

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	3072
Project Name	Rwanda Riparian Restoration Project
Review Type	Registration
Program(s)	VCS Program
Project Proponent	EcoPlanet Bamboo Group, LLC
Methodology	AR-ACM0003 A/R Large-scale Consolidated Methodology: Afforestation and reforestation of lands except wetlands Version 02.0
VVB	TÜV NORD CERT GmbH
Assessment Criteria	VCS Standard, v4.3
Date of First Issue	19 April 2023
Date of Second Issue	22 December 2023
Review Conclusion	Approved
Date of Final Issue	27 December 2023

FINDINGS

#	Finding Description	VVB Response	Status
1	The summary does not provide a description of the scenario existing prior to the implementation of the project		
	<p><u>Issue</u> Section 1.1 of the project description (PD) does not include a description of the scenario existing before project's implementation. Although it is mentioned that the project areas correspond to riparian buffer zones, the pre-project land use is unclear.</p> <p><u>Action Required</u> The VVB must ensure that Section 1.1 of the PD is updated to provide a brief description of the scenario existing prior to the implementation of the project. Further, the VVB must ensure that the updates are consistent with other sections of the PD (e.g., 1.13, 3.4).</p> <p><u>Program Rule(s)</u> VCS Project Description Template, v4.1, Section 1.1</p>	<p>Round 1</p> <p><u>VVB Response</u> Section 1.1 has been updated with a brief description of the pre-project land use. This description is consistent with that found in Section 1.13 and 3.4. ✓</p> <p><u>Verra Response</u> The scenario existing before the project's implementation has been updated in Section 1.1 of the PD.</p>	Closed
2	Inconsistency in the estimated annual average and total GHG ERR between PD and VR		
	<p><u>Issue</u> The estimated annual average and total GHG emission reductions and removals (ERR) are not consistent between Section 1.1 of the PD and Section 3.1.7 of the Validation Report (VR).</p> <p><u>Action Required</u> The VVB must ensure that the estimated annual average and total GHG ERR are consistent in PD and VR.</p> <p><u>Program Rule(s)</u></p>	<p>Round 1</p> <p><u>VVB Response</u> The values have been adapted and are now consistent in the PD^{/01/}, ER Calculations spreadsheet^{/03/} and Validation Report. ✓</p> <p><u>Verra Response</u> The estimated annual average and total GHG emission reductions and removals (ERR) are consistent between Section 1.1 of the PD and Section 3.1.7 of the VR.</p>	Closed

	<p>VCS Project Description Template, v4.1, Section 1.1 VCS Validation Report Template, v4.1, Section 3.1.7</p>		
--	--	--	--

3	Insufficient description of roles and responsibilities of other entities involved in the project		
----------	---	--	--

	<p><u>Issue</u></p> <p>Section 1.6 of the PD has insufficient description of roles and responsibilities of other entities involved in the project.</p> <p><u>Action Required</u></p> <p>The VVB must ensure that Section 1.6 of the PD is updated to expand the roles and responsibilities of EcoPlanet Bamboo Rwanda, Ltd, including but not limited to, implementation, management and monitoring of the project, and the interaction with Rwanda Water Board. If Rwanda Water Board plays a role in the implementation or management of the project or project areas, the entity must be included in Section 1.6 as another entity involved in the project.</p> <p><u>Program Rule(s)</u></p> <p>VCS Standard, v4.3, Section 3.2.3 VCS Project Description Template, v4.1, Section 1.6</p>	<p>Round 1</p> <p><u>VVB Response</u></p> <p>Other than the Project Proponent, EcoPlanet Bamboo Rwanda Ltd is the only entity holding any responsibility within the project. This entity is responsible for all implementation, management and monitoring of the project. Section 1.6 of the PD has been updated to make this clear through an expanded description of the Role in the Project.</p> <p>The Rwanda Water Board does not play a role in the implementation or management of the project and therefore has not been included within Other Entities, Section 1.6.</p> <p>The Validation Report has been updated to provide further clarification on the role of the PP and the Rwanda Water Board. ✓</p> <p><u>Verra Response</u></p> <p>Section 1.6 of the PD has been updated, providing additional information on the roles and responsibilities of other entities involved.</p>	<p>Closed</p>
--	---	--	---------------

