



JOINT VALIDATION & VERIFICATION REPORT

Mixed planting of native and non-native species in Paraguay-I BCR-PY-451-14-001

Conformity Assessment Body

Validation & Verification Report

Project Title	Mixed planting of native and non-native species in Paraguay-I
Project ID	BCR-PY-451-14-001
Project holder	Desarrollos Madereros S.A.
Project Type/Project activity	Reforestation
Grouped project	Does not correspond to a grouped project.
Version number of the Project Document to which this report applies	BCR-PY-451-14-001
Applied methodology	BCR0001 Quantification of GHG Removals Afforestation, reforestation and revegetation. Versión 4.0 09/february/de 2024.
Project location	Municipality of Hernandarias, Department of Paraná, Paraguay. San Juan Nepomuceno Municipality Caazapá Department, Paraguay.
Project starting date	01/12/2018
Quantification period of GHG emissions reductions/removals	40 years, from December 1, 2018 through November 30, 2058.
Estimated total and mean annual amount of GHG emission reductions/removals	Total emissions reduction: 153,133 tCO ₂ Annual average: 3,828 tCO ₂ /year
Monitoring period	1/12/2018 a 31/5/2023 (4,5 years)

Total amount of GHG emission reductions/removals	Total emission reductions: 15.917 tCO ₂ (Monitoring Report)
Contribution to Sustainable Development Goals	<p>SDG 1: No Poverty</p> <p>SDG 2: Zero Hunger</p> <p>SDG 3: Good Health and Well-Being</p> <p>SDG 4: Quality Education</p> <p>SDG 6: Clean Water and Sanitation</p> <p>SDG 9: Industry, Innovation and Infrastructure</p> <p>SDG 12: Responsible Consumption and Production</p> <p>SDG 13: Climate Action</p> <p>SDG 15: Life on Land</p>
Special category, related to co-benefits	N/A
Version and date of issue	Version 4, Diciembre 04, 2024
Work carried out by	<p>Lead auditor: Diana Rauchwerger</p> <p>Technical Expert: Cesar Marin</p>
Approved by	<p>Camilo Andrés Montaña Salamanca</p> <p>CEO</p>

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1 *Executive summary*

The Mixed planting of native and non-native species in Paraguay-I project is part of the AFOLU sector and is part of the GHG removal activities. Its main objective is to increase forest carbon stocks by planting *Eucalyptus* spp. trees in two locations: Hernandarias, in the Department of Alto Paraná, and San Juan Nepomuceno, in the Department of Caazapá. The trees in the plantation will be pruned at 6 years of age and harvested at 10 years of age, followed by the planting of 11 non-disturbed native species. After harvesting, the eucalyptus trees will be replanted, covering three harvesting cycles. After the end of the project crediting period in 2048, no eucalyptus will be replanted, and the native species will be retained to establish a native forest in the project area. The carbon credits generated will be traded entirely in the voluntary market.

This GHG project's purpose is to restore the ecosystem's capacity to absorb carbon from the atmosphere, store it in biomass and soil, through the establishment of forest plantations, and thus contribute to climate change mitigation. In addition to the climatic benefits, the forest plantation can offer additional advantages by generating biological corridors and connectivity between the ecosystems present in Hernandarias and San Juan Nepomuceno.

The project has been validated as generating several additional benefits, such as job creation and economic improvement at the local and regional level, as well as contributing to the conservation of native biodiversity. This will be achieved through the planting of native trees, which will provide habitat and encourage natural regeneration of flora and establishment of fauna. In addition, the project will control soil erosion and improve soil structure by increasing organic matter content compared to the soil use of 5 years ago, which the GHG Project was able to demonstrate was intensive and extensive cattle grazing pasture.

The status of implementation of the activities proposed in the Monitoring Report was verified and it was evaluated that they are aimed at promoting sustainable development. We also established the project's compliance with the criteria defined for the project, which are described in section 2 of this document, as well as with the legal regulations and commitments assumed by the Republic of Paraguay applicable to carbon markets. The methodology used to calculate the emission reductions was examined and the effectiveness of the methods and/or procedures defined by the GHG Project proponent was evaluated. All this ensured compliance with the principles governing the audit process and ensured the integrity and credibility of the results obtained during the verification of the GHG Project.

2 Objective, scope and criteria

The verification process carried out by VERSA's audit team for the Mixed planting of native and non-native species in Paraguay-I project, through a rigorous and detailed evaluation of 100% of the evidence provided by the project manager Desarrollos Madereros S.A. (DMSA). A field visit was fulfilled, in order to validate and verify the accuracy of measurements, review the sampling design, identify possible errors or discrepancies in the declared information, collect additional information that was not reported, and collect additional information that was not reported. (DMSA), together with a field visit to validate and verify the accuracy of the measurements, review the sampling design, identify possible errors or discrepancies in the declared information, collect additional information that was not included in the evidence provided by the GHG project manager, and the effectiveness of the proposed activities.

The purpose of the audit was to conduct an independent assessment of the project in order to determine:

- That the project, its activities, methods and procedures, described in the PD document and its corresponding annexes, including the monitoring plan, comply with the criteria established for this validation and verification, described later in this section.
- Assess the adequacy of the project and the effectiveness of the proposed actions against the objectives, scope, principles and criteria.
- Verify the material accuracy of greenhouse gas (GHG) emission reductions.
- Identify and evaluate any significant changes to the GHG project procedures or criteria described in the PD.

In accordance with Proposal No. GEI-P-146 and Legal Agreement No. VERSA-P-0150, the audit criteria are as follows:

- ISO 14064-2:2019.
- ISO 14064-3:2019.
- BCR Standard Empowering sustainability, Redefining Standards, V3.4 June 28, 2024.
- BCR0001 Quantification of GHG Removals V4.0, February 2024.
- BCR Tool: Sustainable Development Goals V 1.0 July 13, 2023.
- BCR Tool: Permanence and Risk Management V1.1 March 19, 2024.
- BCR Tool: Monitoring, reporting and Verification V1.0 February 13, 2023.
- BCR Tool: Baseline and Additionality V 1.3 March 1, 2024.
- BCR Tool: Avoiding Double Counting V2.0 February 7, 2024.
- Tool 14 Carbon stock estimation and carbon stock change of trees and shrubs in F/R CDM Project Activities V 04.2.

- Manual de Validación y Verificación. Proyectos GHG. Versión 2.4, 23 de marzo de 2024.
- BioCarbon Standard Requirements.

3 Validation and verification planning

In the audit process of the "Mixed Planting of Native and Non-native Species in Paraguay-I Project," developed by the audit team appointed by VERSA, as detailed in Table 2 of section 3.2 of this document, it focused on the review and analysis of compliance with the criteria described in paragraph 2 of this document, in order to identify opportunities for improvement.

During the validation activities, a comprehensive assessment of all documentation and information regarding the design of the GHG mitigation activities proposed in the Project Document (DP) was conducted. The project boundaries were examined to identify potential overlaps with other GHG mitigation initiatives and the proposed GHG mitigation goals and outcomes were assessed. The appropriate use of the methodology BCR0001 "Quantification of GHG Removals", version 4.0, of February 2024, was corroborated and evaluated, ensuring that the assessment of uncertainty had a conservative approach. The baseline scenario was also analyzed along with the expected mitigation outcomes.

Additionally, compliance with the additionality criteria was evaluated, with the aim of validating that the GHG activities proposed by the project in the DP generated an additional impact compared to what would be observed in the absence of the project. Carbon ownership and rights were thoroughly reviewed during the field visit, as this is a critical aspect. In addition, through interviews with all those involved, the effectiveness of the proposed activities to ensure compliance with sustainable development safeguards and their contribution to the sustainable development goals was validated.

For the verification process, a comprehensive review of 100% of the opinions contained in the RM was carried out, paying particular attention to the Greenhouse Gas (GHG) Declaration submitted by the project. This analysis was conducted with the aim of clearly establishing the scope of the audit.

In addition, the conformity of the project with the applicable verification criteria, including the principles of the BCR standard, was evaluated. The purpose of this evaluation was to show how the procedures defined by the project ensured

compliance with the criteria established for the audit, which are detailed in numeral 2 of this document

The documentation related to the project planning was analyzed, reviewing the procedures used to identify the baseline scenario and the quality control measures implemented. Risk management methods and monitoring and reporting procedures were also examined, ensuring the accuracy and reliability of these processes.

The activities described to carry out the monitoring in the DP were compared with those described in the RM, with the aim of evaluating significant changes in the project procedures. Finally, the findings were documented in a detailed report that included conformity assessment and recommendations to improve project performance, facilitating an open dialogue with stakeholders on next steps (FOR 101- Validation and Verification Findings, V6).

After 4 rounds of findings, the project demonstrated that its actions and procedures are real, effective, measurable, verifiable, additional and transparent. That there are mechanisms to guarantee their permanence and monitoring over time. The emissions and removals are significant, and the information provided by the DMSA company is complete and sufficient to support the opinion of the reported GHG gas reductions.

3.1 Validation and verification plan

The step-by-step verification process for the “Mixed planting of native and non-native species in Paraguay-I” project, carried out by VERSA's audit team, is detailed as follows:

1. ***Pre-commitment activities:*** Previous agreement and economic agreement between VERSA and DMSA: in this stage, the two companies defined the type of commitment for the development of the validation process and joint verification of the project. The contract established the level of guarantee, objectives, criteria, scope and materiality threshold according to the needs of the intended user defined in the FOR 129-P COMMERCIAL PROPOSAL VALIDATION VERIFICATION PROJECT GHG. This process took place on: June 14, 2023, according to ISO IEC 17029:2020 and ISO 14065:2019 which are subject to VERSA accreditation with ONAC.
2. ***Selection of the validation and verification team:*** The selection of the audit team was carried out according to the procedures defined to manage risks to impartiality and to ensure the competence of the audit teams available to

provide services in the scopes currently covered by VERSA's accreditation before the ONAC (National Accreditation Body Colombia), to mitigate this risk there is a legally binding agreement (FOR-108 Assignment Service to ensure impartiality during the service), whereby the audit team undertakes to:

- Comply with the processes and instructions of VERSA, including those related to fairness and confidentiality.
- Declare any previous or present association on their part, or by another person or organization with which they have a relationship (for example, a family member or employer), with a client of the VVB.
- Disclose any situation known to them that may present a perceived or actual threat of conflict of interest to them or to VVB, whether internal or external, that may influence validation/verification activities, which ensures that they act in an unbiased manner

Section 3.2 on the audit team and Annex 1 on the competence of team members and technical reviewers provides more detail on these aspects. It is essential to review these sections to gain a detailed understanding of them.

3. **Validation planning:** Validation planning involved strategic analysis, risk assessment and audit plan design. Because VERSA's audit team identified a high risk, it was necessary to perform 100% corroboration activities of the in-situ forest inventory as part of the evidence collection plan. The guidelines established by VERSA were followed to ensure the integrity of the process, as described in the documents: PRO-108 Validation and Verification, Ver 11, FOR 135 Risk Analysis and Evidence Generation Plan Ver and the FOR-109 GHG Validation and Verification Audit Plan, V4.0. They are an integral part of the processes established by VERSA as VVB to carry out validation and verification activities with respect to the requirements specified in ISO/IEC 17029:2019 (The accreditation access has the code 23-VVB_005 and can be consulted at the following link: <https://onac.org.co/certificados/23-VVB-005.pdf>).
4. **Execution of validation activities:** During the documentary review and the field visit, VERSA's audit team evaluated the sufficiency of the evidence with respect to the previously established verification and validation (V/V) criteria. The evidence provided by the Project Proponent was carefully reviewed in four rounds of findings response, finally managing to establish the compliance of the GHG Project with the activities and procedures proposed in the PD and foreseen in the MR in relation to the audit criteria. This activity was developed from July 24, 2023, with the delivery of the findings, until April 15, 2024, when the Project Proponent resolved 100% of the findings.

Based on the above, it can be concluded that the validation team conducted the audit activities in accordance with the validation plan. Evidence gathering activities were conducted according to the corresponding plan, the GHG statement was evaluated, and this validation report was prepared as a result.

5. **Independent Review:** This process was carried out by a competent and independent professional of the audit team responsible for the audit activities, designated by VERSA and approved by the client, following the guidelines of ISO IEC 17029:2019 No: 7 y 9.6, ISO 14065:2020 No: 7 y 9.6, ISO 14066:2014 No: 3.1 y 7, ISO 14064-2:2019 No 8 and ISO 14064-3:2019 No: 8.
6. **Opinion Issuance:** drafting of the verification opinion in accordance with the requirements of section 5.3.7 of ISO IEC 17029:2019 and ISO 14064-2:2019 Chapter 9.

3.2 Audit team

Table 1. Personnel assigned by VERSA.

Full name(s)	Role(s) or responsibility(ies)	Type of activity(ies) developed*
Diana Rauchwerger Londoño*	Lead auditor	Responsible for developing strategic planning activities, risk analysis, evidence collection plan, audit plan, field visit, findings report and verification report.
Cesar Marín*	Technical expert	Responsible for providing technical support for the development of AFOLU project activities.
Lucas Rivera*	Technical Reviewer	Review of all the processes carried out by the lead auditor and responsible for the technical review report.
Camilo Montaña*	Issuance of verification opinion	Responsible for issuing an independent third-party opinion.

*The competence of the VERSA team is related to the Annex 1.

VERSA Expertos en Certificación S.A.S, according to the accreditation issued by ONAC, is structured and has procedures that ensure compliance with the principles of independence, impartiality, transparency, objectivity and confidentiality. These are described in the BCR Antibribery policy detailed in section 8.2.4 of the BCR Validation and Verification Manual and in Impartiality Management in the procedures of certification and registration (2.1 of June 09, 2022).

Through selection and training processes, personnel possess the necessary competence to assure clients of confidence in conformity assessment activities, as can be seen in greater depth in Annex 1 of this document.

The company has clear and defined procedures to manage complaints, especially those related to risks to the impartiality of the services it provides, to mitigate this risk there is a legally binding agreement (FOR-108 Service Assignment to ensure impartiality during the service), whereby the audit team is committed to:

- Comply with the processes and instructions of VERSA, including those related to fairness and confidentiality.
- Declare any previous or present association on their part, or by another person or organization with which they have a relationship (for example, a family member or employer), with a client of the VVB.
- Disclose any situation known to them that may present a perceived or actual threat of conflict of interest to them or to VVB, whether internal or external, that may influence validation/verification activities, which ensures that they act in an unbiased manner, as can be seen in Annex 1.

VERSA's sources of financing come exclusively from conformity assessment activities and, if necessary, credits from financial institutions. No consulting or advisory services are provided.

It is reported that any natural or legal person can access certification services within the established scope. Access to such services is not subject to the size of the client, to memberships, associations or groups, nor to the number of certifications previously issued

3.3 *Level of assurance and materiality*

To comply with the requirements of ISO 14065:2020, ISO 14064:2029, and the BioCarbon Standard, a confidence level of 95% was established. To ensure compliance, the audit team conducted a strategic analysis of the essential components of the GHG project, including: the Project Design Document (PD), the Monitoring Report (MR), spreadsheets, data sources for project removal calculations, measurement records, forest plantation management protocols including personnel training and fire control, cartographic supports for eligibility, baseline, leakage and removals, double counting, and additionality.

In accordance with the above, the nature and scope of the audit activities were developed according to the audit plan and section 10.2.5 of the BCR validation and verification manual, as follows:

1. The level of assurance for the validation and verification of the GHG mitigation Sector Project should not be less than 95%. A 100% sampling of the evidence was carried out, and those involved in the project were interviewed, as detailed in section 3.4 of this document. With a 95% confidence interval and a margin of error less than 10%, 6 of the 8 strata of the project were sampled, as the last one had not been planted at the time of sampling. The overall sampling size for the GHG project, covering 20 plots in total, was calculated. Considering a 95% confidence interval and a 10% margin of error, the required sample size was determined to be approximately 16.66. To ensure conservative results, the final sample size was 17 plots. These results are detailed in chapter 3.4 of this document. Therefore, the level of assurance for validation and verification was not less than 95%.
2. It was validated and verified that the GHG sinks and sources were consistent with the project activities. Additionally, it was confirmed that the project areas did not qualify as forest five years before the project start date. The baseline scenario was considered zero, as the land use five years prior to the commencement of the project was beef cattle ranching. The completion of the contract and the sale of cattle were also demonstrated.

3. The quantification of mitigation results in comparison with the validated baseline, in accordance with applicable national regulations and/or the methodology applied, as appropriate. In this context, the assurance level for the validation and verification of the GHG Project was determined to be 95%. During the process, inconsistencies were identified in the spreadsheets, as detailed in finding 18. However, the project implemented corrective measures to adjust the identified errors, demonstrating that these errors did not exceed 5%.
4. Through interviews with those involved, the effectiveness and efficiency of the activities implemented by the project to support the Sustainable Development Goals and safeguards were assessed.

Thus, it was ensured that there was no material discrepancy in the calculated data, consolidating the reliability of the project information. The verification activities were conducted in accordance with the BCR manual, ensuring that the appropriate procedures were followed and maintaining the integrity of the information presented. Through this rigorous process, it is asserted that the GHG Mitigation Project meets the criteria set in the NTC-ISO 14064-3: 2019 standard and that the results obtained are consistent with the BioCarbon Standard guidelines.

3.4 Sampling plan

The audit plan was executed in accordance with the stipulations in Annex 5, based on the information validated and verified during the Documentary Review and Strategic Planning stages. This approach allowed for the establishment of a robust sampling plan, which was socialised by the VERSA audit team and approved by the client, in line with the guidelines of the most recent versions of ISO IEC 17029 and ISO 14065 standards.

The sampling plan was developed considering the required level of assurance, risk management, and a thorough review of available documentary information. This plan was specifically designed to guide data collection during the field visit, thus ensuring a comprehensive and objective evaluation of the GHG project. The project established two main strata for its evaluation:

1. Baseline Scenario: Pertains to the current land use in the project area.
2. Project Scenario: Corresponds to the year of planting.

To validate the baseline scenario, the audit team reviewed SENACSA certificates, confirming the processing of 12 steers on two specific dates: 22 December 2010 and 4 November 2010. Additionally, grazing contracts with the company Asteria Intil S.A. and other lessees were examined, demonstrating that the lands had been

Handwritten data tables for parameters 2160, 2164, 2169, and 2183. Each table lists a parameter ID, a numerical value, and a handwritten unit or note.

Parameter	Value	Unit/Note
2160	21.8	21.9
2160	18.0	18.0
2160	19.8	19.8
2160	20.8	20.6
2160	20.7	20.3
2160	20.5	20.1
2160	23.4	23.1
2160	22.1	21.7
2160	20.0	19.6
2160	20.3	20.2
2160	16.3	16.1
2160	17.6	16.4
2160	16.2	15.9
2160	15.1	14.0
2160	17.8	17.2
2160	16.6	16.4
2160	16.0	16.3
2160	19.2	19.5
2160	15.8	15.6
2160	19.1	19.5
2164	21.3	21.5
2164	12.2	12.1
2164	18.5	18.9
2164	20.6	20.3
2164	22.6	22.0
2164	18.6	18.7
2164	18.6	18.1
2164	19.6	19.8
2164	22.3	22.5
2164	23.7	23.1
2164	14.3	14.2
2164	14.5	14.8
2164	22.5	22.0
2164	11.5	11.2
2164	13.2	13.1
2169	19.3	19.1
2169	18.4	18.1
2169	18.7	18.5
2169	20.1	20.5
2169	20.3	20.5
2169	17.8	17.8
2169	16.8	16.8
2169	12.3	12.0
2169	19.8	19.2
2169	20.0	19.5
2169	21.9	21.8
2169	13.4	13.5
2169	15.2	15.0
2169	13.4	13.5
2169	20.3	20.5
2169	20.0	19.5
2169	12.7	12.1
2169	18.0	18.2
2169	15.2	15.5
2169	21.2	21.2
2183	9.7	9.5
2183	10.0	10.3
2183	14.1	14.2
2183	12.7	12.8
2183	15.8	15.6
2183	12.6	12.6
2183	15.8	15.7
2183	19.0	19.5
2183	14.4	14.1
2183	15.6	15.7
2183	17.1	17.2
2183	18.0	18.5
2183	19.2	19.2
2183	17.2	17.5
2183	17.9	18.5
2183	12.3	11.3
2183	13.4	14.3
2183	14.2	14.7
2183	13.5	13.5
2183	17.9	18.1
2183	16.2	16.2
2183	12.5	12.7
2183	14.2	14.1
2183	13.0	13.0

Handwritten data tables for parameters 20105, 2177, and 2185. Each table lists a parameter ID, a numerical value, and a handwritten unit or note.

Parameter	Value	Unit/Note
20105	6.6	7
20105	4.4	4.1
20105	5.6	6
20105	5.8	6.1
20105	5.8	5.9
20105	6.0	5.9
20105	5.5	5.5
20105	5.8	5.7
20105	5.5	5.7
20105	6.3	6.1
20105	5.3	5.2
20105	3.7	3.6
20105	6.0	6.5
20105	6.3	6.3
20105	6.3	6.5
20105	6.3	6.5
20105	5.7	5.7
20105	5.4	5.4
20105	5.3	5.3
20105	6.3	6.3
2177	10.1	10
2177	14.1	15
2177	11.9	11.2
2177	15.7	15.6
2177	11.3	11
2177	13.4	13.4
2177	15.3	15.1
2177	13.5	13.6
2177	13.3	13.8
2177	11.5	11.6
2177	15.1	15
2177	15.5	15.6
2177	13.9	13.9
2177	15.1	15
2177	13.1	13.6
2177	13.2	13.3
2185	21.9	22.1
2185	20.6	21
2185	20.4	20.2
2185	19.1	19.2
2185	21.7	21.7
2185	19.3	19.3
2185	22.3	22.1
2185	21.5	22.1
2185	22.3	22.4
2185	16.7	16.5
2185	21.4	21.5
2185	22.5	22.6
2185	15.3	15.5

Regarding the quantification of greenhouse gas (GHG) emissions, Table 2 presents the level of assurance envisaged for the audit. This level was determined based on the data provided by the project owner and establishes the framework for evaluating the accuracy of the information to be used for the quantification of GHG emissions.

Table 2. Level of assurance envisaged for the audit.

Parameter or Requirement	Type of Evidence	Information Source	Level of Assurance
Area	Quantitative	Property and carbon rights documentation (land tenure)	100%
Year		Project start date documentation	100%
Area		Eligibility analysis - GIS	100%
Area		Baseline, detailed evaluation of how the project describes and substantiates, with evidence, the without-project scenario, which in this case corresponds to pastures for extensive livestock farming	100%
Biomass		Spreadsheet	100%

The methodology applied in planning this audit aims to ensure an objective and rigorous evaluation of the forest GHG project during the field visit, complying with the standards required by BioCarbon Standard and the applicable ISO regulations.

Additionally, the risks that could occur during the audit process were evaluated, which was considered in defining the sampling plan in its different phases. These risks could result in errors in the estimation of carbon calculation, as shown in Table 3.

Table 3. Risk assessment in the audit process.

<i>INHERENT RISKS</i>	<i>RISK LEVEL</i>	<i>IMPACT</i>	<i>RISK ASSESSMENT</i>	<i>RISK MANAGEMENT</i>
CONTROL RISKS				
The presented forest inventory does not align with the actual field measurements due to deficiencies in training or the incorrect application of data collection methodologies, which is reflected in the reported growth data.	HIGH	HIGH	MEDIUM	Measurements will be carried out on the diameter at chest height, the coordinates of the plots, the area of the plot, the planting densities, and the height of each of the trees present in the plot. Given that the plantation owners do not directly carry out the measurement and monitoring services of the plots but instead outsource these, an interview will be conducted with the contracted company. During this process, the calibration of the personnel involved in conducting the measurements will be verified, thus ensuring the quality and accuracy of the collected data, as well as the competence and procedure for personnel replacement

<i>INHERENT RISKS</i>	<i>RISK LEVEL</i>	<i>IMPACT</i>	<i>RISK ASSESSMENT</i>	<i>RISK MANAGEMENT</i>
Human error in quantifying emissions. naccuracy: Double Counting, Significant Manual Transfer of Key Data, and Inappropriate Use of Emission Factors	<i>HIGH</i>	<i>HIGH</i>	<i>HIGH</i>	100% of the data indicated in the spreadsheet is cross-checked with the information available in the data source and in the information provided by the GHG project.
The documentation of factors influencing the growth and development of the plantations is insufficient or absent (such as pests, fires, diseases, or others). This lack can have a significant impact on the provided capture estimates.	<i>HIGH</i>	<i>HIGH</i>	<i>HIGH</i>	<i>Advance with an assessment of possible pests and diseases during the field visit. Review the crop management plan of the plantation.</i>
Lack of full data coverage. Exclusion of significant sources, incorrectly defined limits, leakage effects.	<i>HIGH</i>	<i>HIGH</i>	<i>HIGH</i>	It is ensured that all data from the Validation and verification period was considered within the defined limits of the project.
Human error in quantifying emissions.	LOW	HIGH	MEDLE	Se llevará a cabo una verificación del 100% de las hojas de cálculo.
Inherent Risk:				
Reliance on a technology platform designed for	<i>HIGH</i>	<i>HIGH</i>	<i>HIGH</i>	<i>The project proponent provides the procedures and activities they have in place to quantify the data,</i>

<i>INHERENT RISKS</i>	<i>RISK LEVEL</i>	<i>IMPACT</i>	<i>RISK ASSESSMENT</i>	<i>RISK MANAGEMENT</i>
data capture, which can result in omissions and errors in the transfer of raw or raw data to the emissions reduction or removal EXCEL spreadsheet.				<i>capture it, and store it. The auditor verifies compliance with the various procedures through interviews with the project developer. The project proponent must demonstrate how data transfer is carried out and how it is verified. The auditor should include in the audit plan a section for interviews with the personnel responsible for recording and verifying the data in accordance with their procedures</i>
Detection Risk				
Delays in the calibration of measurement or monitoring equipment related to the quantification of GHG removals or reductions.	<i>HIGH</i>	<i>HIGH</i>	MEDLE	The project proponent should establish a procedure whereby a recording check of the calibration frequency of the measuring equipment is carried out to ensure its precision and accuracy. <i>Additional information on the number of plots.</i>
Insufficient information to demonstrate the possession of the rights to use the land on which the forestry activity takes place	<i>HIGH</i>	<i>HIGH</i>	HIGH	<i>The project proponent does not provide the evidence that accredits them as the holder of land use rights.</i>

After considering all the elements collected during the strategic analysis of the project, as well as the assessment conducted throughout the project's development and the on-site audit, it was established that the gathered evidence is appropriate and sufficient to draw a conclusion based on the validation and verification processes.

According to the above, VERSA in FOR 109 - Greenhouse Gas Validation and Verification Audit Plan, defines that to meet the objectives of the process, the auditing process takes a total of 3 days, and no additional virtual interviews are required.

After considering all the elements collected during the strategic analysis of the project, as well as the evaluation carried out throughout the project's development and the on-site audit, it was established that the collected evidence is appropriate and sufficient to draw a conclusion based on the validation and verification processes.

Everything related to the land ownership rights of the project and the boundaries of the areas that form part of it is based on the deeds of the properties. As mentioned earlier, the audit team reviewed 100% of the deeds provided by the person responsible for the GHG project.

It was evidenced through documentary review and interviews with the local authorities that the project leader has specific activities to fulfil the environmental obligations determined by laws and regulations and to ensure compliance over time.

The monitoring of how the project contributes to the Sustainable Development Goals (SDGs) and the safeguards is described in the PD and RM. These impacts were evaluated by the audit team during the field visit with the authorities, neighbours, and other stakeholders involved.

4 Validation and verification procedures and means

4.1 Preliminary assessment

The preliminary evaluation of the GHG AR project, as part of the validation and verification process, was based on a thorough review of the information provided

by Desarrollos Madereros SA and CAMBIUM, using a series of specific criteria to determine the sufficiency of the evidence.

Project documents were analyzed, including the Project Design Document (PDD), Monitoring Report (RM), and forest management plans, along with a number of additional documents that provided detailed evidence of the project, such as: DMSA Deeds, DMSA RUC, Minutes, Contracts, Domain Titles, Invoices, Manuals, Procedures, Management Programs, training certificates, minutes and evidence of the project activities implemented, water and soil analysis, environmental management plans, reports of DMSA's own internal audits, policies and geographic information, among others. Ensured that the requirements of ISO 14065 and the BioCarbon Standard were met. The reported GHG emissions and removals data were evaluated, using an analysis of consistency and completeness of the information. Verified data accuracy and correct application of calculation methodologies.

In addition to the information provided by the project owner, relevant external sources of information were consulted to assess the additionality and credibility of the project. Data from public sources, such as satellite imagery to verify forest cover, climatological information to assess climatic conditions in the project area, and data from local environmental authorities were analyzed to determine compliance with regulations. Relevant laws and regulations were consulted, such as the Forestry Law No. 422/73104, the Environmental Impact Assessment (EIA) Law No. 294/93, the National Environmental Policy designed and supervised by the Ministry of Environment and Sustainable Development (MADES), Law 1447/99110, Law 1507/99111 implementing the Montreal Protocol for the elimination and reduction of substances that damage the ozone layer, the Kyoto Protocol implementing the United Nations Framework Convention on Climate Change, Law No. 536/95114 on the Promotion of Affirmation and Reforestation, and Decree No. 9.425/95115, which regulates Law No. 536/95 for the promotion of afforestation and reforestation.

Based on all the evidence collected, it can be concluded that the criteria defined for this verification were adequate and that the activities were implemented consistently over time. The emissions and removals are significant, and the evidence provided by the companies Desarrollos Madereros SA and CAMBIUM is complete, correct, consistent, updated and supports the scope of the audit, being sufficient to support the reported reductions and/or removals of greenhouse gases.

4.2 Document review

Reformulated: As an essential part of the validation and verification activities of the Greenhouse Gas (GHG) Project, a thorough review of 100% of the documents and evidence provided by the project manager was carried out, as well as additional documents, including official ones, to carry out the cross-verification. This thorough review ensured the accuracy and completeness of the data submitted in relation to greenhouse gas emissions and mitigation measures taken, as detailed in Table 4.

Table 4. Documents reviewed by the audit team

Document Title / Version	Author	Organization	Document provider (if applicable)
PD MIXED PLANTING OF NATIVE AND NON-NATIVE SPECIES IN PARAGUAY-I Versión 4	Company: Desarrollos Madereros SA Trademark: Pomera Maderas	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Monitoring Report Template MIXED PLANTING OF NATIVE AND NON-NATIVE SPECIES IN PARAGUAY-I version 1.1	Company: Desarrollos Madereros SA Trademark: Pomera Maderas	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
EX – Ante carbon capture estimations BCR-PY-451-14-001 20240402	Company: Desarrollos Madereros SA Trademark: Pomera Maderas	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
EX – post monitoring report BCR-PY-451-14-001 20240402	Company: Desarrollos Madereros SA Trademark: Pomera Maderas	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
Deed 171-25-06-96 Incorporation of a company	Rodolfo Ricciardi Jara Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed 252-03-10-96 Incorporation of a company	Rodolfo Ricciardi Jara Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed 23 22-04-04 Signature corporate section	Rosana María Fracchia Sosa Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed 92 22-10-04 Transformation of society	Martha B. Narvaja Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed 93 22-10-04 Transformation of society	Martha B. Narvaja Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed 32 16-06-06 Scriptures	Gladys Esquivel de Cocco Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed 129 09-10-07 Scriptures	Gladys Esquivel de Cocco Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed 28 22-04-08 Transcript of the minutes of the extraordinary meeting	Gilda Krisch de Velázquez Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed 413 13-12-08 Transcript of the minutes of the extraordinary meeting	Luis Alberto Peroni Luis Enrique Peroni Silvana Peroni Notaries	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed 81 31-12-12 Transcript of the minutes of the	José Ramírez Otaño Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
extraordinary meeting			
Deed 77 19-05-14 Transcript of the minutes of the extraordinary meeting	José Ramírez Otaño Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed 55 12-02-15 Transcript of the minutes of the extraordinary meeting	José Ramírez Otaño Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Scripture 77 Transcript of the minutes of the extraordinary meeting	José Ramírez Otaño Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed 76 29-08-16 Transcript of the minutes of the extraordinary meeting	José Ramírez Otaño Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
RUC – Single Taxpayer Registry	Undersecretary of State for Taxation	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Minutes of the Ordinary Meeting DMSA13	DMSA	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Certificate of Assembly Communication	DMSA	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Start of activities- INAFO Contract 20180101	DMSA	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
Service Provision Contract	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 705	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 703	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 749	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 693	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 694	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 696	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 697	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 695	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 700	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 701	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
Work Order 702	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 722	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 681	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 679	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 1.051	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Work Order 1.052	DMSA and Agroforestry Innovation S.R.L	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Domain Condition	DMSA and María Isabel Zarza	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed of sale and transfer of property Finca 13138	Gilda Krisch de Velázquez Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Domain Condition	DMSA and María Isabel Zarza	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed of sale and transfer of property Finca 1338	Gilda Krisch de Velázquez Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Domain Condition	DMSA and María Isabel Zarza	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
Deed of sale and transfer of property Finca 13864	Gilda Krisch de Velázquez Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Domain Condition	DMSA and María Isabel Zarza	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed of sale and transfer of property Fincas 749, 9355, 1951, 1950, 2723, 29703, 29704 and 29702	Gilda Krisch de Velázquez Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Domain Condition	DMSA and María Isabel Zarza	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed of sale and transfer of property registration K13/3624	Gilda Krisch de Velázquez Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Domain Condition	DMSA and María Isabel Zarza	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Deed of sale and transfer of property Finca 35	Gilda Krisch de Velázquez Notary	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Domain Condition	DMSA and María Isabel Zarza	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Grazing contract	DMSA and the company Astería Intil S.A.	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Grazing contract	DMSA and Héctor Peralta Vidal.	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
Grazing contract	DMSA and Porfirio Ramón.	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Livestock guides certificate of sale of cattle for slaughter	National Service for Animal Quality and Health	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Invoices- Investments in CSR, road and fire protection	DMSA Invoices & Vendors/Contractors	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Fire Protection Plan Version 5	DMSA-POMERA	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Operating Procedure 05- DMSA Cutter Ant Control Version 6	Engineers: Fr. Leguizamón and D. Acosta	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Responsible Agrochemical Management Program Version 8	DMSA-POMERA	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Commercial agreement without carbon credit representation	Cambium Earth S.L and Desarrollos Madereros S.A	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Plantation Staff Training from 2018 to 2022	Desarrollos Madereros S.A	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Operating Procedure PO-07 DMSA Planting. Version 7.	Desarrollos Madereros S.A	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Operating Procedure PO-08 DMSA Pruning	Desarrollos Madereros S.A	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
from the first to the seventh level. Version 10			
Water analysis report 25/08/2023	Desarrollos Madereros S.A	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Soil analysis report 12/08/2023	Desarrollos Madereros S.A	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Environmental Management Plan Submitted to the Ministry of Environment December 26, 2014	Desarrollos Madereros S.A	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Environmental Management Plan Submitted to the Ministry of Environment July 27, 2015	Desarrollos Madereros S.A	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
ENVIRONMENTAL AUDIT COMPLIANCE WITH THE ENVIRONMENTAL MANAGEMENT PLAN, year 2022	AUDITOR: ING. CHRISTIAN SCHREIBER	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Results of the Public Presentation of the DMSA Carbon Project	Desarrollos Madereros S.A	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Public Presentation of the DMSA Carbon Project	Desarrollos Madereros S.A	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
Lots Tapyta-Hernandarias.kml	Desarrollos Madereros S.A	Company: Desarrollos Madereros SA	Company: Desarrollos Madereros SA
Resolution SNC 200 Establishing Technical Rules for the Graphic Incorporation and Registration of Georeferenced Location Plans of Property Titles. August 31, 2020	Ministry of Finance – National Cadastre Section	Ministry of Finance of Paraguay	Ministry of Finance of Paraguay
BCR_SDG-Tool BCRPY451-14-001 period 2018-2023.xlsx	Desarrollos Madereros S.A	Desarrollos Madereros S.A	Desarrollos Madereros S.A
Sustainable Development Safeguards ES.docx	Desarrollos Madereros S.A	Desarrollos Madereros S.A	Desarrollos Madereros S.A
Ex – ante carbon capture estimations BCRPY451-14-001 period 2018-2023.xlsx	Desarrollos Madereros S.A	Desarrollos Madereros S.A	Desarrollos Madereros S.A
Ex – post carbon capture estimations BCRPY451-14-001 period 2018-2023.xlsx	Desarrollos Madereros S.A	Desarrollos Madereros S.A	Desarrollos Madereros S.A
Landsat 8 images.zip	Desarrollos Madereros S.A	Desarrollos Madereros S.A	Desarrollos Madereros S.A
Additional Documents			
National Forest Strategy for	Ministry of Environment and	Ministry of Environment and	Ministry of Environment and

Document Title / Version	Author	Organization	Document provider (if applicable)
Sustainable Growth (ENBCS)	Sustainable Development of Paraguay, August 2018.	Sustainable Development of Paraguay	Sustainable Development of Paraguay
National Climate Change Strategy. Asunción, Paraguay 2015	Ministry of the Environment National Office of Climate Change, 2015	Ministry of the Environment National Office of Climate Change	Ministry of the Environment National Office of Climate Change
Second Reference Level of Forest Emissions (FREL) from Deforestation in the Republic of Paraguay – period 2012 - 2019, for payment for REDD+ results under the UNFCCC.	Ministry of Environment and Sustainable Development (MADES) Ministry of the Environment National Office of Climate Change	Ministry of the Environment National Office of Climate Change	Ministry of the Environment National Office of Climate Change
Guide to Developing Climate Change Adaptation Plans for Local Governments, September 2018	Ministry of Environment and Sustainable Development (MADES)	Ministry of Environment and Sustainable Development (MADES)	Ministry of Environment and Sustainable Development (MADES)
Proposal: national climate change plan of the Republic of Paraguay	Ministry of Environment and Sustainable Development (MADES)	Ministry of Environment and Sustainable Development (MADES)	Ministry of Environment and Sustainable Development (MADES)
PARAGUAY NATIONAL CLIMATE CHANGE POLICY	Ministry of Environment and Sustainable Development (MADES)	Ministry of Environment and Sustainable Development (MADES)	Ministry of Environment and Sustainable Development (MADES)

Document Title / Version	Author	Organization	Document provider (if applicable)
IPCC Guidelines 2003, 2006, 2019 for National Greenhouse Gas Inventories. Volume 4. Agriculture, forestry and other land uses.	IPCC	IPCC	IPCC
Law 422/Forestry	Chamber of Deputies Legislative Palace	Chamber of Senators/ General Secretariat	Library and Central Archive of the National Congress
Law 294/ Environmental Impact Assessment	National Congress	National Congress	Library and Central Archive of the National Congress
Law 7190/ on carbon credits	National Congress	National Congress	Library and Central Archive of the National Congress
Law for the Promotion of Afforestation and Reforestation No. 536/95114.	National Congress	National Congress	Library and Central Archive of the National Congress
Guidelines for national greenhouse gas inventories	IPCC	IPCC	IPCC
The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action	United Nations Framework Convention on Climate Change.	United Nations Framework Convention on Climate Change.	United Nations Framework Convention on Climate Change.

Document Title / Version	Author	Organization	Document provider (if applicable)
under the Convention.			
Transforming our world: the 2030 Agenda for Sustainable Development	United Nations.	United Nations.	United Nations.
National System of Protected Wild Areas of Paraguay SINASIP	SEAM Ministry of Environment Paraguay	SEAM Ministry of Environment Paraguay	SEAM Ministry of Environment Paraguay
Reserves and Biodiversity	Government of Paraguay	Government of Paraguay	Yacyreta Binational Entity
Forest measurements	Avery, T. E., & Burkhart, H. E	Avery, T. E., & Burkhart, H. E	McGraw-Hill.
Forest inventory and analysis national core field guide	USDA	USDA	USDA

4.3 Interviews

July 17, 2023, marked the beginning of the audit process with the opening meeting, which was attended by the personnel responsible for the project (DMSA and CAMBIUM). During this meeting, the following points were discussed:

1. The role played by the company Versa as a conformity assessment body, in charge of carrying out the Verification of the PMCC.
2. General presentation of the validation and joint verification process and socialization of the audit plan where emphasis was made on the previously defined criteria, purpose and scope of the validation and joint verification.
3. Ratification of the confidentiality commitment by the VERSA audit team.
4. Explanation of the process of identifying findings and their classification.

