_{NRB} value. Despite limited available literature on this parameter, we cross-referenced with registered projects (VCS-2607, VCS-2533, GS PoA-11498, GS PoA-11474) and found that the project’s reported f_{NRB} value closely aligns with those of established projects. This alignment underscores the accuracy and credibility of the project’s f_{NRB} estimation, in line with industry standards.</p>	
	<p><u>Verra Response</u> The f_{NRB} calculation details have now been provided in line with the tool. This finding is closed.</p>	

2	Compliance of the monitoring plan with the applicable methodology		
	<p><u>Issue</u> 1. Parameter η_{old} (i.e Efficiency of baseline cookstove) is listed</p>	<p>Round 1 <u>VVB Response</u></p>	Closed

<p>as ex-ante parameters. However, the applied methodology requires monitoring this parameter.</p> <p><u>Action Required</u></p> <ol style="list-style-type: none"> 1. The VVB must ensure that the monitoring plan of the project activity includes all monitoring parameter required by the applied methodology; 2. The VVB must clarify how it has validated the compliance of the monitoring plan with the VRM0006 version 1.1, in particular parameter η_{old} (i.e Efficiency of baseline cookstove) and how it has verified the efficiency of baseline cookstoves displaced by the first batch of ICS (i.e. Batch-1) during this monitoring period. <p><u>Program Rule(s)</u></p> <p>Page 19 and 20 of VRM0006 version 1.1; Section 6.2 of VCS Joint PD&MR Template, v4.2 Section 3.16 of VCS Standard v4.4.</p>	<ol style="list-style-type: none"> 1. The parameter η_{old}, representing the efficiency of the baseline cookstove, has been incorporated into Section 6.2, 'Data and Parameters Monitored.' VVB thoroughly verified the Joint PD&MR to ensure its alignment with the applied methodology VMR0006, version 1.1. Consequently, Section 6.2 has been appropriately updated to reflect this inclusion. 2. As per section 9.2 of the applied methodology, "A default value of 0.1 shall be used if baseline device is three-stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or fuel gas ventilation, a grate or a chimney". <p>The value of η_{old} i.e. efficiency of baseline stove has been taken as default value as per applied methodology VMR0006 version 1.1, which is 10%, because the beneficiaries were using three stone cookstove without improved combustion air supply or fuel gas ventilation, a grate or a chimney while using firewood as a fuel source. Furthermore, during the field visit conducted by the VVB and interviews with the beneficiaries, it was confirmed that they were indeed using traditional three-stone cookstoves and traditional mud cookstoves.</p> <p><u>Verra Response</u></p> <p>The parameter has now been added in monitored parameters. This finding is closed.</p>	
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3	Compliance of monitoring parameter with the applicable methodology		
	<p><u>Issue</u></p> <ol style="list-style-type: none"> 1. The value of monitoring parameter $B_{y=1,new,i,j,survey}$ is 	<p>Round 1</p> <p><u>VVB Response</u></p>	Closed