4	No demonstration of regulatory surplus		
----------	---	--	--

	<p><u>Issue</u></p> <p>The PD does not demonstrate that the proposed project activity is not mandated.</p>	<p>Round 1</p> <p><u>VVB Response</u></p> <p>The PP has updated the PD in Section 3.5 to refer to key</p>	<p>Closed</p>
--	--	--	---------------

<p><u>Action Required</u></p> <ol style="list-style-type: none"> 1. The VVB must ensure that the PD includes the appropriate demonstration of regulatory surplus in Section 3.5. 2. The VVB must demonstrate in Section 3.3.5 of the VR how they assessed that the proposed project activity is not mandated. <p><u>Note</u> Verra may raise additional findings when regulatory surplus demonstration is available and reviewed.</p> <p><u>Program Rule(s)</u> <i>VCS Project Description Template, v4.1, Section 3.5</i> <i>VCS Standard, v4.3, Sections 3.5.13 and 3.13</i></p>	<p>legislation that clearly demonstrates that there is no mandate nor regulatory requirement surrounding the project activities.</p> <p>This was confirmed by the VVB during interviews with key staff at the Rwanda Water Resources Board, during the validation audit, that there is no regulatory requirement with regards to the planting of bamboo or any other reforestation activities on riparian buffer zones. The RWB highlighted that their mandate is the protection and conservation of these lands, with legislation that was enacted in 2010 making such lands public property and prohibiting agriculture and other unsustainable land use from occurring within these riparian buffer zones. There is no regulation or mandate for such riparian buffer zones to undergo any active form of restoration or reforestation activity. Further on, there was no indication found during the onsite that the plantation of bamboo or other tree species is business as usual. The FVR has been updated to show how the audit team assessed the additionality and to provided additional clarification. ✓</p> <p><u>Verra Response</u> Section 3.5 of the PD demonstrated the regulatory surplus, and Section 3.3.5 of the VR assessed that the proposed project activity is not mandated.</p>	
--	---	--

5 Insufficient data to reproduce the calculations of the net GHG ERRs		
<p><u>Issue</u></p> <p>The data presented in Section 4.4 of the PD do not allow the reader to reproduce the calculation of the estimated net GHG emission reductions and removals estimations (ERRs).</p> <p><u>Action Required</u></p> <p>Electronic spreadsheets as an appendix or a separate file with all calculations of estimated net GHG ERRs must be submitted to Verra.</p>	<p>Round 1</p> <p><u>VVB Response</u> The spreadsheet containing the ERR- calculations /04/ will be submitted to Verra. ✓</p> <p><u>Verra Response</u> An electronic spreadsheet with all calculations of estimated net GHG emission reductions or removals was submitted.</p>	Closed

<p><u>Note</u></p>	<p>Verra may raise additional findings when the calculations are available and reviewed.</p>	<p><u>Program Rule(s)</u></p>	<p>VCS Project Description Template, v4.1, Section 4.4</p>
--------------------	--	-------------------------------	--