5. Communication channels available to handle comments, complaints and claims.
6. Explanation of the types of feedback.
7. Reasons that could generate the loss of confidence of the audit team.
8. Causes that could stop the audit process.

versa		Apertura y cierre validación y verificación GEI		FOR-126 FECHA VIGENCIA: 27/11/2020 VERSION:01	
Lista de participantes					
Nombre	Cargo	Empresa u organización	Firma		
			Apertura	Cierre	
DANI ROCHWITZ	Auditor Lider	Versa	7:17 AM		
LEONAR MINGO	CONSULTOR	AUTONOMO	7:17 AM		
CEAR MARIN	Auditor acompañante	Versa	7:19 AM		
Miguel RIOS	Jefe Forestal	DMSA			
Carlos Arevales	Je Fe I+D	DMSA			
Mario Ramos	Ayudante Tecnico	DMSA			
LIJIAN GIMONZA	RESPONSABLE FSC	DMSA			
PABLO AQUINO	JEFE DE PROYECTO CARBONO	GARRUCHOS S.A. (POMER + ARGENTINA)			

From July 18 to 20 a series of interviews were conducted; all interviewees are listed in Table 5. At this point it is important to note that there were no virtual interviews.

Table 5. Persons interviewed during the Validation and Verification Process.

Name	ROLE
Derlis Osorio	Forest Inventory Manager of the INAFO company
Lic. Carlos Antonio López	Hernandarias District Hospital
Ing. Gloria Zárate	General Director of Health, Hygiene and Environment of the Municipality of Hernandarias
Eng. Zulma Sandoval	In charge of the Environment of the Municipality of Hernandarias.
Eng. Héctor Benítez:	Environmental Officer of the Municipality of Hernandarias
Sr. Carlos Santacruz	Neighbor of the Community of Heart of Mary
Student Adrián Vega Orué	Neighbor of the Community of Enramadita
Mr. Sergio Chaparro	Park Ranger of the Tapytá Nature Reserve (Moisés Bertoni Foundation)
Mr. Roberto Martinez	Park Ranger of the Tapytá Nature Reserve (Moisés Bertoni Foundation)
<p>Within the framework of the evaluation of the activities of the DMSA company and its impact on the local community, structured interviews were conducted with the neighbors of the forest plantation located in Tapytá and Hernadarias. The objective of these interviews was to collect data on the community's knowledge of the company, its relationship with it, the activities carried out for the benefit of the community and the perceived impact of these activities.</p> <p>The project's activities are aligned with several of the Sustainable Development Goals (SDGs) and the Cancun Safeguards, ensuring a holistic and respectful approach towards community and environmental development. Compliance with SDG 1 (No poverty) and SDG 2 (Zero hunger) is evidenced in the generation of employment and the strengthening of economic security, also promoting the rights of the community and its sustainable development, as proposed by the Cancun Safeguards. Compliance with SDG 3 (Good health and well-being) and SDG 6 (Clean water and sanitation) is reflected in infrastructure improvements and support for a healthier environment, in line with the safeguard that seeks to protect human well-being. Investment in education and training, linked to SDG 4 (Quality Education), responds to the principle of full and effective stakeholder participation, emphasised by safeguards. Progress in infrastructure and sustainable practices, related to SDG 9 (Industry, innovation and infrastructure) and SDG 12 (Responsible consumption and production), and the commitment to mitigating environmental impacts, linked to SDG 13 (Climate action) and SDG 15 (Life on land), are in harmony with the safeguard that emphasizes the</p>	

Name	ROLE
<p>conservation of biodiversity and environmental services. Thus, the project supports both an inclusive and ecologically responsible approach, promoting community well-being and environmental integrity in accordance with the principles established by the Cancun Safeguards.</p>	
Ing. Samuel Chávez	Social area/extension Moisés Bertoni Foundation
Ing. César Florentin	Head of INFONA Regional Office of Caazapá
Eng. Jorge Guillén	INFONA Technician of Asunción
Mr. Elvio Fleitas	INFONA Technician of San Juan Nepomuceno
<p>Structured interviews were conducted with representatives of various government entities. The questions focused on their knowledge of the company, the nature of any collaboration regarding the GHG project, and their perception of the impact of such collaborations.</p> <p>As a result, the interviewees mentioned that the GHG project activities effectively comply with the selected Sustainable Development Goals (SDGs) and the Cancun Safeguards. The interviewees confirmed that the traditional use of the property was focused on livestock, an activity now replaced by sustainable practices that support SDG 1 (No poverty) and SDG 2 (Zero hunger) through the generation of jobs and improved food security. The company contributes directly to SDG 3 (Good Health and Well-being) by donating medicines, improving access to health care in the local community. In addition, its environmental education campaigns in schools reinforce SDG 4 (Quality Education) by promoting environmental awareness from an early age. Actions that ensure responsible water use are aligned with SDG 6 (Clean water and sanitation). The commitment to greener infrastructure and the adoption of sustainable practices is related to SDG 9 (Industry, innovation and infrastructure) and SDG 12 (Responsible production and consumption), promoting cleaner and more efficient processes. Efforts to reduce emissions comply with SDG 13 (Climate Action), while reforestation initiatives promote SDG 15 (Life on Land). All these activities not only support the SDGs, but respect the Cancun Safeguards by fostering sustainable development, protecting community rights, conserving biodiversity, and managing natural resources sustainably, demonstrating a comprehensive approach that benefits both the local community and the global environment.</p>	
Leonel Mingo	Project Consultant
Miguel Rios	DMSA Forestry Chief
Carlos Arévalos	DMSA R+D Manager
Mario Ramos	DMSA Technical Advisor
Lilian Giménez	FSC DMSA Manager

Name	ROLE
Pablo Aquino	Project Manager
Juan Murillo Arias	Cambium Earth SL
Ricardo Rodolfo Kiriluk	DMSA Principal Conductor
<p>In the interviews conducted with the staff of the DMSA company, it was inquired about how the project addressed issues related to the identification of eligible areas, the definition of the baseline scenario, additionality, stratification, uncertainty management, land tenure supports, calculations, cartography, leakage, the monitoring plan, the review of information processing, and the systems of registration and data management.</p> <p>Through these interviews, it was possible to establish that the DMSA company has solid procedures that guarantee the traceability of the information. The data provided by the company was extensive and sufficient to meet the established requirements. The deviations identified by the audit team during the desk review were not due to a lack of information, but rather to aspects related to the presentation of information. This finding underscores the need to improve clarity and organization in the way data is presented, thus ensuring more effective and efficient understanding by evaluators.</p>	

4.4 On-site visit



Plantation, Diana Rauchweger, 2023.

Interviews with plantation workers and others involved in the GHG Project began on July 18 through July 20, 2023, with the fundamental purpose of validating and

verifying the execution of the various activities contemplated as part of the GHG Project (listed in Table 3).

One of the key points during the field visit was to identify how the GHG Project Proponent implements the processes defined for the capture and processing of the information needed to carry out the forest inventory. As well, understand how complaints and claims are handled, as well as any other aspect related to the interaction between workers and DMSA and CAMBIUM, such as training on the use of tools and personnel rotation, among others. This interview process was carried out with the objective of gaining an in-depth understanding of the operational and management dynamics of the Eucalyptus spp. plantation, thus allowing an assessment of the effectiveness and adequacy of the implementation of project activities.

During the second day of the audit, 100% of the temporary plots were verified to confirm the accuracy and effectiveness of the monitoring procedures of the carbon pools that are part of the MR. The main objective of this verification was to ensure the correct implementation of the procedures, defined to estimate the volume and live biomass in DMSA's plantations, which is essential to verify the accuracy of the reported data.

4.5 Clarification, corrective and forward actions request

VERSA has established clear procedures for identifying areas in a GHG Project that require correction, improvement, or clarification during joint Validation and Verification. This procedure is the responsibility of the Lead Auditor and was communicated to the GHG Project Proponent at the beginning of the process. The findings detected are compiled on the FOR 101 form, where the Project Manager provides their answers and additional evidence if necessary.

The main objective of the validation and verification process was to identify deviations from the criteria defined for the GHG project audit. To this end, parameters included in the Project Document (PD) and the Monitoring Report (RM) were evaluated, especially those related to equations, parameters and key data that indicated the alignment of the project with the established criteria. This assessment included the baseline scenario, additionality, layering and monitoring plans, thus ensuring the quality of the information.

A detailed environmental and social assessment was carried out and stakeholders were consulted to ensure transparency and legal compliance. A total of 32 findings were identified. Based on this, the findings of non-conformity were categorized as follows:

4.5.1 Clarification requests (CLs)

Clarifications are minor non-conformities that should be raised when there are non-material misstatements in the PD or RM information that make the argumentation in these documents and the evidence supporting the assertions insufficiently clear or insufficient to determine whether the applicable requirements have been met.

In total, 3 CLs were identified, related to: the scope of the project, spatial and temporal boundaries and its alignment with Paraguay's NDC.

Findings 3 and 4 were related to the lack of clarity in defining the objectives and scope of the GHG mitigation project, based on the needs and expectations of the intended user. To address this situation, the GHG project leader incorporated these considerations into sections 1.1 (Scope) and 3.1.1 (Applicability Conditions of the PD), as well as in sections 1.2 (Sectoral Scope) and 1.3 (Applicability Conditions of the Monitoring Report). The objectives of the project were clarified and included in section 2.2 (Objectives of the PD) and section 1.5 of the monitoring report.

Finding 8 highlights the lack of clarity in the description of project activities in the PD, which did not align with what was observed during the corroboration visit. To resolve this, all project activities were detailed in section 2.3 of the PD, and the description of the technologies was adjusted in the monitoring section. Additionally, all technologies were included in section 13 of the PD and in section 2.3, and this information was added to section 4 of the monitoring report.

4.5.2 Corrective actions request (CARs)

Corrective action requests (CARs) are major non-conformities that must be raised when there is non-compliance with a requirement of the standard, national regulation or GHG program.

A total of 29 CARs related to non-compliance with the versions of the BioCarbon Standard documents were identified. This issue was resolved by using the latest versions of all documents defined by the BioCarbon Standard for this purpose, ensuring compliance with current requirements and improving the quality of the documentation.

Regarding the applicability of the methodology, all elements noted in the finding in section 1.1 (Project Scope) and section 1.2 (Sectoral Scope and Type of Project) of the monitoring report were completed. This ensures that the project is being

executed within the defined parameters, securing its effectiveness and alignment with the expectations of the BioCarbon Registry.

For the identification of the stakeholders involved in the project, a comprehensive and sufficient description was included in the PD and in the eRM, as evidenced by the VERSA audit team in the field. This not only helps to clarify responsibilities but also enhances transparency and accountability among all stakeholders.

Concerning the sinks and sources of GHG, these were properly identified both in the PD and the RM, ensuring that they correspond to those indicated in the PD. This consistency is crucial to ensure that emission reduction estimates are accurate and verifiable.

The eligible areas were adjusted according to the requirements of the latest version of the BCR methodology, ensuring that all project activities are eligible and meet the established criteria, facilitating resource mobilization and financing.

The baseline scenario was developed in accordance with the steps established by the BCR tool and methodology, allowing for a clear framework to measure the project's impacts compared to a non-intervention scenario.

Additionality was also developed following the same framework, demonstrating that the expected emission reductions exceed what would have occurred in its absence, thus ensuring the validity of the generated carbon credits.

Regarding the management of uncertainty, the project included a description of the procedures and actions contemplated in the PD that are implemented in the RM. This ensures that there is a systematic approach to address and mitigate any associated risks, establishing a solid foundation for informed decision-making.

Finally, in relation to compliance with public policy regarding carbon markets and alignment with the NDC and monitoring plan, a list of applicable legal regulations was included, along with how the various activities proposed and implemented by the project comply with such regulations. This approach not only guarantees legal compliance but also strengthens the legitimacy of the project among market actors and other stakeholders."

4.5.3 *Forward action request (FARs)*

They are findings related to the implementation of future actions, which guarantee the veracity of the project that is required to be reviewed during the next verifications as appropriate.

For this project, there were no findings categorized as a FAR.

All deviations identified during the requirements audit process are described in greater detail in Annex 2.

5 Validation findings

During the audit of the Mixed planting of native and non-native species in Paraguay-I project, VERSA's audit team identified certain aspects that the proponent of the GHG project solved in its entirety in 4 ROUNDS of response by the auditor and its description is as follows:

CAR: Corrective Action Request

The VERSA team identified 28 Corrective Action Requests (CARs), related to non-compliance with the requirements of the standards and the BioCarbon Standard program. The CARs identified are derived from:

- Material misstatement: material errors affecting the decision of the intended user of the GHG inventory or project (ISO 14064-3:2019).
- Situations that influenced the ability of the project or inventory to achieve actual, measurable and verifiable GHG emissions quantification, reduction and/or removal.
- Any situation of risk that GHG emissions, reductions and/or removals cannot be monitored and/or calculated.

The list of corrective action requirements identified by VERSA's audit team and their response by the project manager can be consulted in greater detail in Annex 2 of this document, respectively.

CL: Clarification Request

After performing this evaluation, four clarification requests (CLs) were identified, which were resolved in their entirety, due to the responses provided by the Project proponent. These were comprehensive and duly supported with evidence to address the CLs raised. The relevant adjustments were included in both the Project Document (PD), Monitoring Report (MR), evidence and relevant annexes. The list of clarification requests identified and their response by the project manager can be found in more detail in Annex 2.

FAR: Future Action Request

During the stage carried out by the audit team for this validation and retroactive verification process, a total of 28 corrective action requests (CAR), 4 requests for clarification (CL) and 0 requests for future action (FAR) were identified, all of which were satisfactorily closed.

5.1 Project description

The “Mixed planting of native and non-native species in Paraguay-I” project is an initiative within the AFOLU sector (Agriculture, Forestry and Other Land Uses), which focuses its efforts on climate change mitigation. Its main objective is to capture carbon dioxide from the atmosphere by planting forests to generate carbon credits, which will subsequently be traded in their entirety on the voluntary market. In addition, the project seeks to make a positive contribution to the community and the biodiversity of the area by leaving a legacy of a forest composed of native species after 40 years, thus replacing the pasture areas that were historically used for cattle ranching.

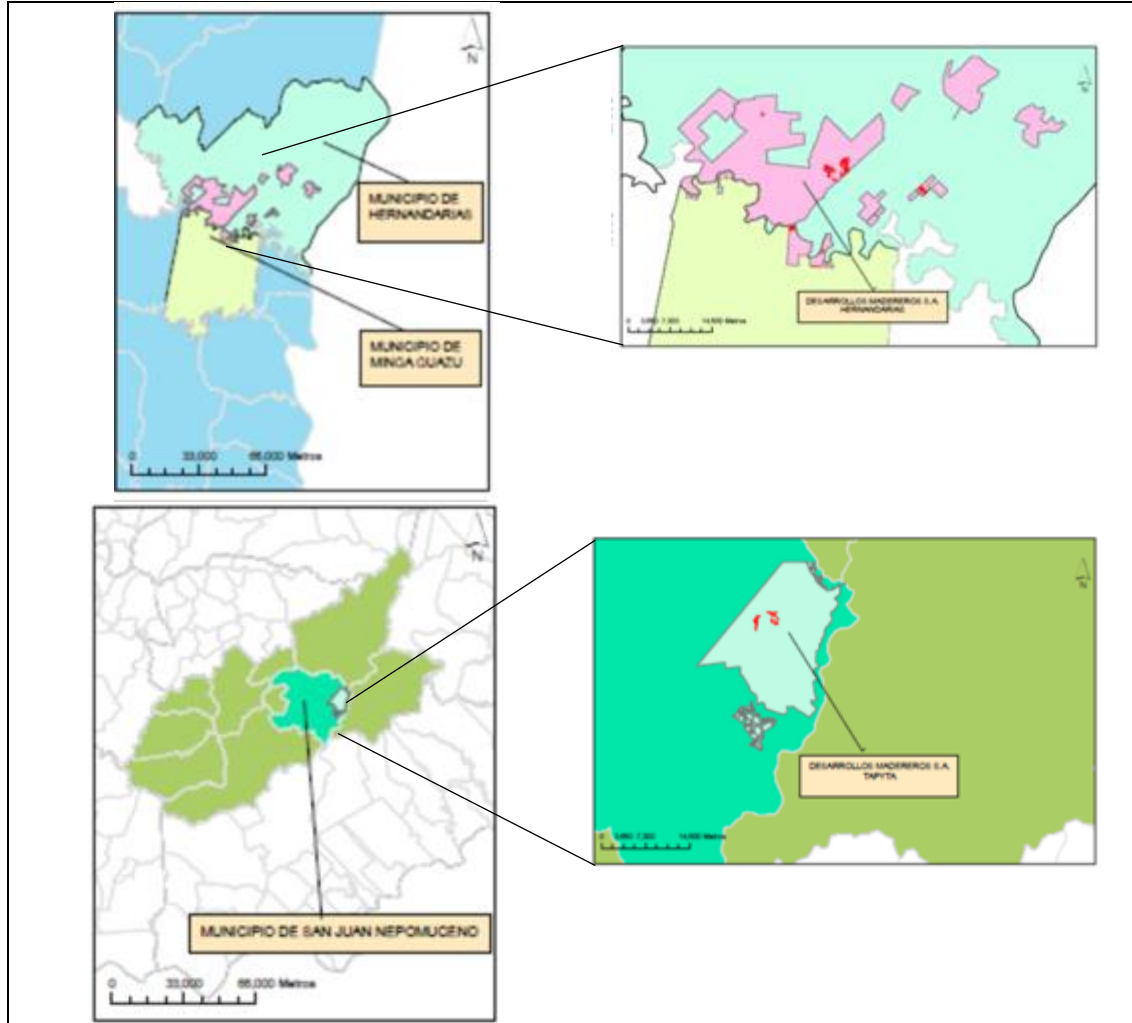
The project is geographically located in Paraguay, in two ranches, the first is located in the municipality of Hernandarias, Department of Alto Paraná, called UMF₁₁ Tapytá, hereinafter referred to as Hernandarias, and the second, UMF Tapytá, is located in the Department of Caazapá, as shown in Table 6.

Table 6. Geographical coordinates and area of the project's farms

Estancia	Reference location	Project surface area (ha)
Hernandarias	-25,361682 -54,773279	138,80
Tapytá	-26,207745 -55,771425	34,00

Source: DMSA, 2023.

Figure 2. Geographic Location of the GHG Project



Source: DMSA, 2023

It is estimated that the project will achieve a reduction of approximately tCO_{2e}. This will result in 153.133 tCO₂ over 40 years of the project, with an annual average of 3,828 tCO₂/year. The audit process developed by VERSA's audit team for the validation and joint verification of the Project "Mixed planting of native and non-native species in Paraguay-I" corresponds to an objective assessment of the reduction and/or elimination of emissions resulting from the project activities during the evaluation period, in accordance with the requirements established by ISO 14064-2:2019 and ISO 14064-3:2019 standards.

In this context, the audit process encompasses a comprehensive review of compliance with the criteria defined for the project, applicable legal regulations, methodologies used to calculate emission reductions and the effectiveness of the

methods defined by the project owner to ensure adherence to the principles governing the audit process.

During the validation, the VERSA audit team assessed, based on objective evidence, whether the project design complied with the relevant requirements of the BCR. To do this, we assessed whether the assumptions or statements made in the DP were complete, conservative, and accurate. It was also evaluated whether the selected methodology complied with the BCR Standard, as well as the conditions of applicability and the tools/guidance issued by BioCarbon.

The following areas were reviewed according to the validation process record:

- Project design: It was verified that the project was clearly defined and that the objectives and activities were aligned with the BCR criteria.
- Emissions calculation methodology: The applicability of the selected methodology for the type of project and the specific conditions of the site was evaluated.
- Baseline: The accuracy and reliability of the data used to establish the emissions baseline was analyzed.
- Monitoring, Reporting, and Verification (MRV): The MRV plan was reviewed to ensure that it was adequate to measure and report emission reductions.

During verification, the VERSA audit team evaluated and compared with valid information that the proposed project activities resulted in GHG emission reductions. The following areas were reviewed according to the verification process record:

- Project implementation: Verified that project activities had been implemented according to the approved design.
- Calculation of emission reductions: The accuracy and reliability of the calculation of reported emission reductions was assessed.

Monitoring and Reporting: The accuracy and completeness of the information reported on the monitoring of the project was verified.

The GHG project successfully demonstrates its alignment with the objective of capturing carbon dioxide from the atmosphere through the establishment of a forest plantation for the generation of carbon credits that will then be fully traded in the voluntary market and allow and encourage the establishment of native species so that at the end of the project a forest remains.

5.2 Project type and eligibility

Project “Mixed planting of native and non-native species in Paraguay-I” is part of the AFOLU sector (Agri-culture, Forestry and Other Land Uses) and with a focus on forestry activities of Aforestation Reforestation (ARR), has an area of 172.76 hectares. Its main objective is to reduce emissions of greenhouse gases (GHG), mainly carbon dioxide equivalent (CO_{2e}), through the absorption and storage of carbon by forest vegetation.

During the first monitoring period, which ran from December 2018 to May 2023, a removal of 16,711 tons of CO₂ was reported. To ensure the permanence and effectiveness of the long-term emissions reductions, the project designated 20% of these removals as reserves. This reserve, known as a buffer, acts as a safeguard that ensures that the reductions achieved are sustainable and lasting over time.

In addition to its contribution to climate change mitigation by reducing GHG emissions, the project has also been shown to generate positive socio-economic impacts. The implementation of forest systems involving species of *Eucalyptus* spp. has created employment for the local communities neighboring the project, reflecting the commitment to the sustained development of the region.

In conclusion, the project owner has complied with the requirements established in the BCR Standard by adequately identifying the scope, the type of project, the activities. Through reserve measures and the creation of benefits for the community, the effectiveness and sustainability of the project in the long term is guaranteed. At this point, it is important to clarify that for this type of initiative the scale does not apply.

Table 7. Type of project and sector.

Eligibility criteria	Evaluation by validation body
Scope of the BCR Standard	AFOLU
Project type	AFOLU sector activities other than REDD+
Project activity(es)	Aforestation, Reforestation and Revegetation (ARR)

Eligibility criteria	Evaluation by validation body
Project scale (if applicable)	N/A

1. Project Scope Review

- Objective: To verify if the owner has correctly identified the scope of the project. In the case of ARR (Afforestation, Reforestation and Revegetation) activities, it is crucial to determine that they are developed in areas that meet the required conditions, that is, areas not considered natural forests or natural vegetation covers.

OVV Evaluation: It is reviewed that the project is located in previously defined areas that are not part of natural forests or protected areas. The project detailed the previous use of the land and justified that these are areas suitable for restoration or reforestation activities.

2. Project Type Identification

- Objective: To confirm that the owner has correctly classified the project type as "ARR".
- OVV Assessment: ARR activities, according to the BCR Standard, include silvopastoral systems, agroforestry systems, commercial plantations or landscape management, if natural forests are not affected. The project clearly specified the type of activity corresponds to commercial plantations. The project uses fast growing exotic plant species (such as Eucalyptus grandis and hybrids) with the objective of conditioning the land, providing shade that allows the adequate growth of native species.

3. Review of Project Activities

- Objective: To determine if the activities described in the project are consistent with the methodologies and good practices for ARR activities, in accordance with the BCR Standard.
- OVV Assessment: It was analyzed that the project activity plan, such as tree planting, is aimed at reducing GHG emissions and improving carbon sequestration in soil and biomass. In addition, they must be aligned with the principles of sustainability and proper management of natural resources.

4. Determining the Scale of the Project

- Objective: To verify if the project has adequately identified its scale, based on the area and the expected results.
- OVV Evaluation: According to the provisions of the BCR Standard. GHG projects classified as ARR activities, and REDD+ Projects are not subdivided into project-scale related categories.

5.3 Grouped project (if applicable)

This item does not apply because this GHG project is not grouped.

5.4 Other GHG program

During the document review, after examining the platforms of greenhouse gas (GHG) programs and standards by the audit team, it was found that the project “Mixed planting of native and non-native species in Paraguay-I” is not registered in GHG standards and programs such as ColCX, Gold Standard, Puro Earth, Global Carbon Council, Cercarbono Clean Development Mechanism, Plan Vivo, Climate action reserve and VERRA. The main objective of this procedure is to ensure that the project does not have duplicate accounting by being registered in another GHG program or standard. Finally, it is evident that only the BioCarbon Standard and VERRA standards have projects in Paraguay and is in accordance with the registration of the project, it has not been canceled in another standard and the GHG reductions or removals generated by the project do not form part of another registered project, in BIOCARBON or in another GHG program.

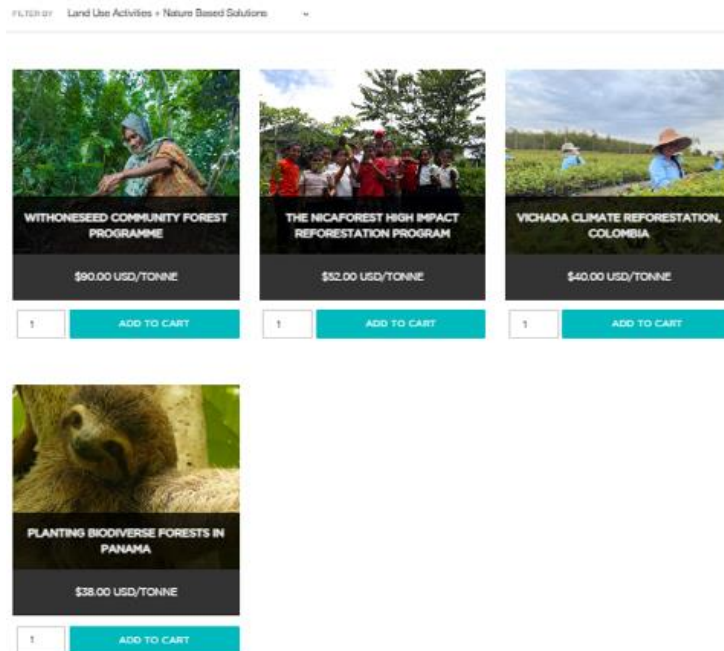
In this sense, according to the evidence, it is possible to affirm that the project is not registered in other GHG standard and program platforms, and that it meets and is consistent with the criteria established in section 2 of this document, as well as with the requirements of the BCR Standard and the AFOLU Sector Methodological Document / BCR0001.

Search in ColCX:

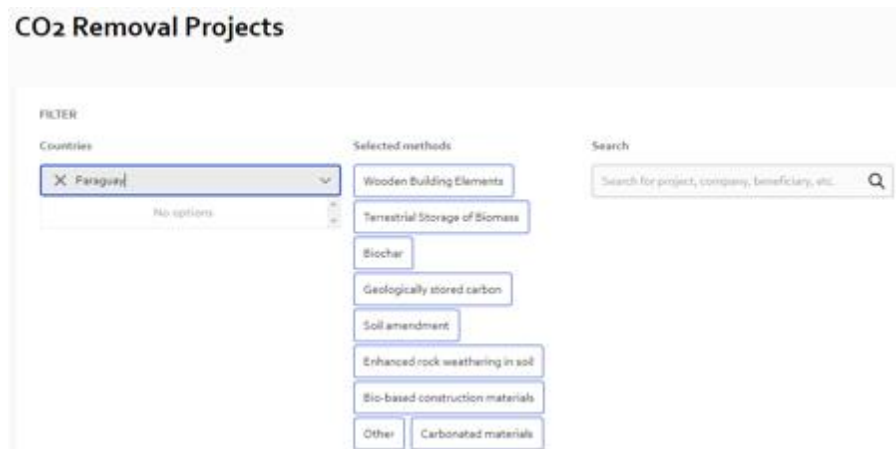
Mostrar 50 registros Buscar:

Cod. Iniciativa	Estado	Fecha de Registro	Nombre de Iniciativa	Titular	Desarrollador
COLCX-14-0001	Registro Completo	2019/12/27	CARBONO SOMBRILLA ABEI/IRRAL	CO2CERO	FORESTRY CONSULTING GROUP SAS
COLCX-14-0002	Registro Completo	2019/12/31	CARBONO ENBOSQUE	ENBOSQUE SAS	FORESTRY CONSULTING GROUP SAS
COLCX-14-0003	Registro Completo	2019/12/31	CARBONO IG FARMS	CO2CERO	FORESTRY CONSULTING GROUP SAS
COLCX-14-0005	Registro Completo	2019/12/31	PROYECTO FORESTAL DE MITIGACIÓN CARBONO SOMBRILLA ZONA CAFETERA FCG – CO2CERO	CO2CERO	FORESTRY CONSULTING GROUP SAS
COLCX-14-0006	Registro Completo	2019/12/31	PROYECTO FORESTAL CO2CERO CARIBE	CO2CERO	CO2CERO

Search in Gold Standard: Filter “Land Use Activities + Nature Based Solutions”:



Search in Puro Earth:



Search in Global Carbon Council:

Joint Validation and Verification Report template Version 1.3



Clear Search: Paraguay

Account Holders		Registered Projects		Issuances	Holdings	Retired Credits	Cancelled Credits											
Registration Date*	Project Submission No.	Project Title	Project Type	Project Owner (Authorized Verifier Focal Point 1)	GCC Project	Location	Latitude Longitude	Applied Methodology	Crediting period Start	Crediting period End	Forecasted GHG Emission Reduction (tCO ₂ e/year)	Forecasted Units in Permanence Buffer Account (tCO ₂ e/year)	Forecasted Units in Corresponding Adjusted Reserve Account (tCO ₂ e/year)	Forecasted Units in Country SOP I Reserve Account (tCO ₂ e/year)	Forecasted Additional Certification	Forecasted UN SDG Goal No.	Forecasted Market Eligibility	Details

Please note this is not a complete listing of all Registered Projects, but only those that the account holder has requested be publicly available.

Search in Cercarbono (Ecoregistry):

Search in Clean Development Mechanism CDM United Nations:

Search in Plan Vivo:

FILTER

INTERVENTIONS	REGION	SIGES	PVCS ISSUED TO DATE
Afforestation/Reforestation ▼	Latin America ▼	All ▼	All ▼

PV CLIMATE STANDARD VERSION

All ▼

Clear Filters



**ZEROCARBON -
GUATEMALA**



**PASKAIA MOSQUITIA -
HONDURAS**



SCOLEL'TE - MEXICO



ARBOLIVIA - BOLIVIA



**COMMUNITREE -
NICARAGUA**

Search in Climate action reserve:



Search in VERRA VCS:

<p>PROPONENT</p> <input type="text"/>	4462	Forestal RioAquadaban (FRA)	global-woods international AG	Agriculture Forestry and Other Land Use	ARR
<p>NAME</p> <input type="text"/>	2361	Afforestation in cooperation with local landowners for Forestal San Pedro S.A	Forestal San Pedro S.A.	Agriculture Forestry and Other Land Use	ARR
<p>PROJECT TYPE</p> <p>METHODOLOGY</p> <p>STATUS</p> <p>COUNTRY/AREA</p> <ul style="list-style-type: none"> Panama Papua New Guinea Paraguay Peru Philippines <p>REGION</p> <p>CREDITING PERIOD</p>	2369	Forestal Apepu Carbon Project	Forestal Apepu	Agriculture Forestry and Other Land Use	ARR
	2469	Afforestation and restoration of degraded forests in Eastern Paraguay or Forestal Azul Carbon Project	Forestal Azul S.A.	Agriculture Forestry and Other Land Use	ARR
	2496	IMPACT REFORESTATION IN THE CHACO PROJECT	Investancia Paraguay S.A.	Agriculture Forestry and Other Land Use	ARR

<p>NAME</p> <input type="text"/>	2498	Afforestation of degraded grasslands in Caazapa and Guairá	Miller Forest Investment AG	Agriculture Forestry and Other Land Use	ARR
<p>PROJECT TYPE</p> <p>METHODOLOGY</p> <p>STATUS</p> <p>COUNTRY/AREA</p> <ul style="list-style-type: none"> Panama Papua New Guinea Paraguay Peru Philippines 	2556	Southern Paraguay Sustainable Afforestation Project	SAIFF Hold Co. Ltd.	Agriculture Forestry and Other Land Use	ARR
	2744	The Paraguayan Chaco Neem Reforestation Project	El Retiro S.A.	Agriculture Forestry and Other Land Use	ARR
	3196	Parcel ARR Carbon Forestry Project	PARACEL SA	Agriculture Forestry and Other Land Use	ARR

5.5 Quantification of GHG emission reductions and removals

The design of the activities to carry out the verification and validation of the project was carried out following the requirements and guidelines established in the methodological documents of the AFOLU sector of the BCR program, specifically in the methodological document BCR0001 V4.0 “Quantification of GHG Removals”.

Project activities designed to reduce GHG emissions while allowing for biodiversity conservation and meeting the current and future needs of neighboring communities involved with the GHG Project are detailed below. Section 3 of the

Project Document (PD) includes a comprehensive and documented description of the methodological conditions for calculating project emission reductions in accordance with the contemplated project activities. For this, the Project Developer relied on the selected methodology, which describes each of the conditions, parameters, assumptions and methodological development around the properties that are part of the project. The audit team reviewed 100% of the information contained in this section and considers it to be credible and sufficient in the scenario of formulation and quantification of ex ante reductions.

5.5.1 Start date and quantification period

According to the evidence collected, the start date of the “Mixed planting of native and non-native species in Paraguay-I” Project is established as December 1, 2018, and a 40-year period has been projected to quantify greenhouse gas (GHG) removals/reductions, covering from December 1, 2018 to November 30, 2058.

This project start date is supported by the dates of the contracts signed between DMSA and its suppliers and partners, which confirms the veracity and validity of the data provided. Contract in which the planning and implementation of the preparation of the site for cultivation is confirmed on December 1, 2018.

5.5.2 Application of the selected methodology and tools

5.5.2.1 Title and Reference

The validation and joint verification process carried out by VERSA's audit team for the “Mixed planting of native and non-native species in Paraguay-I” project consisted of a comprehensive assessment of historical data and an on-site verification visit. The objectives of this process were the following:

- Provide an independent third-party opinion on the evaluation of activities, methods and procedures outlined in the Project Document Format (PD) and Monitoring Report (MR).
- Determine project compliance with the verification principles and criteria established by relevant regulations and the BCR Standard, v3.3.1 dated March 1, 2024.
- Verify the material accuracy of the greenhouse gas emission reductions reported for the first monitoring period.

The Project Description contains complete information about the project activities, project start date, project crediting period, project scale, project location, project boundary, baseline scenario, additionality and monitoring. The Project Description was designed to conform to the Standard BCR v.3.4 (March 2024),

specifically as an ARR project under the AFOLU project types (BCR0001 Quantification of GHG Removals V4.0, February 2024). The project applied the approved CDM Afforestation and Reforestation methodology: AR-ACM0003 A/R Large-scale Consolidated Methodology “Afforestation and Reforestation of lands except wetlands” - Version 2.0. The tools used are:

- BCR Tool: Sustainable Development Goals V 1.0 July 13, 2023.
The audit team evaluated SDG 1: End poverty, SDG 2: Zero hunger, SDG 3: Health and well-being, SDG 4: Quality education, SDG 6: Clean water and sanitation, SDG 9: Industry, Innovation and Infrastructure SDG 12: Responsible Consumption and Production SDG 13: Climate Action, SDG 15: Life of terrestrial ecosystems.
- BCR Tool: Permanence and Risk Management V1.1 March 19, 2024.
The audit team evaluated risks for fires, winds, Pests and diseases, Floods, Resources secured for the establishment of the project, Resources secured for project maintenance, financial capacity of the project holder, Land disputes, Political risks, Opportunity cost.
- BCR Tool: Monitoring, reporting and Verification V1.0 February 13, 2023.
- BCR Tool: Baseline and Additionality V 1.3 March 1, 2024.
The audit team evaluated Step Zero. Project Start Date. Step 1: Identification of Land Use Alternatives, Step 2: Investment Analysis, Step 3: Barrier analysis, Step 4. Impact of Project Registration.
- BCR Tool: Avoiding Double Counting V2.0 February 7, 2024.
The audit team evaluated BioCarbon Registry, VERRA, Gold Standard, Cercarbono, Puro Earth, Global Carbon Council, Clean Development Mechanism, Plan Vivo, Climate action reserve.
- Tool 14 Carbon stock estimation and carbon stock change of trees and shrubs in F/R CDM Project Activities V 04.2.

5.5.2.2 *Applicability*

During the validation and joint verification activities, it was possible to confirm that the project proponent successfully demonstrated compliance with each of the applicability conditions of the methodology that has been evaluated, as presented in Table 8 below:

Table 8. Evaluation of compliance with the applicability conditions of the BCR 0001 methodology of the Project “Mixed planting of native and non-native species in Paraguay-I”.

Conditions of applicability of BCR0001 methodology version 4.0.	VVB Evaluation
<p>The areas within the geographical boundaries of the project do not correspond to the forest category (according to the national definition adopted by the country in which the project activity is proposed) or to natural vegetation cover other than forest at the beginning of the project activities or 5 years prior to the project start date.</p>	<p>The result of the assessment indicates that the criteria defined by the GHG Project proponent to distinguish between forest and non-forest areas as defined by Paraguay in Article 42 of Law 422/1973 were confirmed at the start of activities. It was determined that the areas within the geographical boundaries of the project do not meet the category of forest (according to the national definition adopted by the country where the project activity is proposed) or natural vegetation cover other than forest at the start of project activities or five years prior to the start date of the project.</p> <p>In this case, the verification of the current area could have been done using unmanned aerial vehicle (UAV) imagery, but since it could not be compared to the original date, the best option was to use high resolution satellite imagery.</p> <p>It has been confirmed that this information pertains to satellite images, in this case Landsat 8, which has a spatial resolution of 30 meters. Analysis revealed that the GHG project area, five years before its inception, consisted of a landscape characterized by a system of weedy pasture crops used for both extensive and intensive livestock farming. At the start date of the project there was no forest or forest plantations within the project area, therefore, it meets the applicability condition.</p>
<p>The project activities do not generate the transformation of natural ecosystems.</p>	<p>In line with the above, 100% of the GHG Project area is not located in areas with natural ecosystems. The project owner was able to demonstrate that historically the geographic area where the GHG Project is</p>

Conditions of applicability of BCR0001 methodology version 4.0.	VVB Evaluation
	<p>located has been encouraged by government policies that favor the development of agricultural activities, which is why there are very few areas within this zone where natural ecosystems are still present.</p> <p>This information complies with the applicability requirement was also corroborated through interviews with neighbors of the project and with relevant authorities interviewed during the field visit by VERSA's audit team.</p>
<p>The areas within the geographical boundaries of the project do not correspond to the wetland category.</p>	<p>In line with the above, 100% of the GHG Project area is not located in areas that correspond to the category of wetlands.</p> <p>As mentioned above, the project owner's historical evaluation of land use and studies of the physicochemical characteristics of the soil showed that there are no wetland areas in the geographic area where the GHG Project is located, in accordance with the RAMSAR Convention and the National Wetlands Inventory of Paraguay.</p>
<p>The areas within the geographical boundaries of the project do not contain organic soils.</p>	<p>The project proponent's historical evaluation of land use, agrological and edaphological identification of soils and studies of soil physicochemical characteristics showed that in the geographical area where the GHG Project is located there are no areas corresponding to organic soils (with organic carbon content of more than 12% by weight), Tapytá 1.3% and Hernandarias 3%.</p> <p>According to the evidence provided by the proponent of the GHG Project, it is possible to affirm that the project "Mixed planting of native and non-native species in Paraguay-I" is not located on organic soils.</p>
<p>It is possible that carbon stocks in soil organic matter, litter and dead wood decrease, or remain stable, in the absence</p>	<p>The GHG Project Proponent was able to demonstrate that the baseline scenario corresponds to pastures that have been</p>

Conditions of applicability of BCR0001 methodology version 4.0.	VVB Evaluation
of project activities, i.e., relative to the baseline scenario.	thinned for livestock; therefore, when there is a change in land use by changing to the establishment of a forest crop, carbon stocks increase.
Flood irrigation is not used	No evidence related to the use of flood irrigation systems was found during the field visit and in the forest management plans.
Project activities do not include planting and/or management of species reported as invasive.	Through the bibliographic review and interviews with INFONA officials, the species Eucalyptus spp. is not considered an invasive species.
The effects of drainage are negligible, so GHG emissions, other than CO ₂ , can be omitted.	During the field visit, the audit team found no evidence that drainage has been implemented in the project area.
Soil disturbances due to project activities, if any, are carried out in accordance with appropriate soil conservation practices and do not recur for less than 20 years.	It was possible to identify that the practices developed during planting are directly related to soil conservation. The plantations have forest management plans that are implemented through sustainable management practices with FSC (Forestry Stewardship Council) certification, a quality management system certification that is being implemented to prevent uncontrolled soil disturbance. They also have the Responsible Agrochemical Management programme in place to better manage the area.

5.5.2.3 Methodology deviations (if applicable)

According to the evidence presented by the responsible for the GHG Project, no methodological deviations were identified for this Validation and Joint Verification.

