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	4511
Project Name	Silvador Climate Action
Review Type	Registration and Verification
Program(s)	VCS
Verification Period	01 August 2020 – 31 December 2022
Project Proponent	Silvador Company SRL
Methodology	VM0012, Improved Forest Management on Privately Owned Properties in Temperate and Boreal Forests (LtPF) v.1.0
VVB	EPIC Sustainability Services Private Limited
Assessment Criteria	VCS Standard, version 4.4
Date of First Issue	10 September 2024
Review Conclusion	Approved
Date of Final Issue	2 December 2024

FINDINGS

#	Finding Description	VVB Response	Status
1	**Missing audit history table**		
	Issue Section 1.1 of the joint PD/MR does not include the audit history table. Action Required 1. The VVB must ensure that the audit history table is included in section 1.1 of the joint PD/MR. Program Rule(s) *VCS Standard v4.4*, Section 3.5.1 and 3.5.4, *VCS joint project description and monitoring report template v4.2,* Section 1.1.	**Round 1** VVB Response Project proponent has added the audit history table to the updated PD-MR v1.7. Refer Table 1, Audit history summary, Section 1.1 The submission involves combined validation and verification, hence the relevant details such as validation date and monitoring period are provided. VVB reviewed Section 1.1 of the revised PD-MR v1.7 and confirms that the audit history table is added. Verra Response The VVB fulfilled the required action.	Closed

2	**Clarity needed on project eligibility**		
	Issue Under Section 1.3 of the joint PD/MR, it is unclear whether the project area is designated, sanctioned, or approved for wood product management by a national or local regulatory body. Action Required 1. The VVB must ensure that the PD/MR clarifies whether the project area is designated, sanctioned or approved for wood product management by a national or local regulatory body.	**Round 1** VVB Response Project proponent has updated Section 1.3 in the PD-MR v1.7 to clarify that the project area is the private forest fund property approved for wood management under the national regulatory body of Romania, i.e. "The National Directorate of Forests – ROMSILVA" (https://www.rosilva.ro/). The validation team reviewed all the FMPs to note that the private forest fund properties (project area) comply with the host country laws and guidelines provided by ROMSILVA	Closed

	2. The VVB must assess the updated PD/MR and update the VVR as needed. Program Rule(s) *VCS Standard, v4.4*, Section A1.3	https://www.rosilva.ro/articole/paduri_private__p_213.htm https://www.rosilva.ro/articole/paduri_private__p_1912.htm Section 3.1 (Project Details) of the VVR is updated to reflect the above-mentioned information. Verra Response The VVB fulfilled the required action.	

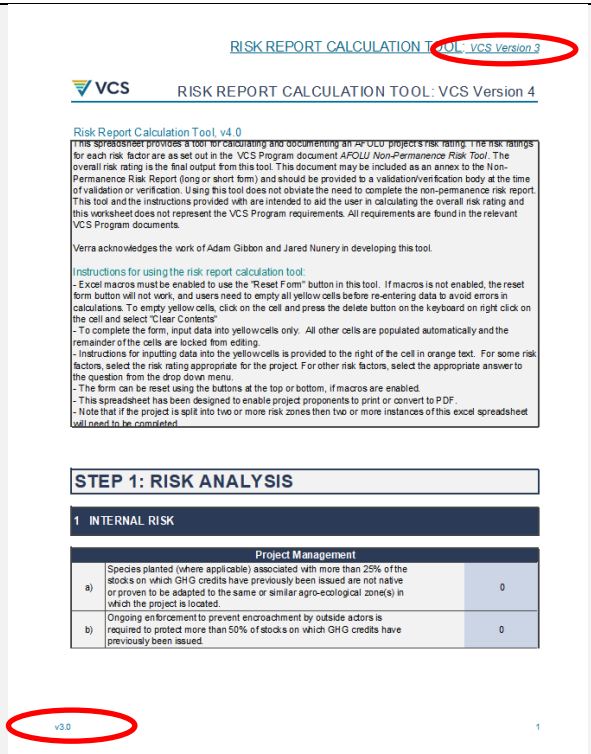
3	Clarity needed on VCUs ownership		
	Issue Under section 1.7 of the PD/MR, it is unclear who owns the VCUs. Action Required 1. The VVB must ensure in Section 1.7 about the ownership of the VCUs. 2. The VVB must assess the updated PD/MR and update the VVR. Program Rule(s) *VCS Standard, v4.4, Section 3.7.*	**Round 1** VVB Response The project proponent has updated Section 1.7 of the PD-MR v1.7 to provide clarity on ownership of the VCUs. Both landowners, Forest Capital SRL and Silvador company SRL jointly referred to as "Silvador" legally own the project areas, have the rights to implement the project activities on the properties and holds a joint ownership of generated VCUs. Refer updated PD-MR v1.7. Section 1.4 (Summary Description of the Project) in the VVR v1.2 is updated to reflect Forest Capital SRL and Silvador company SRL joint ownership of the project areas to implement the project activities, therefore owning the generated VCUs. Verra Response The VVB fulfilled the required action.	Closed