<p>6 Insufficient justification of the chosen approach for the calculation of AGB</p>			
<p><u>Issue</u></p>	<ol style="list-style-type: none"> 1. According to Section 5.1 of the PD, aboveground biomass (AGB) will be calculated using species specific allometric equations developed by the project proponent. However, the PD does not demonstrate that the calculation approach is the most reasonable and conservative compared to other secondary scientific information available for the species or similar and does not provide any verifiable source to support this approach. 2. Section 3.3.6 of the VR does not include a conclusion on whether the allometric equation developed by the project proponent is robust enough to estimate the project’s biomass increase. 	<p>Round 1</p>	<p>VVB Response</p> <ol style="list-style-type: none"> 1. The PD refers to a document^{/25/26/} in which a qualified 3rd party was engaged for the development of the allometric equation. This paper follows the relevant tool, including detailed description of why the equation chosen was the most scientifically rigorous, along with its adherence to a conservative approach. 6a: “The equation was derived from a data set of at least 30 sample trees, and the value of coefficient of determination (R2) obtained was not less than 0.85.” ^{/37/} <p>Section 5.1 of the PD has been updated to make the justification clearer.</p> <ol style="list-style-type: none"> 2. No allometric equations have been found available for the species being grown – therefore it is not possible to provide a “verifiable source” to confirm such absence of existing equations. Nevertheless, comparison with data from an article published in the BAMBOO JOURNAL, No. 29 March 2015^{/41/} shows the identical value for 5 year old Dendrocalamus asper propagated by rhizome cutting tC/ha as calculated by the PP ^{/04/}: 41 tC. However, number of clumps/ha and culms/clump differ. 3. Review of the excel data collection sheet “Destructive Sampling”/Bambusa polymorpha and “Destructive Sampling”/Bambusa textilis spp along with photographic
<p><u>Action Required</u></p>	<ol style="list-style-type: none"> 1. The VVB must ensure that Section 5.1 of the PD is updated to demonstrate that the choice of data for the parameter AGB_CULM_POLYMORPHA and AGB_CULM_TEXTILIS are reasonable, and conservative compared to existing information. This demonstration must be documented with verifiable sources. 2. The VVB must include in Section 3.3.6 of the VR how they reached to the conclusion that the allometric equation used is robust and is validated to calculate the biomass increase resulting from the implementation of the project activity. 		<p>Closed</p>
<p><u>Note</u></p>	<p>Verra may raise additional findings when the description is available and reviewed.</p>		

<p><u>Program Rule(s)</u></p> <p><i>Tool for “Demonstrating Appropriateness of Allometric Equations for Estimation of Aboveground Tree Biomass in A/R CDM Project Activities” UNFCCC/CCNUCC 2011, v1.0</i> <i>VCS Project Description Template, v4.1, Section 5.1</i> <i>VCS Validation Report Template, v4.1, Section 3.3.6</i></p>	<p>evidence provided^{/38/39/40/}</p> <p>4. Finally, - Following the guidance provided by CDM tool^{/37/}: 5. “For ex ante estimation of aboveground tree biomass in project scenario any allometric equation can be used.”</p> <ul style="list-style-type: none"> - The PP also updated the PD to Version 1.5 and included a description of the Methodology deviation in section 3.6. and more detailed in section 4.2. The only applicable data existing is the data selected by the PP. None of the sources listed in the AR-TOOL 14 under Annex 1 point 6 were seen as adequate, as the Bamboo Project is the first of its kind concerning the planted species, provenance, technology and ecological conditions. - The PD had been updated and includes now a section where the independently developed species-specific allometric equation is compared with data form an article published in the BAMBOO JOURNAL, No. 29 March 2015/41/ that shows the identical value for 5 year old Dendrocalamus asper propagated by rhizome cutting in tC/ha as calculated by the PP /04/: 41 tC. However, number of clumps/ha and culms/clump differ. The audit team assessed the provided information and reference and confirms the realistic estimate of the developed equation in the context of the sparce availability of available data. The FVR has been updated accordingly. <p>Section 3.3.6 of the VR has been updated to provide a further information on the assessment of the audit team. ✓</p> <p><u>Verra Response</u></p> <p>Section 5.1 of the PD and Section 3.3.6 of the VR were updated and sufficient justification.</p>	
--	--	--

7 Incomplete assessment of the project start date and the project crediting period		
<p><u>Issue</u> Section 3.1.5 of the VR does not describe how the VVB assessed the justification of the project start date and the project crediting period.</p> <p><u>Action Required</u> The VVB must update Sections 3.1.5 and 3.1.6 of the VR to provide information on how they assessed the justification of the project start date and the project crediting period.</p> <p><u>Program Rule(s)</u> VCS Standard, v4.3, Sections 3.7 and 3.8 VCS Project Description Template, v4.1, Sections 1.8 and 1.9</p>	<p>Round 1</p> <p><u>VVB Response</u> At the time of the audit no planting had been conducted, but the seedlings were already raised in the nurseries. This was confirmed by visual inspections of the nursery, interviews with local authorities, managers and caretakers. First planting is foreseen with the start of the rainy season in October. This is conservative as the seedlings were already growing (in the nurseries) during the onsite visit in July 2022.</p> <p>Subsequent to the validation audit, the PP provided confirmation of the first planting beginning as planned in October 2022, through the provision of photos.</p> <p>The crediting period has been justified due to the rapid removals associated with the bamboo species being planted. All projected carbon removal benefits are expected to be realized within a 20 year crediting period. At the same time the PP has clearly demonstrated longevity as required for permanence within the NPRR. Therefore the project crediting period of 20 years is justifiable.</p> <p>Respective information has been included in the VR section 3.1.5/3.1.6 ✓</p>	Closed
	<p><u>Verra Response</u> Sections 3.1.5 and 3.1.6 of the VR described the assessment of the project start date and the project crediting period.</p>	