5.5.3 Project boundary, sources and GHGs

In accordance with the PD and the RM, this GHG Project only considers carbon dioxide CO₂ as a greenhouse gas, and its capture occurs through the carbon reserves generated by the planting of 172.76 ha of eucalyptus and a group of 11 native species on 2 properties, which in the absence of the project would possibly have continued to be used for cattle ranching. The reservoirs taken into account

for the CO₂ estimation are aboveground biomass and belowground biomass in roots.

The plantations are in two Forest Management Units (FMUs) owned by DMSA:

- Hernandarias, 138,74 ha
- Tapytá, 34,02 ha

The audit team reviewed 100% of the related evidence supporting that Desarrollos Madereros S.A. (DMSA) is the owner of the land where the project is developed (See section 5.8 Carbon ownership and rights). It is important to mention that Desarrollos Madereros S.A. is the legal name of the company in Paraguay, but the commercial brand is POMERA MADERAS, under which another company of the same business group also operates in Argentina: Garruchos SA. Although the company is known by the brand name POMERA MADERAS and its official website is under this name.

In addition to the deeds, we also had access to the Condition of Ownership Report, which was duly processed by a Notary Public. There again it was possible to corroborate that DMSA is the owner of the two properties that make up the GHG Project and that there are no indigenous communities according to the data of indigenous communities of the Geoportal of the National Institute of Statistics of Paraguay.

According to the evidence provided by the GHG Project Proponent, it is possible to state with certainty that the legal owner of the land where the GHG activities are being implemented is the company DMSA.

5.5.3.1 Eligible areas in the GHG project boundaries (for AFOLU projects)

The GHG project managed to demonstrate with ample and sufficient evidence, that the geographic boundaries correspond to the category of non-forest according to the definition granted by Paraguay in Article 42 of Law 422 of 1973, at the beginning of the activities, nor 5 years before the start of the project. It defines forest as: "Eastern Region of Paraguay, in which this project is located: minimum area of 1 hectare (1 ha), with a tree height equal to or greater than five meters (5 m) reaching a minimum canopy cover in its natural state of at least thirty percent (30%)." The procedure for analyzing compliance with the applicability of the GHG Project methodology is described in Table 9.

Table 9. Criteria for establishing the reference region, BCR0001

Criteria	Justification
<p>Forest or natural vegetation cover other than forest does not cover it.</p> <p>Is not temporarily without forest or non-forest vegetative cover, because of human intervention such as harvesting or natural causes, or is not covered by natural cover in juvenile stages, which could reach a canopy density or height equal to national values and which has the potential to become forest without human intervention.</p>	<p>The project proponent was able to demonstrate through a multi-temporal analysis (5 years prior to the project start date) that the land where the GHG Project is being developed was historically dedicated to pasture for livestock.</p>

The mapping to delimit the area of land use cover and for the identification of natural vegetation cover other than forest was done with the categories defined by the Corine Land Cover methodology, up to the third level, with the exception of agriculture, which is up to the second level (transitory crop). This is due to the fact that in the area surrounding the project there is a great variety of different agricultural crops. The images used correspond to Landsat 8 with a resolution of 30 m, this collection was chosen given the temporal availability of images for the entire period from 2013 to 2023.

It was corroborated that the performance of the model and this was high, this analysis was performed through a normalized confusion matrix that shows the proportions of correct and incorrect predictions in each class, especially when it comes to differentiate between forest cover versus the absence of it.

5.5.4 Baseline or reference scenario

To evaluate the baseline scenario described for the validation of the GHG project, the applicable validation requirements related to the establishment of the baseline scenario in the applied methodology of the BioCarbon Standard Protocol and the BCR 0001 methodology were followed. The step-by-step process performed by VERSA's audit team is described as follows:

- Assumptions, methods, parameters, data sources and factors were applied in a transparent manner, adequately justified and supported by ample and sufficient evidence.
- Uncertainty was considered and verified to be conservative (less than 10%).
- Relevant national carbon market policies and programs and sectoral circumstances were considered.

- The procedures described in the PD to identify the baseline scenario were verified to be consistent and coherent with the criteria defined in section 2 of this document. In addition, it was ensured that the emission factors, activity data, GHG emission projection variables and other relevant parameters were coherent and consistent with the evidence provided by the GHG Project manager, as well as with the data reported in the Monitoring Report (MR).

According to the information provided by the initiative managers, it can be concluded that the project establishes its baseline for validation and joint verification according to the criteria defined by the BCR001 methodology and the "BASELINE AND ADDITIONALITY" tool. The baseline has remained consistent and the GHG reduction project has not undergone significant changes from what was described in the PD. This consistency is in line with the methodological guidelines of the BioCarbon Registry, which stipulate that a reassessment is required if the implementation of the monitoring plan results in a different baseline scenario or a different net GHG removal than originally planned.

In conclusion, the documentation used to determine the baseline scenario is relevant and properly justified, ensuring that the project is consistent with the established methodological requirements and that the baseline remains appropriate for measuring the expected GHG reductions. The documents have been fundamental in establishing the baseline of the project, as they provide the technical, legal and strategic framework necessary for the planning, implementation and monitoring of initiatives related to land management, climate change mitigation and forest sustainability in Paraguay. SNC Resolution 200 ensures the correct georeferencing of property titles, key to determining areas eligible for reforestation activities. The National Forest Strategy for Sustainable Growth (ENBCS) and the National Climate Change Strategy guide the objectives of reducing emissions and preserving forest resources. The Second Reference Level of Forest Emissions (NREF) provides historical data that is essential to measure the results of REDD+ projects, while the Guide to prepare Adaptation Plans and the Proposal for the National Climate Change Plan articulate adaptation and mitigation actions at the local and national level. The National Climate Change Policy frames all these actions within a long-term plan to comply with international commitments under the UNFCCC.

5.5.5 *Additionality*

The Project Proponent provides a comprehensive list of baseline scenarios supported by historical evidence from the areas where the GHG project activities will take place. It was evidenced that to establish the most reasonable baseline scenario of what would occur in the absence of the proposed project activity the

GHG Project Proponent selected the criteria from Section C (carbon stock changes at project boundaries, identifying the most likely land use at project initiation) of the BCR Tool: Baseline and Additionality V 1.3 March 1, 2024. The steps described in Table 10 were followed.

Table 10. Steps and applicability analysis of the methodology selected by the GHG Project Proponent.

STEP	JUSTIFICATION
Step 0.	Preliminary screening based on the start date of the project activity: According to the evidence provided by the project proponent the start date of the GHG Project is December 01, 2018, supported by the work orders contracted by POMERA to establish the eucalyptus plantation.
Step 1a.	<p>The GHG project analyzed the following scenarios:</p> <ul style="list-style-type: none"> -Scenario 1: continue with the activity prior to the proposed project extensive cattle ranching. -Scenario 2: agriculture. -Scenario 3: forest crops for timber harvesting. <p>VERSA's audit team corroborated that the scenarios proposed by the GHG project proponent are consistent with the historical use of soils in the region, which could be verified during the field visit through interviews with the project's neighbors and through literature review.</p>
Sub-step 1b.	<p>The project proponent has demonstrated that the three scenarios identified in sub-step 1a (livestock, agriculture, and forestry plantations) comply with Paraguay's national and regional legislation. This compliance ensures that the activities are carried out within the appropriate legal framework, allowing for responsible management of natural resources.</p> <p>The results indicate that the implementation of crops, especially soybeans, maize, and other high-value crops, is in line with current regulations that promote sustainable agricultural practices. Thus, it has been verified that the project's activities not only respect the legislation but also contribute to a sustainable approach in agriculture, ensuring environmental protection and efficient use of resources.</p> <p>These findings are detailed in section 5.7 "Compliance with current legislation" of the document, reinforcing the project's viability within the legal and environmental context of Paraguay.</p>
Step 2.	The audit team was able to demonstrate through an analysis of NPV and IRR for the 3 activities (livestock, agriculture and forestry plantations). They found that the development of forestry from a

STEP	JUSTIFICATION
	financial point of view is the least viable activity of all the alternatives to the point where it is only viable to carry out thanks to the incentives of carbon credits.
Sub-step 2a.	The GHG Project at this stage performed an investment comparison analysis (IRR and NPV) with the objective of demonstrating that the project, without the revenues from the planned sale of Verified Carbon Credits (VCCs), is economically and/or financially less attractive than the other two alternatives identified in step 1.
Sub-step 2b.	With the two indicators described in step 2b it is possible to consistently establish that the two indicators incorporate the time value of money in determining the net cash flows of the business or project, in order to be able to make correct comparisons between cash flows in different periods over time.
Sub-step 2c.	According to the implementation of the previous sub-steps (2a and 2b), VERSA's audit team was able to establish through the documentary review, based on the evidence provided by the GHG Project Proponent, that the procedures implemented in these three stages are coherent and consistent with the requirements of the BCR 0001 methodology and the BCR Tool: Baseline and Additionality.
Sub-step 3.	<p>The following points are related to specific studies and evidence based on the situation in Paraguay:</p> <p>Documentary Review: An analysis of the "Situation of the Forestry Sector in Paraguay" provides updated information on the legislation and policies impacting forestry, documenting the challenges and opportunities within the sector.</p> <p>Analysis of Financial Incentives: The study "Financing and Sustainability in Agriculture and Forestry in Paraguay" highlights the lack of specific financial incentives for forestry projects compared to the more robust support received by agriculture and livestock.</p> <p>Policy and Program Assessment: Research such as "Public Policies for Forest Conservation in Paraguay" analyzes the institutional framework and the limitations in implementing policies that benefit forestry relative to other agricultural sectors.</p> <p>Identification of Technological Advances: A report on "Technological Innovations in Paraguayan Agriculture" mentions advancements and the adoption of technologies in agriculture and</p>

STEP	JUSTIFICATION
	<p>livestock, noting the lack of focus on technologies applicable to forestry.</p> <p>Ecological Conditions: Environmental studies like the "Inventory of Natural Resources of Paraguay" identify the characteristics of soils and climates in different regions, highlighting the limitations for the development of forestry in areas with degraded soils.</p> <p>Cultural Analysis: The research "Culture and Perception of Forestry in Rural Communities of Paraguay" addresses the cultural acceptance of forestry, underscoring its lack of cultural roots compared to livestock and agriculture.</p> <p>Social Assessment: Sociological studies such as "Social Conflicts in the Rural Sector" analyze the social dynamics in rural communities in Paraguay, evidencing the absence of significant conflicts that could hinder forestry projects.</p> <p>Property Documentation: Analyses of "Land Tenure in Paraguay" show a clear land ownership framework in areas where projects are implemented, facilitating the implementation of forestry activities.</p> <p>Market and Logistics Analysis: Research on "Markets for Forest Products in Paraguay" provides data on market access and logistics, evidencing the barriers for forestry compared to agriculture.</p> <p>Review of Fire Management Plans: Documents like "National Fire Management Strategy" develop plans and measures to mitigate the risk of fires in forest areas, highlighting the greater vulnerability of forestry.</p> <p>This relationship between the identified points and specific studies in Paraguay provides a solid framework for the lead auditor to analyze and understand the various barriers that forestry faces in the country.</p>

This additionality analysis was reviewed in a detailed and exhaustive manner, evaluating each step to verify that the sources provided by the promoter were authentic and in compliance with the requirements of both the Standard and the "BASELINE AND ADDITIONALITY" tool. During this review process, the validity of the information submitted was thoroughly checked to ensure that all supporting

documentation was properly substantiated and in full compliance with the project requirements. In addition, each source provided by the project managers was checked for alignment with the requirements of the BCR0001 methodology, ensuring that the data provided was consistent and accurate.

Through this careful review, it was possible to demonstrate that the information provided was relevant and factual, leading to the conclusion that the evidence presented was fully related to the project activities. This rigorous validation process confirmed that there were no inconsistencies between the documentation provided and the conditions required by the standard.

Regarding the justification of additionality, the promoter argued that the project fully complies with the conditions set out in the relevant tool.

The necessary assessments have been carried out to demonstrate that the actions carried out under the project would not have taken place in the usual way without the intervention of the project, thus confirming that additionality is adequately supported. This justification, based on the tool, confirms that the project represents a real reduction in GHG emissions beyond the initial baseline scenario.

In summary, not only has the information and documentation been validated, but it has also been demonstrated that the project meets all the established additionality conditions, ensuring that the GHG emission reductions are real and verifiable. The sources provided by project officials are adequate and meet the requirements of the standard, which strengthens the legitimacy and integrity of the project.

5.5.6 Conservative approach and uncertainty management

The level of assurance agreed with the GHG Project Proponent for the validation and verification process was set at 95%, as detailed in Chapter 3.3 "Level of assurance and materiality". This process involved several stages, including a strategic analysis, a risk assessment, and the design of evidence collection.

The guidelines of the BioCarbon Standard2023 tool, version 1.0, dated 13 February 2023, were followed, establishing uncertainty management and a conservative approach to quantifications. To this end, the project presents the information used in spreadsheets with a conservative approach, national references, and the calculation of quantification uncertainty and cartographic information. Uncertainty is determined by the accuracy of the maps used to estimate emission calculations and the use of field-reported information. This conservative approach

included the responsible party using conservative values and procedures to avoid overestimating emission reductions.

As part of the assessment, the statistical relevance of the sampling used by the Project Proponent was reviewed. Sample sizes, plot selection methodology, and the representativeness of the field-collected data were analysed. Uncertainty calculations associated with the quantification results were found to be within the acceptable levels established by applicable standards. This conclusion is based on the verification of diameter at breast height (DBH) and tree height measurements. Differences between the project's declared values and those evidenced in the field were not significant, as they did not exceed the maximum margin of error allowed by the measuring instruments used.

Furthermore, interviews revealed that those responsible for carrying out the measurements possessed the necessary qualifications, and that training was conducted every 6 months. It was also confirmed that two additional teams were available for relief, ensuring the continuity of measurements.

A 100% review of the documents provided by the project proponent was conducted, along with interviews with stakeholders. The risk assessment indicated that the probability of finding material errors or significant breaches of criteria was less than 10%.

The consistency of the Project's GHG baseline with Paraguay's current commitments under the United Nations Framework Convention on Climate Change (UNFCCC) and/or the applied methodology was also reviewed. The values assessed for the emission reduction activity were confirmed as consistent with the document "Second Level of Forest Emission Reference (NREF) for Deforestation in the Republic of Paraguay - period 2012 - 2019".

Regarding the quantification of mitigation results compared to the validated baseline, in accordance with current national standards and/or the applied methodology, as well as the assessment of additional benefits and indicators related to the Sustainable Development Goals, the audit team concluded that the level of assurance for the GHG Project was not less than 95%. Therefore, no material discrepancies were found between the data supporting the quantification of GHG emission reduction results.

Quantification of Greenhouse Gas Emission Reductions

During the audit process, the parameters and values reported in the spreadsheets to identify greenhouse gas emissions in the baseline scenario were evaluated, and

their compliance was validated considering the criteria defined by the methodology BCR0001 Quantification of GHG Removals. Afforestation, Reforestation and Revegetation Activities. Version 4.0 of February 9, 2024.

The project proponent, to quantify greenhouse gas emissions and removals in ARR activities as a landscape management tool, has incorporated fully justified and recognized criteria, in Table 9 are the reservoirs that the GHG Project contemplated, which are aligned with the provisions of section 9.1 of the BCR0001 V4.0 methodology.

Table 11. Sources and reservoirs of the GHG Project

Source or Reservoir	GHG	Included (yes or no)	Justification
Aerial biomass	CO ₂	YES	The GHG Project proponent was able to justify in the PD that carbon stocks will increase in the form of aboveground Biomass due to project activities from tree growth, (represented in leaves, branches and trunk) compared to baseline values, in this case pasture for livestock.
Subterranean biomass			The GHG Project proponent was able to justify in the PD that carbon stocks will increase in the form of belowground biomass due to project activities by tree growth, (represented in leaves, branches and trunk) compared to baseline values, in this case pasture for livestock.
Dead wood and leaf litter		NO	The GHG Project proponent is aligned with numeral 4.7 conservative attitude of ISO 14064-2: 2019 and BCR0001 methodology as dead wood as a carbon pool is not considered.
Woody biomass combustion		NO	The proponent of the GHG Project was able to demonstrate that it did not carry out woody combustion processes as an activity for soil preparation and for its project activities. In addition to the above, the BCR 0001 methodology does not contemplate it.

It was confirmed that the emission factors, activity data, GHG emission projection variables and other parameters used to calculate the CO₂ projections for eucalyptus and native species were consistent with those reported in Paraguay's 2019 national GHG inventory, which used IPCC values. As described in paragraph 13 of the BCR0001 V4.0 methodology, the GHG Project implemented a conservative value of the 20% discount factor for quality and applicability of the

GHG estimation model for IPCC density values and (R:S) factor for belowground biomass, as shown in Table 12.

Table 12. Parameters used to calculate CO₂ projections

Data/parameter	Data value and source
Wood density (t/m ³)	Eucalyptus grandis: 0,51 t/m ³ IPCC, 2006 ¹⁰¹ Chapter 4 Forest. Native species, Timbó (Enterolobium shomburgkii): 0,82 t/m ³ IPCC, 2006 ¹⁰¹ Chapter 4 Forest.
BEF – Biomass expansion factor	Eucalyptus spp. in tropical forests: 2 There are no official data for this native species, so, for conservative purposes, the lowest broadleaf value was selected: 1.2.
Carbon fraction	0.47 “Estimation of carbon stocks and carbon stock change of trees and shrubs in F/R CDM project activities” v. 04.2.”
Root-to-shoot-ratio	Eucalypt plantation/forest: - 0,29; b<50 t.d.m/ha, IPCC year 2006 - 0,15; 50 - 150 t.d.m/ha, IPCC year 2006 - 0,10; b> - 150 t.d.m/ha, IPCC year 2006 - Native species: - 0.22 low range, IPCC year 2006

The equations and parameters used in the estimation of catches for native species were validated to be coherent and consistent with the guidelines established by the BCR 0001 Methodology and ISO 14064-2:2019. Ample and sufficient evidence was found to support the increase in average annual trunk volume (m³/ha-year), “Growth in height and diameter and mortality in plantations of native species of the Yungas in Valle Morado, Salta”. The density of dry wood (t/m³), source: 2006 IPCC Table 3A.1.9-2 corresponding to Eucalyptus robusta (America), the BEF₂ (dimensionless=total aerial biomass/trunk biomass), source: IPCC Table 3A.1.10. lowest value for broadleaves species in tropical regions, the R:S (dimensionless=root biomass/total aerial biomass), source: IPCC 3.A.1.8 and finally carbon as a fraction of dry organic matter, source: CDM AR-TOOL14.

During the documentary review stage and the field visit it was possible to validate that the different strata defined by the GHG Project Proponent have a heterogeneous biomass distribution in the project areas in relation to the types and combinations of species, density and planting distances. However, the

planting dates for the establishment of this vary, for this reason the project has 8 strata (see Table 13), which reduces the variability.

Table 13. GHG Project strata.

Strata	Sowing year	Area (ha)	Location
1	2018	13,43	Hernandarias
2	2019	32,14	Hernandarias
3	2019	17,62	Hernandarias y Tapytá
4	2019	52,71	Hernandarias y Tapytá
5	2020	3,02	Hernandarias
6	2022	17,53	Tapytá
7	2023	11,83	Hernandarias
8	2023	24,48	Hernandarias
TOTAL		172,76	

Source: adapted from DMSA, 2023

For the calculation of carbon stocks in trees, the mitigation project used estimation through the measurement of sampling plots. It is important to note that only 6 strata were included. The number of non-permanent plots was calculated using equation 23 from section 17.3.1.4 of the BCR0001 Version 4.0 methodology (see the detail of the calculation of sampling plots in section 15.1 of the RM), with a confidence level of less than 95% and a material discrepancy of less than 5%. The sampling intensity was, on average, 0.59%, totaling 20 circular plots of 400 m² (radius of 11.28 m) in 136.4 ha.

Table 14. Strata and Sampling Plots Composition.

Stratum	Year of Planting	Species	Area (ha)	Number of Sample Plots
1	2018	Eucalyptus	13.43	2
2	2019	Eucalyptus	32.14	4
3	2019	Eucalyptus	17.62	3
4	2019	Eucalyptus	52.71	8
5	2020	Eucalyptus	3.02	1
6	2022	Eucalyptus	17.53	2
Total				20
7	2023	Eucalyptus	11.83	2
8	2023	Eucalyptus	24.48	5
Total			136.45	27

Source: adapted from DMSA, 2023

Table 15. Ex ante projections of CO₂ removals

Year	Baseline scenario (tCO ₂ e)	GHG CO ₂ Captures without the non-permanence discount (tCO ₂ e)	Leackages (tCO ₂ e)	GHG Ton CO ₂ Captures with non-permanence discount (20%) (tCO ₂ e)
1	0	0	0	-
2	0	754	0	602
3	0	6.273	0	5.018
4	0	5.047	0	4.037
5	0	7.826	0	6.260
6	0	7.390	0	5.912
7	0	-3.081	0	-2.465
8	0	9.077	0	7.261
9	0	11.146	0	8.917
10	0	8.937	0	7.149
11	0	6.002	0	4.801
12	0	-38.893	0	-31.114
13	0	9.244	0	7.395
14	0	8.623	0	6.898
15	0	3.245	0	2.595
16	0	10.590	0	8.471
17	0	-23.311	0	-18.649
18	0	11.722	0	9.377
19	0	11.989	0	9.590
20	0	10.505	0	8.404
21	0	7.520	0	6.016
22	0	-39.895	0	-31.915
23	0	7.720	0	6.176
24	0	9.955	0	7.964
25	0	2.897	0	2.317
26	0	11.491	0	9.192
27	0	-13.860	0	-11.088
28	0	10.333	0	8.266
29	0	10.417	0	8.333
30	0	9.849	0	7.878
31	0	11.267	0	9.013

Year	Baseline scenario (tCO _{2e})	GHG CO ₂ Captures without the non-permanence discount (tCO _{2e})	Leackages (tCO _{2e})	GHG Ton CO ₂ Captures with non-permanence discount (20%) (tCO _{2e})
32	0	9.198	0	7.358
33	0	11.020	0	8.815
34	0	11.409	0	9.127
35	0	10.634	0	8.506
36	0	11.986	0	9.588
37	0	10.044	0	8.034
38	0	11.807	0	9.445
39	0	12.662	0	10.129
40	0	11.901	0	9.520
SubTOTAL without the non-permanence discount				191.438
Minus 20% of BCR's general reserve				-38.288
TOTAL with the non-permanence discount				153.133

Source: Cambium Earth, 2023

The Project included an additional discount to mitigate the “Reversion Risk” of 20% on the total GHG emission reductions quantified for each verified period, to cover a potential materialization of the identified risks. Overall, of the total 191,438 tCO_{2e} generated in the project, the 20% to be allocated to the reserve accounts (10% to the BCR General Reserve account and 10% to the project reserve account) would be 38,288 tCO_{2e}, leaving a total of 153,133 tCO_{2e}.

5.5.7 Leakage and non-permanence

It was corroborated that the GHG Project only contemplates leakage derived from the displacement of agricultural activities, specifically related to extensive cattle ranching. For this validation, the GHG Project Proponent was able to demonstrate with a multi-temporal analysis of coverage and with documents the termination of leases of the project area to various third parties. In this way it is possible to establish that 5 years prior to the start of the GHG project, the land was used for the development of extensive livestock systems with a cover dominated by weedy pastures according to the CORINE LANDCOVER methodology.

For this validation, according to the guidance provided by the tool AR-TOOL₁₅ “Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in a CDM F/R project activity” v.02.0 and detailed in the BCR 0001 methodology, it is established that leakage emissions attributable to

displacement of grazing activities are negligible and are counted as zero under the following conditions: when the animals are moved to the zero-grazing system. In addition, according to these tools, no leakage is considered to occur after five years from the start of GHG Project implementation, if the project implementation areas are not increased. Based on the above, it is concluded that emissions because of displacement of livestock activities are zero. The results of this review are in accordance with the guidelines established by the criteria defined in numeral 2 of this document.

All cattle present before the project's start were slaughtered within one month following the contract's conclusion. As documented in ANNEX 3 of PD, two receipts for the sale of the cattle are included, confirming that the leakage is zero. On the other hand, the mitigation measures that DMSA identified for the medium and high risks, as well as their monitoring, has been developed following the BCR Risks and Permanence V 1.1 tool, in section 7.1 of the current document, being in accordance with the requirements of BCR Standard v3.4, section 12.3

5.6 Monitoring plan

VERSA's audit team conducted a comprehensive evaluation of the monitoring plan proposed by the GHG Project. This analysis focused on validating the conformity of the activities and methods described in Section 17, Monitoring of the PD. The steps carried out are described in Table 16.

Table 16. Steps to evaluate the monitoring plan proposed by the GHG Project in the PD.

Description	RM Justification
Project areas by stratum: Eucalyptus coverage, measured in ha.	The procedure defined by the GHG project manager to follow up on the delimitation limits of the project areas was corroborated using satellite images and corroboration with GPS trails.
Forest Inventory: DBH is measured in cm; Total Height is measured in m and phytosanitary status.	<p>During the field stage, the distribution of the sampling units (temporary plots) was corroborated, which had an area of 400 m² in which the following dasometric variables were measured in 100% of the individuals present in the plot:</p> <ul style="list-style-type: none"> -DAP: The measurement was carried out with the help of Diametric Tape. The diameter was measured with a 1.3 m long rod that will be used to measure the diameter at breast height. -Height: It was carried out with the help of the Nikon Forestry II hypsometer calculated from the laser register.

Description	RM Justification
Biomass	The spreadsheets verified the correct use of 100% of the allometric equations according to the values of the dasometric variables measured in the forest inventory.
Remociones	The procedure for the use of allometric equations for the calculation of tons of carbon dioxide equivalent was verified in 100% of the Excel spreadsheets.

Following this evaluation, it was determined that the monitoring plan is in line with Paraguay's national circumstances, adopts good practices and follows the quality standards established by ISO 14064-2. As a result, it is considered that the monitoring plan meets the methodological and reference tool requirements.

In addition, it is confirmed that the monitoring plan proposed in the PD complies with the guidelines established by Methodology BCR0001 Quantification of GHG Removals. Afforestation, Reforestation and Revegetation Activities. Version 4.0 of February 9, 2024. The evaluation conducted by VERSA's audit team during the strategic planning phase and the on-site audit process concludes that the information related to the monitoring plans adequately covers the tracking of project activities and the presentation of GHG mitigation targets.

In accordance with the applicable validation requirements related to the monitoring plan the compliance assessment process was evaluated with the following items:

a) data and information necessary to estimate GHG reductions or removals during the quantification period:

The PD describes that the monitoring for the estimation of emissions is carried out according to the verification periods stipulated by the project and under the guidelines of the BCR0001 methodology and ISO 14064-2:2019. In each verification period the activity data must be monitored. The emission factors to be considered correspond to those validated in section 5.5.6 of this document.

b) complementary data and information to determine the baseline scenario:

The project proponent was able to demonstrate with ample and sufficient evidence that the baseline corresponds to the development of extensive livestock systems, such as leases to third parties, termination of these and a multitemporal GIS analysis of satellite images. It showed that 5 years before the implementation of the project, the area of the GHG Project was covered by weeded pastures according to the CORIN LAND COVER methodology.

According to the above, VERSA's audit team can establish that the baseline scenario is zero.

c) specification of all potential emissions occurring outside the project boundary attributable to GHG project activities (leakage):

The project proponent managed to demonstrate with ample and sufficient evidence that the leakage derived from the displacement of agricultural activities, correspond to livestock. such as lease contracts to third parties, termination of these and a multitemporal GIS analysis of satellite images, where it was evidenced that 5 years before the implementation of the project the GHG Project area was covered by weeded pastures according to the CORIN LAND COVER methodology.

According to the above, VERSA's audit team can establish that the leakage associated with this project is zero.

d) procedures established for the management of GHG reductions or removals and related quality control for monitoring activities:

Section 17 of the PD presents the Quality Control and Quality Assurance Procedures for the GHG Project. It should be noted that the team responsible for the forest inventory has demonstrated that it is competent, as it has more than 3 years of experience and is constantly being updated with respect to tools such as:

Forcípulas, Tapes (metric and diametric), Vertex IV, Rod, Telescopic, Compass, GPS, Record Sheet, Stand Maps, Pen and/or Pencil, Permanent Marker, Spray Paint, Wooden Stakes, Nails, Hammer, Mallet, Veneer, Metal Number Engraver.

The mechanism defined for data processing consists of filling out the field data recorded in a physical spreadsheet into an electronic spreadsheet (Excel), to carry out dasometric and volumetric calculations.

e) information related to the assessment of the environmental and social impacts of project activities:

For the assessment of the environmental and social effects of project activities the GHG Project Proponent incorporated the tool "Avoiding Harm" and environmental and social safeguards. V 1. March 07, 2023", in which an analysis of associated socioeconomic impacts was made.

f) description of the methods defined for the periodic calculation of GHG reductions or removals and GHG leakage:

The GHG Project Proponent has a defined procedure for the periodic calculation of GHG reductions or removals, at this point it is clarified that GHG leakage, as mentioned above, has a value of zero.

For the GHG inventory, 100% of the temporary plots were validated during the field visit. For the calculation of the number of temporary sampling plots associated with each stratum, it was possible to establish that the GHG Project used equation 23 of section 17.3.1.4 of the BCR 001 methodology version 4.0. In this way, the distribution of the plots within a stratum was completely random, a code was assigned to associate it with the measurements recorded in the field, and its geolocation was recorded in the GIS database, thus ensuring that the sampling plots corresponding to each stratum and monitoring date can be located. The sampling intensity was 0.5%, the size of the sampling plots was 400 square meters, complying with the provisions of section 17.3.1.3 of the BCR 001 methodology version 4.0. It was corroborated that for the determination of the center of the sampling plot to be randomly located on the property, the ArcMap program was used to check the centers of the plots.

During the audit, it was noted that the center of the plot was marked with a stake, visible from approximately 10 to 15 meters, establishing the north direction as a reference. The trees were numbered in a clockwise direction, with clear criteria for ordering from the outside to the inside. Highly visible and durable paint was used to identify each tree consecutively.

In addition, detailed plot information was recorded in a spreadsheet, including tables, measurement dates and responsible parties. Each tree was recorded with its distance in meters and azimuth, taking the center of the plot as the point of origin.

It was observed that, when the trees reached the appropriate size for Diameter at Breast Height (DBH) measurement, a consistent method of marking at a height of 1.30 meters from the ground was applied, thus facilitating successive DBH measurements with a tape measure. This methodologically sound approach ensures accuracy and consistency in the tree plot data collection.

g) the assignment of roles and responsibilities for monitoring and reporting the relevant variables for the calculation of reductions or eliminations:

During the activities carried out by VERSA's audit team, it was found that the head of the Research and Development Area (R&D) is responsible for the field monitoring of tree growth. An external consultant carried out the GHG quantification and removal calculations, as well as the preparation of the PDD and monitoring report. The head of the R&D area is responsible for the measurements

and the safekeeping of the information. The measurements are stored in both digital and physical format. In addition, it was verified that the Project Proponent has defined procedures for storing data for at least two years after each project verification period, in accordance with the guidelines established by the BCR0001 methodology “Quantification of GHG Removals” version 4.0.

h) procedures established for the management of GHG reductions or removals and related quality control for monitoring activities:

The project holder state in the monitoring plan that it will apply and comply with the best practices recommended in the methodology used, BCR0001 version 4.0.

The establishment of plots to count carbon will be temporary. At each verification, the same procedure will be randomly repeated, following the best practice recommendations of the BioCarbon Registry.

The project owner will select the sampling intensity, 0.5% will be used and a size of 400m will be determined according to section 17.3.1.3 of the BCR0001 version 4.0 methodology to determine the number of plots validated with equation 23 of the BCR0001 version 4.0 methodology.

Measurements are stored in both digital and physical format. In addition, it was verified that the Project Proponent has defined procedures for storing data for at least two years after each project verification period, in accordance with the guidelines established by the BCR0001 methodology “Quantification of GHG Removals” version 4.0.

5.7 Compliance with Laws, Statutes and Other Regulatory Frameworks

VERSA has verified compliance with the legal requirements applicable to the GHG Project, given that the Paraguayan legal regulations were reviewed and read to arrive with a context of regulations before going to the field. This process included the identification of relevant standards, laws or resolutions and commitments assumed by Paraguay before the UNFCCC, as well as a thorough analysis of their context of application and compliance. The VERSA audit team, in its role as validation and verification body, relies on the transparency, consistency and traceability of the information provided by the project holder. In addition to the above, the project has measures in place to monitor possible continuously changes in the legislative aspects that may affect its GHG Project activities. This ensures that the GHG project complies with current regulations and can effectively adapt to any legal changes that may arise.

The project demonstrates compliance with the current national legislation of Paraguay. In particular, the one mentioned below:

1. Law No. 422/73: This Law declares the use and rational management of the country's forests and forest lands, as well as the renewable natural resources included in the regime of this Law, to be in the public interest.
2. Regulatory Decree No. 11.681/75: This Decree approving the Regulations of Law No. 422, the Forestry Law, provides that the Ministry of Agriculture and Livestock is responsible for the State's forestry administration through the National Forest Service.
3. Law No. 536/95: The Law consists of 5 chapters and 30 articles. CONTENTS: General provisions (I); Incentives for forestry activity (II); Tax regime (III); Sanctions (IV); Special and final provisions.
4. Regulatory Decree No. 9.425/95: The Decree, which consists of 25 articles, regulates Law No. 536/95 on the promotion of afforestation and reforestation, and establishes the criteria for the classification of forest priority soils and management plans, as well as incentives for forestry activity.
5. Law No. 294/93: This Law, which consists of 15 articles, declares the Environmental Impact Assessment (EIA) mandatory and defines it as the scientific study that allows identifying, foreseeing and estimating environmental impacts (any modification of the environment caused by works or human activities), in any work or activity planned or in execution. Any evaluation shall be submitted by those responsible to the administrative authority together with the project or activity; and the amendments introduced by Law No. 345/94
6. Law No. 345/94: This Law amends Article 5 of Law No. 294, providing that all Environmental Impact Assessments and their reports shall be submitted by their person or persons in charge to the administrative authority together with the work project and its regulatory decree No. 453/13
7. Regulatory Decree No. 453/13. By virtue of this Decree, the scope of Article 2 of Decree No. 453 of 2013 is expanded, which lists the works and activities that require obtaining an environmental impact statement.

Note: The Project proponent has the document “Registro Legal Paraguay DMSA”, which establishes and documents the methodology to identify, register, and update the Legislation subscribed by the company and that are applicable to its activities, products or services, such as well as monitor and evaluate compliance

with applicable legal requirements. Following this, the project has a guiding document “Estándar Nacional Provisional de la República de Paraguay” which establishes the principles and indicators of “compliance with the laws.” These two documents are part of the Management System stipulated by the project proponent, which demonstrates the continuous monitoring of current legal legislation and its updates.

5.8 *Carbon ownership and rights*

VERSA has verified compliance with the legal requirements applicable to the GHG Project, given that the Paraguayan legal regulations were reviewed and read to arrive with a context of regulations before going to the field. This process included the identification of relevant standards, laws or resolutions and commitments assumed by Paraguay before the UNFCCC, as well as a thorough analysis of their context of application and compliance. The VERSA audit team, in its role as validation and verification body, relies on the transparency, consistency and traceability of the information provided by the project holder. In addition to the above, the project has measures in place to monitor possible continuously changes in the legislative aspects that may affect its GHG Project activities. This ensures that the GHG project complies with current regulations and can effectively adapt to any legal changes that may arise.

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Note: The Project proponent has the document “Registro Legal Paraguay DMSA”, which establishes and documents the methodology to identify, register, and update the Legislation subscribed by the company and that are applicable to its activities, products or services, such as well as monitor and evaluate compliance with applicable legal requirements. Following this, the project has a guiding document “Estándar Nacional Provisional de la República de Paraguay” which establishes the principles and indicators of “compliance with the laws.” These two documents are part of the Management System stipulated by the project proponent, which demonstrates the continuous monitoring of current legal legislation and its updates.

5.9 Risk management

It was confirmed that as part of the mechanism established in the GHG Project, to guarantee permanence, the GHG Project has a collective carbon pool equivalent to 20% of the total removal achieved in each verification event. This pool ensures compliance with the non-permanence criterion. Section 2 of the BCR Permanence Risk and Risk Management Tool V 1.0 presents three tables (Table 26, Table 27 and Table 28) detailing the environmental, financial and social risks identified by the project proponent. These risks were classified into three levels (high, medium and low) based on their potential impact on carbon benefits. High risk can reverse up to 10% of the carbon benefits accrued at each verification event. Medium risk affects between 5% and 10% of VCC units, while low risk affects less than 5% of VCCs.

For the Monitoring, Reporting and Verification (MRV) of the GHG project, it was possible to identify that risks related to environmental, social, financial and technical aspects were assigned in the MR, with the objective of mitigating them and ensuring the reduction of reversal risks through adequate management.

Table 17. Sources of associated risks

Risk Source	Control	Justification
Environmental Risks		
Fires	<p>Forest fires are a significant concern due to their impact on carbon emissions and climate change. In Paraguay, there has been a notable increase in fires, mainly due to drought and human activities. Rural communities use fire to clear land but lack the resources to fight fires. These fires destroy plantations, damage water and air quality, and threaten wildlife. DMSA has created an index to evaluate and prevent fires, using meteorological data and other variables. Agricultural burning and human negligence cause most fires. DMSA is committed to mitigating these risks and has resources to address those including replanting affected areas.</p>	<p>The GHG Project Proponent rates this risk as high. During the audit process it was possible to validate and verify that the GHG project proponent has effective mechanisms to identify and respond to possible fires that could affect the project areas, which is described in the Fire Protection Plan. This plan describes the integrated fire management established by DMSA to detect, combat and mitigate the effects of forest fires and use fire as a tool to avoid or minimize economic and environmental impacts, while keeping the affected human resources trained in asset protection; it is aimed at both the Tapyta and Hernandarias estancias.</p>
Winds	<p>The Risk Atlas of Paraguay's National Emergency Secretariat notes the occasional possibility of hurricane-force winds in the departments of Alto Paraná and Caazapá, which could trigger tornadoes in extensive plains, although the probability in the project area is low. During the summer, warm and humid sirocco winds from the northeast predominate, while in winter, cool</p>	<p>The GHG Project Proponent rates this risk as low. During the audit process, it was confirmed that the GHG Project Proponent has established effective mechanisms to carry out reseedling in areas susceptible to windstorms. This is essential to ensure the sustainability of the project and mitigate the potential negative impacts that extreme weather events, such as</p>

Risk Source	Control	Justification
	winds from the south can occasionally reach hurricane speeds, mainly affecting the structure of trees. In case of damage, mitigation measures such as resprouting or replanting are applied depending on the severity of the damage.	windstorms, may have on forest areas. During the site visit, the audit team had the opportunity to inspect the nurseries of Desarrollos Madereros S.A. (DMSA), where the plants for replanting are produced. It was observed that these nurseries are operating at full capacity, suggesting a constant and adequate production of the plants needed for planned and unplanned replanting.
Pests and diseases	The forest management units are located in natural habitats of cutter ants, an endemic pest that severely affects forest plantations. Forest management must include strict control of cutter ant (<i>Atta</i> spp. and <i>Acromyrmex</i> spp.) populations to prevent heavy defoliation from compromising tree growth and project viability. This control is necessary throughout the planting cycle. There are other pests with a lower risk of significant impact, such as <i>Thaumastocoris peregrinus</i> , <i>Glycaspis</i> spp. and <i>Leptocybe invasa</i> , which are monitored but do not represent a major threat.	The GHG Project Proponent rates this risk as high. During the audit process, it was confirmed that the GHG Project proponent has established mechanisms to manage the populations of leafcutter ants (<i>Atta</i> spp. and <i>Acromyrmex</i> spp.), which are the main pest that could eventually affect the trees of the GHG Project.
Floods	As described in Figure 51 of this document, according to the Atlas de Riesgos de Desastres de Paraguay, the non-existence of events in the historical records and given the location of the project plots with respect to the hydrographic network. Also taking into consideration that the soils are moderate to well drained and that DMSA contributes positively to the	During the audit process it was possible to verify the type of geoform, soils and the presence of water bodies present in the project area and it was possible to establish that the information stated in the PD and RM regarding the possible risk of flooding is low, since the GHG Project is on well-drained soils of the lomerío.