4	Unclear calculation of project scenario live biomass gain		
	Issue It is unclear if the project scenario live biomass gain is calculated in polygons before they would have been harvested according to the baseline scenario forest management plan (FMP).	**Round 1** VVB Response Yes, the live biomass gain is calculated for both the project and baseline scenario polygons from the project start date. An identical starting inventory is used for both the project and	Closed

	Action Required 1. The VVB must clarify if the project scenario live biomass gain is calculated for all project scenario polygons starting from the project start date or if polygons are added to the project scenario calculations only after their harvesting date as scheduled in the baseline FMP. Program Rule(s) *VCS Standard, v4.4, Section 3.14.*	baseline model runs within CBM-CFS3. The difference between the baseline and the project scenario results in the net emission reductions/removals. Section 8.1.3 of VM0012, addresses Baseline Live Biomass Gain while, Section 8.2.6 references Project Live Biomass Gain. These indicated equations are equivalent resulting in the equivalent value for a subject polygon. Therefore, at the polygon level, there is no difference between the net emission reductions/removals in the baseline and project scenario until the harvesting date as scheduled in the baseline FMP (Eq. 57). This indicates the date when project achieves additional emission reductions/removals compared to the baseline scenario at the polygon level. The VVR is updated (Sub-section: Quantification of project emissions, Pg. 82) to reflect the above assessment and confirmed that the live biomass gain is calculated for both the project and baseline scenario polygons from the project start date. **8.1.3 Live Biomass Gain** Live biomass gain in year, *t*, polygon, *i* ($\Delta C_{BSL,G,i,t}$) is calculated as: $\Delta C_{BSL,G,t} = \Sigma(A_{BSL,i} \bullet G_{BSL,i,t}) \bullet CF$ (4) where: $A_{BSL,i,}$ = area (ha) of forest land in polygon, *i*; $G_{BSL,i,t}$ = annual increment rate in tree biomass (t d.m. ha^{-1} yr^{-1}), in polygon, *i*, and; CF = carbon fraction of dry matter t C t^{-1} d.m. (IPCC default value = 0.5).	

		8.2.6 Live Biomass Gain Live biomass gain in year, *t*, polygon, *i* ($\Delta C_{PRJ,G,i,t}$) is calculated as: $\Delta C_{PRJ,G,t} = \Sigma(A_{PRJ,i} \bullet G_{PRJ,i,t}) \bullet CF$ (32) where: $A_{PRJ,i}$ = area (ha) of forest land in polygon, *i*; $G_{PRJ,i,t}$ = annual increment rate in tree biomass (t d.m. ha^{-1} yr^{-1}), in polygon, *i*, and; CF = carbon fraction of dry matter t C t^{-1} d.m. (IPCC default value = 0.5). Verra Response The VVB fulfilled the required action.	