8 Incomplete assessment of whether the project has taken due account the stakeholders' inputs		
<p><u>Issue</u> Section 3.2.2 of the VR does not describe how the VVB assessed whether the project proponent has taken due account the</p>	<p>Round 1</p> <p><u>VVB Response</u> a. The audit team updated the VR to provide additional</p>	Closed

<p>stakeholders' inputs.</p> <p><u>Action Required</u> The VVB must update the section 3.2.2 of the VR to provide information on:</p> <ol style="list-style-type: none"> a. How they have assessed whether the project proponent has adequately considered all and any input and provide an overall conclusion regarding local stakeholder input. b. The project proponent's response to all input, a description of any resulting changes to the project design and provide an explanation of how the project proponent's responses are appropriate. <p><u>Program Rule(s)</u> VCS Standard, v4.3, Section 3.17 VCS Project Description Template, v4.1, Section 2.2 VCS Validation Report Template v4.1, Section 3.2.2</p>	<p>clarification on the structure of the project and hence, the responsibilities of the PP in project implementation and management.</p> <p>The project has identified two main groups of stakeholders, the Government of Rwanda and Communities. Within the Government of Rwanda there are three levels of stakeholder. The inputs of each category of stakeholder were reviewed during the onsite audit. To provide further clarification on the assessment, additional information and supporting documentation has been included in section 3.2.2 of the VR.</p> <p>b. The PP has expanded on Section 2.2 to include the key messages from a socio-economic baseline assessment within the surrounding communities. This was conducted in order to provide data on the livelihoods, incomes and status of the farmers surrounding the project areas. This information has been used to guide the project design. ✓</p> <p><u>Verra Response</u> Section 3.2.2 of the VR is updated and provides the assessment of how stakeholders 'inputs have been taken by the project proponent.</p>	
---	--	--

<p>9 Non-eligible areas inside the project area (KML file)</p>		
<p><u>Issue</u></p> <ol style="list-style-type: none"> 1. The KML file provided includes non-eligible areas inside the project area. 2. It is unclear how the VVB confirmed that the area of the first project instance meets the eligibility criteria. Although it is understandable that the area for future planting areas will be provided later, at the verification stage (FAR 02 in the VR), since the project started on October 1, 2022, it is not known whether the already planted areas are eligible or not. 	<p style="background-color: #1a3d54; color: white; padding: 2px;">Round 1</p> <p><u>VVB Response</u></p> <p>1a. The validation audit occurred prior to the project start date in July 2022 and all final documents were submitted prior to the completion of the 2022 planting season. As common in grouped projects, eligibility aspects Tare subject to verification at each verification event (see VCS Std 3.5.8 ff). Hence, FAR 02 has been raised to make sure that this is considered at verification.</p>	<p>Closed</p>