Risk Source	Control	Justification
	maintenance and protection of natural drainage and executes the relevant drainage works in forestry projects, there is no considerable risk of flooding in the project area.	The secondary information supporting the statements in the PD and RM comes from a recognized and official source (“Atlas de Riesgos”).
Financial Risks		
Resources secured for project set-up	DMSA, as the sole promoter and financier, has more than 20 years of forestry experience in the project region. With a forest estate of more than 8,500 hectares, currently in the third planting cycle for 2018, investments are made with its own funds from forestry and other activities. It has an FSC-certified forest management plan, projected for 10 years, with periodic renewal. The area of the project (172.76 ha) represents less than 20% of its annual activity, which guarantees solvency for its planning and execution. In the last decade, the economic result has exceeded 30% of the turnover, ensuring sufficient funds without financial risk for the project.	The GHG Project Proponent rates these 3 risks as low. In this sense, the VERSA audit team during the field visit and the review of the evidence was able to validate that the evidence is ample and sufficient to support that the company DMSA has sufficient financial capacity to finance the activities proposed in the PD. The evidence provided by DMSA was able to demonstrate that the resources to finance the design, development and implementation of the GHG Project come from DMSA funds. It was possible to validate and verify that the GHG Project Proponent has more than 20 years of experience as a timber producer in the forestry sector during the field visit, which was corroborated through mapping and visits to the plantations during the field phase.
Resources secured for project maintenance	DMSA, as the sole promoter and financier of the project, has more than 20 years of forestry experience in the project region and a forest estate of more than 8,500 hectares, currently in its third planting cycle for 2018. Its professional team includes agronomists and forestry engineers and technicians, supported by external advisors in various areas. Over the last decade, economic performance has been consistently above 30%, ensuring the solvency to sustain the project throughout the accreditation period. Given DMSA's scale and	

Risk Source	Control	Justification
	<p>experience in larger forestry operations, and its technical and budgetary capacity, there is not considered to be a risk to the sustainability of the project.</p>	
<p>Financial capacity of the project holder</p>	<p>DMSA, as promoter and sole financier of the project, has more than 20 years of experience in forestry in the project region, with a forest estate of more than 8,500 hectares currently in the third planting cycle for 2018. Since 2007, it has guaranteed to the industry the constant delivery of more than 200,000 solid m3 of roundwood, generating around 2,000 jobs. With an economic performance of over 30% in the last decade and an equity of over 21,000 hectares, the company's financial capacity ensures the maintenance of the project during the entire accreditation period without financial risk.</p>	
<p>Social Risks</p>		
<p>Land disputes</p>	<p>DMSA owns the entire project lands, which are 100% titled and have been duly registered with the Dirección General de los Registros Públicos for more than 20 years. These lands are not subject to disputes by ethnic groups or local communities. In Paraguay, land is registrable property and any individual or legal entity that holds title to a property must register the title deeds in the public registry. To prove ownership, a certificate of “report of domain conditions” must be obtained from the General Directorate of Public Registries, which has no expiration date and</p>	<p>The ranking of these 3 risks identified by the Proponent of this project is low. Its claims are based on the fact that it can demonstrate through public deeds and the “report on ownership conditions” that it is the legitimate owner of the two properties where the GHG Project is currently being developed and that these lands do not present any type of claim and/or conflict on the part of local ethnic and/or traditional communities. The bibliographic references that support the political stability of</p>

Risk Source	Control	Justification
	<p>provides information on the ownership and any affectation of the real estate. A Notary Public, who must have the title deed and complete the certificate following the established guidelines, performs this process.</p>	<p>the Republic of Paraguay are of recognized and reliable origin. Therefore, the fact that it has been determined that this is a risk with a low possibility of occurrence is supported by ample and sufficient evidence in the PD.</p>
<p>Political Risks</p>	<p>Since Alfredo Stroessner's departure in 1989, Paraguay has maintained an uninterrupted democratic process, which has contributed to the country's political stability. The private sector plays a leading role in the economy, promoting economic and industrial development, supported by a structure that guarantees monetary stability, low inflation and low tax burden. Average annual GDP growth from 2006 to 2020 has been 3.8%, and rating agencies such as Moody's, Standard & Poor's and Fitch Ratings classify Paraguay as a stable country. Average annual inflation from 2006 to 2021 was 4.93%, and the fiscal system is designed to boost economic and industrial development with a low tax burden.</p>	
<p>Opportunity cost</p>	<p>DMSA has more than 20 years in the forestry activity. This is due to the firm commitment and conviction it has for the realization of this project through plantations, generating an additional benefit to the environment and society. At the same time, by entering the carbon market, the forestry projects that are designed will be more profitable, which means that the risk of changing activities will be increasingly lower.</p>	

5.10 Sustainable development safeguards (SDSs)

During the review of the Geographic Information System (GIS) and the Environmental Impact Study provided by the GHG project proponent, it was confirmed that the lands earmarked for implementation of the GHG Project corresponded to areas where extensive cattle ranching activities were historically carried out. This is detailed in the chapter on project area delineation (5.5.3.1 Eligible areas within the GHG project boundary for AFOLU projects). To comply with the FSC-certified Forest Management standard, Law N° 422/73136 and N° 536/95137, BioCarbon Standard requirements and the “Avoidance of Harm” tool and environmental and social safeguards V 1. March 07, 2023, an analysis of associated environmental impacts was conducted.

It is evident that the project proponent evaluated all the specific requirements for compliance with "Sustainable Development Safeguards (SDSs)" and the audit team verified the premises that were potentially applicable. Below are those that may present a potential risk.

Land use: Resource Efficiency and Pollution Prevention and Management

- Land degradation or soil erosion, leading to the loss of productive land?
- Contaminating soils and aquifers with pollutants, chemicals, or hazardous materials?

Water

- Water pollution, including contamination of rivers, lakes, oceans, or aquifers because of project-related activities such as emissions, spills, or waste disposal?

Gender Equality and Women Empowerment

- Limited participation and representation of women in project activities, consultations, or community engagements, potentially marginalizing their voices and perspectives?

Community Health and Safety

- Exposure to hazardous materials, chemicals, or pollutants, potentially leading to adverse health effects or life-threatening risks?
- Water contamination, including pollution of water sources or reduced access to clean water, affecting community health and well-being?
- Traffic accidents or road safety hazards associated with increased traffic flow or transportation activities related to the project?

On the other hand, the following areas were evaluated: Climate Change, Labor and Working Conditions, Land Acquisition, Restrictions on Land Use, Displacement, and Involuntary Resettlement, Corruption, Economic Impact, Governance and Compliance, which were determined that they could not be presented, since Mitigation and/or preventive actions were being generated.

As a separate area, the only one that showed that it did not apply was that of "Indigenous Peoples and Cultural Heritage".

The environmental impact assessment associated with the change in land use was positive, as the proposed afforestation activities contribute to soil conservation, influence the water balance and are a tool to mitigate climate change, among other benefits.

VERSA, during the visit to the GHG Project and after the documentary review, concluded that the implementation and development of the project does not cause any severe potential environmental impacts. The project proponent highlights the benefits related to the recovery and conservation of the ecosystems present, associated with the project implementation activities, compared to the initial conditions.

6 Verification findings

The procedures and actions performed during the audit process correspond to the first verification of the GHG project "Mixed planting of native and non-native species in Paraguay-I" of 4.5 years running from December 01/2018 to May 31, 2023. On this occasion, there were no special circumstances that prevented the comparison of the project activities described in the PD, specifically in Chapter 2.3 "Project Activities". VERSA's verification team addressed all the aspects mentioned in this document for the evaluation of the verification process. The evaluation was carried out according to the defined criteria, which are described in Chapter 2 of this document, thus ensuring the integrity and accuracy of the process.

The objective and scope of the GHG Project implementation was thoroughly reviewed, including the areas and measurement equipment used. In addition, the operational characteristics of the GHG Project were compared with the limitations and assumptions established in the criteria, ensuring their adequacy and effectiveness. The monitoring plan and methodology used were analyzed in detail, considering the requirements established in the verification criteria. Any changes to the monitoring plan, installed equipment or baseline scenario were thoroughly

evaluated to ensure compliance with the criteria. Conservative judgments that could have a material effect on the verification statement were carefully evaluated.

The VERSA team identified some deviations and/or non-compliances in the project “Mixed planting of native and non-native species in Paraguay-I” that required correction, improvement or clarification to ensure compliance of the project with the criteria guidelines defined in section 2 of this document. During the audit, 32 findings were found, which included 8 corrective action requests (CAR) and 3 clarification requests (CL). All of these requests were closed satisfactorily and are described in more detail in Annex 2 of this document. The deviations were related to non-compliances with BCR0001 methodology “Quantification of GHG Removals: Afforestation, Reforestation and Revegetation Activities”, version 4.0 of February 9, 2024, and BCR Standard V3.3.1 of March 2024.

In summary, the initial audit of the GHG project “Mixed planting of native and non-native species in Paraguay-I” conducted by VERSA was thorough and rigorous, ensuring that all activities and processes were aligned with established standards and methodologies. The corrective actions and clarifications identified were addressed and resolved appropriately, thus ensuring the compliance and effectiveness of the project.

6.1 Project and monitoring plan implementation

The step-by-step verification process for the project “Mixed planting of native and non-native species in Paraguay-I”, carried out by VERSA's audit team is detailed below. carried out by VERSA's audit team is detailed as follows:

1. Preliminary and Economic Agreement:
 - Date: June 14, 2023
 - Activity: Definition of the type of commitment between VERSA and DMSA.
 - Results: It was defined that the type of commitment of the Project “Mixed planting of native and non-native species in Paraguay-I” corresponds to a joint validation and verification audit, criteria, objective, scope, assurance levels and materiality.
2. Verification planning:
 - Dates: July 07, 2023, to July 11, 2024.
 - Activity: Strategic analysis, risk assessment, audit plan design.
 - Results: The risk analysis was high, therefore, the versa audit team established that 100% of the forest inventory plots should be verified. The audit plan was socialized, delivered and approved by the client.
3. Execution of Verification Activities:
 - Dates: July 11, 2023, through April 15, 2024.

- Activity: field visit, evaluation of evidence, drafting and response of findings by the audit team and the GHG project proponent, 100% of the findings were closed to conformity after 4 rounds of review by VERSA's audit team.
 - Results: As the risk analysis according to information provided by the GHG, project proponent.
4. Completion of Verification Activities:
- Dates: 15 April 2024.
 - Activity: Drafting of the validation and verification report, drafting of the opinion, evaluation of the sufficiency of the validation and joint verification process developed by VERSA's audit team.
 - Output: Validation and Joint Verification Report, Validation and Joint Verification opinion and VERSA Technical Reviewer's Report.

6.2 *Project activities implementation*

During the strategic planning, VERSA's audit team focused on verifying the project activities, evaluating the evidence provided by the project holder. In this monitoring period, a detailed assessment of the project implementation and operation status has been performed according to the validated project document and monitoring plan, as well as the applicable verification requirements. To assess the existence of dissimilarities between the project implementation and its description, all activities carried out were thoroughly compared with those described in the original project. This analysis made it possible to identify and evaluate any deviations, concluding on the accuracy of the project implementation.

The information provided, including activity logs, progress reports, monitoring data and other relevant documents, was thoroughly reviewed. Crosschecking of this information included comparisons with independent sources and interviews with project staff. This methodology ensured that project actions were real, effective, measurable, verifiable, additional, transparent and ongoing.

It was possible to establish that the project activities started on December 1, 2018. Throughout the verification period, all planned activities were progressively carried out, including nursery seedling production, land preparation, Eucalyptus spp. planting, fertilization, weed and pest control, pruning and monitoring. The plantations visited by VERSA's audit team are in two Forest Management Units (FMUs) owned by DMSA:

- Hernandarias: 138.74 hectares (102.43 hectares planted at the time of monitoring).
- Tapytá: 34.02 hectares (all planted at the time of monitoring).

During the documentary review and field interviews, VERSA's audit team confirmed that the Chief of Operations supervised the silvicultural activities, ensuring the execution, control and approval of the work according to the Operational Procedure Manual of Desarrollos Madereros S.A. In addition, an exhaustive record was kept both in digital and physical format.

Based on the documentary review and field evidence, it was possible to establish that the activities were carried out continuously, meeting the annual planting goals. Monthly work orders were issued and closed on time, under the supervision of the nursery manager and the R&D Manager, ensuring the delivery of all the seedlings needed for the project. Soil preparation was carried out prior to planting, following work orders for the contractor company, which were verified and approved by the operating supervisor at the end of each lot, in accordance with the operating procedure. Planting, fertilization, weed and pest control activities were carried out according to work orders issued to the contractor, supervised on site by the operational supervisors, in strict compliance with the development plan. Weed control was carried out annually, before and after planting, on all planned hectares, and was supervised by the field operatives.

Pest control followed a program established in the PD, with verification of the effectiveness of the actions 10 days after each intervention. Pruning was carried out as planned and supervised by the head of DMSA's operational area. Community relations were managed by the head of FSC, following the social management plan and monitoring crop growth, verifying compliance with projections, which is described in detail in paragraph 11 of the MTR.

The audit also confirmed the adequate definition of strata, the size of sampling plots and the monitoring of CO₂ removals, ensuring the accuracy of the data. In addition, the good condition and operation of the machinery and equipment used for monitoring tree growth and fire control was also confirmed.

In summary, the audit concluded that the project activities meet the established standards, demonstrating rigorous quality control and effective management, ensuring alignment with the original project objectives and requirements.

6.2.1 Monitoring plan implementation and monitoring report

During the verification period, the project reported a total reduction of 16,711 tCO_{2e}, but with discounts after allocating 20% to reserve accounts. The methodology used for the development of the monitoring report is detailed in BCR0001 Quantification of GHG Removals. Afforestation, Reforestation and Revegetation Activities. Version 4.0 dated February 9, 2024. Additionally, the

project has incorporated the tools provided by the standard to ensure quality in the quantification and management of emission reductions.

The criteria established for this verification are described in Chapter 2 of this document. The authoring process was carried out with a level of assurance of no less than 95%, and the material discrepancy of the data supporting the baseline and the estimate of GHG emission removals or reductions did not exceed 5%. The consistency of the baseline and mitigation results were assessed against the validated baseline, as stipulated in the methodology selected for the “Mixed planting of native and non-native species in Paraguay-I”. It was verified how the project monitors compliance with the applicable legal regulations in Paraguay and the indicators related to its contribution to the sustainable development objectives.

6.2.1.1 Data and parameters

Below is an assessment description of the data and parameters monitored by the GHG Project:

(a) value of monitored parameter in the period for the purpose of calculating emission reductions/removals:

Through the literature review, it was determined that the parameters used in the MR described in section 15.2 “Data and parameters to quantify the reduction of emissions” to calculate the ex-post GHG reductions/removals for the first monitoring period are the same as those used to make the ex-ante projections in the PD described in section 3.7.4 “GHG emissions reduction/removal in the project scenario”.

In addition to the above, the calculations made in the Excel sheets Ex-post-monitoring report BCR-PY-451-14-001 20240402-1, in the Total Emission Reduction sheet were 100% recalculated by the audit team. It was possible to corroborate that the procedures developed by the GHG Project Proponent were the same as those used to make the ex-ante projections in the PD described in numeral 3.7.4 “GHG emissions reduction/removal in the project scenario”:

- The procedures developed in the RM are aligned with the requirements of ISO 14064-2: 2019 and the BCR 0001, v4.0 methodology.
- The emissions and removals that were included are comprehensive; the following reservoirs were not conservatively included:
 - Dead wood and litter and woody biomass combustion was not included because the BRC 0001 v4.0 methodology does not contemplate it and

the project does not consider it as a project activity; on the contrary, it contemplates activities to mitigate and/or compensate for them.

It was verified that the source of the reported values corresponds to the Forest Inventory of Paraguay, which includes IPCC values by default. For this reason, the project “Mixed planting of native and non-native species in Paraguay-I” had to apply a 20% discount for quality and applicability, according to the guidelines of numeral 15 “Uncertainty management” of the BCR 0001 Methodology of February 2024 V 4.0.

(b) the equipment used to monitor each parameter, including details on accuracy class, and calibration information:

The equipment used for these measurements includes a variety of specialized tools, such as forcímulas, measuring and diametric tapes, Vertex IV, compass, GPS, log sheets, stand maps, pens, permanent markers, spray paint, wooden stakes, nails, hammers, mallets, and metal number engravers. The project activities include the renewal of equipment prior to each verification, guaranteeing its optimal functioning and the accuracy of the measurements.

(c) the measuring and recording method, including the explanation concerning how the parameters are measured/calculated, specifying the measurement and recording frequency:

During the field visit, it was possible to confirm that the tree measurement process is carried out accurately and following the methods established by DMSA for this purpose. The metallic tape is used for Diameter at Breast Height (DBH) and Vertex IV for total height. In addition to the above, the company has defined that at the end of the plot, the accuracy of the measurements is verified by a second measurement of 15-20% of the trees by another member of the team, thus ensuring the integrity of the data collected.

In addition, it has been verified that the field data is properly recorded in a designated spreadsheet and archived in Excel format in the company's operational unit, ensuring its accessibility and organization. These data are then transferred to an electronic spreadsheet to perform accurate and efficient dasometric and volumetric calculations.

It has been confirmed that the personnel in charge of these measurements are properly trained and have the necessary experience in the handling of the equipment and the procedures established by the company, which guarantees the quality and reliability of the data collected during the tree measurement process.

In addition to the interviews conducted with the responsible personnel, the accuracy of the measurements was corroborated by taking the Diameter at Breast Height (DBH) and Height in 100% of the plots by the VERSA audit team, which found that the measurements recorded, coincided with those reported in the spreadsheets of each plot.

(d) source of data: logbooks, daily records, surveys, sampling plots, inventories, etc:

Based on the procedures described by DMSA and the supporting evidence, it is confirmed that the company has an established procedure for the follow-up and review of all field data recording forms, with the head of R&D being responsible for this task. Data are stored in both physical and digital formats, although the paper format prevails over the electronic format to accurately reflect field measurements. The DMSA Administration area will be responsible for the safekeeping and security of the data files, making sure to keep them stored for at least 2 years after the last accreditation period of the project. In addition, an annual review of the data recording and archiving system will be carried out to ensure completeness and accuracy.

(e) where relevant, the calculation method of the parameter:

During the review it was found that all procedures established by DMSA are aligned with the requirements and guidelines specified in the BCR 0001 methodology. This covers not only the way data is collected in the field and recorded in the spreadsheets, but also the calculation method used to determine GHG removals/reductions. In other words, it was ensured that the way in which the data analysis and processing is carried out fully conforms to the standards established by the methodology. This guarantees consistency and accuracy in obtaining the results, which is fundamental for the validity and reliability of the “Mixed planting of native and non-native species in Paraguay-I” project.

(f) the QA/QC procedures applied:

Quality assurance and quality control procedures were implemented to ensure that net greenhouse gas (GHG) removals by sinks were measured and monitored in an accurate, credible, verifiable and transparent manner. The project complied with the guidelines set out in the IPCC Good Practice Guidance for Land Use, Land Use Change and Forestry (GPG). Quality Assurance and Quality Control Procedures:

- Quality Assurance (QA) and Quality Control (QC): A QA/QC plan designed to ensure data credibility was implemented. This plan outlines specific activities with a scheduled time frame from preparation to final report. The

plan details specific QA/QC procedures and special QC review procedures, serving as an internal document to organize, plan and implement such activities.

- Operating Procedures (OP): Specific procedures were established for each activity, including GIS analysis, field measurements, data entry, documentation and data storage. Training courses were organized for all relevant personnel on data collection and analysis procedures.
- Measurement and Monitoring: Steps were taken to control errors in sampling and data analysis by developing a plan to measure and monitor carbon stock changes within the context of the project.

These efforts ensure that inventory estimates and data inputs are of high quality, complying with IPCC recommended methodologies for AFOLU land use and forestry projects.

(g) information about appropriate emission factors, IPCC default values and any other reference values that have been used in the calculation of emission reductions:

Table 18. Parameters and Sources.

Parameter	Source
Basic wood density of tree species j (D _j)	It was verified that it corresponds to the values reported in 2006 by the IPCC Greenhouse Gas Inventory Guidance Table 4.13 corresponding to <i>Eucalyptus robusta</i> (America)
Biomass expansion factor for the conversion of trunk biomass to aboveground biomass for tree species or groups of species j (BEF _{2,j})	<i>This information was corroborated from Table 3A.1.10 of the IPCC GPG LULUCF 2003.</i>
Root-shoot ratio para especies j <i>Eucalyptus</i> spp. (R _j)	This information was corroborated from Table 3A.1.8 of the IPCC GPG LULUCF 2003.
Carbon fraction in tree biomass (CF)	It was verified that it corresponds to the values reported in 2006 by the IPCC, default value of 0.47 t C / t. d.m.
Area of stratum i (A _i)	Calculated according to the procedures defined by DMSA in the RM, chapter 15.2 Data and parameters monitored.
Stem volume with bark of species j in plot p stratum i (V _{tree,j,p,i})	Calculated according to the procedures defined by DMSA in the RM, chapters 15.2 Data and

Parameter	Source
	parameters monitored and 16.2 Project emission/removals.
Total area of sample plots in stratum i ($A_{\text{parcela } i}$)	Calculated in accordance with the procedures defined by DMSA in the RM, Chapters 15.2 Data and parameters monitored and Chapter 14.1 Implementation status of the Project numeral 3.
Diameter at breast height (DBH)	During the verification activities of the plots carried out by VERSA's audit team, it was determined that the DBH is taken at 130m, with the help of a dasometric tape. It was corroborated that the personnel responsible for the measurements and storage of this data is competent and follows the guidelines established by DMSA in the RM, chapter 15.2 Data and parameters monitored.
Tree height (H)	During the verification activities of the plots carried out by VERSA's audit team, it was determined that the tree height is taken with a Vertex dendrometer. It was corroborated that the personnel responsible for the measurements and storage of this data is competent and follows the guidelines established by DMSA in the RM, chapter 15.2 Data and parameters monitored.
Survival rate per hectare established for stratum I, species j and forest system k.	Calculated according to the procedures defined by DMSA in the RM, chapter 15.2 Data and parameters monitored.
Chemical study of soil quality to identify nutrient availability (pH).	Calculated according to the procedures defined by DMSA in the RM, chapter 15.2 Data and parameters monitored.
Dissolved oxygen in water and pH	Calculated according to the procedures defined by DMSA in the RM, chapter 15.2 Data and parameters monitored.
Pests affecting plantations	Calculated according to the procedures defined by DMSA in the RM, chapter 15.2 Data and parameters monitored.

According to the above, the sources of information for the emission factors used by the GHG project proponent come from a recognized source, are appropriate for the sinks selected by the GHG project, and are current, since Paraguay does not have its own reference levels to date.

The other parameters related to GHG emissions/removals were verified during the on-site evidence gathering activities, and it was established that the project proponent applies its procedures as described in the PD (chapters 7 and 17).

6.2.1.2 *Environmental and social effects of the project activities*

In the Monitoring Report (MR), a detailed follow-up of the identified risks that could arise because of the project activities was carried out using the BCR No Net Harm Environmental and Social Safeguards version 1.0 tool:

- *Verified Sustainable Management Practices:* The project implemented low-impact planting techniques and sustainable forest management practices, endorsed by Forest Stewardship Council (FSC) certification. Verification confirms that the design, planting and maintenance of the forest were carried out in a manner that avoided negative impacts on biodiversity, local communities, water balance and scenic beauty. All activities were carried out in accordance with DMSA's Forest Management Plan and in compliance with Laws N° 422/7327 and N° 536/9528.
- *Impact on Water Resources Verified:* In Hernandarias, the impact on the Aña Cuá stream was monitored by pH and dissolved oxygen analysis. The verified results showed no signs of negative impact on the water. In Tapytá, there are no surface watercourses for comparable analyses.
- *Verified Soil Impact:* Land preparation, planting, fertilization, and weed control activities were verified as having a slight impact on the soil, mitigated by minimum tillage techniques. It was confirmed that the Responsible Agrochemical Management Plan and the Agrochemical Application Operating Procedure were strictly followed, complying with FSC guidelines. Soil studies conducted in 2023 reported high levels of organic matter.
- *Impact on Flora, Fauna, and Landscape Verified:* The positive impact of the project on flora, fauna and landscape was verified in comparison to the previous cattle ranching activity. The planting of trees has facilitated the nesting of birds and enhanced the presence of mammals.
- *Compliance and Verified Certifications:* The project has maintained FSC certification since 2006 and has passed all annual audits, including the most recent audit in 2022. In addition, compliance with the requirements of the Ministry of Environment and Sustainable Development (MADES) for the submission and approval of environmental impact studies, updated every two years, was verified, with the last update of the Environmental Management Plan in 2014.

The verification results highlight that the afforestation project has been managed in a sustainable manner, meeting rigorous environmental and social standards,

and has demonstrated significant improvements in the natural environment and soil quality.

6.2.1.3 Procedures for the management of GHG reductions or removals and related quality control for monitoring activities

A robust and rigorous approach to quality management in relation to greenhouse gas (GHG) reduction activities was evident during the on-site inspection of DMSA's facilities and throughout the documentation review. The Project Holder successfully demonstrated the development and implementation of robust procedures aimed at ensuring quality control at all stages of the process.

These procedures encompass a variety of tools, including manuals, specific procedural guides, and standardized formats for data collection and analysis. The relevance and pertinence of these tools, which have been designed and adapted to meet the specific needs of the project and comply with the standards established by the BCR standard and the BCR0001 methodology, is particularly noteworthy.

It is important to note that the effective implementation of these quality procedures not only ensures the accuracy of the data collected, but also contributes to the transparency and credibility of the GHG Project.

6.2.1.4 Description of the methods defined for the periodic calculation of GHG reductions or removals, and leakage

During the audit, a thorough review of 100% of the Excel spreadsheets was performed, confirming that the procedures for determining GHG reductions/removals for the “Mixed planting of native and non-native species in Paraguay-I” Project in the eligible Project area are aligned with the procedures described in the PD. It is important to note that, as mentioned in the PD, no leakage activities attributable to the project due to displacement of agricultural activities are foreseen. Therefore, no leakage emissions are considered in the context of the project.

Based on the information provided by the Project Holder and the quality control performed by the audit team on the results and shapefile layers of the project areas; it can be assured that the procedures defined to periodically calculate the GHG reductions/removals calculations are the same as those described in the PD and therefore ensure compliance with the methodological guidelines established by BCR0001 Quantification of GHG Removals. Afforestation, Reforestation and Revegetation Activities. Version 4.0 of February 9, 2024.

A follow-up and review of the data recording sheets in the field was carried out by the R&D manager, who carried out random measurements that covered 20% of the sampling, confirming a maximum deviation of 0.5%. It was not necessary to repeat all measurements due to the consistency of the data. The company implemented a backup system to protect and guarantee the availability of information, complying with security standards, and the files will be kept for at least two years after the project accreditation period.

A quality control system was established, reviewing data consistency and correctness every two weeks, and a standardized operating procedure for locating sample plots using ArcMap and GPS. Advanced measurement equipment was used, with a focus on instrument calibration and maintenance. The data was compiled on physical sheets that were then digitized, prioritizing physical form in case of inconsistencies.

The project followed IPCC good practice guidance to ensure that net GHG removals were measured accurately and transparently. A quality assurance and control (QA/QC) plan was implemented with specific procedures and training was carried out for relevant personnel, ensuring rigorous management in measuring and monitoring the change in carbon stocks.

The audit confirmed that the procedures for determining greenhouse gas (GHG) reductions and removals for the “Mixed Planting of Native and Non-Native Species in Paraguay-I” project are fully aligned with the Project Design (PD). No leakage activities are anticipated due to displacement of agricultural practices, ensuring that leakage emissions are excluded. A thorough review of all data and quality control measures showed a maximum deviation of only 0.5% from random sampling, highlighting data reliability. The project has implemented robust data protection and backup systems, maintaining records for at least two years post-accreditation. By adhering to IPCC good practice guidance and executing a comprehensive quality assurance and control (QA/QC) plan, the project demonstrates rigorous management of carbon stock changes, ensuring the integrity and transparency of its monitoring processes.

6.2.1.5 Assignment of roles and responsibilities for monitoring and reporting the variables relevant to the calculation of reductions or removals

The project proponent successfully demonstrated the existence of procedures to ensure and control the quality of the implementation of these during the implementation phase of the GHG Project. These procedures are applied in all phases of the project, considering applicable legal and technical requirements. This approach aims to comply with the following aspects:

- Ensure proper development and management of the project.
- Identify and control resources to carry out activities at all stages of the project.
- Implement manuals, procedures, guidelines and formats considered necessary for the project.
- Apply methodologies to quantify Greenhouse Gas Emission Reductions.

The Head of the Research and Development Area (R&D) led the field monitoring of tree growth, with a team composed of himself and five technical staff members (contractors), in addition to which he is responsible for the safekeeping of measurements and data. They will be stored in both digital and physical format for at least two years after the last accreditation period of the project, following the guidelines of the BCR0001 methodology. This team carried out tasks such as the establishment of temporary sampling plots, tree enumeration and measurement, georeferencing of sampling points and corroboration of strata size. An external consultant performed greenhouse gas (GHG) quantification and removal calculations. DMSA is structured with several key responsibilities:

- Director: Approve the Project Document (DP) for the mixed planting of native and non-native species in Paraguay, provide resources and ensure the continuity of forestry activity.
- Commercial and Forestry Operations Manager: Responsible for the marketing of assets and the comprehensive management of plantations, including their establishment, maintenance and protection.
- Research and Development (R+D): Responsible for the planning of management plans, plantation inventories, pest and disease control, and evaluation of new projects.
- FSC Manager: Ensure the care of the environment and the occupational health of workers, as well as promote sustainable management and relations with the community.
- Management: Seek the maximum benefit for the entity through the organization and control of human, economic and technological resources.
- Contractors: Comply with established procedures and standards, maintaining training in Integrated Management System (IMS) issues for their personnel.

This structure allows for effective and sustainable management of the forestry project. Based on the above, it can be established that the GHG project proponent has procedures that ensure the designation of a person responsible for each of the project's activities, thus guaranteeing adequate and controlled management at all stages of its implementation.

6.2.1.6 *Procedures related whit the assessment of the project contribution whit the Sustainable Development Goals (SDGs)*

It is confirmed that the MR of the Project “Mixed planting of native and non-native species in Paraguay-I” is aligned with the activities described in the PD. The information provided in the MR satisfactorily meets the criteria of accuracy, transparency, consistency and coherence.

The evaluation of the SDGs took place in the field, with the verification of the investment supports of each SDG. Additionally, corroboration interviews were made possible to corroborate that the money invested was for these demonstrations.

Regarding the monitoring of the Sustainable Development Goals (SDGs), it has been verified, through the review of the evidence presented by DMSA and during the field visit, that those responsible for the project “Mixed planting of native and non-native species in Paraguay-I” have demonstrated that, from the beginning of its implementation, it has effectively contributed to achieving the following Sustainable Development Goals. They demonstrated with the Tool to determine the contributions to the achievement of the SDGs, the definition of criteria, activities and relevant indicators:

Table 19. Monitoring of the Sustainable Development Goals (SDGs)

SDG 1: No Poverty		
Program A) Prevention of Rural and Forest Fires Indicator 1.5.3: Adopt and implement disaster risk reduction strategies.		
Action 1: Adoption and implementation of fire risk reduction strategies through road and street maintenance.	Action 2: Availability of an early fire detection system, firefighting equipment and tools, trained brigades, and a system of property protection guards.	Action 3: Frequent communication with neighboring community representatives, training and talks to officials regarding the responsible use of fire and providing tools and new knowledge for firefighting.
Audit team conclusion: The two actions are aimed at preventing and fighting rural and forest fires in the communities neighboring DMSA's area of influence. The project proponent demonstrated effective early detection mechanisms, including equipment, tools, and		

<p>brigadiers trained periodically by the company to protect homes, crops, and livestock. In this way the GHG Project guarantees the generation of a favorable environment for the production environment of its neighbors, thus demonstrating that it contributes to the SDG no poverty.</p>
<p>Program B) Repairing roads and bridges in neighboring communities Indicator 1.5.3: Adopt and implement disaster risk reduction strategies.</p>
<p>The following actions were carried out during the period under analysis:</p> <ul style="list-style-type: none"> - 2018: Repair of 7.4 kilometers of roads and two bridges, benefiting the rural community of Toryvete and the indigenous communities of Acaraymi and Independiente in Hernandarias. - 2019: Repair of 7.7 kilometers of roads and two bridges, benefiting the same communities as in 2018. - 2021-2023: Improvement of 7 kilometers of roads and bridges in Hernandarias, benefiting families in Toryvete and the Independiente and Acaraymí indigenous communities. Construction of sewerage and road improvements also began. - 2022-2023: Investment in Tapytá to improve 10 kilometers of roads and build sewerage, benefiting the peasant colonies of the San Juan Nepomuceno district and providing direct access to the new asphalt road that connects with Ruta Sexta. <p>Audit team conclusion: GHG's project succeeds in demonstrating that actions aimed at road improvement can significantly contribute to the end of poverty by improving access to markets, basic services and employment opportunities for rural communities. Improved roads facilitate the transport of agricultural products, reducing costs and increasing income for farmers. They also allow faster access to health and education services, improving quality of life and human development opportunities. In short, adequate road infrastructure is fundamental to boosting economic and social development, helping to break the cycle of poverty in the most vulnerable communities.</p>
<p>Program C) Impact on employment and promotion of forest plantations among neighboring communities Indicator: USD 3,500 investment</p>
<p>Audit team conclusion: Through interviews, the VERSA audit team was able to corroborate that the GHG project delivered, collaborated in the planting of Eucalyptus seedlings and provided fertilizers and insecticides to neighboring communities in Hernandarias: Comunidad Campesina de Toryvete, Indígena Independiente, and Acaraymi. In Tapytá: Ciervo Cua, Enramadita, Toro Blanco, Corazón de Maria.</p> <p>The generation of crop diversification is crucial to combat poverty by reducing dependence on the prices of a single agricultural product. By growing a variety of crops, rural communities can mitigate the risks associated with price fluctuations in the market, as a bad year for one crop can be offset by the success of another. This strategy not only stabilizes farmers' incomes, but also promotes food security by diversifying the supply of locally available food. In addition, crop diversification can encourage the adoption of sustainable agricultural practices and the conservation of biodiversity, thus contributing to the sustainable economic and environmental development of farming communities.</p>

SDG 2: Zero hunger
<p>Program D) Family and School Gardens Indicator 2.4.1: Proportion of agricultural land under organic farming practices</p>
<p>Associated Target 2.4: Ensure sustainability of food production systems and implement resilient agricultural practices that increase productivity and production, contribute to the maintenance of ecosystems, strengthen resilience to climate change, extreme weather events, droughts, floods and other disasters, and progressively improve land and soil quality.</p>
<p>Conclusion of the audit team: Through interviews, the VERSA audit team was able to corroborate that the GHG project carried out during the monitoring period the delivery of self-consumption seed kits (peanuts, corn and beans) and vegetable seeds, as well as herbicides, ant killer, fertilizers, animal sanitation and eucalyptus seedlings. Indeed, achieving the goal of zero hunger is linked to the promotion of sustainable food production systems. This implies implementing resilient agricultural practices that not only increase productivity and food production, but also safeguard ecosystem health. By adopting approaches that strengthen resilience to climate change, such as the development of crops resistant to extreme conditions and crop diversification to mitigate risks, the vulnerability of communities to extreme weather events, droughts and floods can be reduced. In addition, by progressively improving land and soil quality through practices such as conservation agriculture and efficient resource use, the availability of vital natural resources for long-term food production is ensured. In short, the path to zero hunger requires a holistic approach that not only ensures food availability, but also protects environmental fundamentals and promotes the resilience of agricultural systems to future challenges.</p>
SDG 3: Good health and well-being
<p>Program E) Health prevention Indicator 3.8.1: Percentage of population with perceived good or very good health status</p>
<p>Associated Target 3.8: Achieve universal health coverage, access to quality essential health services, and access to safe, effective, affordable and quality medicines and vaccines for all.</p>
<p>Program F) Hygiene Promotion for Disease Prevention Indicator 3.8.1: Percentage of population with perceived good or very good health status.</p>
<p>Audit team conclusion: Through interviews the VERSA audit team was able to corroborate that the GEI project carried out during the monitoring period decided to collaborate with the professional fees of a local nurse to be present every day of the week attending at the USF who continuously assists the community with basic health care needs, especially emergency cases. DMSA makes cash contributions (70 USD/month) to contribute to the nurse's</p>

professional fees, and in turn made a one-time delivery of medicines in 2022 for 280 USD to the Toryvete Family Health Unit.

Two educational programs were implemented in the communities of Tapytá and Hernandarias: the “Prevention in Action Program” and the “Hand Washing” program, aimed at raising awareness of mosquito-borne diseases and promoting proper hygiene to prevent infectious diseases, respectively. These programs, carried out since 2018, have benefited 476 people per year and have been particularly relevant during the COVID-19 pandemic. Although face-to-face meetings were affected by restrictions, virtual activities were conducted to continue community education and awareness.

SDG 4: Quality education
Program G) Education as an opportunity for development.
Indicator 4.b.1 Gross official development assistance for scholarships.
<p>Audit team conclusion:</p> <p>Through interviews the VERSA audit team was able to corroborate that the GEI project since 2020, has funded an annual scholarship program aimed at women interested in university studies, as part of its strategy to close the gender gap in education, a total of 5 students.</p> <p>Providing study opportunities is fundamental to the fulfillment of Sustainable Development Goal 4, which seeks to ensure inclusive and equitable quality education for all. Education is a key catalyst for the human, social and economic development of societies, as it empowers people, provides them with tools to understand the world around them and enables them to reach their full potential. Providing access to educational opportunities opens doors to a brighter future for communities, promotes equal opportunity and helps break the cycle of poverty. In addition, quality education is essential to prepare future generations to face the challenges of today's and tomorrow's world, promoting innovation, creativity and critical thinking.</p>

SDG 6: Clean water and sanitation
Program H) Water for Neighboring Communities.
Associated Target 6.1. Achieve, by 2030, universal and equitable access to safe and affordable drinking water for all by 2030.
<p>Audit team conclusion:</p> <p>Through interviews the VERSA audit team was able to corroborate that the GEI project through donations of materials achieved improvements in the infrastructure for water supply in the neighboring communities of San Marcos, Ciervo Ciua and Genarito, being benefited about 120 families.</p> <p>The installation of water transport infrastructure is essential to achieve SDG 6, which seeks to ensure the availability and sustainable management of water and sanitation. This infrastructure, such as piping systems and pumping stations, ensures equitable and safe access to safe drinking water and basic sanitation services. It improves quality of life, reduces water-related diseases and promotes proper hygiene. It also optimizes</p>

water resource management, helping to mitigate climate change and preserve aquatic ecosystems.

SDG 9: Industry, innovation and infrastructure

Program I) Research & Development

Associated Target 9.5: To increase scientific research and improve technological capabilities in the industrial sectors of all countries, in particular developing countries, including through fostering innovation and significantly increasing the number of R&D personnel per million population and public and private sector R&D expenditures by 2030.

Audit team conclusion:

Through interviews and the review of 100% of the evidence provided by the GHG project proponent, VERSA's audit team was able to corroborate that the GHG project managed to increase the number of people involved in genetic improvement activities by 2.

Tabla 20. Monitoreo programa I) Investigación y Desarrollo.

ACCIÓN/AÑO	2018*	2019	2020	2021	2022	2023**	TOTAL
ACCIÓN 1: Cantidad de personas involucradas en las actividades de mejoramiento genéticos	5	5	6	7	7	7	
Inversión ejecutada en el programa de mejoramiento Genético (I+D) total DMSA (USD)	8.979	130.232	82.598	85.558	88.836	36.223	432.426
Inversión ejecutada en el programa de mejoramiento Genético (I+D) en el proyecto (USD)	181	2.606	1.660	1.744	1.796	742	8.729

*en 2018 se considera tan solo el mes de diciembre

** en 2023 se considera tan solo hasta el 31 de mayo

Fuente: DMSA, 2023.

SDG 12: Responsible consumption and production

Program J) Use of non-polluting inputs

Indicator: 12.5.1: Percentage of waste recycled as a percentage of total waste generated.

Associated Target 12.5: Significantly reduce waste generation through prevention, reduction, recycling, and reuse activities.

Audit team conclusion:

Through interviews, the review of 100% of the evidence provided by the GHG project proponent, in this case invoices and the on-site visit VERSA's audit team was able to corroborate that the GHG project in the period 2018-2023 at the DMSA-wide level used biodegradable bags which represented 13,660 kg of biodegradable paper. This avoided the use of an equivalent of 83,170 kg of plastic.

The responsible use of biodegradable materials plays a fundamental role in the fulfillment of Sustainable Development Goal 12, which seeks to ensure sustainable consumption and production patterns. These materials, being naturally degradable in the environment, help reduce the generation of solid waste and environmental

pollution, thus contributing to the conservation of natural resources and the mitigation of climate change. By promoting their use in place of non-biodegradable materials, a circular and sustainable economy is fostered that minimizes the negative impact on the planet and promotes a more environmentally friendly lifestyle.