5	**Incorrect version of risk report calculation tool**		
	Issue Version 3 of the risk report calculation tool has been used instead of version 4.0. Action Required 1. The VVB must ensure version 4.0 of the risk report calculation tool is used.	**Round 1** VVB Response The project proponent has applied the risk report calculation tool v4.0, but in the print preview, the header and footer incorrectly state as v3.0 (refer to the screenshot below). **Print Preview Version:**	Closed

	2. The VVB must assess and update the v/v report accordingly. <u>Program Rule(s)</u> *AFOLU Non-Permanence Risk Tool, v4.0.*	 RISK REPORT CALCULATION TOOL: VCS Version 3 VCS RISK REPORT CALCULATION TOOL: VCS Version 4 Risk Report Calculation Tool, v4.0 This spreadsheet provides a tool for calculating and documenting an AFOLU project's risk rating. The risk ratings for each risk factor are as set out in the VCS Program document *AFOLU Non-Permanence Risk Tool*. The overall risk rating is the final output from this tool. This document may be included as an annex to the Non-Permanence Risk Report (long or short form) and should be provided to a validation/verification body at the time of validation or verification. Using this tool does not obviate the need to complete the non-permanence risk report. This tool and the instructions provided with are intended to aid the user in calculating the overall risk rating and this worksheet does not represent the VCS Program requirements. All requirements are found in the relevant VCS Program documents. Verra acknowledges the work of Adam Gibbon and Jared Nunery in developing this tool. Instructions for using the risk report calculation tool: - Excel macros must be enabled to use the "Reset Form" button in this tool. If macros is not enabled, the reset form button will not work, and users need to empty all yellow cells before re-entering data to avoid errors in calculations. To empty yellow cells, click on the cell and press the delete button on the keyboard on right click on the cell and select "Clear Contents" - To complete the form, input data into yellow cells only. All other cells are populated automatically and the remainder of the cells are locked from editing. - Instructions for inputting data into the yellow cells is provided to the right of the cell in orange text. For some risk factors, select the risk rating appropriate for the project. For other risk factors, select the appropriate answer to the question from the drop down menu. - The form can be reset using the buttons at the top or bottom, if macros are enabled. - This spreadsheet has been designed to enable project proponents to print or convert to PDF. - Note that if the project is split into two or more risk zones then two or more instances of this excel spreadsheet will need to be completed. STEP 1: RISK ANALYSIS 1 INTERNAL RISK Project Management a) Species planted (where applicable) associated with more than 25% of the stocks on which GHG credits have previously been issued are not native or proven to be adapted to the same or similar agro-ecological zone(s) in which the project is located. 0 b) Ongoing enforcement to prevent encroachment by outside actors is required to protect more than 50% of stocks on which GHG credits have previously been issued. 0 v3.0 1 VVB reviewed this risk report calculation tool and confirmed that the content and calculation applied reflects v4.0 of the tool. The project proponent has corrected the header and footer to reflect v4.0 of the tool, revised the VCS Risk Report Calculation Tool PDF and updated Appendix 1: Non-Permanence risk report, in the PD-MR v1.7. The VVB reviewed the revised documents mentioned above to confirm that the revision made is appropriate. (In addition, Section 3.5 of the VVR is updated to specify the exemption granted by VERRA for the project from using the AFOLU Non-Permanence Risk Tool v4.2)	

		Verra Response The VVB fulfilled the required action.	

6	**ERR calculations spreadsheet does not transparently report model inputs**		
	Issue The ERR calculations spreadsheet does not transparently report the forest inventory data input for the CBM-CFS3 carbon model. Action Required 1. The VVB must ensure the forest inventory data and other model inputs are reported in the ERR calculations spreadsheet. Program Rule(s) *VCS Standard, v4.4*, Section 2.2.1. Background Transparency: Disclose sufficient and appropriate GHG-related information to allow intended users to make decisions with reasonable confidence.	**Round 1** VVB Response The VVB reviewed all inputs used in the CBM-CFS3 model. There are seven input files uniquely formatted for the CBM-CFS3 carbon model with the primary files being disturbance events, disturbance types, inventory, yields, transitions, age class and classifiers. The model utilizes advanced algorithms for biomass estimation and simulates annual disturbances. Scientific updates enhance the representation of ecosystem components, including dead organic matter and soil carbon, while improving predictions for growth and belowground biomass. The static inventory data alone isn't the sole source of information for the model, so it wouldn't enable the user to replicate ERR calculations. To increase transparency, the CBM-CFS3 Project Summary output file (.txt) that reports the inventory records, is added by the project proponent to the ERR Calculation Spreadsheet (GHG Estimate_20240202.xlsx, CBM_Summary tab) and included as an appendix to the updated PD-MR v1.7. The summary provides a listing of all groupings contained in the project database that were utilized within CBM-CFS3 to report starting inventory. The VVB reviewed the project summary and revised ERR Calculation Spreadsheet to confirm that the provided information is appropriate and adequate to report the forest inventory data input for the CBM-CFS3. Verra Response	Closed