<p><u>Action Required</u></p> <ol style="list-style-type: none"> 1. The VVB must describe how it has verified that: <ol style="list-style-type: none"> a. No project area has been cleared of native ecosystems to generate GHG credits; and b. infrastructure and forest areas that are included in the KML file are not part of the project area nor of the ERR accountability. 2. KML file must be updated to clearly delineate the project area only where the activities to reduce GHG emissions are taking place. <p><u>Program Rule(s)</u> VCS Standard, v4.3, Section 3.10.2</p>	<p>1b. As described in the PD and in the VR, ERR calculation is based on standing area of planted single bamboo clumps and not on area base. This indicates that all infrastructure and existing forest areas will not be counted as project area. The aim of the project is to protect the watercourses from erosion. Where there is existing natural vegetation, there will be no planting of bamboo. As described before it is part of the duty of the RWB to secure existing vegetation against illegal activities. Hence, patches with existing natural vegetation/forests will clearly not be part project activity which includes planting of bamboo only. This would make no sense. The audit team went onsite in July 2022 and confirms the project design including the eligibility requirements. Nevertheless, the audit team can of course not confirm whether the planted areas are eligible or not, because that happened in the future.</p> <p>2. The PP provided updated KML files^{/03/} that only include eligible areas. These are subject of verification at the coming verification event as in every grouped project.</p> <p>Section 1.12 of the PD has been updated with maps of the exact 500ha Project Area for the 2022 plantings, and a separate KML file provided. ✓</p> <p><u>Verra Response</u> FAR 02 prompts the verification VVB to ensure a KML file that precisely delineates the project area and facilitates accurate monitoring, reporting, and verification of GHG ERRs is submitted to Verra at the first verification.</p>	
---	---	--

10	AFOLU-Specific Safeguards incomplete		
	<u>Issue</u>	<p>Round 1</p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> 1. The PP has updated the PD as follows: 	Closed

	<p>Section 2.5 the PD does not describe all the AFOLU Safeguards.</p> <p><u>Action Required</u></p> <ol style="list-style-type: none"> 1. The VVB must ensure that Section 2.5 of the PD is updated to describe the following AFOLU Safeguards: <ol style="list-style-type: none"> a. The location of communities, local stakeholders and areas outside the project area that are predicted to be impacted by the project; b. The location of territories and resources which local stakeholders own or to which they have customary access; c. Whether the project proponent nor any other entity involved in project design or implementation are be involved in any form of discrimination or sexual harassment; d. How communication and consultation are performed in a culturally appropriate manner, including language and gender sensitivity, directly with local stakeholders or their legitimate representatives when appropriate. 2. The VVB must ensure that the project meets the requirements of AFOLU-Specific Safeguards and describe its assessment in Section 3.3.5 of the VR. <p><u>Program Rule(s)</u> <i>VCS Standard, v4.3, Sections 3.17.10 to 3.17.18</i> <i>VCS Project Description Template, v4.1, Section 2.5</i></p>	<ol style="list-style-type: none"> a. Section 2.2 has been updated to include maps of local stakeholders outside of the project area that have the potential to be impacted by the project. This mapping has been carried out at all levels, District, Sector, Cell and Village. b. Section 2.5 has been updated with a paragraph confirming detailing the customary access scenario of the project. c. Section 2.5 has been updated to include a statement confirming no discrimination or sexual harassment. d. Section 2.5 has been updated to include specific points relating to how the communication and consultations are carried out in a culturally appropriate manner including language and gender sensitivity. <ol style="list-style-type: none"> 2. The VVB has included a description of the in section 3.2.2 and 3.2.5 of the VR. ✓ <p><u>Verra Response</u> Section 2.5 of the PD describes all the AFOLU -Specific Safeguards sufficiently.</p>	
--	--	---	--

11	Unclear QC/QA procedures		
	<p><u>Issue</u></p> <p>Section 5 of the PD references a QC/QA procedure that is not described in the PD.</p> <p><u>Action Required</u></p> <ol style="list-style-type: none"> 1. The VVB must ensure that the QC/QA procedure is detailed in Section 5 of the PD. 	<p>Round 1</p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> 1. Various parts of Section 5 of the PD have been re-written to expand upon the QC/QA procedures implemented, both for monitoring and for individual parameters to be monitored. This is in line with the SOP on QC/QA provided to the audit team during the site visit^{49/}. 2. The VR section 3.3.8 has been updated. 	Closed

	<p>2. The VVB must update Section 3.3.8 of the VR on how it has evaluated the QC/QA procedures proposed by the project proponent and provide the corresponding validation conclusion.</p> <p><u>Program Rule(s)</u> <i>VCS Standard, v4.3, Section 3.15</i> <i>VCS Project Description Template, v4.1, Section 5</i></p>	<p>✓</p> <p><u>Verra Response</u> The QA/QC procedures has been described in Section 5 of the PD.</p>	
--	--	--	--