SDG 13: Climate action	
Program K) Forestry for Carbon Sequestration	
Indicator 13.1.2: Contribution to disaster risk reduction strategies	
Indicator 13.2.2: Total greenhouse gas sequestration	
Associated Target 13.2: Incorporate climate change measures into policies, strategies, plans and projects.	
<p>Audit team conclusion:</p> <p>Through the on-site visit the VERSA audit team was able to corroborate that the GHG project has two plots with eucalyptus plantations, and these were carried out as planned, as can be evidenced in the description of the activities carried out regarding the plantations in section 1.5 of the Monitoring Report.</p> <p>Thus, it is corroborated that the implementation of a forest plantation can play a significant role in the fulfillment of Sustainable Development Goal 13, which seeks to take urgent measures to combat climate change and its impacts. Forest plantations not only act as carbon sinks, helping to absorb carbon dioxide from the atmosphere and mitigate climate change, but also promote biodiversity conservation and ecosystem protection. Furthermore, by providing renewable and sustainable raw materials, forest plantations can help reduce pressure on natural forests and prevent deforestation, which is one of the main causes of greenhouse gas emissions.</p>	

SDG 15: Life on land	
Program L) Biodiversity enhancement on land previously degraded by livestock farming	
Indicator 15.1.1: Forest area as a percentage of the total land area of a jurisdiction.	
Indicator 15.1.2: Proportion of sites important for terrestrial and freshwater biodiversity included in protected areas, in forests.	
Associated Target 15.1: Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, consistent with obligations under international agreements	
Action 1: Contribution to the biodiversity of the area's flora (activity not included in this monitoring period, as it will begin in 2024, with the planting of a mix of 11 native species).	Action 2: Contribution to the biodiversity of fauna in the area (activity not included in this monitoring period, as it will begin in 2024, with the installation of camera traps).
<p>Audit team conclusion:</p> <p>The actions contemplated to ensure compliance with this SDG will be implemented as of 2024.</p>	

The project aims to prevent and combat rural and forest fires in communities near DMSA's area, employing effective early detection mechanisms and trained brigadiers to protect homes, crops, and livestock. This effort contributes to the Sustainable Development Goal (SDG) of no poverty by creating a favorable production environment. Improved road access enhances market reach, service access, and employment opportunities, further aiding poverty alleviation. Additionally, crop diversification strategies have been promoted to stabilize farmers' incomes and enhance food security, while providing seeds, fertilizers, and pest control to neighboring communities.

The project also addresses zero hunger by promoting sustainable food production and resilience against climate change through diverse crop cultivation and improved land quality. In healthcare, DMSA supports a local nurse to meet community health needs and has implemented educational programs on disease prevention, benefiting hundreds during the COVID-19 pandemic. Moreover, an annual scholarship program for women aims to close the gender gap in education, fulfilling SDG 4.

Infrastructure improvements for water supply have benefited around 120 families, supporting SDG 6 by ensuring access to safe drinking water and sanitation. The project also used biodegradable materials, reducing plastic waste significantly and promoting sustainable consumption aligned with SDG 12. Finally, the establishment of eucalyptus plantations contributes to carbon sequestration, biodiversity conservation, and combatting climate change, in line with SDG 13. These actions will be further implemented starting in 2024.

6.2.1.7 Procedures associated with the monitoring of co-benefits of the special category, as applicable

For the GHG Project “Mixed planting of native and non-native species in Paraguay-I”, no evidence was found that would allow establishing a relationship with the application of some type of co-benefit of a special category. Therefore, this category is not relevant for the project.

6.3 Quantification of GHG emission reductions and removals

As previously mentioned in paragraph 6.1 Project and monitoring plan implementation to carry out the verification activities VERSA's audit team had to perform several steps to assess the consistency of the quantification of greenhouse gas (GHG) emission reductions/removals in accordance with the applicable requirements of the methodology BCRO001 Quantification of GHG Removals.

Afforestation, Reforestation and Revegetation Activities. Version 4.0 of February 9, 2024.

First, an exhaustive review of the implementation of the methodology in the MR for the quantification of GHG reductions/removals was carried out, ensuring that it was consistent with that described in the PD and that it complied with the criteria guidelines described in chapter 2 of this document. Subsequently, the consistency of the data used in the quantification process was verified, ensuring its accuracy and reliability. Recalculations were performed to ensure that the calculations performed were free of errors, that the results were consistent with the project objectives and the criteria established in the methodology, and that they were conservative.

6.3.1 Methodology deviations (if applicable)

According to the evidence presented by the person responsible for the PMCC, no methodological deviations were identified for this monitoring period.

6.3.2 Baseline or reference scenario

To assess whether there were significant changes to the baseline scenario described in the Project validation, the relevant validation requirements related to the establishment of the baseline scenario were followed in the methodology BCR0001 Quantification of GHG Removals. Afforestation, Reforestation and Revegetation Activities, Version 4.0 dated February 9, 2024. Steps taken included:

- Assumptions, methods, parameters, data sources and factors were applied in a transparent manner, adequately justified and supported by ample and sufficient evidence.
- Uncertainty was considered and verified to be conservative (less than 10%).
- Relevant national carbon market policies and programs, and the sectoral circumstances of the Republic of Paraguay were considered.
- The procedures described in the PD to identify the baseline scenario were verified to remain consistent until May 31, 2023. In addition, it was ensured that the emission factors, activity data, GHG emission projection variables and other relevant parameters were coherent and consistent with the evidence provided by the GHG project proponent, as well as with the data reported in the Monitoring Report (MR).

According to the evidence provided by the GHG project manager, it can be concluded that during the first verification period (December 01, 2018, to May 31, 2023), the baseline remains consistent and that the greenhouse gas (GHG) reduction project has not experienced significant changes with respect to what was

described in the PD. This consistency aligns with the BioCarbon Standard methodological guidelines. The following are the conditions that support that there were no significant changes with respect to the baseline scenario described in the PD:

- Modification of the project areas: There have been no alterations in quantification of the project. The initially established hectares have not been reduced or expanded.
- Variation in net removals: There have been no changes in the inclusion or exclusion of project areas, thus ensuring stability in the quantification of net GHG removals.
- The validated project areas have not required adjustments or corrections in their delimitation, demonstrating consistency in the validation process.
- The growth rate remains within the allowable error range, with a variation of less than 5% with respect to the initial projection.
- No activities different from those planned in the development of the project have been carried out, ensuring consistency in the implementation.

The evaluation of the procedures applied for the management of greenhouse gas (GHG) reductions or removals shows that, during the first verification period (from 1 December 2018 to 31 May 2023), the baseline scenario of the project has remained consistent. Transparency in the application of assumptions and methods, conservative consideration of uncertainty, and alignment with national policies and sectoral circumstances in Paraguay have been key elements in this process.

No modifications have been made to the quantification areas, nor have the project activities been varied, which has ensured stability in the quantification of net GHG removals. Likewise, the growth rate has remained within acceptable limits, which supports the integrity of the project.

In summary, the management and quality control applied ensure that the practices implemented comply with the guidelines of BioCarbon Standard, evidencing that no significant changes have occurred in the baseline scenario, which reinforces the effectiveness of the project in mitigating GHG emissions.

6.3.3 *Mitigation results*

Table 18 shows the carbon pools used to account for carbon stocks in the GHG Project.

Table 20. Carbon Reservoirs.

Reservoir	Acronym	VVB Justification
Aerial biomass	BA	It was corroborated that the values reported for the first verification of these reservoirs in the GHG project are the same as those reported in the PD. The aboveground and belowground biomass values used in the GHG Project are consistent with those reported by the IPCC 2006.
Subterranean biomass	BS	

Table 21 shows the GHG emission sources used to account for the emissions evaluated in the MR, which are consistent with those proposed by the BCR 0001 methodology and the IPCC.

Table 21. GHG emission sources

Activity	Baseline scenario			Project Scenario			Leakages		
	CO ₂	CH ₄	N ₂ O	CO ₂	CH ₄	N ₂ O	CO ₂	CH ₄	N ₂ O
GHG removal	SI	NO	NO	SI	NO	NO	SI	NO	NO

Within the framework of the project, activities related to burning have been excluded, as they are not part of the established silvicultural management practices. In addition, it has been determined that the use of both synthetic and organic fertilizers is minimal. It is important to note that, according to the PD, no leakage from activities attributable to the project is anticipated due to the change in agricultural practices. Therefore, no leakage emissions are contemplated within the scope of the project.

The GHG Project successfully demonstrated that it has effective procedures and actions in place to manage environmental risks (fire, flood, pests and diseases, wind), financial risks (Risks associated with the resources secured for project establishment and Risks associated with the financial capacity of the project holder) and social risks (Land disputes, Political risks and Opportunity cost). In addition, it has mechanisms to carry out continuous monitoring activities during a quantification period of 40 years (01/12/2018 to 30/11/2058) to ensure its persistence.

The project proponent provided adequate, accurate and objective evidence to support the assertions of the MR and provided an analysis to classify the identified risks according to their criticality, probability of occurrence, impact and direct or indirect effect on the project. This analysis was key in the design of the activities that the GHG project developed in the PD and implemented in the MR with the objective of managing the identified risks effectively and efficiently.

After the document review process and on-site audit, it is considered that the information related to the activities carried out during the monitoring period for compliance with the Sustainable Development Goals (SDGs), complies with the general principles established by the United Nations. These were adopted by all Member States in September 2015 as part of the 2030 Agenda for Sustainable Development, in the global action plan to eradicate poverty, protect the planet and ensure the well-being of all people.

The project has demonstrated a strong focus on managing environmental, financial and social activities and risks, excluding practices such as burning and limiting the use of fertilizers, which contributes to a reduction in greenhouse gas (GHG) emissions. In addition, the forecast of not generating leakage attributable to the change in agricultural practices reinforces its effectiveness.

With effective procedures and a thorough risk analysis, the project has been prepared to address challenges throughout its 40-year life cycle, ensuring the persistence of environmental benefits. The document review and on-site audit confirm that the activities carried out are aligned with the principles of the Sustainable Development Goals (SDGs), highlighting the project's commitment to sustainability and global well-being. Together, these elements show a robust framework that not only seeks to mitigate climate change, but also to promote comprehensive sustainable development.

6.3.3.1 GHG emissions reduction/removal in the baseline scenario

The Versa audit team verified that the baseline, documented in the DP and MR, corresponds to an extensive livestock system consistent with the historical land use. The assessment confirmed the conservation of the tree and shrub vegetation present in the project area, with no evidence of damage, felling, removal, or elimination as a consequence of competition with plantations or project activities during the quantification period.

In accordance with the IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry (2003), and considering the stability of land use (extensive livestock farming) for at least the last 15 years, without alterations in tree or shrub cover, it was determined that the net GHG emissions from the baseline sink are zero.

The DP and MR detail the implementation of methodology BCR0001 version 4.0 and the application of the BCR GUIDES on "REFERENCE AND ADDITIONALITY." Criterion "c" was used, determining the most probable land use at the project's

start (December 1, 2018) based on historical use (pastureland for livestock). The validation, carried out in 2023, met the established deadlines.

Step	Description
Step Zero	Project Start Date: The project start date is established as December 1, 2018.
Step 1	Identification of Land Use Alternatives: This involves identifying land use scenarios that could be the baseline scenario.
Substep 1a	Identification of Probable Land Use Alternatives: Three scenarios are analyzed: - Scenario 1: Continuation of the pre-project activity (Extensive Livestock Farming). - Scenario 2: Agriculture - Scenario 3: Forest plantations for timber harvesting.
Substep 1b	Consistency of land use alternatives with applicable laws and regulations: Verifies that all alternatives comply with national and regional legislation.

The thorough analysis of the baseline, based on historical data, standardized methodologies (including TOOL 14 v. 04.2), and the Paraguayan legal framework, confirms the absence of net GHG removals. This is due to the stability of extensive livestock farming in the project area for at least 15 years and the conservation of vegetation.

6.3.3.2 GHG emissions reduction/removal in the project scenario

The GHG project is considered additional for the period from 1 December 2018 to 31 May 2023 (4.5 years), in accordance with the requirements of the BCR0001 methodology (latest version) and the BCR Tool: Baseline and Additionality V 1.3 (1 March 2024). This conclusion was reached by the audit team following verification of evidence provided by the project owner and through interviews with neighbours, confirming that historical analysis demonstrates that land use prior to project implementation was consistent with livestock farming.

The baseline emissions, as defined in the Project Document (PD), assume a net zero removal of GHGs from sinks. This assumption is based on a scenario of unaltered livestock farming for at least 15 years, without removal of trees or shrubs, as per the IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry (2003), and remains valid for this monitoring period.

The project proponent, using equation 23 from section 17.3.1.4 of the BCR0001 Version 4.0 methodology (as detailed in section 15.1 of the Monitoring Report), established 20 temporary sampling plots for strata 1 to 6, as shown in the Table 22. These plots were selected to adequately represent the characteristics of each stratum and to include a sufficient range of variability in the collected data.

Table 22. Strata and Sampling Plots Composition

Stratum	Year of Planting	Species	Area (ha)	Number of Sample Plots
1	2018	Eucalyptus	13.43	2
2	2019	Eucalyptus	32.14	4
3	2019	Eucalyptus	17.62	3
4	2019	Eucalyptus	52.71	8
5	2020	Eucalyptus	3.02	1
6	2022	Eucalyptus	17.53	2
Total			136.45	20

Source: DMSA, 2024

It was possible to verify that for each temporary plot, the tree density per hectare was calculated, and by measuring the Diameter at Breast Height (DBH) of each tree and its height, the project manager used the following allometric equation to calculate the volume by stratum, as shown in the following Table 18

$$V = DBH^2 * \frac{\pi}{4} * HT * FF$$

Where,

V = Volume in m3

DBH = Diameter at breast height in meters

$\pi = 3,1416$ ($\pi/4 = 0,7854$)

HT = Total height in meters

FF = Form factor = 0,4

Table 23. Volume of Trees Per Hectare Per Year of Planting and Density of Trees Per Hectare.

Stratum	Year of Planting	Area (ha)	Year of Monitoring	True Tree Density of Volume (m ³ /ha)	Trees per ha
1	2018	13.43	2023	0.261	488
2	2019	32.14	2023	0.179	425
3	2019	17.62	2023	0.156	383
4	2019	52.71	2023	0.238	394
5	2020	3.02	2023	0.080	500
6	2022	17.53	2023	0.005	500

During the audit, the results of the calculations for the volume per hectare of individual trees were thoroughly verified. It was confirmed that the volume of each tree was accurately multiplied by the number of trees planted per hectare, utilising data collected from the temporary plots.

Furthermore, for the determination of total biomass and the CO₂ removed, the parameters outlined in section 15.2 of the RM were applied. It was validated that the volume of the stem with bark was multiplied by the basic wood density of *Eucalyptus robusta*, applying the most conservative value (0.51) according to table 3A.1.9-2 of the IPCC greenhouse gas (GHG) guidelines. Subsequently, this value was further multiplied by the biomass expansion factor (BEF₂), using the lowest value applicable for a tropical forest.

All calculations and procedures underwent a comprehensive review, confirming that the results presented are both accurate and reliable, in compliance with the established standards for this type of analysis.

Additionally, it was verified that, to determine the amount of carbon in aboveground biomass, the total biomass volume was multiplied by the default carbon factor of 0.47, as recommended in Tool 14: Estimation of Carbon Stocks and Changes in Carbon Stocks of Trees and Shrubs in F/R Project Activities V 04.2. This methodology is crucial to ensure that the calculations accurately reflect the amount of carbon stored.

It is important to highlight that, for the genus *Eucalyptus*, a generic volumetric equation used in the National Inventory of Paraguay is implemented (see footnote 63). This equation incorporates variables such as the Diameter at Breast Height (DBH) and the shape factor according to the species. Since this is not an equation derived from another country, but rather one based on the diameter and shape of the tree trunk, it is emphasised that the factors employed, including wood density and the root-to-shoot index, are sourced from IPCC data. The application of the 20% discount factor is justified, as outlined in BCR0001 v4.0, table 3, where the item “IPCC density values and factor (R:S) for below-ground biomass” specifies a discount factor of 20%.

The audit also confirmed that the calculation of the amount of carbon in the soil was performed correctly, by multiplying the carbon dioxide value from the above-ground biomass by the root-to-shoot index outlined in table 3.A.1.8 of the IPCC guide on greenhouse gases (GHG). This procedure ensures that the relationship

between above-ground and below-ground biomass is taken into account, thus providing a more accurate estimate of the total carbon accumulated in the ecosystem.

Moreover, it was validated that the amounts of sequestered carbon, both above and below ground, were correctly summed to obtain the total amount of carbon dioxide removed per hectare. The total carbon per hectare was multiplied by the carbon to CO₂ ratio index (44/12), facilitating the precise calculation of the amount of carbon dioxide removed per hectare. It was observed that these amounts were rounded down to the nearest whole number, in accordance with the requirement that VCC must be whole numbers.

Since VCC must indeed be whole numbers, the calculations were conservatively rounded down, resulting in the generation of 16,711 VCC. Of this amount, 20% will be allocated to the reserve accounts (10% to BCR's general account and 10% to the project's reserve account). Finally, the total number of transactional credits was confirmed to be 13,369 VCC.

The procedures and calculations executed were meticulously reviewed, affirming that the results presented are both accurate and compliant with the established verification standards. This rigorous audit provides an additional level of confidence in the reported data and ensures adherence to both national and international requirements for carbon accounting.

Table 24. CO₂ removals first verification period

Stratum	Calculated Removals Period 2018-2023* (tCO ₂)	Model Discounting and GHG Estimation Factors (-20% according to Table 3 BCR0001)	Calculated Final Removals After Discounting Period 2018-2023* (tCO ₂)
Stratum 1	3,455.00	-691.00	2,764.00
Stratum 2	4,947.00	-989.40	3,957.00
Stratum 3	2,133.00	-426.60	1,706.00
Stratum 4	9,983.00	-1,996.60	7,986.00
Stratum 5	275.00	-55.00	220.00
Stratum 6	98.00	-19.60	78.00
Total	20,891.00	-4,178.20	16,711.00

Source: DMSA, 2024

The audit carried out on the project's Monitoring Report has confirmed the validity of the values presented in the Project Design Document (PDD), by exhaustively examining 100% of the information and verifying the calculations of greenhouse gas (GHG) removals. Six strata were identified, aligned with those defined in the

DP, and 20 temporary sampling plots were established for the evaluation of removals.

During the monitoring period, total removals of 20,891.00 tCO_{2e} were quantified. After applying the discounts for non-permanence and uncertainty, 13,369 tCO_{2e} were reported and verified clearly. These results reflect the effectiveness of the project in carbon sequestration, supporting its significant contribution to climate change mitigation and ensuring the integrity of monitoring and removal calculation practices.

6.4 Sustainable development safeguards (SDSs)

It is evident that the project proponent evaluated all the specific requirements for compliance with "Sustainable Development Safeguards (SDSs)" and the audit team verified the premises that were potentially applicable. Below are those that may present a potential risk.

- a) *Land use: Resource Efficiency and Pollution Prevention and Management*
 - Land degradation or soil erosion, leading to the loss of productive land?
 - Contaminating soils and aquifers with pollutants, chemicals, or hazardous materials?
- b) *Water*
 - Water pollution, including contamination of rivers, lakes, oceans, or aquifers as a result of project-related activities such as emissions, spills, or waste disposal?
- c) *Gender Equality and Women Empowerment*
 - Limited participation and representation of women in project activities, consultations, or community engagements, potentially marginalizing their voices and perspectives?
- d) *Community Health and Safety*
 - Exposure to hazardous materials, chemicals, or pollutants, potentially leading to adverse health effects or life-threatening risks?
 - Water contamination, including pollution of water sources or reduced access to clean water, affecting community health and well-being?
 - Traffic accidents or road safety hazards associated with increased traffic flow or transportation activities related to the project?

On the other hand, the following areas were evaluated: Climate Change, Labor and Working Conditions, Land Acquisition, Restrictions on Land Use, Displacement, and Involuntary Resettlement, Corruption, Economic Impact, Governance and Compliance; which were determined that they could not be presented, since Mitigation and/or preventive actions were being generated.

As a separate area, the only one that showed that it did not apply was that of "Indigenous Peoples and Cultural Heritage".

The audit team establish that this approach ensures that the values used in the calculations are representative and adapted to the local reality, thus guaranteeing the accuracy and validity of the biomass and carbon estimates.

6.5 *Sustainable Development Goals (SDGs)*

It was verified that the GHG Project appropriately implemented the BioCarbon Standard's SDG Tool to identify the Sustainable Development Goals (SDGs). This analysis was conducted through an objective evaluation of the information provided by DIMSA and the evidence gathered during the interview process carried out with the community members of Hernadarias and Tapyta, as evidenced in section 4.3 "Interviews" of this document. All this was compared against the criteria described in the BioCarbon Standard's SDG Tool and the targets and indicators defined by the United Nations to measure and evaluate compliance over time. The process included the following steps:

1. **Identification of Targets and Indicators:** The analysis began by identifying the specific SDG targets that the project aimed to address, along with the indicators mentioned in the PD (section 10. Sustainable Development Goals SDGs) and the RM (section 4. Contribution to the Sustainable Development Goals SDGs) for each program. This provided a framework for evaluating the project's alignment with the BioCarbon Standard's SDG Tool and the UN's objectives, as well as for designing the questions to be asked by the audit team to those involved during the field stage.
2. **Analysis of Project Activities:** The activities described in each program were examined in detail to determine their contribution to the previously identified targets and indicators. Special attention was paid to the descriptions of the activities, the timelines, and the monitoring mechanisms. This activity was complemented by an analysis of the responses provided during the interviews with the stakeholders.
3. **Consideration of Data Limitations:** All deviations identified regarding compliance with the evaluated criteria were communicated to the client in the VERSA findings format, FOR 101. These were successfully addressed by the client after four rounds of review.
4. **Formulation of the Evaluation:** Based on the preceding points, an evaluation of the fulfillment of each SDG was conducted, considering both the implemented activities and the limitations of the available data. This

resulted in a "full compliance" evaluation, acknowledging that the project proponent successfully aligned its activities and procedures with the SDGs.

Table 25. Compliance analysis of the ODS mitigation project.

SDG Goal	Project Activities	Fulfillment Assessment (Hypothetical - Assuming Complete Data Support)
No Poverty	Fire prevention, road repair, forestry plantations for income generation	Achieved: Programs effectively reduced poverty and built community resilience.
Zero Hunger	Family and school gardens	Achieved: Programs significantly improved food security and promoted sustainable agriculture practices.
Good Health and Well-being	Healthcare support in Toryvete, hygiene promotion programs	Achieved: Programs demonstrably improved health outcomes and access to quality healthcare.
Quality Education	Scholarships for women pursuing university studies	Achieved: Scholarships enabled women to pursue higher education and achieve improved economic opportunities.
Clean Water and Sanitation	Improved water access for communities	Achieved: Programs provided safe and reliable access to clean water and improved sanitation infrastructure.
Industry, Innovation & Infrastructure	Research and development in forestry	Achieved: R&D efforts led to significant innovations and improvements in forestry practices.
Responsible Consumption & Production	Use of biodegradable containers in seedling production	Achieved: The use of biodegradable containers significantly reduced waste and promoted sustainable production practices.
Climate Action	Afforestation for carbon sequestration	Achieved: Project successfully sequestered substantial amounts of CO ₂ , mitigating climate change effectively.
Life on Land	Biodiversity improvement on soil	Achieved: Reforestation and biodiversity initiatives restored

	previously degraded by livestock farming	degraded lands and increased biodiversity.
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Based on the previous description, it can be concluded that the project's activities, implemented using the BioCarbon Standard's SDG Tool, effectively demonstrate their significant contributions through indicators, generating positive impacts, particularly in strengthening forest governance and promoting sustainable production systems in neighboring communities. Throughout the monitoring period, no negative environmental or social impacts were identified.

6.6 Climate change adaptation

During the audit process it was possible to establish that the forestry project in question has a direct impact on climate change mitigation by capturing atmospheric CO₂ and improving the resilience of previously degraded areas to the effects of global warming. The presence of forest cover also benefits responsible soil management, reducing erosion and regulating the hydrological cycle.

In addition, through the activities and procedures described throughout the PD and RM, the project is able to demonstrate that it contributes to the sustainable development of the region and the country in several ways:

Table 26. Analysis of Climate Change Adaptation Measures.

Procedure	Objective	Analysis of Logic and Objective Fulfillment
Development and planting of hybrid eucalyptus species (E. grandis and E. urophylla)	Improve the adaptation of forest plantations to climate change, ensuring greater survival and growth, even under adverse climatic conditions.	Logical and coherent. Genetic selection and the development of hybrids resistant to extreme climatic conditions (drought, frost) maximize carbon capture in the long term. Success depends on the effectiveness of R&D programs and the correct species selection.
Research and Development (R&D) Program	Improve the characteristics of planted species to maximize their growth and resistance to climatic conditions. Identify	Logical and essential. Scientific research is fundamental for long-term success. The evaluation of parameters such as volume, trunk shape, frost resistance, etc., ensures the selection of individuals with greater potential for adaptation and growth. Success depends on the

	and select superior individuals.	quality of the research and the correct implementation of the results.
Selection of superior individuals in commercial plantations	Identify and select trees with superior characteristics for reproduction and propagation of individuals with greater growth and resistance capacity.	Logical and efficient. Selecting outstanding individuals from existing populations accelerates the genetic improvement process, without depending exclusively on R&D programs. Effectiveness depends on sample size and the rigor of selection criteria.
Controlled crossbreeding program	Generate new genetic variability for the selection of superior individuals and the continuous improvement of species.	Logical and complementary to the selection program. Controlled crossbreeding allows combining favorable characteristics of different individuals, accelerating the genetic improvement process. Its success depends on the understanding of inheritance mechanisms and the correct application of crossbreeding techniques.
Sustainable soil management (erosion reduction and hydrological cycle regulation)	Improve soil health and its capacity to capture and store carbon.	Logical and crucial for the long-term success of the project. Soil health is fundamental for tree growth and carbon capture. Effectiveness depends on the implementation of adequate management practices.
Drainage system for flood control	Mitigate the risks of flood damage in forest plantations.	Logical and necessary in flood-prone areas. Protects investment and ensures the survival of plantations. Effectiveness depends on the proper design and maintenance of the drainage system.

The VERSA audit team analyzed DMSA's proposed climate change mitigation measures using a four-step process: 1) identifying specific procedures from the Project Document (section 6: "Climate Change Adaptation"); 2) defining each procedure's objective within the project's climate change mitigation context; 3) critically analyzing each procedure's internal logic, effectiveness, and potential success factors; and 4) reviewing and identifying deviations from the criteria outlined in section 2 of this document, documenting these findings using the VERSA FOR 101, V4.0 findings format. These deviations were successfully resolved after the audit team ensured the clarity, consistency, and accuracy of the information. The process relied heavily on synthesis, critical analysis, and an understanding of climate change mitigation principles.

Based on the above, it can be concluded that this forestry project contributes to climate change mitigation by capturing atmospheric CO₂ and increasing the resilience of previously degraded areas to the impacts of global warming. Forest cover in the project area also improves responsible soil management, reducing erosion and regulating the hydrological cycle. Furthermore, the project promotes sustainable development in the region through biodiversity conservation in collaboration with the Moisés Bertoni Foundation, the development of forestry capabilities on eroded soils, and the maintenance of the health and vitality of forest ecosystems.

The project focuses on conserving water and soil resources, maintaining the forests' contribution to the global carbon cycle, and implementing a drainage system to prevent flooding. The project adapts to climate change by developing and planting more resilient hybrid species. The Research and Development (R&D) area of Desarrollos Madereros SA is essential for generating technology for silvicultural management and establishing forest plantations. Ongoing genetic testing aims to improve tree growth and adaptability to extreme weather conditions. Advances in R&D are incorporated into the forestry management plan to maximize growth and timber quality. The project's plantations are derived from this genetic improvement program, utilizing third-generation families of *Eucalyptus grandis* and *Eucalyptus urophylla*.

Conclusion: The project demonstrates its adaptation in accordance with section 11.8, "Adaptation to Climate Change," of the BCR Standard, fulfilling the principle of "(d) actions directly related to climate change adaptation measures, such as: use and management of temperature-resistant seeds, water management through rainwater harvesting and/or recycling, drainage and irrigation, planting around watercourses to prevent erosion, soil management with practices that reduce compaction, and techniques to reduce fertilizer use.

6.7 *Co-benefits (if applicable)*

VERSA's audit team did not find evidence to determine that the GHG Project has contemplated processes or procedures related to the BioCarbon Standard Co-benefits categories. Therefore, this numeral does not apply.

6.8 REDD+ safeguards (if applicable)

Not applicable.

6.9 *Double counting avoidance*

In section 16. Double Counting Avoidance of the PD, the process that the Project holder has defined to ensure that it avoids double counting is described. To ensure compliance with these measures, the GHG Project Manager identifies the possible overlaps that could arise with:

1. A ton of CO₂ is counted more than once to demonstrate compliance with the same GHG mitigation target. In this sense, VERSA's audit team corroborated that the GHG Project was not enrolled in other programs or standards available in the market.
2. One ton of CO₂ is counted to demonstrate compliance with more than one GHG mitigation target. The proponent of the GHG Project was able to demonstrate that it has defined procedures to ensure compliance with the mitigation objective defined by it in the PD and the MR, which is the establishment of a forest of native species at the end of a 40-year period. This will be achieved through transitional mixed forest plantations with species of the genus *Eucalyptus* spp that will be managed by thinning and complete cutting, interspersing native species without management in an area of 172.76 hectares where it was demonstrated that the historical land use prior to the implementation of the GHG Project was pasture for livestock.
3. One ton of CO₂ is used more than once to obtain remuneration, benefits or incentives. Forest plantations are not contemplated as environmental compensation measures in Paraguay, as stipulated by law. In addition, VERSA's audit team confirmed this information through interviews with officials from INFONA and the Secretariat of the Environment.
4. A ton of CO₂ is verified, certified or credited by assigning more than one series to a single mitigation result. In this sense, it is possible to affirm that the project areas do not present overlaps, and the project complies and is consistent with the criteria established in section 2 of this document.

The project implements periodic monitoring to prevent double counting of carbon sequestration, following the BCR Tool Avoiding Double Counting V2.0. It verifies that

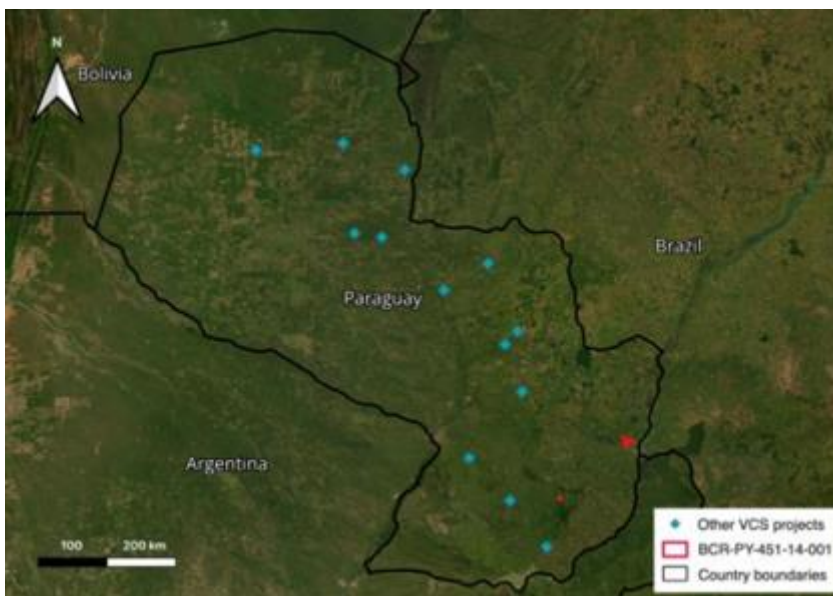
none of the potential causes of double counting have occurred. Specifically, the project has no geographic overlap with other carbon initiatives, as DMSA exclusively owns the land, ensuring that no CO₂ is counted multiple times to meet the same GHG mitigation target.

During the monitoring period, the project had not generated Verified Carbon Credits (VCCs), which means there were no end users claiming to have utilized carbon sequestration from this project for their mitigation efforts. This effectively mitigates the risk of one ton of CO₂ being counted for more than one GHG mitigation target or being used multiple times for remuneration, benefits, or incentives.

Furthermore, since no VCCs backed by the project's carbon sequestration have been placed on the market, the risk of double counting through multiple verifications or certifications has not materialized. This comprehensive monitoring process ensures the integrity and credibility of the carbon sequestration claims associated with the project.

The project is not registered in any other GHG (Greenhouse Gas) program, nor has it been previously rejected by another similar program. The project land has only one owner, which is the developer DMSA, which means that any overlap with other AFOLU projects would be illegal, as it would not have the consent of DMSA. Furthermore, the developer of a hypothetical project would not be able to prove ownership of the land according to the standards and the VVB. The government of Paraguay has promoted the creation of an official registry for this type of projects, although said registry does not yet exist. Therefore, to verify that there is no overlap with other AFOLU projects, a study has been carried out on the existence and location of other GHG elimination projects, such as those of the ARR and REDD+ type, throughout the country.

Regarding the evaluation and detailing how it has been confirmed that the project areas are not included within other project boundaries. The proponent of the project presented a representation of the projects in Paraguay, as evidenced below:



Source: DMSA, 2024

The VERSA audit team carried out a cartographic analysis that ensured the validity of this evaluation, since it reviewed the shapes and satellite images of the projects present in VERRA to avoid possible overlaps, which resulted in the fact that there are no projects near the BCR-PY-451-14-001 project area.

Note: It is important to note that the proponent of the project made the BCR tool "Avoiding double counting of emission reductions/removals". Version 2.0 in both the PDD and MR in the corresponding sections of Double Counting Avoidance.

6.10 Stakeholders' Consultation

During the audit, the team conducted a thorough review of the evidence provided by the GHG Project proponent, as well as interviews with various individuals, groups and organizations that could be involved in or affected by project activities. These groups include national agencies, universities, health centers, primary and secondary education centers, and civil associations representing the forestry sector, among others (see Table 27). The GHG Project presented evidence in the form of emails, meeting records and presentations. These findings were also supported by the interviews described in section 4.3 Interviews.

Table 27. Stakeholder's Consultation

<i>REPRESENTATIVE SECTOR</i>
<i>Hernandarias District Hospital</i>
<i>Neighbor of the Toryvete Community</i>

<i>REPRESENTATIVE SECTOR</i>
<i>Principal of School No. 3240 Sta. Rosa</i>
<i>Hernandarias Municipality Health and Hygiene</i>
<i>Hernandarias Municipality Environment</i>
<i>Finance Manager DMSA</i>
<i>DMSA Forestry Supervisor</i>
<i>INAFO/BGB Contractor</i>
<i>Head of Caazapá Regional Office</i>
<i>Caazapá Regional Office</i>
<i>Contractor Grupo Geral Servicios</i>
<i>Hernandarias 5th Police Station</i>
<i>Moisés Bertoni Foundation</i>
<i>Enramadita's Health Sub-Council</i>
<i>Directorate of Agricultural Extension (MAG)</i>
<i>H.D.S.J.N. Mesa Vamos</i>
<i>Cooperative Capiibary Ltda.</i>
<i>Municipal Board of S.J.N.</i>
<i>University Student</i>
<i>Municipality of San Juan Nepomuceno</i>
<i>Radio Kapiibary FM 104.5</i>
<i>Judge of Misdemeanors of the Municipality of San Juan Nepomuceno</i>
<i>Municipality of San Juan Nepomuceno</i>
<i>Mayor of the Municipality of San Juan Nepomuceno</i>
<i>Representative of the U.P.G. Agronomy Career</i>
<i>Desarrollos Madereros S.A.</i>

Source: DMSA, 2023.

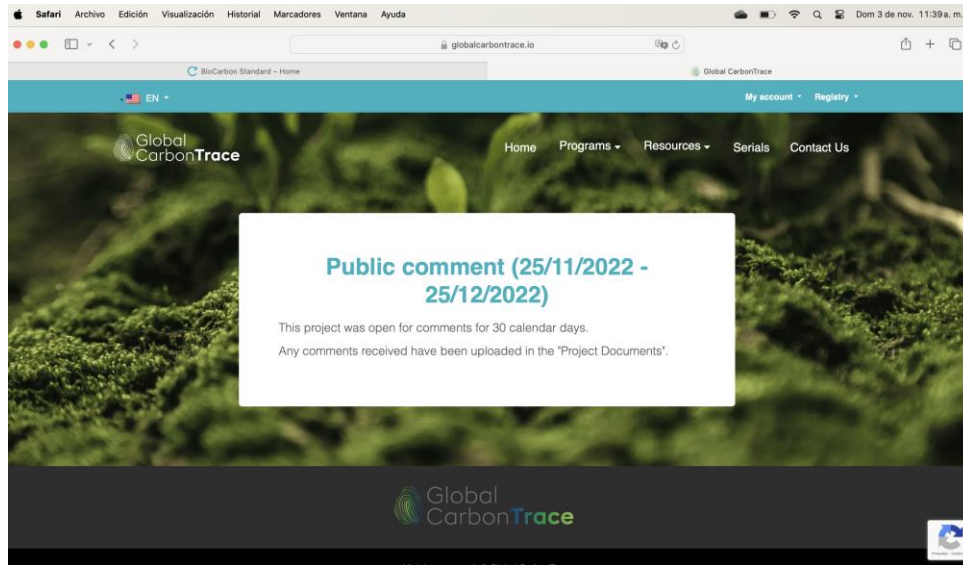
Note: Attendance lists with attendees' names are shared in the supplementary documentation folder 40.

Based on the above, it can be affirmed that the GHG Project Proponent has mechanisms and procedures that objectively disclose the purpose, scope, schedule, impacts and activities of the project to all interested parties. In addition, it has been verified that it has a process in place to address and address complaints, suggestions and grievances, which reflects a commitment to transparency and attention to concerns.

6.10.1 Public Consultation

In strict compliance with numeral 15.2 on Public Consultation, the consultation for comments was carried out on the BioCarbon Standard website. It was found that,

during a period of 30 calendar days, which began on November 25, 2022, and ended on December 24, 2022, no evidence was found on the Global Carbon Trance page suggesting that any comments were received.



Therefore, it is possible to conclude that the project met the established procedures for the Public Consultation and that no comments were received during the designated period from 25 November 2022 to 25 December 2022 on the Global Carbon Trance page.

7 Internal quality control

During the audit process, it was validated and verified that the PD, the RM and related evidence in Annex 3 submitted by the GHG Project proponent was coherently and consistently planned and implemented to carry out periodic monitoring of the main components necessary to ensure effective control over the variables associated with the GHG Projects. It was also verified that the information related to the data for carbon estimates was aligned with the principles and accepted practices for the management of Paraguay's forest inventory and the requirements of the BioCarbon Standard.

During the verification, any changes in risks and material discrepancy thresholds that may have occurred were assessed. In addition, it was analyzed whether the high-level analysis procedures applied were still representative and appropriate. It was determined whether the evidence gathered was sufficient and appropriate to generate a conclusion, 4 rounds of responses to findings were conducted, where it

was thoroughly reviewed to ensure that there were no material errors or discrepancies that could affect the validity of the results obtained.

The PD and MR according to the evidence provided by the GHG Project proponent complies with the requirements of the Standard BCR V3.2 September 2023 document and BCR0001 Quantification of GHG Removals. Afforestation, Reforestation and Revegetation Activities. Version 4.0 February 9, 2024. Therefore, in this joint validation and verification the VERSA audit team confirms that the GHG Project is aligned with the criteria defined in point 2 of this document.

The VERSA team addressed all the aspects mentioned in this document for the evaluation of the validation and joint verification processes. The assessment was carried out in accordance with the audit plan (FOR 109 Audit Plan) and the criteria defined for this purpose, thus ensuring the integrity and accuracy of the process. The scope of the MR implementation was thoroughly reviewed, including the areas and measurement equipment used. In addition, the operational characteristics described in the PD were compared with the limitations and assumptions established in the criteria, ensuring their adequacy and effectiveness.

The monitoring plan and methodology used were analyzed in detail, considering the requirements established in the validation and verification criteria. In addition, the procedures described in the PD were considered and compared with those described and implemented in the MR, thus the GHG Project managed to demonstrate that for the first verification period (1/12/2018 to 31/5/2023) they did not present significant changes.

According to the above mentioned, it is possible to conclude that the activities proposed in the PD are coherent and consistent with the audit criteria (described in numeral 2 of this document, the scope described in numerals 1.1 of the PD and 1. Of the MR and the objectives of the GHG Project and that in the RM during its first monitoring period (December 1, 2018 to May 31, 2023) did not evidence significant changes with respect to the monitoring plan and in the baseline scenario numeral 3.3 proposed in the PD.