		The finding cannot be closed. Issue The project scenario in-situ field data is not transparently reported in the ERR calculations spreadsheet. Action required 1. The VVB must ensure the in-situ field data used to calculate the project scenario ERRs is reported in the ERR calculations spreadsheet. For example, for the parameter $DBH_{i,t}$, the MS Excel File *tree_data_carbon_final* is mentioned in the PD but is not included in the ERR calculations spreadsheet. **Round 2** VVB Response The VVB has reviewed the in-situ field data to note that they are accurately calculated and transparently reported in the ERR calculations spreadsheet for the project scenario. These data are exclusively used to determine the uncertainty deduction factor and are not involved in the calculation of project emission reductions or removals. Section 8.2 (Project Emissions) of the applied methodology VM0012 stated that the net emissions for both the project and baseline scenarios must be derived using consistent modelling methods and inventory inputs. For the proposed project, inventory data (Silvador_Forest_Inv_GC's_Jan24'23) from approved forest management plans are utilized to model both baseline and project Emission Reductions and Removals (ERRs). In compliance with Section 8.2.2 of the applied methodology, for determining actual onsite carbon stocks, field plot	

		measurements are collected to validate biomass estimates from monitoring activities against the modelled values for the current project year. This process is aimed at determining the uncertainty factor and did not contribute to the creation of a forest inventory. The parameter DBHi,t and the associated MS Excel file, tree_data_carbon_final, contain all the data collected from the monitoring plots. This Excel file served as a direct input for the uncertainty calculation, maintained in a separate Excel document. Both files are made accessible to the VVB during the audit process. Given the complexity of the data and the calculations required for determining the uncertainty factor, the PP kept these processes separate from the GHG calculation. The audit team conducted on-site validation and verification of the in-situ field data at sampled monitoring plots. The audit team completely reviewed the plot data spreadsheets used for uncertainty calculations and evaluated the project inventory data along with the outputs from the CBM-CFS3 model. Altogether, the audit team opinion is that the processes and data used for determining the project ERRs are appropriate, transparent, and follows the requirements specified in applied methodology. The forest inventory data (Silvador_Forest_Inv_GC's_Jan24'23) from approved forest management plans which is utilized to model both baseline and project Emission Reductions and Removals (ERRs) is submitted for further review by VERRA.	
		<u>Verra Response</u> The VVB fulfilled the required action.	

7	**Unclear if the methodology deviation is more conservative**		
	Issue It is unclear how the VVB reached the conclusion in Section 3.4.7 of the v/v report, that the deviation does not "negatively impact the conservativeness of the quantification of GHG ERRs". Action Required 1. The VVB must clarify what the leakage factor would be without the methodology deviation and accurately report if the deviation is more, or less conservative. Program Rule(s) *VM00012, v1.2,* Section 8.3.5, Table 5	**Round 1** VVB Response Section 3.19.2, of the Standard v4.4 states that *"Methodology deviations shall not negatively impact the conservativeness of the quantification of GHG emission reductions or removals, except where they result in increased accuracy of such quantification".* As it relates to the MARketz tool utilized by the project proponent to measure the effects of market leakage, it is determined by the VVB that the assessment is more accurate than other options available within the methodology. Without the methodology deviation the market leakage would be 17.4% = (1-0.13) * 20%, where 0.13 is the international leakage factor for Romania and 20 % is proportional leakage by biomass ratio obtained as per default VM0012 – Option 3. The Marketz tool uses seven distinct analyses to evaluate how project activities may impact local, regional, and national markets in the host country. This analysis involves detailed calculations across various stages including market determination, market equilibrium, distribution and regulatory barriers, product substitutability, land/carbon impact as a percentage of the national inventory, and biomass ratio of the project. In contrast, the default method prescribed in the methodology relies only on international leakage factor and proportional leakage by biomass ratio to determine the market leakage of the project. Despite the market leakage value derived from the deviation method being less conservative (10 %) than the default VM0012 approach (17.4 %), it still ensures enhanced accuracy through a multi-faceted approach	Closed