<p>determined as 1.095 tonnes/device/year (i.e. 3kg/household/day * 365 /1000, derived from an household value of 3kg/household/day), based on survey results. However, it is not clear: (a) how the value at device level is derived from a surveyed value at household level, considering multiple devices may be allocated to a single household; (b) whether the survey has been conducted at device level or at household level, considering the survey question (i.e. “Wood usage in Improved Cookstove /household” in cell L2 of the Sample sheet) is not clear; (c) whether the sampling/survey requirement of the applied methodology have been met, in particular how the surveys have been conducted (i.e. either solely based on questionnaires/interviews or involving measurement campaigns) and its applicability for the project activity, as required by page 17 of VMR0006 version 1.1.</p> <p><u>Action Required</u></p> <ol style="list-style-type: none"> 1. The VVB must ensure that the PP has monitored and determined the parameter $B_{y=1,new,i,j,survey}$ in accordance with sampling/survey requirements of the applied methodology, in doing so the actual survey question and survey method (i.e. measurement campaigns at representative households or sample survey) must be clarified as well as how the value of $B_{y=1,new,i,j,survey}$ is derived from the survey raw data; In addition, whether multiple ICSs have been distributed to single household(s) must be clarified. 2. The VVB must ensure that the PP has provided the sampling details in section 5.4 of the Joint PD-MR. 3. The VVB must clarify how it has validated and verified the compliance of the conducted sampling/survey on parameter $B_{y=1,new,i,j,survey}$ with VMR0006 version 1.1, in particular how the surveys have been conducted and how the value of $B_{y=1,new,i,j,survey}$ is derived. 	<ol style="list-style-type: none"> 1. PP has monitored the parameter $B_{y=1,new,i,j,survey}$ according to the sampling/survey requirements of the applied methodology VMR0006 version 1.1. PP had calculated the minimum number of samples for the survey using the CDM Standards for sampling and survey’s version 09.0. PP had sampled 400 cookstoves in under the project monitoring. Since, the distribution of the cookstoves happened in a batch wise mode, therefore, PP had conducted the survey for parameter $B_{y=1,new,i,j,survey}$ twice i.e. for cookstoves distributed in month of November and December-2021, the monitoring for the parameter was conducted between 07 to 22nd February 2022; and for the cookstove distributed in month of January and February 2022, the monitoring of parameter was conducted between 10-20th April 2022. PP had asked the beneficiaries for bringing the amount of wood required in the cookstove per day and then weighted the amount. As per the user agreements and the interviewing the beneficiaries during the field visits, VVB has cross verified that only one cookstove has been given per household. 2. Section 5.4 of Joint PD-MR has been updated with the sampling details. Kindly refer to updated Joint PD-MR. and further the description of the sampling has been described under the section 6.3 of the Joint PD-MR. 3. PP has conducted the monitoring surveys to obtain the value for the parameter $B_{y=1,new,i,j,survey}$. To verify the same assessment team has conducted the acceptance sampling. While conducting the site visit of the 8 samples selected by the assessment team from the already surveyed household by the PP, assessment team conducted the interviews to verify the amount of the wood consumed on a daily basis. Further assessment team also weighed the wood used by the 	
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	<p><u>Program Rule(s)</u> Page 17 of VRM0006 version 1.1; Section 6.2 of VCS Joint PD&MR Template, v4.2; Section 3.16 of VCS Standard v4.4.</p>	<p>end users for a day to crosscheck the monitored value and found the data to be consistent. Hence accepted</p>	
		<p><u>Verra Response</u> The survey details have been provided. This finding is closed.</p>	

4 Further information on applicability condition			
	<p><u>Issue</u> In order to confirm the applicability criteria 3 of VMR0006, v.1.1, Section 3.2 of Joint PD-MR refers to a FSI report dated 1987. However, it is not clear how it has been demonstrated that non-renewable biomass has been in use since 31 December 1989, up until the proposed project start date.</p> <p><u>Action item</u></p> <ol style="list-style-type: none"> 1. The VVB must ensure that the project proponent describes in detail how they demonstrate that non-renewable biomass has been used in the project region since 31 December 1989 until present. 2. The VVB must validate this information and update the Joint Validation and Verification report (JVVR) as needed. <p><u>Program Rule(s)</u> VMR0006, v.1.1, applicability criteria 3 Section 3.2 of VCS Joint PD&MR Template, v4.2</p>	<p>Round 1</p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> 1. The majority of the population in region belongs to the rural community, who are predominantly dependent on the forest for their livelihood. Firewood has been their primary source of daily fuel for cooking purposes. PP has used the published national data and other studies and also have evaluated the use of firewood during the baseline survey in the region. The detail explanation of firewood usage since 1989 is been included in the justification for the applicability criteria 3 of the applied methodology VMR0006 version 1.1. 2. During the site visit, the beneficiaries were also questioned about on the history of their usage of firewood. Their responses indicated a consistent pattern of using firewood in traditional cookstoves for more than 40 years. Some beneficiaries reported that they had been using firewood since their youth, while others stated that the practice had been ongoing since before their childhood. 	Closed
		<p><u>Verra Response</u> VVB has confirmed the applicability condition. This finding is closed,</p>	