8 Validation and verification opinion

The audit team performed the validation and joint independent verification of the project “Mixed planting of native and non-native species in Paraguay-I” with registration number BCR-PY-451-14-001 in accordance with the following documents and regulations:

- ISO 14064-2:2019.
- ISO 14064-3:2019.
- BCR 0001 Quantification of GHG Removals V4.0, February 2024.
- Clean Development Mechanism AR-ACM0003.
- Standard BCR V3.4, June 2024.
- BCR Tool Sustainable Development Safeguards SDSs Tool, v1.1 July 2024.
- BCR Tool: Sustainable Development Goals V 1.0 June 13, 2023.
- BCR Tool: Permanence and Risk Management V1.1 March 19, 2024.
- BCR Tool: Monitoring, reporting and Verification V1.0 February 13, 2023.
- BCR Tool: Baseline and Additionality V1.3 March 1, 2024.
- BCR Tool: Avoid Double Counting V2.0, February 7, 2024.
- Tool 14 Carbon stock estimation and carbon stock change of trees and shrub in F/R CDM project activities V04.2.
- BioCarbon Standard Requirements.

It has been verified that all activities established in the validation and joint verification process have been successfully executed. In addition, it is confirmed that the Greenhouse Gas (GHG) Emissions related statement is free of substantial and material discrepancies, ensuring a confidence level of 95% as stipulated in the BCR Standard V3.3.1 of March 2024.

The project has been designed with a 40-year projection (01 December 2018 to 30 November 2058), aligning precisely with the requirements set forth in BCR Standard V3.3.1, particularly in its section 10.5. It has been validated that the project “Mixed planting of native and non-native species in Paraguay-I”, included an additional discount to mitigate the “Reversion risk” of 20% on the total GHG emission reductions quantified for each verified period, in order to cover a potential materialization of the identified risks. Overall, out of the total of 78,719 tCO_{2e} generated in the project, the 20% to be allocated to the reserve accounts (10% to the BCR General Reserve account and 10% to the project reserve account) would be 15,745 tCO_{2e}, leaving a total of 62,974 tCO_{2e}, as detailed in Table 13 of this document.

In addition to the above, it was also determined that removals for the project scenario (ex post) totaled 20,891.00 tCO_{2e} during the monitoring period. Considering the 20% non-permanence assurance and the 20% uncertainty discounts, the net removals to be reported and verified in this second monitoring amount to 16,711.00 tCO_{2e}, as can be seen in detail in Table 20.

VERSA's lead auditor recommends a positive validation and verification opinion. The validation process was developed as follows: i) strategic planning, monitoring plan, and ex ante and ex post estimation of GHG reductions; ii) on-site audit and

stakeholder interviews; iii) resolution of outstanding issues and issuance of the final validation report and opinion. During the validation process, corrective and clarifying actions were proposed, all of which have been successfully closed, as explained in section 12.1 of this report.

The review of the Project Description documentation and additional documents related to ex ante estimation and monitoring methodologies, along with background research, follow-up interviews and review of stakeholder comments, has provided the audit team with sufficient evidence to validate compliance with the established criteria.

9 Validation statement

Versa Expertos en Certificación S.A.S. been commissioned by Desarrollos Madereros SA to validate the Mixed planting of native and non-native species in Paraguay-I GHG emissions reduction project. The declared Mixed planting of native and non-native species in Paraguay-I project involves the activities developed in Hermandarias, Paraguay. The Mixed planting of native and non-native species in Paraguay-I project has been developed in accordance with the guidelines of international standards ISO 14064-2:2019, ISO 14064-3:2019 and the specific requirements of the GEI BioCarbon Standard program.

Versa Expertos en Certificación S.A.S. conducted a review of all the supporting documentation used by by Desarrollos Madereros SA for the elaboration of the Mixed planting of native and non-native species in Paraguay-I project and made a field visit together with by Desarrollos Madereros SA, where through interviews and review of primary information sources, it confirmed the organizational and reporting limits, activity data, emission factors and global warming potentials used; as well as the methodological assumptions and exclusions made.

Versa Expertos en Certificación S.A.S. established the objectives, scope and validation criteria in the commercial proposal and legal agreement VERSA-P-0150 and in the approved audit plan for the validation of the Mixed planting of native and non-native species in Paraguay-I. The objectives, scope and validation criteria are described below:

Objective

The Validation process consists of the evaluation by Versa Expertos en Certificación S.A.S of the project design document and/or monitoring reports in accordance with the guidelines of the ISO 14064-2:2019 standard, the guidelines of

the selected GHG program, the methodologies used and the legislation of the country where the project is developed.

Scope

Validate and verify the project activities, its PDD, its monitoring plan, its GHG sources, sinks and/or deposits, its GHG emissions reduction quantification period, its baseline scenario, its requirements management processes legal and information, guidelines and methodological documents Biocarbon Registry. Sectoral scope: Forestation and reforestation.

Criteria:

- ISO 14064-2:2019.
- ISO 14064-3:2019.
- BCR 0001 Quantification of GHG Removals V4.0, February 2024.
- Clean Development Mechanism AR-ACM0003.
- Standard BCR V3.4, June 2024.
- BCR Tool Sustainable Development Safeguards SDSs Tool, v1.1 July 2024.
- BCR Tool: Sustainable Development Goals V 1.0 June 13, 2023.
- BCR Tool: Permanence and Risk Management V1.1 March 19, 2024.
- BCR Tool: Monitoring, reporting and Verification V1.0 February 13, 2023.
- BCR Tool: Baseline and Additionality V1.3 March 1, 2024.
- BCR Tool: Avoid Double Counting V2.0, February 7, 2024.
- Tool 14 Carbon stock estimation and carbon stock change of trees and shrub in F/R CDM project activities V04.2.
- BioCarbon Standard Requirements.

Versa Expertos en Certificación S.A.S. ensures that the data and information supporting the GHG statement are projected in nature. Validation activities have been configured in such a way that they offer a high, but not absolute, level of assurance.

Versa Expertos en Certificación S.A.S. identified that, according to the review of the evidence provided by Desarrollos Madereros SA and during the field visit, from the beginning of the initiative the Mixed planting of native and non-native species in Paraguay-I project has generated contributions to the Sustainable Development Goals (SDGs 1, 2, 3, 4, 6, 9, 12,13 and 15 defined by the project) applicable for the components (Quantification of GHG Emission Reductions) according to the relevant criteria and indicators.

Versa Expertos en Certificación S.A.S. based on the results of the activities developed, it declares that the Mixed planting of native and non-native species in Paraguay-I project of Desarrollos Madereros SA in 2023 complies with the principles established by ISO 14064-2:2019, ISO 14064-3:2019 and the GHG BioCarbon Standard program are within the level of material assurance and importance and is free from material errors. This statement is addressed to BioCarbon Standard and other interested parties and is issued.

10 Verification statement

Versa Expertos en Certificación S.A.S. been commissioned by Desarrollos Madereros SA to verify the Mixed planting of native and non-native species in Paraguay-I GHG emissions reduction project. The declared Mixed planting of native and non-native species in Paraguay-I project involves the activities developed in Hernandarias, Paraguay. The Mixed planting of native and non-native species in Paraguay-I project has been developed in accordance with the guidelines of international standards ISO 14064-2:2019, ISO 14064-3:2019 and the specific requirements of the GEI BioCarbon Standard.

Versa Expertos en Certificación S.A.S. conducted a review of all the supporting documentation used by Desarrollos Madereros SA for the elaboration of the Mixed planting of native and non-native species in Paraguay-I project and made a field visit together with Desarrollos Madereros SA where through interviews and review of primary information sources, it confirmed the organizational and reporting limits, activity data, emission factors and global warming potentials used; as well as the methodological assumptions and exclusions made.

Versa Expertos en Certificación S.A.S. established the objectives, scope and verification criteria in the commercial proposal and legal agreement VERSA-P-0150 and in the approved audit plan for the verification of the Mixed planting of native and non-native species in Paraguay-I. The objectives, scope and verification criteria are described below:

Objectives

1. Evaluate with a 95% level of assurance that the project design document and/or monitoring reports prepared by Versa Expertos en Certificación S.A.S comply with the guidelines of the ISO 14064-2:2019, as well as the regulations of the selected GHG program, the methodologies used, and the legislation of the country where the project is developed.

2. Verify that the activities, methods, and procedures, including monitoring procedures, have been implemented in accordance with the project's PD.
3. Confirm that the material discrepancy underlying the baseline and the estimation of reported GHG removals for the monitoring period does not exceed 5%.
4. Validate and verify the project activities, the Project Design Document (PDD), the monitoring plan, the GHG sources, sinks and/or deposits, the GHG emissions reduction quantification period, the baseline scenario, the requirements, the legal management processes and information, as well as the guidelines and methodological documents for the Biocarbon Registry.

Scope

Validate and verify the project activities, PDD, monitoring plan, GHG sources, sinks and/or deposits, GHG emissions reduction quantification period, baseline scenario, requirements, management processes legal and information, guidelines and methodological documents for Biocarbon Registry. Sectoral scope: Forestation and reforestation.

Criteria

- ISO 14064-2:2019
- ISO 14064-3:2019
- BCR0001 Quantification of GHG Removals V4.0, February 2024
- Clean Development Mechanism AR-ACM0003
- Standard BCR V3.4, June 2024
- BCR Tool Sustainable Development Safeguards SDSs Tool, v1.1 July, 2024
- BCR Tool: Sustainable Development Goals V 1.0 June 13, 2023
- BCR Tool: Permanence and Risk Management V1.1 March 19, 2024.
- BCR Tool: Monitoring, reporting and Verification V1.0 February 13, 2023
- BCR Tool: Baseline and Additionality V1.3 March 1, 2024
- BCR Tool: Avoid Double Counting V2.0, February 7, 2024
- Tool 14 Carbon stock estimation and carbon stock change of trees and shrub in F/R CDM project activities V04.2
- BioCarbon Standard Requirements

Versa Expertos en Certificación S.A.S. confirms that the data and information supporting the GHG statement are historical in nature. The 95% assurance level in the audit signifies that the auditor has a high degree of confidence in the accuracy

of the findings and that the results accurately reflect the status of the project; however, there remains a 5% risk of potential inaccuracies or undetected errors. The verification activities are structured to deliver a high level of assurance, albeit not absolute.

Versa Expertos en Certificación S.A.S. identified that, according to the review of the evidence provided by Desarrollos Madereros SA and during the field visit, from the beginning of the initiative the PROYECTO Mixed planting of native and non-native species in Paraguay-I project has generated contributions to the Sustainable Development Goals (SDGs 1, 2, 3, 4, 6, 9, 12, 13 and 15 defined by the project) applicable for the components (Quantification of GHG Emission Reductions) according to the relevant criteria and indicators.

Versa Expertos en Certificación S.A.S. based on the results of the activities developed, it declares that the Mixed planting of native and non-native species in Paraguay-I project of Desarrollos Madereros SA in 2024, complies with the principles established by ISO 14064-2:2019, ISO 14064-3:2019 and the GHG BioCarbon Standard program, are within the level of material assurance and importance and is free from material errors. This statement is issued and addressed to BioCarbon Standard and other interested parties.

11 Annexes

Annex 1. Competence of team members and technical reviewers

In the following Table 1, the audit team selected by VERSA for the validation process of the Mixed plantation of native and foreign species in Paraguay-I is listed:

Full Name(s)	Role	Activities to Develop
Diana Rauchwerger	Lead Auditor	The lead auditor has predestined activities which are: -Document review -Creation of the audit plan -Carry out the field audit according to regulations -Make findings corresponding to the audit - Delivery of verification report
Cesar Marín	Technical Expert	The technical expert has predestined activities which are: -Document review -Carry out the field audit according to regulations -Make findings corresponding to the audit
Lucas Rivera	Technical Reviewer	The technical reviewer has predestined activities which are: - Carry out the review of the final documents.

		- Issue technical review document.
Camilo Montaña	Issuer of the V/V opinion	Accreditation in: ISO/IEC STANDARD 17029;2019 - ISO 14064-1 - ISO14064-2 - ISO 14064-3 ISO/IEC STANDARD 17065;2012

Diana Rauchwerger:

Is an Agricultural Engineer specialized in environmental and local development, with studies in Biodiversity Conservation and Use. She has over 7 years of experience in the formulation, evaluation, and oversight of environmental projects. She has been part of teams responsible for designing and implementing sustainable strategies in sectors such as OIL&GAS, mining, electricity, and infrastructure.

Currently, she works as a contractor at the Ministry of Environment and Local Development, specifically in the Climate Change Mitigation group. Additionally, she serves as a lead auditor and technical expert for various entities involved in the carbon credit market, climate change, validation and verification of greenhouse gas (GHG) projects, and accreditation processes for validator/verifier bodies (VVB) in GHG offset initiatives.

Cesar Marín:

Biologist – botanist, National University of Colombia, with 25 years of professional experience in fieldwork, characterization of vegetation cover in Amazonian, Andean, and páramo ecosystems. Twelve years of experience in designing methodologies for biodiversity characterization and project coordination. Demonstrates good coordination skills and effective interaction in interdisciplinary and interinstitutional teams. Expertise in vegetation characterization, ethnobotany, economic botany, ecological restoration, landscape management tools, ecological analyses, and biodiversity monitoring. Most recent experience includes the development of methodologies for carbon estimation in páramo ecosystems and high-mountain wetlands.

Lucas Rivera:

Consultant with more than thirteen years of international experience in REDD+, ARR, transportation, waste and energy for its formulation, validation, verification and issuance of carbon credits. With Master’s training in Environmental Management, Master’s Degree in Financial Administration and Forestry Engineering. Carbon Footprint and GHG Auditor.

Camilo Andres Montaña Salamanca:

Mechanical engineer and project manager with over 12 years of experience in conformity assessment and monitoring of technical regulations. Former head of the technical regulations group at the Superintendence of Industry and Commerce. He has completed the courses for lead formulators for the validation and verification of greenhouse gas (GEI) mitigation projects provided by Asocarbono-Asocec. Currently serving as the General Director of Versa Expertos en Certificación SAS.

BCR Antibribery policy:

The Conformity Assessment Body (CBA) must ensure the absence of conflicts of interest that may affect its validation and verification services, always acting objectively and independently. In addition, it is obliged to maintain the confidentiality of BCR's information, prohibiting its disclosure and reproduction without a justified need. Failure to comply with this obligation may result in the settlement being terminated and claims for damages.

The OEC must also comply with the BCR Code of Ethics and anti-corruption regulations, avoiding any relationship with entities linked to money laundering or terrorist financing, ensuring that all its transactions are legitimate. To manage conflicts of interest, VERSA uses the FOR-108 format (allocation and non-conflict of interest).

Annex 2. Clarification requests, corrective action requests and forward action requests

Finding N°:	1	Finding type:	CAR	x	CL
Description:	The GHG project is not aligned with: - Numeral 9 Methodological Documents, BCR Standard. - Numeral 6.1 General Requirements, ISO 14064-3:2019 - Numeral 1.1 Scope, Project Document Template BCR - 1.3 Sectoral Scope and Project Type of the Monitoring Report Template				
Objective evidence	The owner of the initiative must comply with the guidelines of the numerals 9. BCR V3.0 Standard and Numeral 1.1 Scope, Project Document Template V2.0, therefore, it must include within the Project Document Template BCR V2.0 and in the Monitoring Report (MR) all the applicability criteria previously defined with the VVB VERSA. The criteria must consider: a. A method to determine the scope and limits of the commitment; b. The GHGs and SRFs to be accounted for; c. Applicable local laws governing carbon markets and GHG initiatives. d. Quantification methods; e. Disclosure requirements. 1. The version of the documents used for the development of the mitigation project must be consistent across all documents. 2. The criteria must be relevant, complete, reliable, understandable and available to the intended user.				
Plan of action:	ROUND 1 Completed all items noted in the finding in section 1.1 Scope of the PDD and in section 1.2 Sectoral scope and project type of the monitoring report. ROUND 2 The wording was improved and points that were unclear were clarified. It can be found in section 3.1.1 Conditions of applicability.				
VVB Evaluation:	ROUND 1 In the PDD it is necessary to list the applicability conditions of the BCR 0001 methodology, numeral 5. ROUND 2 The applicability conditions are met, finding satisfactorily resolved.				
Conclusion:	Close finding	X	Maintain finding		FAR

Finding N°:	2	Finding type:	CAR	X	CL
Description:	The GHG project is not aligned with: - Numeral 2 Version, Standard BCR 0001.				
Objective evidence	1. The project owner must use the most updated versions of the BCR standard and the documentation that is related to it. In this case, the audit team was presented with the BCR Project Design Document in its Version 1.0, which does not correspond to the most recent version published by the standard, version 2.0. 2. The versions of the documents cited must be consistent with the most recent versions of the Project Document Template V2.0 Standard.				
Plan of action:	ROUND 1 They were reviewed and adjusted to the most updated versions of the standard, as well as its methodologies and tools. ROUND 2 The template was adjusted to version 2.1 and standard 3.2 (the latest version) was used. ROUND 3 The following have been used:				

	<ul style="list-style-type: none"> - BCR Standard Version 3.2 of 23/09/2023 - BCR0001 Methodology Version 4.0 of 9/02/2024 - BCR Guidelines. Baseline and Additionality. Version 1.2 - Project Description Template Version 2.2 - Monitoring Report Template Version 1.1 <p>Regarding the degree of freedom in the adjustment to the format of the templates, we consulted BCR and obtained the following response: "El formato del documento de GEI es a elección del desarrollador. La plantilla, es una guía del orden y capítulos a desarrollar y el texto en gris, es una explicación que debe desarrollar de proyecto describir o sustentar técnicamente en cada una de las secciones. Importante ser escrito en inglés y con orden y estética, pero el criterio de formato, fuente o alineado, es a su consideración, así como el de las tablas." REVISED ROUND 3: Explicit mention of BCR Tool: Monitoring, reporting and Verification V1.0 (February, 2023) is included en:</p> <ul style="list-style-type: none"> - Project Description: item 1.1. Scope in the BCR Standard; point 17. Monitoring Plan - Monitoring Report: item 1. General description of the project; item 2. Title, reference and version of the baseline and monitoring methodology applied to the project. <p>In addition, explicit mention of the CDM AR-TOOL15 tool is included in point 3.6 Leakage and non-permanence of the PD (page 145):. <i>"According to the Methodology AR-ACM0003 and Tool 15 'Estimation of incremental GHG emissions attributable to displacement of pre-project agricultural activities in the F/R CDM project activity' v02.0, leakage emissions due to displacement of agricultural activities should only be considered if this leads to an increase in GHG emissions relative to the GHG emissions attributable to the activity as it exists within the project boundary. In the proposed project the extensive cattle ranching taking place on the selected parcels was not owned by Desarrollos Madereros S.A. but belonged to a neighbor in the area who had been granted access to these lands."</i></p>				
<p>VVB Evaluation:</p>	<p>ROUND 1 The PDD must be adapted to the latest version 3.1 as the transition period for version 3.0 expires on October 25, 2023. The PDD was updated to version 2.0, however, it does not correspond to the latest version.</p> <p>ROUND 2 The project proponent must complete the template information according to the instructions related to the rules and requirements set forth in the BioCarbon StandardStandard.</p> <p>ROUND 3 No evidence was found on how the GHG project implemented BCR TOOL Moritoring, Reporting and Verification (MRV) version 1.0.</p> <p>ROUND 4. Finding satisfactorily resolved no further action required.</p>				
<p>Conclusion:</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Close finding</td> <td style="width: 25%; text-align: center;">X</td> <td style="width: 25%;">Mantain finding</td> <td style="width: 25%;"></td> </tr> </table> <p style="text-align: right;">FAR</p>	Close finding	X	Mantain finding	
Close finding	X	Mantain finding			

Finding N°:	3	Finding type:	CAR	CL	X
Description:		The GHG project is not aligned with: - ISO 14064-3:22019 numeral 5.1.6 Scope. - 1.1 Scope of the BCR Standard, Project Document Template BCR, Similarly, clearly describe and justify how the project is eligible under the scope of the BCR Standard.			
Objective evidence		The Scope shall be adjusted to the defined objectives of the GHG mitigation project, to the needs and expectations of the intended user. And not to the scope of the standard. At a minimum the scope should include: (a) Spatial and temporal boundaries; b) Physical infrastructure, activities, technologies and processes; c) GHG FSR d) GHG types			

	e) Periods				
Plan of action:	In compliance with ISO 14064-3:2019 these considerations were included in sections 1.1 Scope 3.1.1 Conditions of applicability of the PD, and in sections 1.2 Sectoral scope and 1.3 Conditions of applicability of the monitoring report.				
VVB Evaluation:	A broad scope was included in the PDD and is aligned with the requirements of the criteria. No additional actions are required.				
Conclusion:	Close finding	X	Maintain finding	FAR	

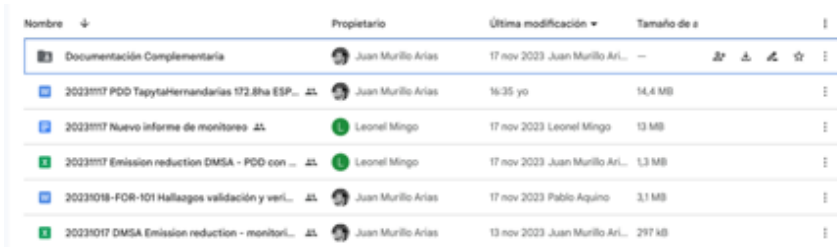

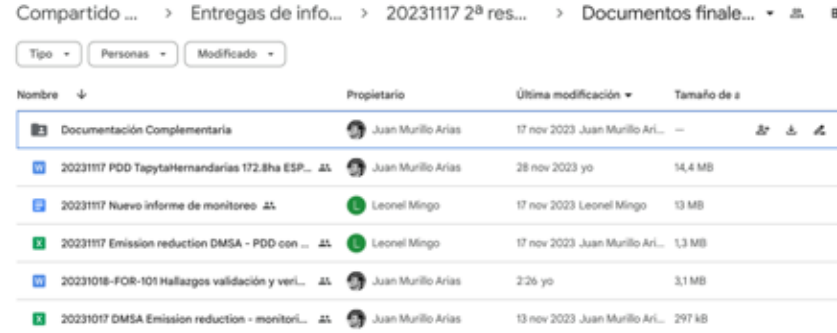
Finding Nº:	4	Finding type:	CAR	CL	X
Description:	The GHG project is not aligned with: - Numeral 2.2 Objectives, Project Document Template				
Objective evidence	It is not clear how the project objectives are aligned with meeting the intended user's objectives, targets, criteria and international commitments related to climate change, such as the Kyoto Protocol or the Paris Agreement.				
Plan of action:	Project objectives were clarified It was included in section 2.2 Objectives of the PDD and in section 1.5 of the monitoring report.				
VVB Evaluation:	The objectives stated in the PDD and RM are consistent with the intended user and aligned with the validation and verification criteria.				
Conclusion:	Close finding	X	Maintain finding	FAR	

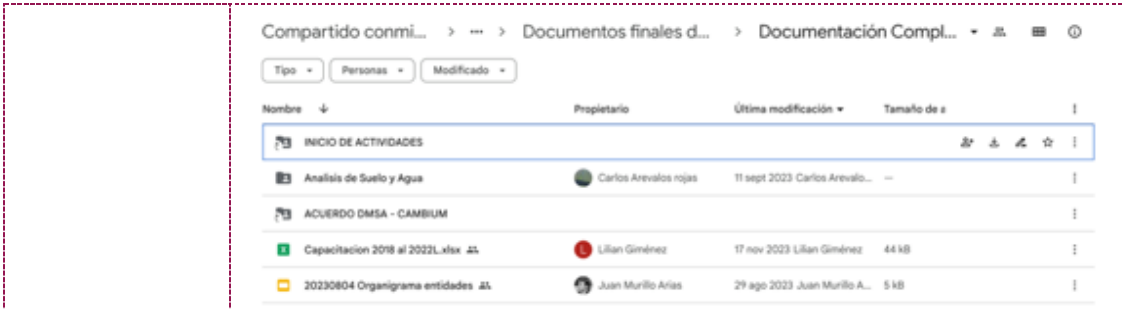
Finding Nº:	5	Finding type:	CAR	X	CL
Description:	The GHG project is not aligned with: - ISO 14064-2:2019 numeral 6.2 Project description				
Objective evidence	1. The GHG mitigation project proponent must include the chronological plan or actual dates and justification for the following: a) Project start date. b) GHG baseline period. c) Project completion date. d) Frequency of monitoring and reporting, as well as the project period, including relevant project milestones at each stage of the GHG project cycle, as applicable. 2. The GHG mitigation project proponent shall include the level of assurance of the GHG mitigation project.				
Plan of action:	In compliance with ISO 14064-2:2019, everything identified in the finding in section 2.1 of the PDD was clarified.				
VVB Evaluation:	The chronological plan and assurance level were included in version 2.0 of the PDD. No additional activities are required.				
Conclusion:	Close finding	X	Maintain finding	FAR	

Finding Nº:	6	Finding type:	CAR	X	CL
Description:	The GHG project is not aligned with: - Section 6.2 Project Description h) ISO 14064-02:2019 - Numeral 1.5 Other participants in the project. BCR Protocol.				
Objective evidence	1. The GHG mitigation project proponent must identify all direct and indirect stakeholders involved in the project (stakeholder analysis) such as local authorities present related to forestry activities, companies or populations that are part of the project's co-benefit plan, partners and developers, among others. 2. The project owner must define the roles and responsibilities of the project participants and other direct and indirect stakeholders involved in the GHG project.				
Plan of action:	ROUND 1 Direct stakeholders were included in section 5. Ownership and carbon rights of the DD and indirect stakeholders were included in section 10. ROUND 2 ROUND 3				

<p>In the PD, section 10 Consultation with interested parties (stakeholders) includes Table 32 - Stakeholder analysis: stakeholders identified (pages 221 and 222) in which stakeholders are identified. It is determined whether they are direct or indirect stakeholders - according to the criteria set out in the same section - their role in the project, and how they are affected by or influence the project:</p> <table border="1"> <thead> <tr> <th>Parte interesada</th> <th>Actor directo o indirecto</th> <th>Rol dentro del proyecto (Desarrollo detallado abajo)</th> <th>Afectaciones ¿Cómo afecta al proyecto a cada parte interesada/cómo el proyecto se ve afectado por ella?</th> </tr> </thead> <tbody> <tr> <td>Organismo Nacional: MADES</td> <td>Directo</td> <td>El Ministerio de Medio Ambiente y Desarrollo Sostenible diseña, establece, supervisa, fiscaliza y evalúa la Política Ambiental Nacional, y dentro de esta los procesos de evaluación ambiental que condicionan los permisos de desarrollo de las actividades de este proyecto.</td> <td>El proyecto cumple con todos los requerimientos legales exigidos por MADES en materia medioambiental. Este punto se desarrolla en el apartado de cumplimiento legal.</td> </tr> <tr> <td>Organismo Nacional: INFONA</td> <td>Directo</td> <td>El Instituto Forestal Nacional es la entidad encargada de la administración, promoción y desarrollo sostenible de los recursos forestales del país.</td> <td>El proyecto está obligado legalmente a cumplir con todos los requerimientos exigidos por INFONA en materia de planificación y gestión forestal. Este punto se desarrolla en el apartado de cumplimiento legal.</td> </tr> </tbody> </table> <p>In addition, the role played by each of these stakeholders is described in the texts below the table.</p>		Parte interesada	Actor directo o indirecto	Rol dentro del proyecto (Desarrollo detallado abajo)	Afectaciones ¿Cómo afecta al proyecto a cada parte interesada/cómo el proyecto se ve afectado por ella?	Organismo Nacional: MADES	Directo	El Ministerio de Medio Ambiente y Desarrollo Sostenible diseña, establece, supervisa, fiscaliza y evalúa la Política Ambiental Nacional, y dentro de esta los procesos de evaluación ambiental que condicionan los permisos de desarrollo de las actividades de este proyecto.	El proyecto cumple con todos los requerimientos legales exigidos por MADES en materia medioambiental. Este punto se desarrolla en el apartado de cumplimiento legal.	Organismo Nacional: INFONA	Directo	El Instituto Forestal Nacional es la entidad encargada de la administración, promoción y desarrollo sostenible de los recursos forestales del país.	El proyecto está obligado legalmente a cumplir con todos los requerimientos exigidos por INFONA en materia de planificación y gestión forestal. Este punto se desarrolla en el apartado de cumplimiento legal.
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VVB Evaluation:	<p>ROUND 1 The numbers cited do not correspond to those found in the table of contents and the PDD. The other parties directly and indirectly involved in the project, such as government entities and beneficiaries, are not related to the company's programs.</p> <p>ROUND 2 1. There is no proposed plan of action. 2. The roles played by each of the other participants in the project are not clear. In this regard, the proponent should describe how the other participants relate to the project.</p> <p>ROUND 3 The project proponent presented sufficient ample evidence of the different stakeholders involved with the GHG project. Finding satisfactorily resolved, no further action required.</p>												
Conclusion:	<table border="1"> <tr> <td>Close finding</td> <td>X</td> <td>Maintain finding</td> <td></td> <td>FAR</td> </tr> </table>	Close finding	X	Maintain finding		FAR							
Close finding	X	Maintain finding		FAR									

Finding Nº:	7	Finding type:	CAR	x	CL
Description:	<p>The GHG project is not aligned with:</p> <ul style="list-style-type: none"> Numeral 5.3 Agreements related to carbon rights, Project Document Templates BCR 				
Objective evidence	<p>No evidence was found in the PD of justification demonstrating that the project is not being developed on territories of ethnic groups and/or local traditional communities. The holder must request a certificate from the competent authority to determine if there are ethnic communities, other GHG projects, nature reserve areas or forest compensation areas.</p>				
Plan of action:	<p>ROUND 1 An additional folder will be shared with all domain certificates. This in turn was addressed in section 5.4 Agreements related to PD carbon rights.</p> <p>ROUND 2 The evidence to be made public was clarified. It can be seen in section 5.4 Land tenure and table 42 with all the dates of acquisition of the farms that make up the project area was included in the same section.</p> <p>ROUND 3 The PD addresses these issues in the following points:</p> <ul style="list-style-type: none"> Land ownership: in numeral 5.4 Land tenure (projects in the AFOLU sector) in table 25-List of estancias with their date of acquisition and reference (page 186), the set of properties is shown with farm and land registry information. In addition, all property deeds and ownership certificates are provided. They are included in the Confidential Supplementary Documentation -and not in PD, which will end up being a public document- because they are documents in which personal names appear, in order to preserve the privacy of those mentioned. Specifically, they can be seen in Folder 02-TITLES AND CONDITIONS OF DOMAIN. In addition, in the DD, Annex 1-Title of the parcels (page 295), it is shown with an example how to interpret the key data in the domain conditions Indigenous communities: Section 5.4 Land tenure (projects in the AFOLU sector) in Figures 56 and 57 (pages 188 and 189) shows the absence of indigenous 				

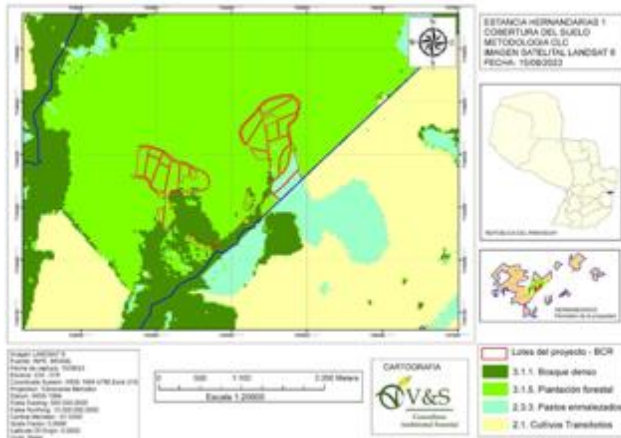
	<p>communities within the project area according to official information from the National Institute of Statistics of Paraguay.</p> <ul style="list-style-type: none"> • Other GHG projects: Section 16 Double counting avoidance lists ARR and REDD+ type GHG projects in the main platforms (pages 261 and 262); Figure 64 in this same section shows the lack of geographic overlap with our project. • Nature reserve areas: in numeral 2.5 Additional information about the GHG Project, under the sub-section Flora and Fauna (pages 56 to 57), Figures 16 and 17 show the protected areas in the project environment, showing the lack of geographic overlap between these protection zones and the project.
<p>VVB Evaluation:</p>	<p>ROUND 1 The project holder included land title supports. No additional actions are required. However, it is not clear because the evidence remains partially published.</p> <p>ROUND 2</p> <ol style="list-style-type: none"> 1. The documentation provided by the holder did not find evidence related to the domain certificates.   <p>The owner of the initiative must provide evidence that guarantees that the project is not implemented on the territories of ethnic groups and/or local traditional communities.</p> <ol style="list-style-type: none"> 2. The holder shall evidence compliance with the requirements associated with the prevention of double counting, taking into account the regulations that prohibit the registration, emission and removal of greenhouse gas (GHG) mitigation results. 3. No evidence was found related to the application of the BCR tool “Avoid Double Counting (ADC)”, which establishes the principles and requirements of the BCR Program to prevent double counting of emission reductions or removals. 

	
Conclusion:	Close finding <input checked="" type="checkbox"/> Maintain finding <input type="checkbox"/> FAR <input type="checkbox"/>

Finding Nº:	8	Finding type:	CAR	<input type="checkbox"/>	CL	<input checked="" type="checkbox"/>
Description:	The GHG project is not aligned with: - Numeral 2.3 Project activities, Project Document Template BCR					
Objective evidence	Description of the project activities described in the PD is not clear, and they do not correspond to the project activities evidenced during the corroboration visit.					
Plan of action:	The project processes, types of technologies used for data collection (manual) and calibration processes, products and services should be described.					
VVB Evaluation:	All project activities were described in section 2.3 of the PD. Regarding technology, the Description of these was adjusted in the monitoring section of the PD and all technologies were included in section 13 of the PD and in section 2.3 Project activities of the PD. This in turn was included in section 4 of the monitoring report.					
Conclusion:	Close finding <input checked="" type="checkbox"/>	Maintain finding <input type="checkbox"/>	FAR <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Finding Nº:	9	Finding type:	CAR	<input checked="" type="checkbox"/>	CL	<input type="checkbox"/>
Description:	The GHG project is not aligned with: - Numeral 4.5 Accuracy ISO 14064-2:2019 - Item 4.6 Transparency ISO 14064-2:2019					
Objective evidence	The cartography presented in the PD must include the type of product (orthoimage, digital terrain model or cartographic database), scale, origin, datum, north and conventions among others.					
Plan of action:	<p>ROUND 1</p> <p>The requirements were met. The mapping can be seen in section 3.1.1 of the PD.</p> <p>ROUND 2</p> <p>The reference of the secondary source images was correctly cited. This can be seen in section 2.5 additional information on the GHG project.</p> <p>Regarding the areas that continue to be shown as matted pasture, it was clarified that these plots have not yet been planted and therefore continue to be shown as such. This can be seen in Figures 16, 17, 18 and 19 in section 3.1.1.</p> <p>ROUND 3</p> <p>In the map indicated in Figure 32 the land cover classification is correct, in numeral 3.1.1 Applicability conditions of the methodology, subsection A) page 86, it is clarified:</p> <p>"In the previous image it can be seen that there are lots that are currently listed as 3.1.5 Forest plantation due to the fact that they were planted in 2019 and 2020. The reason why there are lots listed as 2.3.3 Wooded Pasture in the year 2023 is because these are going to be planted in the second half of 2023 and therefore will not be considered for the CO2 absorption calculations in the first stage of quantification."</p> <p>In addition, in Figures 23, 32, 33, 34 and 35, which show the results of the Corine Land Cover (CLC) analysis in the project area for the year 2023, it is clarified in the legend whether the lots were or were not planted on the date of the CLC analysis. The plots whose cover is classified as weedy pasture are not forested at that date.</p>					

	<p>ESTANCIA HERNANDEZ 1 COBERTURA DEL SUELO METODOLOGIA CLC IMAGEN SATELITAL LANDSAT 8 FECHA: 15/08/2023</p> <p>INDICE LANDSAT 8 Punto: 89R, 89A88 Fecha de captura: 15/08/2023 Extensión: 224 x 078 Coordenadas Espaciales: WGS 1984 UTM Zona 21R Proyección: Transversal Mercator Datum: WGS 1984 Falso Easting: 500,000,000 Falso Northing: 10,000,000,000 Centro Meridiano: 47,000 Scale Factor: 0.9999 Latitude Of Origin: 0.0000 Units: Meter</p> <p>CARTOGRAFIA V&S Consultores Ambientales</p> <p>0 500 1.100 2.200 Metros Escala 1:20000</p> <p>ESTADÍSTICAS Porcentaje de la propiedad</p> <ul style="list-style-type: none"> Lotes del proyecto - BCR (Plantado) Lotes del proyecto - BCR (A plantar) 3.1.1. Bosque denso 3.1.5. Plantación forestal 2.3.3. Pastos enmalezados 2.1. Cultivos Transitorios
<p>VVB Evaluation:</p>	<p>ROUND 1</p> <p>In the PDD the cartography persists without information of origin, source, scale, datum, north and conventions among others. As per in numeral 2.5.</p> <p>Tipos de clima en el Paraguay según Köppen.</p> <ul style="list-style-type: none"> Clima tropical húmedo (Af) Clima tropical monstónico (Am) Clima tropical de sabana (Aw) Clima semiárido cálido (BSh) Clima subtropical húmedo (Cfa) <p>Región Occidental (Chaco) Región Oriental</p> <p>The secondary information referenced must be properly cited according to the standards and criteria defined for this purpose. In Figures 16 and 17 the areas marked in red are still reported as weeded pasture, not as forest plantation.</p> <p>ROUND 2</p> <p>It is not clear in the document the management given by the owner to the recently intervened pasture areas. In some maps they are presented as grasslands.</p>

	<p>Figura 15: Hermandarias 1 año 2023 - fecha de realización del PDD</p>  <p>ROUND 3 Finding satisfactorily resolved, no further action required.</p>				
Conclusion:	Close finding	X	Maintain finding	FAR	

Finding N°:	10	Finding type:	CAR	X	CL	
Description:	<p>The GHG project is not aligned with: - Numeral 2.5 Additional GHG project information. BCR Project Design Document - Numeral 6.2 Project Description d) ISO 14064-2:2019</p>					
Objective evidence	<p>This item should include a general description of the environmental conditions (soils, climate, cover, etc.) prior to the implementation of the plantation.</p>					
Plan of action:	<p>These items were included in section 2.5 Additional information of the PD.</p>					
VVB Evaluation:	<p>A Description of the pre-project environmental conditions was included. No additional adjustments are required</p>					
Conclusion:	Close finding	X	Maintain finding	FAR		

Finding N°:	11	Finding type:	CAR	X	CL	
Description:	<p>The GHG project is not aligned with: - Numeral. 3.1.1 Conditions of Applicability. Project Design Document. - Section 5. Conditions of applicability. BCR Protocol</p>					
Objective evidence	<p>The project holder must explain and justify how the project meets the applicability conditions defined by the BCR Standard.</p>					
Plan of action:	<p>ROUND 1 Details of the applicability conditions are included in section 3.1.1 Applicability conditions of the PD methodology. ROUND 2 The fulfillment of the applicability conditions was properly explained and justified. This is below the table requested by the template in section 3.1.1. ROUND 3 In PD numeral 3.1.1 Applicability conditions of the methodology a summary of compliance with the applicability conditions is included in table 11, which is developed below that table (pages 63 to 103). Specifically, for example I (pages 100 to 103) indicated in the round 2 assessment, the following is corrected: “Although the project will generate soil disturbance initially due to soil preparation, planting and logging activities (detailed in Section 2.3), the project is being carried out on soils degraded by cattle ranching so the net impact of the project will be positive for the soil in the long term.”</p>					

	<p>This assertion is supported by data contrasted in the scientific literature as follows:</p> <p>“On the other hand, tree planting implies positive values for the increase of soil organic carbon - COS. According to Ojeda J., et al (2022) [1] reported a stock of COS for native forests of 65 ton C/ha and for eucalyptus plantations 47 ton C/ha, located in the Atlantic Forest Ecoregion of Alto Paraná, these values did not present significant differences between them.</p> <p>Besides, authors report for pastures with isolated trees, dedicated to livestock, a stock of COS around 29.6 t C/ha (Diaz M., et al, 2020) [2] and 39.69 t C/ha (Diaz M., et al, 2019) [3] in the central Paraguayan Chaco..”</p>					
VVB Evaluation:	<p>ROUND 1 It is not clear in the PDD how the GHG mitigation project explains¹ and justifies² compliance with the standard's applicability criteria.</p> <p>ROUND 2 It is not clear at all how the project explains and justifies compliance with the applicability criteria of the standard.</p> <p>G) Las perturbaciones del suelo, debidas a las actividades del proyecto, si las hay, se realizan de acuerdo con prácticas adecuadas de conservación del suelo y no se repiten en menos de 20 años.</p> <p>Las actividades del proyecto no generarán perturbación del suelo. Por el contrario, la plantación de árboles mejorará la calidad de los suelos. A su vez este proyecto contará con el certificado FSC, lo que implica que el diseño, plantación y mantenimiento del bosque se realizan a través de un programa de manejo forestal sostenible que permite la comercialización de madera, evitando impactos negativos sobre la biodiversidad, las comunidades locales, el balance hídrico de las cuencas y la belleza escénica del paisaje.</p> <p>ROUND 3 <i>Finding satisfactorily resolved, no further action required.</i></p>					
Conclusion:	<table border="1"> <tr> <td>Close finding</td> <td>X</td> <td>Maintain finding</td> <td></td> <td>FAR</td> </tr> </table>	Close finding	X	Maintain finding		FAR
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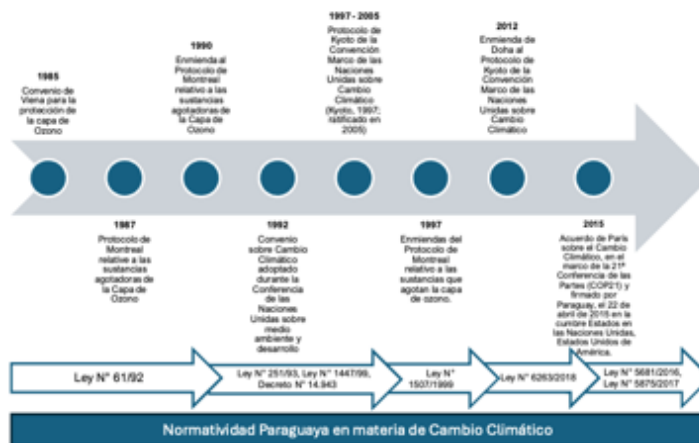
Finding N°:	12	Finding type:	CAR	X	CL
Description:	<p>The GHG project is not aligned with:</p> <ul style="list-style-type: none"> Numeral 6.6 Selection of GHG FSRs for monitoring or estimating GHG emissions and removals. 				
Objective evidence	<p>The project proponent should select or establish GHG FSR selection criteria and procedures for monitoring or periodic estimation. In addition, it must justify the rationale for not including any GHG FSRs for both project activities (PDD) and monitoring activities (MR).</p>				
Plan of action:	<p>ROUND 1 Performed as identified in the finding in section 3.2.2 Carbon pools and GHG sources of the PD, and in section 1.6 of the monitoring report.</p> <p>ROUND 2 It was duly clarified that the project did not and will not perform any woody biomass combustion. This can be found on sheet 93 in section 3.2.2.</p>				
VVB Evaluation:	ROUND 1				

¹ The explanation generally includes: a) how the approaches were used or how the decisions were feared; b) why these approaches were chosen or decisions were made. (Colombian Technical Standard NTC-ISO 14064-2, 2019).