		supported by credible publicly available references such as cost of transportation, tree substitutability factor, Forestry Production and Trade of Romania etc. Section 3.4.6 and 3.4.7 of the VVR is revised accordingly to reflect the above-mentioned information regarding the methodology deviation applied.	
		Verra Response The finding cannot be closed. Issue The leakage calculation spreadsheet was not submitted to Verra for review. Action required The VVB must ensure to share the leakage calculation spreadsheet in the ERR calculation sheets or as a separate excel file if they prefer for this project.	
		Round 2	
		VVB Response The MarKetz Leakage spreadsheet Silvador_MARketLeakage(Jul' 24).xlsx and supporting description of the tool Silvador_MARketzTool_Overview.pdf, is submitted for further review by VERRA.	
		Verra Response The VVB fulfilled the required action.	

8	**Uncertainty regarding the most profitable alternative land use scenario.**		
	Issue It is not clear what alternative land use scenario is the most profitable as defined by Section 1.3 of the NPRR.	**Round 1** VVB Response The project proponent has updated Section 1.3 of the NPRR.	Closed

	Action Required 1. The VVB must clarify the most profitable alternate land use scenario among 'continuation of historical land use' and 'conversion to real estate development'. 2. The VVB must assess any changes to PD/MR or ERR calculations and update the VVR accordingly. Program Rule(s) *AFOLU Non-Permanence Risk Tool v4.0*, Section 2.2.3.	'The outcome of the Additionality test resulted in the selection of the "Historical Practice: Continuation of conventional timber extraction activities" as the most profitable alternative land use activity.' The VVB reviewed the NPV analysis of the project activity with other alternative land use scenarios to confirm that "Historical practice" is the most profitable alternative land use scenario. Considering scenario involving conversion to real estate development, it is excluded from consideration, as instructed by the requirements in Step-1, Section 6 of the Applied Methodology. This section specifies that the identified baseline scenario should involve forest areas remaining as forest. Therefore, converting forest areas to real estate development would not meet this criterion. However, after reviewing the project area using Google Earth software, QGIS, and on-site visits it is observed that the project areas are forest land and situated in remote and isolated locations and not adjacent to towns. Given this context, initiating real estate development in these areas is deemed economically unattractive and unprofitable. The project proponent has revised Appendix 1 of PD-MR v1.7. No changes to the ERR calculations are made, since the calculation of non-permanence risk remains unaltered. The VVR is revised accordingly adding "Historical practice" as the most profitable alternate land use scenario to the Opportunity Cost section under Section 3.5 Non-Permanence Risk Analysis. Verra Response The VVB fulfilled the required action.	

9	**Baseline scenario for future PAIs is not in line with standard requirements**		
	Issue Eligibility criteria #4 for the inclusion of new PAIs in Section 1.4.1 of the joint PDMR does not ensure that future PAIs will be subject to the same baseline scenario determined in the PD for the specified project activity and geographic area. Action Required 1. The VVB must ensure that eligibility criteria #4 is revised to be in conformance with Section 3.6.16(4) of the VCS Standard. 2. The VVB must assess the joint PD/MR and update the VVR accordingly. Program Rule(s) VCS Standard, *v4.4*, Section 3.6.11 and Section 3.6.16(4).	**Round 1** VVB Response The project proponent has updated Section 1.4.1 of the PD-MR v1.7 to describe the following. *"Inclusion of additional PAI(s) in the SCA must adhere to the following eligibility criteria:* ▪ *Are subject to the baseline scenario determined in the project description for the specified project activity and geographic area".* The VVB reviewed Section 1.4.1 of the updated PD-MR, 1.7 and confirmed that the provided information is appropriate and conformance with Section 3.6.16(4) of the VCS Standard v4.4. Section 3.1 (Sub-section: Project design, including eligibility criteria for grouped projects) of the VVR is revised accordingly to reference the PD-MR v1.7. Verra Response The VVB fulfilled the required action.	Closed