5 Information missing regarding monitoring survey		
<p>Issue</p> <p>Following information is missing in Joint PD-MR:</p> <ol style="list-style-type: none"> The dates when monitoring survey for the current monitoring period was conducted. The details including sampling plan, sample size for the current monitoring period. <p>Action item</p> <ol style="list-style-type: none"> The VVB must ensure that the project proponent provide information regarding monitoring survey for the current monitoring period. The VVB must validate this information and update the JVVR as needed. <p><u>Program Rule(s)</u></p> <p>VCS Joint PD&MR Template, v4.2</p>	<p>Round 1</p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> Project Proponent had conducted the monitoring survey for current monitoring in two phases. For the parameter $B_{y=1,new,i,j,survey}$ the monitoring survey was conducted in the month of February and April, and for rest other parameters i.e. $N_{y,i,j}$, η_{new}, η_{old}, the monitoring was carried out between January 10th and January 25th, 2023. The details of the monitoring period and procedure has been mentioned in the section 6.3 of the updated PDMR. VVB also cross verified this information during the site visit and interviewing the beneficiaries. Section 2.1 of the JVVR has been updated. 	Closed
	<p><u>Verra Response</u></p> <p>The monitoring survey details have been provided. This finding is closed.</p>	
6 Inconsistencies in Joint PD-MR		
<p>Issue</p> <p>In section 7.1 of Joint PD-MR, η_p is referred as “Efficiency of baseline stove” whereas it is referred as “The efficiency of the project stove at the start of project activity” in section 6.1 of Joint PD-MR. Further, the parameter is listed in section 6.1 of Joint PD-MR instead of section 6.2.</p> <p>Action item</p> <ol style="list-style-type: none"> The VVB must ensure that the project proponent provides consistent and correct description of parameters. 	<p>Round 1</p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> The parameter has been updated in the section 7.1 and all the parameters has been made consistent with correct descriptions. Relevant section of JVVR has been updated. 	Closed

	<p>2. The VVB must validate this information and update the JVVR as needed.</p> <p><u>Program Rule(s)</u> Section 6.2 and 7.1 of VCS Joint PD&MR Template, v4.2</p>	<p><u>Verra Response</u></p> <p>The corrections have been made. This finding is closed.</p>	
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7	Information regarding additionality		
	<p><u>Issue</u></p> <ol style="list-style-type: none"> In section 3.5 of Joint PD-MR, information is missing regarding parameters used to conduct investment analysis. It is not clear how VVB has assessed the additionality for the grouped project including validation of parameters and values used in investment analysis and the information given in section 3.4.5 of JVVR is duplication of information provided in Joint PD-MR. <p><u>Action item</u></p> <ol style="list-style-type: none"> The VVB must ensure that the project proponent provides complete information regarding all the parameters and values used in investment analysis. The VVB must validate this information and update the JVVR as needed. <p><u>Program Rule(s)</u> Section 6.2 and 7.1 of VCS Joint PD&MR Template, v4.2</p>	<p>Round 1</p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> The section 3.5 'Additionality' has been updated. Since, the project proponent has not distributed the cookstoves for free, therefore PP has used the Project method and showcased investment analysis option for the justification of the additionality of the project. PP have included all the parameters and values required for the analysis. Kindly refer to the section 3.5 'Additionality' in the updated Joint PD-MR. Section 3.4.5 of the JVVR has been updated accordingly <p><u>Verra Response</u></p> <p>The additionality demonstration has been clarified and required investment analysis has been provided. This finding is closed.</p>	<p>Closed</p>