² The justification has other criteria: c) explain why alternative approaches were not chosen; d) provide supporting data or analysis (Colombian Technical Standard NTC-ISO 14064-2, 2019).

	<p>Carbon pools, sources and sinks were included, however, the following text is confusing:</p> <p>Cumpliendo con la sección 8.2 de la metodología BCR 0001, las emisiones de CO2 debidas a la combustión de biomasa leñosa no son cuantificables como cambios de las reservas de carbono. Por otro lado se realizará combustión de biomasa leñosa para la preparación del sitio como parte de la preparación del suelo deberán cuantificarse las emisiones de CH4 y N2O. En el actual proyecto no se realizó quema de biomasa para la preparación del suelo por lo tanto no van a ser consideradas.</p> <p>It is not clear why N2O and CH4 emissions will not be taken into account if woody biomass combustion will be used for soil preparation.</p> <p>ROUND 2 Finding satisfactorily resolved, no additional actions are required.</p>					
Conclusion:	<table border="1" style="width: 100%;"> <tr> <td>Close finding</td> <td style="text-align: center;">X</td> <td>Maintain finding</td> <td></td> <td>FAR</td> </tr> </table>	Close finding	X	Maintain finding		FAR
Close finding	X	Maintain finding		FAR		

Finding Nº:	13	Finding type:	CAR	X	CL
Description:	<p>The GHG project is not aligned with:</p> <ul style="list-style-type: none"> - Numeral 4 Compliance with Applicable Laws, Template for Project Document, P-0. - Numeral 10.7 Compliance with Applicable Laws, P-0. Project Document Template 				
Objective evidence	<p>The project proponent must demonstrate compliance with legislation related to GHG mitigation activities.</p> <ol style="list-style-type: none"> 1. PD: In this section it is important to include an analysis of how the project complies with or relates to local regulations. 2. RM: This section should describe the activities or processes for periodic monitoring of compliance with local regulations. 				
Plan of action:	<p>ROUND 1 All applicable legislation was discussed in section 4 Compliance with Applicable Legislation of the PD. A detailed analysis of all laws that impact or may impact the project and how DMSA complies with all applicable legislation was included.</p> <p>ROUND 2 This is found in section 4.1 and section 4.2 of the Compliance with Applicable Legislation.</p> <p>ROUND 3 Firstly, in the PD numeral 4 Compliance with applicable legislation (pages 171 to 182) a diagram is included in Figure 55 that summarizes the international commitments assumed by Paraguay in relation to the fight against climate change, and their transposition into the national legal framework.</p>				



	<p>In addition, within the same section (pages 176 to 181), Table 23 lists the main forestry, environmental and carbon market regulations in Paraguay and indicates how this project complies with them. Example:</p> <table border="1" data-bbox="586 342 1260 646"> <thead> <tr> <th>Ley</th> <th>Descripción</th> <th>Cumplimiento en el marco del proyecto</th> </tr> </thead> <tbody> <tr> <td>Ley Forestal N° 422/73^m</td> <td>Reglamentado por Decreto N° 11.680/73^m que aprueba el Reglamento de la Ley N° 422, Ley Forestal, dispone que el Ministerio de Agricultura y Ganadería es el responsable de la administración forestal del Estado a través del Servicio Forestal Nacional. Los programas de trabajo del Servicio Forestal Nacional serán realizados en todo el país por la Jefatura de los Distritos Forestales y Centros Forestales, cuyos jefes o directores son directamente responsables ante el Director del Servicio Forestal Nacional, o por la unidad auxiliar que operará en el nivel de Dirección del Servicio Forestal Nacional. El Servicio es el sucesor de todos los organismos y dependencias gubernamentales que tienen a su cargo la administración de los bosques, terrenos forestales y recursos de la fauna. Por consiguiente, todas las atribuciones, conferidas a tales dependencias en leyes, reglamentos, decretos, resoluciones en lo concerniente al sector forestal y</td> <td>DMSA gestiona ante el INFONA (Instituto Forestal Nacional), el Plan Forestal para la obtención del Registro Forestal. Anualmente DMSA, presenta su Plan Forestal Real, con la Proyección y Ejecución por los siguientes seis meses. El INFONA emite un Certificado con la nota aclaratoria a DMSA.</td> </tr> </tbody> </table>	Ley	Descripción	Cumplimiento en el marco del proyecto	Ley Forestal N° 422/73 ^m	Reglamentado por Decreto N° 11.680/73 ^m que aprueba el Reglamento de la Ley N° 422, Ley Forestal, dispone que el Ministerio de Agricultura y Ganadería es el responsable de la administración forestal del Estado a través del Servicio Forestal Nacional. Los programas de trabajo del Servicio Forestal Nacional serán realizados en todo el país por la Jefatura de los Distritos Forestales y Centros Forestales, cuyos jefes o directores son directamente responsables ante el Director del Servicio Forestal Nacional, o por la unidad auxiliar que operará en el nivel de Dirección del Servicio Forestal Nacional. El Servicio es el sucesor de todos los organismos y dependencias gubernamentales que tienen a su cargo la administración de los bosques, terrenos forestales y recursos de la fauna. Por consiguiente, todas las atribuciones, conferidas a tales dependencias en leyes, reglamentos, decretos, resoluciones en lo concerniente al sector forestal y	DMSA gestiona ante el INFONA (Instituto Forestal Nacional), el Plan Forestal para la obtención del Registro Forestal. Anualmente DMSA, presenta su Plan Forestal Real, con la Proyección y Ejecución por los siguientes seis meses. El INFONA emite un Certificado con la nota aclaratoria a DMSA.
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<p>VVB Evaluation:</p>	<p>ROUND 1 A broad description of the applicable legal regulations was found, however the licensee should include an analysis of how the GHG project activities comply with the applicable legislation.</p> <p>ROUND 2 The finding persists, as there is no analysis of how the GHG project activities comply with applicable legislation in the document.</p> <p>ROUND 3 Finding satisfactorily resolved no further action required.</p>						
<p>Conclusion:</p>	<table border="1"> <tr> <td>Close finding</td> <td>X</td> <td>Maintain finding</td> <td>FAR</td> </tr> </table>	Close finding	X	Maintain finding	FAR		
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<p>Finding N°:</p>	<table border="1"> <tr> <td>14</td> <td>Finding type:</td> <td>CAR</td> <td>CL</td> <td>x</td> </tr> </table>	14	Finding type:	CAR	CL	x	
14	Finding type:	CAR	CL	x			
<p>Description:</p>	<p>The GHG project is not aligned with: - Numeral 12.1 Land tenure. BCR Protocol.</p>						
<p>Objective evidence</p>	<p>It is important that within this numeral a context is given to explain and justify how the titleholder proves that he/she is the sole owner and lord of the land, within the context related to local legislation on land tenure rights or private property.</p>						
<p>Plan of action:</p>	<p>ROUND 1 This was addressed in section 5 Ownership and Carbon Rights of the DD. In turn, an additional folder with supporting documentation will be shared.</p> <p>ROUND 2 The wording was improved and details of the purchase of the farms that make up the project area were included in Table 42. This can be seen in section 5.4 Land Tenure.</p> <p>ROUND 3 The PD addresses these issues in the following points: - In numeral 5.4 Land tenure (projects in the AFOLU sector) in table 25-List of estancias with their acquisition date and reference (page 186), the set of properties with farm and padrón information is shown. - In addition, all property deeds and ownership certificates are provided. They are included in the Confidential Supplementary Documentation -and not in PD, which will end up being a public document- because they are documents in which personal names appear, in order to preserve the privacy of those mentioned. Specifically, they can be seen in Folder 02-TITLES AND CONDITIONS OF DOMAIN. - In addition, in the PD, Annex 1-Titularity of the plots (page 295), it is shown with an example how to interpret the key data in the domain conditions provided.</p>						

	 <p>Finally, in the RM (page 80) the information provided as Confidential Complementary Documentation, Folder 02-TITLES AND CONDITIONS OF OWNERSHIP is again emphasized. In future monitoring reports the ownership conditions will be updated to demonstrate that the land tenure situation has not changed from one period to another.</p>
<p>VVB Evaluation:</p>	<p>ROUND 1</p> <p>1. A comprehensive explanation of land tenure was included in the PDD, however, the text is confusing. The wording is unclear and the evidence in the binder with supporting documents is not related.</p> <p>2. The following point is not clear in the monitoring report:</p> <p>1.8 Otras entidades involucradas en el proyecto</p>  <p>Informe de monitoreo Planificación estratégica de empresas madereras y forestales en Paraguay</p> <p>Incluir cambium</p> <p>El principal responsable de este proyecto en Desarrollos Madereros SA es el Director de esta empresa:</p> <p>ROUND 2</p> <p>The initiative holder must comply with the stipulations of paragraph 5.4 of the BioCarbon Template V 2.1 document.</p> <p>5.4 Land tenure (Projects in the AFOLU sector)</p> <p>Demonstrate in detail that the project participants own the land or land parcels on which the GHG project activities take place, at least during the period of quantification of GHG emission reductions or removals.</p> <p>In the analysis of section 5.4 of the PDD, it is evident that the company Desarrollos Madereros is the owner of the project lands. However, no evidence was identified in this section to concretely support this statement. It is essential to have solid documentary</p>

	evidence to support the declared ownership, in order to strengthen the integrity and credibility of the information contained in the evaluated document.				
Conclusion:	Close finding	X	Maintain finding		FAR


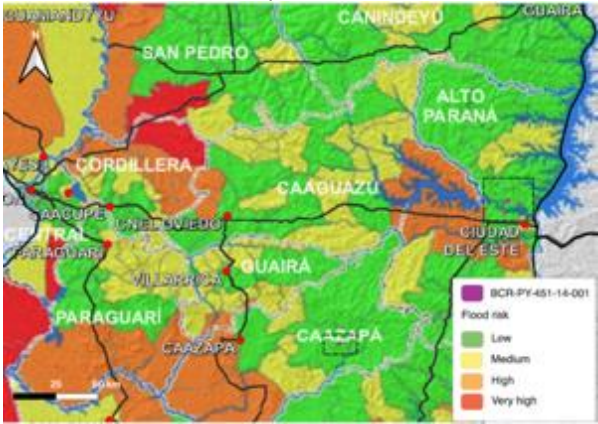
Finding N°:	15	Finding type:	CAR	X	CL
Description:	The GHG project is not aligned with: - Section 6.4 GHG Baseline Determination, BCR Protocol. - Item 13 stratification, BCR 0001 Methodology.				
Objective evidence	The project proponent must select, establish, describe, apply criteria and procedures to identify the different strata that make up the forest plantation and their adequate representation in the Monitoring Report.				
Plan of action:	<p>ROUND 1 These were included in section 13 Monitoring Plan of the PD and also in section 4.1.4 of the monitoring report.</p> <p>ROUND 2 The monitoring report was made from scratch. Description of the procedure defined by the project owner to establish the strata was not included in the monitoring report.</p> <p>ROUND 3 The monitoring report (MR) has been thoroughly corrected to eliminate design and future planning aspects that should be included exclusively in the project description (PD). In this new version, the content of the MR describes in the past the execution and follow-up actions developed in the monitoring period, which covered from December 1, 2018 to May 31, 2023.</p>				
VVB Evaluation:	<p>ROUND 1 It is not clear why the monitoring report contains a description of the procedure defined by the project owner to establish the strata.</p> <p>ROUND 2 The finding persists. At this point, it is important to clarify that the project owner must incorporate in the Monitoring Report a detailed Description of the actions carried out during a defined period. In this case, the Monitoring Period covers from December 1, 2018 to May 31, 2023. Therefore, it is necessary to highlight that the aforementioned activities have already been completed, as they are actions that occurred in the past. In this numeral, the specific Description of the actions carried out during said period is required.</p> <p>ROUND 3 Finding satisfactorily resolved, no additional actions required.</p>				
Conclusion:	Close finding	X	Maintain finding		FAR

Finding N°:	16	Finding type:	CAR	X	CL
Description:	The GHG project is not aligned with: - Principle Transparency and Accuracy, ISO 14064-2:2019. - Numeral 11.2 Baseline or reference scenario, BCR Protocol. - 11.1 Baseline scenario, BCR001 methodology..				
Objective evidence	No related evidence was found on how the project holder identifies the baseline scenario to demonstrate that the project is additional. According to the UNFCCC, in order to determine the baseline scenario of an AFOLU project, project holders must choose one of the scenarios described below, justifying their choice: a) Existing or historical changes, as appropriate, in carbon stocks within the project boundary. b) Changes in carbon stocks within the project boundary by land use that represents an attractive course of action considering barriers to investment. c) Changes in carbon stocks, within the project boundary, identifying the most likely land use at the start of the project.				
Plan of action:	<p>ROUND 1 Clarifications were made in section 3.3 Establishment and Description of the baseline scenario of the PD.</p> <p>ROUND 2 The paragraph that was repeated was corrected and the wording was improved. This can be seen in section 3.3 Establishment and Description of the baseline scenario.</p>				

	<p>Regarding the work order contracts, they were included in Section 3.3 Establishment and Description of the baseline scenario in Figures 21, 22, 23 and 24.</p> <p>ROUND 3</p> <p>PD numeral 3.3, Sub step 1 a Identification of probable land use alternatives in the project areas (pages 110 to 120) identifies the three most realistic and credible land use scenarios in the absence of project activities. With regard to the historical land use based on the Corine Land Cover analysis and the knowledge of DMSA that has been operating in this environment for more than 20 years, after having reasonably ruled out other possible unrealistic uses according to the geographical and socio-economic context of the environment. References are also provided to support the assertions made.</p> <p>"In this regard, the following three scenarios are going to be analyzed:</p> <ul style="list-style-type: none"> ● Scenario 1: continuation with the activity prior to the proposed project, extensive livestock farming. ● Scenario 2: agriculture ● Scenario 3: forest crops for timber harvesting. <p>The three economic activities are options that could be developed by the proponent on the selected plots. As required by the methodology, the determination of the most likely land use within the project boundaries at the time of project initiation depends on the prevailing land use in the region, land use trends, and land use barriers. These 3 scenarios meet the requirements of the methodology.³</p> <p>Other uses are ruled out in advance due to their low probability; we offer a couple of examples in this regard:</p> <ul style="list-style-type: none"> - Urban land development: since the plots of land to be developed are located in rural areas and are not adjacent to consolidated urban centers, this alternative is ruled out. - Development of renewable energy projects: Paraguay is self-sufficient in electricity generation from a source that is already renewable in origin, hydroelectric energy, thanks to the large projects developed in past decades. <p><i>In addition, the historical land use inferred from the Corine Land Cover analysis in the years 2013, 2018 and 2023 (see Figure 21 to Figure 35) show that the main land covers in the project environment in both estancias are limited to primary sector activities, agriculture, livestock and forestry. This information is consistent with DMSA's knowledge of the main activities in the surrounding area, where it has been operating for more than 20 years."</i></p>				
<p>VVB Evaluation:</p>	<p>ROUND 1</p> <p>The procedure for determining the line is not clear. Information is repeated, the introductory paragraph is the same as step 1.</p> <p>It is not clear because the contract information is partly public in the annexes and is not included in the text describing the numeral.</p> <p>ROUND 2</p> <p>1. There are items in the step by step where the statements are not supported by evidence.</p> <p>Selección de escenario de la línea base: Uso histórico de la tierra</p> <p>El uso histórico de la tierra es pasturas para ganadería. Esta actividad se desarrolló en estas parcelas desde el año 2005 (los contratos con los terceros que realizaron esta tarea están disponibles a pedido).</p> <p>3. <i>It is not clear why alternative scenarios were not considered. The incumbent should provide a rationale for the selection or not of possible scenarios.</i></p> <p>ROUND 3</p> <p><i>Finding satisfactorily resolved. No further action required.</i></p>				
<p>Conclusion:</p>	<table border="1"> <tr> <td>Close finding</td> <td>X</td> <td>Maintain finding</td> <td>FAR</td> </tr> </table>	Close finding	X	Maintain finding	FAR
Close finding	X	Maintain finding	FAR		

3

<https://www.ine.gov.py/Publicaciones/Biblioteca/Atlas%20Censal%20odel%20Paraguay/9%20Atlas%20Caazapa%20censo.pdf>

Finding N°:	17	Finding type:	CAR	X	CL
Description:	The GHG project is not aligned with: - Numeral 11. Identification of the baseline scenario, Methodology BCR 0001				
Objective evidence	1. The process developed by the GHG initiative on how it identifies the baseline scenario to demonstrate that the project is additional is not consistent. At this point it is important to include all the numbers of the steps set out in the methodology and to relate the barriers that directly affect the plantation, such as flooding and fires identified in the field. 2. The barriers described in the document do not correspond to those identified in the field.				
Plan of action:	<p>ROUND 1 Both points were clarified and corrected in section 3.3 Establishment and Description of the baseline scenario of the DD.</p> <p>ROUND 2 All references on all analyzed barriers were included. This is found in section 3.4, step 3 barrier analysis.</p> <p>ROUND 3 In numeral 3.3 Establishment and Description of the PD baseline scenario, new evidence is provided for the valuation of barriers, as for example in the case of fires, for which an analysis has been carried out on the typology of land cover in the burned areas in a significant time period (2015-2020).</p>  <p>Another example is the analysis of the flood barrier, for which cartographic references based on official sources have been incorporated:</p>  <p>In addition, in Table 17 Degree of impact of the identified barriers to the project alternatives, the following five degrees of impact are assigned to each of the three alternative activities: very low, low, medium, high, high, very high:</p>				

	Barrera	Escenario 1: Continuación del uso de la tierra anterior al proyecto - ganadería	Escenario 2: Agricultura	Escenario 3: Forestación sin incentivos de los créditos de carbono
	Barreras de inversión	Muy baja	Baja	Alta
	Barreras institucionales	Baja	Baja	Alta
	Barreras Tecnológicas	Muy baja	Muy baja	Muy baja


VVB Evaluation:

ROUND 1
The assertions of the barrier analysis must be supported by ample and sufficient evidence.

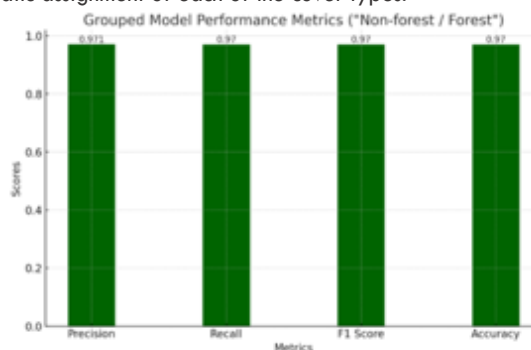
ROUND 2
The response to this item is linked to finding 16. In the case of modifications to the scenarios, it will be necessary to update the barrier analysis. Although the procedure suggested by the methodology is followed, the text does not clarify precisely the prioritization process carried out.

ROUND 3
Finding satisfactorily resolved. No further action required.

Conclusion: Close finding X Maintain finding FAR

Finding N°:	18	Finding type:	CAR	X	CL
Description:	The GHG project is not aligned with: - Numeral 3.5. Uncertainty management. BCR 0001 methodology.				
Objective evidence	The uncertainty management process described in the PDD is not consistent with what was evidenced during the field visit. A description of the processes developed by the GHG mitigation initiative to reduce uncertainty should be included.				
Plan of action:	<p>ROUND 1 Adjustments were made to section 7 "Risk Management" of the PD.</p> <p>ROUND 2 A detailed analysis of the uncertainty and the procedure that DMSA follows to ensure that the margin of error is below 5% was performed in detail. This can be found in section 3.5 Uncertainty Management.</p> <p>ROUND 3 The BCR Version 3.2 standard states in section 11.1 Conservative approach and uncertainty management (page 14) that if the parameters applied in the CO2 absorption calculations coincide with those used by the country in the preparation of its national inventories - as is the case of this project. Then it is not necessary to calculate and apply the discount percentages due to the uncertainty that would otherwise need to be calculated and applied.</p> <p style="text-align: right;"></p> <p>limit of the range of data as long as it corresponds to the most conservative assumption".</p> <p>Finally, if the Project makes references to external documents susceptible to updates, such as the IPCC Guidelines for National GHG Inventories, the project holder shall use the most recent version of those documents.</p> <p>To manage uncertainty in projects in the AFOLU sector, BioCARBON REGISTRY determines criteria and guidelines to comply with the uncertainty management associated with models to estimate emission reductions / removals in GHG Projects".</p> <div style="border: 1px solid green; padding: 5px; margin: 10px 0;"> <p>If the data and parameters applied to estimate the reduction or removal of GHG emissions shall be consistent with the emission factors, activity data, projection of GHG emissions, and the other parameters used to construct the inventory national of GHG and the national reference scenario. If this is the case, then it is unnecessary to apply the percentages defined for the discount factor provided in the guidelines for managing uncertainty.</p> </div> <p>Regardless of this, the PD specifies the levels of confidence in the measurement and calculation instruments that are key to the project:</p>				

- Numeral 3.1.1 Applicability conditions of the methodology, point A) referred to the justification of the absence of forest cover in the past 5 years, for the supervised image classification model used as part of the Corine Land Cover methodology. Its confusion matrix is provided (Figures 18 and 19, pages 71 and 72) and the parameters of precision, sensitivity (recall), F1 and accuracy (Figure 20, page 73), demonstrating a margin of error of less than 5% in the automatic assignment of each of the cover types.



- Numeral 3. Uncertainty management details the accuracy of the measuring instruments used to measure various dimensions that influence the results of the verification of the correct execution of the project and its monitoring.
Los equipos que se van a utilizar son:

- Cinta metálica diamétrica: Sistema de medida métrica, precisión de la medición es de +/-0.5% indicado por el fabricante; diseñada para la medición de los diámetro de los árboles , obteniendo un DAP lo más exacto posible. Permite tomar las medidas en centímetros en forma longitudinal y circunferencialmente y/o en diámetro en centímetros. Se va a utilizar para la medición de Diámetro Altura de Pecho
- Vertex 4: es un isométrico digital que tiene un rango de precisión a 90 metros de +/- 4cm que se utilizará para la medición de la altura y la distancia de los árboles.
- GPS de alta precisión: se utilizan los puntos de muestreo pre creados mediante el software ArcGIS (v 10.5). A su vez sirve para delimitar el área del proyecto y los estratos. Este instrumento cuenta con una precisión de +/- 3,65 m.
- Cintas métricas: se utilizan para medir distancias para la instalación de las parcelas de muestreo, cuentan con una precisión de 1 cm.

REVISED ROUND 3:

In the PD

- 3.5 Uncertainty management, it is stated: "Considering all of the above, we are in the case described in row 10 of table 3 of the BCR0001 V4.0 methodology, and therefore it is appropriate to apply the above mentioned discount factor of 20%. However, if new sources of knowledge are developed, such as scientific articles on the species used with local data, and their data are applied in the next monitoring, this discount factor value may be reduced."

- point 3.7.4 GHG emissions reduction/removal in the project scenario states "Overall, out of the total 78,719 VCC generated in the project, 20% to be allocated to the reserve accounts (10% to the BCR General Reserve account and 10% to the project reserve account) would be 15,745 VCC in total. According to the provisions of point 13.1.1 of the BCR Standard, half of these retained Verified Carbon Credits - those corresponding to the project reserve account - may be released and placed in the market at successive verifications if the risks have not materialized, and the GHG project continues under the BCR Standard and active in the BioCarbon Standardsystem of registry."

VVB Evaluation:

ROUND 1

Uncertainty management does not correspond to the definition of ISO 14064-02:2016.

	<p>"3.2.8 uncertainty. A parameter associated with the result of quantification that characterizes the dispersion of values that could reasonably be attributed to the quantified quantity. NOTE 1 to the input. Uncertainty information generally specifies quantitative estimates of the likely dispersion of values, and a qualitative description of the likely causes of the dispersion".</p> <p>The project holder should submit a detailed uncertainty analysis.</p> <p>ROUND 2</p> <p>It is clarified that this finding is linked to the uncertainty or doubt present in the measurements, calculations, values used and methodological approaches. In this context, it is imperative that the project ensures that the level of uncertainty or doubt is kept below 10% in the implementation of the initiatives. This is done in order to increase confidence in the results, ensuring that they are reliable, comparable, consistent and reproducible.</p> <p>ROUND 3</p> <p>1. According to the guidelines established in the framework of the BCR 0001 methodology in numeral 15, "Uncertainty Management", when selecting the data for estimating greenhouse gas (GHG) removals, discounts must be applied according to the quality and origin of the estimation data, whether they come from Table 3 or from sections 6.1 or 6.2 of the Clean Development Mechanism (CDM) methodology tool.</p> <p>At this point, it is important to mention that the data and parameters for the calculation of GHG emissions reduction and/or removal reported in the Project Design Document (PdD) in numeral 3.7.4, "Reduction/removal of GHG emissions in the project scenario", were obtained from:</p> <ul style="list-style-type: none"> - Wood density: IPCC, 2006. - Biomass expansion factor: IPCC, 2006. - Carbon fraction: "Estimation of carbon stocks and carbon stock change of trees and shrubs in F/R CDM project activities" v. 04.2. - Ratio of roots to aboveground biomass: IPCC, 2006. <p>It is not clear because in equation (3), the uncertainty discount factor is:</p> $u_c = \text{incertidumbre en } C_{ARB} \text{ (cumpliendo con la metodología BCR0001 V4.0 sección 15 no corresponde aplicar factor de descuento por incertidumbre al actual proyecto. Ver detalles en la sección 3.5 del presente documento)}$ <p>In accordance with BCR 0001 methodology, the following clarification is made: Ahora bien, si los datos y parámetros empleados para el cálculo de la reducción y/o remoción de emisiones de GEI son consistentes con los factores de emisión, datos de actividad, variables de proyección de las emisiones de GEI y los demás parámetros empleados para la construcción del inventario nacional de GEI, no será necesaria la aplicación de los porcentajes definidos para el factor de descuento.</p> <p>Under this scenario it is not possible to demonstrate that the calculations are conservative to ensure that emission reductions or increases in removals from the project are not overestimated.</p> <p>2. Total removals are not reflected in the PdD and RM, these emission reductions correspond to the Net emissions reductions, the totals are those that reflect the 20% discount corresponding to the risk of non-permanence.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;"> Estimated total and average annual GHG reduction amount </td> <td style="width: 50%; text-align: center;"> Total, reducción de emisiones: 98.430 tCO₂ ¹ Promedio anual: 3.281 tCO₂/año </td> </tr> </table> <p>ROUND 4.</p> <p>Finding satisfactorily resolved, no further action required.</p>				Estimated total and average annual GHG reduction amount	Total, reducción de emisiones: 98.430 tCO ₂ ¹ Promedio anual: 3.281 tCO ₂ /año
Estimated total and average annual GHG reduction amount	Total, reducción de emisiones: 98.430 tCO ₂ ¹ Promedio anual: 3.281 tCO ₂ /año					
Conclusion:	Close finding	X	Maintain finding	FAR		

Finding N°:	19	Finding type:	CAR	X	CL
Description:	The GHG project is not aligned with: <ul style="list-style-type: none"> - Numeral 3.5. Uncertainty management. - Numeral. 9.1 Mapping information requirements for eligibility analysis. 				

Objective evidence	1. The GHG project holder must demonstrate that it follows the guidelines established by the country's land cover survey update methodologies applicable to it in the country in which the project is developed (CORINE LAND COVER). 2. The holder must describe the procedures used for processing the information and delimitation of the eligible areas of the project.				
Plan of action:	All mapping included in the PD complies with the Corine Land Cover methodology. This can be observed in section 3.1.1 Conditions of applicability of the methodology.				
VVB Evaluation:	Finding satisfactorily resolved. No additional actions are required.				
Conclusion:	Close finding	X	Maintain finding	FAR	

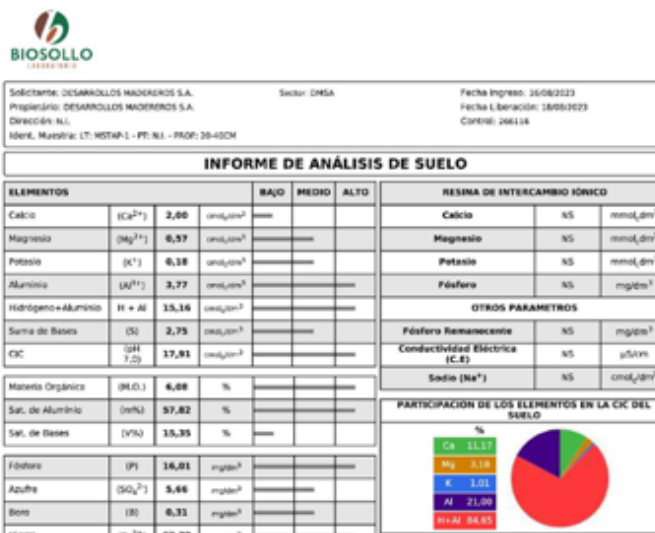
Finding Nº:	20	Finding type:	CAR	X	CL	
Description:	The GHG project is not aligned with: Section 3.7.3 GHG emission reductions in the baseline scenario. Section 6.7 Quantification of GHG emissions and/or removals. Methodology BCR0001 15. Removals by sinks. Methodology BCR0001					
Objective evidence	1. The procedures defined by the project to determine the GHG emission reductions in the baseline are not described in this section. 2. The order of the spreadsheets for the quantification of GHG removals in the baseline scenario is not clear. 3. The explanation given in the PD is not consistent with the results of the Excel spreadsheets provided by the project holder and with the identified FSRs. 4. No related evidence was found in the analysis to explain and justify the discount factor for reversion risk.					
Plan of action:	The baseline GHG emission reductions are included in section 3.7.2 PD stratification, the Excel was corrected and the discount factor for reversal risk was included in both the PD and Excel.					
VVB Evaluation:	Finding satisfactorily resolved. No further action required					
Conclusion:	Close finding	X	Maintain finding	FAR		

Finding Nº:	21	Finding type:	CAR	X	CL	
Description:	The GHG project is not aligned with: - Numeral 3.7.4 GHG emission reductions in the project scenario. - Numeral 6.7 Quantification of GHG emissions and/or removals. Methodology BCR0001 - Numeral 15 Removal by sinks. Methodology BCR0001					
Objective evidence	1. The procedures defined by the project to determine the GHG emission reductions of the project are not described in this section. 2. The order of the spreadsheets for the quantification of GHG removals in the project scenario is not clear. 3. The explanation given in the PD is not consistent with the results of the Excel spreadsheets provided by the project holder and with the identified FSRs. 4. No related evidence was found in the analysis to explain and justify the reversion risk discount factor (20%).					
Plan of action:	Everything identified in this finding was included in section 3.7.3 GHG emission reductions in the baseline scenario and 3.7.4 GHG emission reductions in the project scenario, and the discount factor was included in both the PD and the monitoring report and in the supplementary Excels.					
VVB Evaluation:	Finding satisfactorily resolved. No further action required					
Conclusion:	Close finding	X	Maintain finding	FAR		

Finding Nº:	22	Finding type:	CAR	X	CL	
Description:	The GHG project is not aligned with: - Numeral 21. Monitoring Plan, BCR Standard					
Objective evidence	Within the monitoring report it is not clear how the initiative developed the following items: - The emissions that could occur in the leakage area. - The impacts of the implementation of project activities on the environment and communities.					

<p>Plan of action:</p>	<p>- The assignment of roles and responsibilities for monitoring and reporting of relevant variables for the calculation of GHG emission reductions or removals.</p> <p>ROUND 1 The assignment of roles and responsibilities for the calculation of GHG emission reductions was included in section 13 Monitoring of the PD and in section 4 monitoring report. The 2 previous items were included in the monitoring report (they were already duly detailed in the PD).</p> <p>ROUND 2 1. the explanation of leakage can be found in section 16.3 specification of all potential emissions occurring outside the project boundary, attributable to Project GHG activities (leakage); 2. Impacts of activities on the environment can be found in Section 8 Environmental Aspects. The impact on communities can be found in section 9 Socioeconomic aspects. The assignment of roles and responsibilities for monitoring and reporting relevant variables for the calculation of GHG emission reductions or removals can be found in section 15.1.7 Assignment of roles and responsibilities for monitoring and reporting relevant variables for the calculation of reductions or removals.</p> <p>ROUND 3 In numeral 8 Environmental Aspects (pages 82 to 93 of the RM) the impacts of the project associated with environmental aspects during the 2018-2023 monitoring period have been identified. Supporting the statements in scientific literature and in the result of analyses carried out in the field (soil and water analysis), describing them in detail and exposing how control and mitigation measures have been applied in each case. For example:</p> <p style="padding-left: 40px;">La actividad de preparación de suelo se realizó entre los años 2019 y 2022. Esta actividad generó una leve perturbación del suelo debido a que se utilizaron maquinarias como tractor y rastra³⁴. Como medida de mitigación para reducir el impacto se utilizó la técnica de labranza mínima. Esto implica que la preparación del suelo se realizó en fajas: se preparó solamente una faja de 1 a 2 m de ancho a lo largo de las líneas de plantación de los árboles. Este sistema es uno de los que menor alteración del suelo genera debido a que reduce fuertemente la porción de tierra que se labra³⁵. A su vez se seleccionaron minuciosamente los días donde se realizaron la tarea de labranza mínima seleccionando las condiciones de humedad adecuado para evitar una mayor compactación del suelo³⁶.</p> <p style="padding-left: 40px;">La plantación de árboles se realizó igualmente en los años 2019 y 2022. Como medida de mitigación se realizó de manera manual, de modo que la alteración sobre el suelo de esta actividad fue baja³⁷. Se utilizaron palas para cavar los hoyos. Para el transporte de las plantas se utilizó un vehículo liviano (inferior a los 2.000 kg) hasta los límites del estrato y dentro del mismo el transporte se realizó con recipientes de manera manual. El operario realizó un hoyo con la pala solamente en el lugar donde se plantó el árbol, se insertó la planta y luego se tapó con la tierra que provino del mismo hoyo.</p> <p>³⁴ https://www.scielo.sa.cr/pdf/tem/v31n1/0379-3982-tem-31-01-167.pdf ³⁵ http://revistas.uach.cl/pdf/bosque/v16n2/art01.pdf ³⁶ https://www.jircas.go.jp/sites/default/files/publication/manual_guideline/manual_guideline--44.pdf ³⁷ https://journals.lib.unb.ca/index.php/IJFE/article/view/30002/1882525236</p> <p>The results of the analyses carried out, the coordinates and the geospatial information compatible with GIS software were included in folder 09.- SOIL AND WATER ANALYSIS in the complementary documentation.</p>
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Figura 30. Resultados de análisis suelo en Hemandarias



Finally, Table 29, shown at the end of this section, includes a summary of the different impacts identified during the 2018-2023 monitoring period, their magnitude, sign, temporality and whether they are direct or indirect, including control and/or mitigation measures if applicable.

Aspecto ambiental	Detalle	Actividad del proyecto	Magnitud	Signo	Director Indirecto	Temporalidad	Medidas de control	Medidas de mitigación
Recursos hídricos	Calidad del agua subterránea	Preparación del terreno	Baja	+	Indirecto	Temporal	Análisis de suelo sobre puntos de control	
	Calidad del agua superficial	Uso de agroquímicos	Baja	-	Indirecto	Temporal	Análisis de agua a la entrada y salida del campo Alfa Culi	Cumplimiento estricto del Plan de Manejo responsable de Agroquímicos, Programa Operativo de Aplicación de Agroquímicos, IGA y directrices FISC
Suelo	Calidad del suelo		Baja	-	Directo	Temporal		Seguimiento estricto y cumplimiento del Plan de Manejo responsable de Agroquímicos, Programa Operativo de Aplicación de Agroquímicos, IGA y directrices FISC
	Alteración de horizontes	Preparación del terreno	Baja	-	Directo	Temporal	Análisis de suelo sobre puntos de control	Empiezo de técnicas de labranza mínima y selección de período de aduación favorable en función de climatología

VVB Evaluation:

ROUND 1

The monitoring report still does not have clear and defined actions with respect to this finding.

ROUND 2

1. The finding was satisfactorily resolved; no further action is required.

2. The results of the environmental assessment are unclear. It is necessary to support this analysis with reliable and updated references (evidence).

In the case of the use of agrochemicals, which could have negative impacts, it is necessary for the owner to explain the actions and corrective measures that will be implemented to manage and minimize the impacts derived from the development of the greenhouse gas (GHG) reduction project activities.

Impacto al Suelo:

El grado de afectación del proyecto al suelo, es de grado bajo. El tipo de tareas utilizadas para la preparación del sitio no produce grandes cambios en este sentido y de hacerlo, sólo puede producir impactos negativos sobre la estructura de la capa superficial, en la línea de plantación donde se realiza esta actividad. Durante el desarrollo de los árboles el impacto puede ser beneficioso a través del aporte de las raíces, las que, a su vez, producen compactación como consecuencia del crecimiento radial.

ROUND 3:

Finding satisfactorily resolved, no further action required.

Conclusion:

Close finding

X

Maintain finding

FAR

Finding N°:

23

Finding type:

CAR

X

CL

Description:

The GHG project is not aligned with:


Objective evidence	<p>- Numeral 16.3.1.2 Size of the plots or sampling units. Methodology BCR0001.</p> <ol style="list-style-type: none"> 1. No information related to equation 23 Sample size of the BCR methodology was found in the Monitoring Report. 2. The number of strata and plots recorded in the Monitoring Report does not reflect those evidenced by the audit team during the field visit. According to the above, the carbon stock changes in the selected reservoirs and the GHG emissions of the project are not consistent with the proposed BCR 0001 v3.0 methodology. 			
Plan of action:	<p>ROUND 1 Equation 23 was used to define the number of sampling plots. It was included in the monitoring report in section 4.1.4 and section 13 of the PD.</p> <p>ROUND 2 Included in detail how equation 23 was used and details the number of temporary plots that arose from the application of this equation. Data and information for estimating GHG reductions or removals during the quantification period can be found in section 15.1.1 of the monitoring report.</p>			
VVB Evaluation:	<p>ROUND 1 The actions defined by the project are not clear.</p> <p>ROUND 2 Finding satisfactorily resolved, no additional actions required.</p>			
Conclusion:	Close finding	X	Maintain finding	FAR

Finding N°:	24	Finding type:	CAR	X	CL
Description:	<p>The GHG project is not aligned with:</p> <ul style="list-style-type: none"> - Numeral 13 Risk management, BCR Protocol 				
Objective evidence	<ol style="list-style-type: none"> 1. The risks identified in the PD do not coincide with those identified by the audit team during the field visit phase. 2. The procedures described in the PD do not coincide with the procedures that the plantation currently has in place to mitigate them. 				
Plan of action:	<p>The project risks, and how to mitigate them, were completed. Included in section 7 Risk Management of the PD.</p>				
VVB Evaluation:	<p>Finding satisfactorily resolved. No further action required.</p>				
Conclusion:	Close finding	X	Maintain finding	FAR	

Finding N°:	25	Finding type:	CAR	X	CL									
Description:	<p>The GHG project is not aligned with:</p> <ul style="list-style-type: none"> - Numeral 13.1 Risk Management, BCR Standard V3.0 													
Objective evidence	<p>The risk of reversion described in the PD fails to demonstrate how the project defines specific actions to ensure that this risk is maintained over time.</p>													
Plan of action:	<p>ROUND 1 Reversal risk has been clarified in section 7.4 Reversal risk of the PD.</p> <p>ROUND 2</p> <p>ROUND 3 In numeral 7.1 Reversal Risk a table is included for each family of risks, including the mitigation measures for each of them: Table 29 Environmental risk mitigation measures, Table 30 Financial risk mitigation measures, Table 31 Social risk mitigation measures.</p> <table border="1" data-bbox="548 1528 1312 1810"> <thead> <tr> <th>Riesgo</th> <th>Calificación del Riesgo</th> <th>Medidas de Mitigación</th> </tr> </thead> <tbody> <tr> <td>Incendios</td> <td>Alto</td> <td>El Plan de Protección Contra Incendios del proyecto diseñado por DMSA, contiene el Plan de manejo integrado del fuego, estableciendo medidas para detectar, combatir y mitigar los efectos de incendios forestales y usar el fuego como herramienta con el fin de evitar o minimizar impactos económicos y ambientales, manteniendo entrenados al Recurso Humano afectado en la Protección Patrimonial, está dirigido a ambas estancias Tapyta y Hermandarias. Para revisar el plan en detalle favor dirigirse al documento "Plan de Protección Contra Incendios" en la carpeta Documentación Complementaria". El monitoreo de los incendios se explica detalladamente en la sección 17 de plan de monitoreo.</td> </tr> <tr> <td>Vientos</td> <td>Bajo</td> <td>A pesar de que la calificación de este riesgo es baja para el proyecto, el proyecto ha tomado ciertas medidas de mitigación a fin de evitar pérdidas por los vientos desde la planeación del establecimiento de plantaciones, estas ubican en la cercanía de barreras naturales. De presentarse este tipo de riesgo y de dañar alguna de las superficies del proyecto DMSA cuenta con la solvencia y la decisión de volver a replantar todo lo que se vea afectado.</td> </tr> </tbody> </table> <p>REVISED ROUND 3:</p>					Riesgo	Calificación del Riesgo	Medidas de Mitigación	Incendios	Alto	El Plan de Protección Contra Incendios del proyecto diseñado por DMSA, contiene el Plan de manejo integrado del fuego, estableciendo medidas para detectar, combatir y mitigar los efectos de incendios forestales y usar el fuego como herramienta con el fin de evitar o minimizar impactos económicos y ambientales, manteniendo entrenados al Recurso Humano afectado en la Protección Patrimonial, está dirigido a ambas estancias Tapyta y Hermandarias. Para revisar el plan en detalle favor dirigirse al documento "Plan de Protección Contra Incendios" en la carpeta Documentación Complementaria". El monitoreo de los incendios se explica detalladamente en la sección 17 de plan de monitoreo.	Vientos	Bajo	A pesar de que la calificación de este riesgo es baja para el proyecto, el proyecto ha tomado ciertas medidas de mitigación a fin de evitar pérdidas por los vientos desde la planeación del establecimiento de plantaciones, estas ubican en la cercanía de barreras naturales. De presentarse este tipo de riesgo y de dañar alguna de las superficies del proyecto DMSA cuenta con la solvencia y la decisión de volver a replantar todo lo que se vea afectado.
Riesgo	Calificación del Riesgo	Medidas de Mitigación												
Incendios	Alto	El Plan de Protección Contra Incendios del proyecto diseñado por DMSA, contiene el Plan de manejo integrado del fuego, estableciendo medidas para detectar, combatir y mitigar los efectos de incendios forestales y usar el fuego como herramienta con el fin de evitar o minimizar impactos económicos y ambientales, manteniendo entrenados al Recurso Humano afectado en la Protección Patrimonial, está dirigido a ambas estancias Tapyta y Hermandarias. Para revisar el plan en detalle favor dirigirse al documento "Plan de Protección Contra Incendios" en la carpeta Documentación Complementaria". El monitoreo de los incendios se explica detalladamente en la sección 17 de plan de monitoreo.												
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	<p>In the Project Description document one can see:</p> <p>-Item 1.1 Scope in the BCR Standard. "The project will be validated and verified for the first time in May 2023, 4.5 years after the start of the project, where it is estimated to be able to certify captures of 16,711 tCO₂, from which 20% will be deducted to be allocated to reserve accounts to cover possible reversal risks as indicated in the BCR Standard."</p> <p>-Section 3.7.4 GHG emissions reduction/removal in the project scenario "It is important to highlight the BCR Standard v 3.2 in section 13.1 'Reversal risk' establishes that projects in the AFOLU sector. Once GHG removals are registered, a reserve of 20% of the total GHG emissions reductions quantified for each verified period will be automatically discounted and maintained, in order to cover a potential materialization of the identified risks." In the Monitoring Report document you can see:</p> <p>-Item 1.5 Summary Description of the Implementation Status of the Project. "In accordance with the BCR V3.2 Standard in section 13.1 Reversal Risk, once the GHG removals of an AFOLU project are registered, a 20% reserve of the total quantified GHG emission reductions for each verified period shall be automatically deducted and maintained. Therefore, the amount of CCV Carbon Certificates of the project -after discounting the aforementioned 20% to cover the potential materialization of the identified risks- will be 16,711 tCO₂".</p>				
<p>VVB Evaluation:</p>	<p>ROUND 1 This finding is related to the monitoring report. The project owner should identify the risks of reversion in the defined monitoring period.</p> <p>ROUND 2 The monitoring report provides a comprehensive description of the fire risk, as well as how the company has clear actions to mitigate it. However, no clear guidelines were found on how the project defines actions to mitigate the other risks identified.</p> <p>ROUND 3 The resolution of this finding is related to the response to finding 18.</p> <p>ROUND 4. Finding satisfactorily resolved no additional actions are required.</p>				
<p>Conclusion:</p>	<table border="1"> <tr> <td>Close finding</td> <td>X</td> <td>Maintain finding</td> <td>FAR</td> </tr> </table>	Close finding	X	Maintain finding	FAR
Close finding	X	Maintain finding	FAR		

<p>Finding Nº:</p>	<p>26</p>	<p>Finding type:</p>	<p>CAR</p>	<p>X</p>	<p>CL</p>
<p>Description:</p>	<p>The GHG project is not aligned with:</p> <ul style="list-style-type: none"> - Numeral 6.9 Data quality management ISO 14064-02:2019 - Numeral 16.5 Quality control and quality assurance procedures. Methodology BCR 0001 - Numeral 16.5.1 Verification of field data. BCR Protocol. 				
<p>Objective evidence</p>	<ol style="list-style-type: none"> 1. The GHG project holder must design a management and quality assurance system that ensures good management, quality, reliability of information, data field verification, information-processing review, data recording and archiving system. 2. The GHG mitigation project holder shall establish a protocol for the measurement of growth plots according to the criteria defined by ISO 14064-2:2019 and BCR 0001 methodology. 				

	
Plan of action:	This finding was clarified in section 13 of the PD monitoring plan and in section 4 of the monitoring report.
VVB Evaluation:	Finding satisfactorily resolved. No further action required.
Conclusion:	Close finding <input checked="" type="checkbox"/> Maintain finding <input type="checkbox"/> FAR <input type="checkbox"/>

Finding N°:	27	Finding type:	CAR	<input checked="" type="checkbox"/>	CL
Description:	The GHG project is not aligned with: - Numeral 14 Grouped projects. BCR Protocol.				
Objective evidence	No related evidence was found on how the project owner explains and justifies the conditions applicable to clustered projects described in the BCR protocol.				
Plan of action:	It is clarified in section 12 of the PD that the project is not going to be a clustered project.				
VVB Evaluation:	Finding satisfactorily resolved. No further action required.				
Conclusion:	Close finding	<input checked="" type="checkbox"/>	Maintain finding	<input type="checkbox"/>	FAR <input type="checkbox"/>

Finding N°:	28	Finding type:	CAR	<input checked="" type="checkbox"/>	CL
Description:	The GHG project is not aligned with: - Numeral 6.10 GHG project monitoring. Methodology BCR 0001.				
Objective evidence	The procedures defined by the project proponent to maintain a monitoring plan for the selected SDGs are not clear, they should include: 1. Indicator or list of parameters to be measured and monitored; 2. Types of data and information to be reported, including units of measurement, equipment calibration if necessary; 3. origin of the data; 4. Monitoring methodologies, including estimation, modeling; 5. Frequency of monitoring, considering the needs of the intended user; 6. controls including internal checking of data for input elements, transformation and output elements, and procedures for corrective actions. 7. Management systems. 8. Timeline.				
Plan of action:	<p>ROUND 1 All of this was clarified in section 13 of the PD monitoring plan.</p> <p>ROUND 2 All evidence related to the activities developed by the GHG project during the monitoring period was included. This is found in section 4 Contribution to Sustainable Development Goals (SGD) of the monitoring report.</p> <p>ROUND 3 Section 11 of the PD identifies the SDGs on which the project has a positive impact, and the structure in programs and actions of this project, including the schedule of activities with annual resolution. Regarding the activities carried out in the current monitoring period (1/12/2018-31/05/2023) these are reflected in numeral 4 of the RM. Some KPIs are qualitative,</p>				

and others however can be translated into monetary units. Whenever possible, the latter has been chosen.

In relation to the attribution of actions and budget to the actions of this project, there are indeed specific programs of this project, but also cross-cutting programs that respond to the needs of communities, and that involve a high expenditure by DMSA. In this type of situation, where the amount spent is shared by all DMSA projects, a proration is made to assign a value to this project proportional to the weight of the project area with respect to the total managed by DMSA forestry.

The detail of ODS, programs and actions, as well as the budget attributable to this project is shown in the spreadsheet "Ex-post-monitoring report BCR-PY-451-14-001", in the "Prorated ODS" tab.

Aportaciones económicas directas, a las que se suman otras acciones no cuantificables en términos monetarios	2018*	2019	2020	2021	2022	2023**	Total, periodo 1 dic 2018 a 31 mayo 2023
ODS 1: Fin de la pobreza (USD)	420	7.204	5.510	6.955	6.403	1.594	28.085
ODS 2: Hambre cero (USD)	282	2.969	2.457	4.436	6.688	1.552	18.384
ODS 3: Salud y Bienestar (USD)	0	0	840	840	1.120	627	3.427
ODS 4: Educación de calidad (USD)	0	0	1.106	484	663	0	2.253
ODS 6 Agua Limpia y saneamiento (USD)	0	0	0	2.714	10.138	0	12.852
ODS 9: Industria, Innovación e Infraestructura (USD)	181	2.606	1.660	1.744	1.796	742	8.729
ODS 12: Producción y Consumo Responsable (USD)	68	6.241	183	0	1.077	0	7.570
ODS 13: Acción por el clima (tCO2)***	0	0	752	6.274	5.045	8.620	20.692
ODS 15: Vida de ecosistemas terrestres	Contribución inherente al proyecto ARR en empleo de un mix de 11 especies nativas, a comenzar en 2024						

Finally, in row 65 of the Excel table and in Table 14 on page 45 of the RM, the jobs created by the project and occupied by residents of the surrounding area (FTE) are shown.

VVB Evaluation:

ROUND 1

No evidence was found related to the activities developed by the GHG project during the monitoring period.

ROUND 2

It is not possible to differentiate the contribution to SDGs of the project in particular, from the contribution of the company DMSA.

How many jobs does the project generate? What specific project activities have been carried out? How many communities has this particular project benefited?

ROUND 3

Finding satisfactorily resolved, no further action required.

Conclusion:

Close finding

X

Maintain finding

FAR

Finding N°:

29

Finding type:

CAR

X

CL

Description:

The GHG project is not aligned with:

- Numeral 6.10 GHG Project Follow-up

Objective evidence

The PD did not show how the project owner will follow up on the following activities:

1. Project boundaries
2. Project activities
3. Crop and biomass growth management.
4. Field stratification and sampling design.
5. Current applicable legislation
6. Reversion risks.
7. Biodiversity sampling (Fauna and Flora).
8. Land tenure and carbon rights.

	<p>9. Methodology deviation 10. Field data review 11. Quality control and quality assurance 12. Data recording and archiving system</p>						
<p>Plan of action:</p>	<p>ROUND 1 This was completed in all the corresponding sections of the PD.</p> <p>ROUND 2 Included in detail how all items identified in this finding were developed. This is found in section 1.1 Scope of the DD.</p> <p>ROUND 3 In the PD, paragraph 17 Monitoring plan (pages 262 to 294), all the requirements established in the Template GHG Project V2.2 (most current version used in the submission) are answered.</p> <p><i>In addition, table 48 within the same numeral summarizes the monitoring plan for each of the aspects listed by the PD template version 2.2:</i></p> <p>(a) Monitoring of project boundaries. (b) Monitoring of the execution of project activities (c) Monitoring the quantification of the quantification of the project's emission reductions/removals (d) Quality control and quality assurance procedures (e) Verification of field data (f) Review of data processing (g) Data logging and archiving system</p> <table border="1" data-bbox="634 890 1248 1476"> <thead> <tr> <th>Aspecto a monitorizar</th> <th>Plan de monitoreo</th> </tr> </thead> <tbody> <tr> <td>(a) Supervisión de los límites del proyecto</td> <td>Se recorrerán los límites del proyecto empleando GPS para verificar su integridad y continuidad a lo largo del tiempo. Se realizará al menos 1 vez durante el periodo de monitoreo hacia el final del mismo. Además, se verificará que la composición de los estratos es coherente con los criterios establecidos en este PD y recogidos también a continuación en el subapartado <u>Estratos: Descripción de los criterios de la composición de los estratos.</u></td> </tr> <tr> <td>(b) Seguimiento de la ejecución de las actividades del proyecto</td> <td>Se establecerá la unidad de medida para cada una de las actividades del proyecto y se comprobará el grado de cumplimiento del objetivo anual establecido. Las actividades a realizar seguimiento serán: - Número de plantines producidos</td> </tr> </tbody> </table>	Aspecto a monitorizar	Plan de monitoreo	(a) Supervisión de los límites del proyecto	Se recorrerán los límites del proyecto empleando GPS para verificar su integridad y continuidad a lo largo del tiempo. Se realizará al menos 1 vez durante el periodo de monitoreo hacia el final del mismo. Además, se verificará que la composición de los estratos es coherente con los criterios establecidos en este PD y recogidos también a continuación en el subapartado <u>Estratos: Descripción de los criterios de la composición de los estratos.</u>	(b) Seguimiento de la ejecución de las actividades del proyecto	Se establecerá la unidad de medida para cada una de las actividades del proyecto y se comprobará el grado de cumplimiento del objetivo anual establecido. Las actividades a realizar seguimiento serán: - Número de plantines producidos
Aspecto a monitorizar	Plan de monitoreo						
(a) Supervisión de los límites del proyecto	Se recorrerán los límites del proyecto empleando GPS para verificar su integridad y continuidad a lo largo del tiempo. Se realizará al menos 1 vez durante el periodo de monitoreo hacia el final del mismo. Además, se verificará que la composición de los estratos es coherente con los criterios establecidos en este PD y recogidos también a continuación en el subapartado <u>Estratos: Descripción de los criterios de la composición de los estratos.</u>						
(b) Seguimiento de la ejecución de las actividades del proyecto	Se establecerá la unidad de medida para cada una de las actividades del proyecto y se comprobará el grado de cumplimiento del objetivo anual establecido. Las actividades a realizar seguimiento serán: - Número de plantines producidos						
<p>VVB Evaluation:</p>	<p>ROUND 1 No evidence was found related to the activities developed by the GHG project during the monitoring period.</p> <p>ROUND 2</p>						

	<p>The project fails to explain all the requirements listed in numeral 17 Monitoring plan of the Template GHG Project V2.1.</p> <p>17 Evitar el doble conteo</p> <p>La herramienta BCR "Evitar el doble cómputo de las reducciones/absorciones de emisiones". Versión 1.0, en su sección 7 define al doble cómputo como contabilización de un resultado de mitigación de GEI en toneladas de Co2 en los siguientes escenarios:</p> <p>a) una tonelada de CO2 se cuenta más de una vez para demostrar el cumplimiento del mismo objetivo de mitigación de GEI</p> <p>b) se cuenta una tonelada de CO2 para demostrar el cumplimiento de más de un objetivo de mitigación de GEI</p> <p>c) una tonelada de CO2 se utiliza más de una vez para obtener remuneraciones, beneficios o incentivos</p> <hr/> <p>BCR-PY-451-14-001 Página 308 de 351 Versión 3- 17 de noviembre de 2023</p> <hr/> <p>Documento de Diseño de Proyecto BioCarbon Registry <i>Plantación mixta de especies nativas y foráneas en Paraguay-I</i></p> <p>d) se verifica, certifica o acredita una tonelada de CO2 asignando más de una serie a un único resultado de mitigación</p> <p>El presente proyecto no realiza, ni va a realizar ninguna de las opciones que definen el doble cómputo. A su vez no se registró ni se piensa registrar este proyecto bajo ningún otro programa de GHG. Por lo tanto no va a ocurrir doble contabilidad con las remociones de CO2 del proyecto.</p> <p>ROUND 3 <i>Finding satisfactorily resolved.</i></p>			
Conclusion:	Close finding	X	Maintain finding	FAR

Finding N°:	30	Finding type:	CAR	X	CL
Description:	The GHG project is not aligned with: - Numeral 6.10 GHG project monitoring				
Objective evidence	The monitoring report did not show how the project owner followed up on the following project activities for verification: 1. monitoring of project boundaries 2. Monitoring of the implementation of the project activities. 3. Monitoring of crop management and biomass growth 4. 4. Stratification 5. Size of plots or sampling units. 6. Sample size 7. Calculation of the number of plots 8. Location of plots in the field 9. Frequency of monitoring. 10. Measurement and estimation of changes in carbon content. 11. Monitoring quantification of removals. 12. Verification of field data 13. Review of data processing 14. Recording and archiving of quality control and quality assurance data.				
Plan of action:	ROUND 1 Although the above requirements have been incorporated, they are not adequately justified and, in many cases, lack evidence to support the statements in the document.				

	<p><u>Impacto al Suelo:</u> El grado de afectación del proyecto al suelo fue bajo en términos del uso de este recurso y de la potencial alteración que podría ocurrir en él. Durante el control de malezas, la potencial alteración podría ocurrir debido a derrames derivados del uso inadecuado de productos agroquímicos, por lo tanto, para el periodo del presente informe no hubo derrames debido al uso responsable y adecuado de estos insumos. Por otra parte, los suelos no sufrieron derrames de hidrocarburos de maquinarias durante las operaciones, como así también erosiones en caminos, y en cortafuegos mediante la aplicación de medidas preventivas descritas en los procedimientos operativos.</p> <p><u>Impacto a la Flora, la Fauna y Paisaje</u> Los impactos sobre estos factores fueron de intensidad variable en el tiempo:</p> <p><u>Flora y paisaje</u> Los estratos plantados en los primeros 2 años tuvieron impacto medio, debido a la preparación de suelo y posterior plantación donde fueron realizados controles de maleza en forma dirigida o parcial, posteriores a los 2 años no se realizaron más controles de malezas que permitió apariciones de especies arbustivas propias de la zona.</p> <p><u>Fauna</u> La fauna silvestre constituye el factor de mayor movilidad ambiental y menor previsibilidad debido a sus requerimientos variables a lo largo de su ciclo vital, fases de crecimiento, dificultad de observación. Sin duda, su abundancia y biodiversidad están directamente ligadas a los espacios físicos del hábitat. La presencia del bosque implantado junto a las áreas destinadas a la conservación permitió la existencia de nuevos ecotonos en el paisaje, que posibilitó áreas de refugio y reproducción para algunas especies.</p> <p>ROUND 2 A detailed description of how all the items identified in this finding were monitored was included. This can be found in section 1.5 Summary Description of the Implementation Status of the Project of the monitoring report.</p> <p>ROUND 3 Both the Description (section 6.10 GHG Project Monitoring) and the Objective evidence (items 1 to 14) are outdated according to the new BCR_Monitoring-Report-Format V1.1 template. However, we indicate below where in the MR the response to each of the items identified is provided:</p> <ul style="list-style-type: none"> (a) Monitoring of project boundaries <input type="checkbox"/> page 118 of the RM (b) Monitoring of the implementation of project activities <input type="checkbox"/> pages 119 to 121 of the RM (c) Monitoring of quantification of emission reduction/removal quantification proyecto <input type="checkbox"/> pages 121-124 of the GM (d) Monitoring and assurance procedures calidad <input type="checkbox"/> pages 125-126 of the RM (e) Verification of field data <input type="checkbox"/> page 124 of the FR (f) Review of information processing <input type="checkbox"/> page 124 of the RM (g) Registration and filing system datos <input type="checkbox"/> page 125 of the RM <p>Finally, the image indicated in the VVB Evaluation -related to the impacts of the project- corresponds in reality to the PD, to an aspect already addressed in finding 22.</p>
VVB Evaluation:	<p>ROUND 1 Although the above requirements have been incorporated, they are not adequately justified and, in many cases, lack evidence to support the statements in the document.</p>

	<p><u>Impacto al Suelo:</u> El grado de afectación del proyecto al suelo fue bajo en términos del uso de este recurso y de la potencial alteración que podría ocurrir en él. Durante el control de malezas, la potencial alteración podría ocurrir debido a derrames derivados del uso inadecuado de productos agroquímicos, por lo tanto, para el periodo del presente informe no hubo derrames debido al uso responsable y adecuado de estos insumos. Por otra parte, los suelos no sufrieron derrames de hidrocarburos de maquinarias durante las operaciones, como así también erosiones en caminos, y en cortafuegos mediante la aplicación de medidas preventivas descritas en los procedimientos operativos.</p> <p><u>Impacto a la Flora, la Fauna y Paisaje</u> Los impactos sobre estos factores fueron de intensidad variable en el tiempo: Flora y paisaje Los estratos plantados en los primeros 2 años tuvieron impacto medio, debido a la preparación de suelo y posterior plantación donde fueron realizados controles de maleza en forma dirigida o parcial, posteriores a los 2 años no se realizaron más controles de malezas que permitió apariciones de especies arbustivas propias de la zona. Fauna La fauna silvestre constituye el factor de mayor movilidad ambiental y menor previsibilidad debido a sus requerimientos variables a lo largo de su ciclo vital, fases de crecimiento, dificultad de observación. Sin duda, su abundancia y biodiversidad están directamente ligadas a los espacios físicos del hábitat. La presencia del bosque implantado junto a las áreas destinadas a la conservación permitió la existencia de nuevos ecotonos en el paisaje, que posibilitó áreas de refugio y reproducción para algunas especies.</p> <p>RONDA 2 <i>Hallazgo satisfactoriamente resuelto, no se requieren acciones adicionales.</i></p>
Conclusion:	Close finding <input checked="" type="checkbox"/> Maintain finding <input type="checkbox"/> FAR <input type="checkbox"/>

Finding N°:	31	Finding type:	CAR	<input checked="" type="checkbox"/>	CL
Description:	The GHG project is not aligned with: - Numeral 6.10 GHG project monitoring. Methodology BCR 0001				
Objective evidence	<p>ROUND 1</p> <p>In the monitoring report it was not found how the holder gives compliance to numeral 6.10 of ISO 14064-2:2019.</p> <p>a) purpose of monitoring; b) list of parameters to be measured and monitored; c) types of data and information to be reported, including units of measurement; d) origin of the data; e) monitoring methodologies, including estimation, modeling, measurement, calculation approaches and uncertainty; frequency of monitoring, considering the needs of the intended users; monitoring roles and responsibilities, including procedures for authorizing, approving and documenting changes to the recorded data; h) controls including internal checking of data for input, transformation and output elements, and procedures for corrective actions; GHG information management systems, including the location and retention of stored data and data management including a procedure for transferring data between different forms of systems or documentation.</p> <p>In addition to the above, the following statement is not clear: "Two types of monitoring are going to be performed, an internal one that is going to be carried out every year in the month of July and another with a Validating or Verifying Body (VVB) whose monitoring period will be every 5 years." At this point it is clarified that the monitoring is NOT carried out with a VVB. It is done prior to the periodic verification performed by the VVB.</p>				
Plan of action:	All items identified in this finding were included in section 15.2.1 Data and parameters determined at registration and not monitored during the monitoring period, including default values and factors and in section Data and parameters monitored. 15.2.2				
VVB Evaluation:	The parameters were included in the MR. No additional actions are required.				
Conclusion:	Close finding <input checked="" type="checkbox"/>	Maintain finding <input type="checkbox"/>	FAR <input type="checkbox"/>		

Finding N°:	32	Finding type:	CAR	<input checked="" type="checkbox"/>	CL
Description:	Numeral 11. BCR Standar v 3.1				

Objective evidence	P. 137 Refers to ex ante estimation. In the Excel calculation table, it is not clear because it is assumed that there is no mortality of planted trees, which is neither real nor conservative. It is necessary to use real mortality percentage information obtained from plantations of the same species in the area.			
Plan of action:	A mortality rate was calculated and included. This can be found in the PD spreadsheet in the last tab called "Calculation of Mortality Rate".			
VVB Evaluation:	Finding satisfactorily resolved, no further action required.			
Conclusion:	Close finding	X	Maintain finding	FAR

Annex 3. Documentation review

Document Title / Version	Author	Organization	Document provider (if applicable)
PD MIXED PLANTING OF NATIVE AND NON-NATIVE SPECIES IN PARAGUAY-I Versión 4	Sociedad: Desarrollos Madereros SA Marca comercial: Pomera Maderas	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Monitoring Report Template MIXED PLANTING OF NATIVE AND NON-NATIVE SPECIES IN PARAGUAY-I version 1.1	Sociedad: Desarrollos Madereros SA Marca comercial: Pomera Maderas	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
EX – Ante carbon capture estimations BCR-PY-451-14-001 20240402	Sociedad: Desarrollos Madereros SA Marca comercial: Pomera Maderas	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
EX – post monitoring report BCR-PY-451-14-001 20240402	Sociedad: Desarrollos Madereros SA Marca comercial: Pomera Maderas	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura 171-25-06-96 sntitución de sociedad	Rodolfo Ricciardi Jara Notario	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura 252-03-10-96 Cosntitución de sociedad	Rodolfo Ricciardi Jara Notario	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura 23 22-04-04 Seción de coutas sociales de la firma	Rosana María Fracchia Sosa Escribana	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
Escritura 92 22-10-04 Trasformación de sociedad	Marta B. Narvaja Escribana	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura 93 22-10-04 Trasformación de sociedad	Marta B. Narvaja Escribana	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura 32 16-06-06 Escrituras	Gladys Esquivel de Cocco Escribana	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura 129 09-10-07 Escrituras	Gladys Esquivel de Cocco Escribana	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura 28 22-04-08 Trascripción del acta de asamblea extraordinaria	Gilda Krisch de Velázquez Escribana	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura 413 13-12-08 Trascripción del acta de asamblea extraordinaria	Luis Alberto Peroni Luis Enrique Peroni Silvana Peroni Notarios	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura 81 31-12-12 Trascripción del acta de asamblea extraordinaria	José Ramírez Otaño Notario	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura 77 19-05-14 Trascripción del acta de asamblea extraordinaria	José Ramírez Otaño Notario	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura 55 12-02-15 Trascripción del acta de asamblea extraordinaria	José Ramírez Otaño Notario	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
Escritura 77 Trascripción del acta de asamblea extraordinaria	José Ramírez Otaño Notario	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura 76 29-08-16 Trascripción del acta de asamblea extraordinaria	José Ramírez Otaño Notario	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
RUC – Registro Único de Contribuyentes	Subsecretaría de Estado de Tributación	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Acta de asamblea ordinaria DMSA13	DMSA	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Constancia de comunicación Asamblearia	DMSA	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Contrato de prestación de servicios	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 705	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 703	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 749	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 693	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 694	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 696	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
Orden de trabajo 697	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 695	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 700	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 701	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 702	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 722	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 681	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 679	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 1.051	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Orden de trabajo 1.052	DMSA e Innovación Agroforestal S.R.L	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Condición de dominio	DMSA e María Isabel Zarza	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura de venta y transferencia de inmueble Finca 13138	Gilda Krisch de Velázquez Escribana	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Condición de dominio	DMSA e María Isabel Zarza	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
Escritura de venta y transferencia de inmueble Finca 1338	Gilda Krisch de Velázquez Escribana	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Condición de dominio	DMSA e María Isabel Zarza	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura de venta y transferencia de inmueble Finca 13864	Gilda Krisch de Velázquez Escribana	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Condición de dominio	DMSA e María Isabel Zarza	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura de venta y transferencia de inmueble Fincas 749, 9355, 1951, 1950, 2723, 29703, 29704 y 29702	Gilda Krisch de Velázquez Escribana	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Condición de dominio	DMSA e María Isabel Zarza	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura de venta y transferencia de inmueble matrícula K13/3624	Gilda Krisch de Velázquez Escribana	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Condición de dominio	DMSA e María Isabel Zarza	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Escritura de venta y transferencia de inmueble Finca 35	Gilda Krisch de Velázquez Escribana	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Condición de dominio	DMSA e María Isabel Zarza	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Contrato pastoreo	DMSA y la empresa Astería Intil S.A.	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
Contrato pastoreo	DMSA y Héctor Peralta Vidal .	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Contrato pastoreo	DMSA y Porfirio Ramón.	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Guías ganaderas certificado de venta de ganado para sacrificio	Servicio Nacional de Calidad y Salud Animal	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Facturas- Inversiones en RSE, camino y protección contra incendios	Facturas DMSA y proveedores/ Contratistas	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Plan de protección contra incendios Versión 5	DMSA-POMERA	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Procedimiento Operativo 05- DMSA Control de Hormigas cortadoras Versión 6	Ingenieros: P. Leguizamón y D. Acosta	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Programa de manejo de agroquímicos responsable Versión 8	DMSA-POMERA	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Acuerdo mercantil sin representación de créditos de carbono	Cambium Earth S.L y Desarrollos Madereros S.A	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Capacitación personal de la plantación del 2018 al 2022	Desarrollos Madereros S.A	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Procedimiento operativo PO-07	Desarrollos Madereros S.A	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
DMSA Plantación. Versión 7.			
Procedimiento operativo PO-08 DMSA Poda del primer al séptimo nivel. Versión 10	Desarrollos Madereros S.A	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Informe análisis de agua 25/08/2023	Desarrollos Madereros S.A	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Informe análisis de suelos 12/08/2023	Desarrollos Madereros S.A	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Plan de gestión ambiental presentado ante La Secretaría de ambiente 26 de diciembre de 2014	Desarrollos Madereros S.A	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Plan de gestión ambiental presentado ante La Secretaría de ambiente 27 de julio de 2015	Desarrollos Madereros S.A	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
AUDITORIA AMBIENTAL CUMPLIMIENTO DEL PLAN DE GESTION AMBIENTAL, año 2022	AUDITOR: ING. CHRISTIAN SCHREIBER	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Resultados Presentación Pública Proyecto Carbono DMSA	Desarrollos Madereros S.A	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Presentación Pública Proyecto Carbono DMSA	Desarrollos Madereros S.A	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA

Document Title / Version	Author	Organization	Document provider (if applicable)
Lotes Tapyta-Hernandarias.kml	Desarrollos Madereros S.A	Sociedad: Desarrollos Madereros SA	Sociedad: Desarrollos Madereros SA
Resolución SNC 200 Por la cual se establecen Reglas Técnicas para la incorporación gráfica y registro de planos de ubicación georreferenciada de títulos de propiedad. 31 de agosto de 2020	Ministerio de Hacienda – Sección Nacional de Catastro	Ministerio de Hacienda del Paraguay	Ministerio de Hacienda del Paraguay
Estrategia nacional de bosques para el crecimiento sostenible (ENBCS)	Ministerio de Ambiente y Desarrollo Sostenible del Paraguay, agosto de 2018.	Ministerio de Ambiente y Desarrollo Sostenible del Paraguay	Ministerio de Ambiente y Desarrollo Sostenible del Paraguay
Estrategia Nacional de Cambio Climático. Asunción Paraguay 2015	Secretaría del Ambiente Oficina Nacional de Cambio Climático, 2015	Secretaría del Ambiente Oficina Nacional de Cambio Climático	Secretaría del Ambiente Oficina Nacional de Cambio Climático
Segundo Nivel de Referencia de las Emisiones Forestales (NREF) por Deforestación en la República del Paraguay – período 2012 - 2019, para pago por resultados de REDD+ bajo la CMNUCC.	Ministerio del Ambiente y Desarrollo Sostenible (MADES) Secretaría del Ambiente Oficina Nacional de Cambio Climático	Secretaría del Ambiente Oficina Nacional de Cambio Climático	Secretaría del Ambiente Oficina Nacional de Cambio Climático
Guía para elaborar Planes de Adaptación ante el	Ministerio del Ambiente y Desarrollo	Ministerio del Ambiente y Desarrollo	Ministerio del Ambiente y Desarrollo

Document Title / Version	Author	Organization	Document provider (if applicable)
Cambio Climático para Gobiernos Locales, septiembre de 2018	Sostenible (MADES)	Sostenible (MADES)	Sostenible (MADES)
Propuesta: plan nacional de cambio climático de la República del Paraguay	Ministerio del Ambiente y Desarrollo Sostenible (MADES)	Ministerio del Ambiente y Desarrollo Sostenible (MADES)	Ministerio del Ambiente y Desarrollo Sostenible (MADES)
PARAGUAY POLÍTICA NACIONAL DE CAMBIO CLIMÁTICO	Ministerio del Ambiente y Desarrollo Sostenible (MADES)	Ministerio del Ambiente y Desarrollo Sostenible (MADES)	Ministerio del Ambiente y Desarrollo Sostenible (MADES)
<i>Directrices del IPCC 2003, 2006, 2019 para los inventarios nacionales de gases de efecto invernadero. Volumen 4. Agricultura, silvicultura y otros usos de la tierra.</i>	IPCC	IPCC	IPCC
<i>Ministerio de Agricultura y Ganadería. (2020). Situación del sector forestal en Paraguay. Asunción, Paraguay: MAG.</i>	Ministerio de Agricultura y Ganadería.	Ministerio de Agricultura y Ganadería.	Ministerio de Agricultura y Ganadería.
<i>Financiación y sostenibilidad en la agricultura y la silvicultura en Paraguay. (2021)</i>	<i>Pérez, J. A., & Gómez, M.</i>	<i>Revista de Desarrollo Agrícola</i>	<i>Revista de Desarrollo Agrícola</i>

Document Title / Version	Author	Organization	Document provider (if applicable)
<i>Políticas públicas para la conservación de bosques en Paraguay.</i>	<i>Fernández, L. (2019).</i>	<i>Asunción: Centro de Estudios Ambientales.</i>	<i>Asunción: Centro de Estudios Ambientales.</i>
<i>Innovaciones tecnológicas en la agricultura paraguaya.</i>	<i>López, R. (2022).</i>	<i>Journal of Agricultural Technology</i>	<i>Journal of Agricultural Technology</i>
<i>Tenencia de la tierra en Paraguay.</i>	<i>González, T. (2021).</i>	<i>REVISTA Derecho Agrario</i>	<i>REVISTA Derecho Agrario</i>

Annex 4. Abbreviations

Use the table to list all the abbreviations used in this report.

Abbreviations	Full texts
AFOLU	Agricultura, forestal u otro uso del suelo
C	Carbono
DMSA	Desarrollos Madereros S.A.
FSR	Fuentes, sumideros y depósitos
GEI	Gases de Efecto Invernadero
NDC	Contribuciones Determinadas a Nivel Nacional
NREF	Nivel de Referencia de Emisiones Forestales
ODS	Objetivos de Desarrollo Sostenible
RM	Reporte de Monitoreo
t	Tonelada
t/ha	Toneladas por hectárea
tCO ₂ e	Toneladas de dióxido de carbono equivalente
UNFCCC	Convención Marco de las Naciones Unidas sobre el Cambio Climático
V/V	Validación y Verificación

Annex 5. AUDIT PLAN

VERSA EXPERTOS EN CERTIFICACIÓN S.A.S Plan auditoria validación y verificación GEI

Programa GEI y/o metodología	ColCX		Cercarbono		Biocarbon Registry	X
	ISO 14064-1:2018		GHG Protocol		<<Otro>>	

Proyecto/Inventario	Plantación mixta de especies nativas y foráneas en Paraguay-I					
Ubicación	Tapyta, Paraguay: (26°12'34"S, 55°45'57"W) Hernadarias, Paraguay (25°21'4"S, 54°46'6"W)					
Alcance sectorial	Agricultura, Silvicultura y Otros Usos del Suelo (AFOLU)					
Tipo servicio	Validación		Verificación		Validación + Verificación Retroactiva	X Verificación post registro
Persona contacto	Pablo Aquino					
Email	paquino@pomeramaderas.com					

Equipo auditor	Auditor Líder	Diana Rauchwerger				
	Auditor acompañante	Cesar Marín				

Metodología GEI utilizada para proyecto <<borrar si no aplica>>	Nombre	BioCarbon Standard				
	Versión	Más reciente	Sector y Área Técnica		AFOLU	
	Nombre	BCR0001 "Cuantificación de la Reducción de Emisiones de GEI"				
	Versión	3.0	Sector y Área Técnica		AFOLU	
	Nombre	BCR Tool "Monitoring reporting and Verification"				
	Versión	1.0	Sector y Área Técnica		AFOLU	

Criterios de auditoría	 ISO 14064-2:2019
	 ISO 14064-3:2019
	 BCR0001 "Quantification of GHG Emission Reductions" version 3.0
	 BioCarbon Registry Standard Version 2.1
	 BCR Tool "Monitoring reporting and Verification" "Version 1.0
	 Política Nacional de Cambio Climático Paraguay

Inventario Corporativo GEI			Versión	<<>>	Fecha	DD/MM/AAAA
Documento diseño de proyecto (PDD)			Versión	1.0	Fecha	18/06/2023
Reporte de monitoreo	Nº	1.0	Del	1/12/2018	Al	01/06/2023

Nivel de aseguramiento	Importancia relativa	Acuerdo previo
Razonable	0.5 % del total tCO ₂ e	<input type="checkbox"/>
	1% del total tCO ₂ e	<input type="checkbox"/>
	2% del total tCO ₂ e	<input type="checkbox"/>
	5% del total tCO ₂ e	<input checked="" type="checkbox"/>
Limitado	5% - 10% total tCO ₂ e	<input type="checkbox"/>

Evaluación de riesgo

Riesgo de control identificado		
Alto	Es probable que el sistema de control no prevenga, detecte o corrija el error material y que este riesgo tenga una alta probabilidad de materializarse durante la validación y/o la verificación.	<input checked="" type="checkbox"/>
Medio	El equipo auditor no tiene suficiente confianza en que el sistema de control interno del proyecto prevenga, detecte o corrija un error material con alguna probabilidad de materialización durante la auditoría.	<input type="checkbox"/>
Bajo	El sistema de control está bien estructurado, documentado, implementado y mantenido, generando suficiente confianza sobre su capacidad de prevenir, evitar o corregir posibles errores materiales.	<input type="checkbox"/>

Riesgo de detección establecido para el proyecto		Evaluación riesgo control					
		Bajo		Medio		Alto	
Evaluación	Bajo	Muy bajo	<input type="checkbox"/>	Bajo	<input type="checkbox"/>	Medio	<input type="checkbox"/>

riesgo inherente	Medio	Bajo	<input type="checkbox"/>	Medio	<input type="checkbox"/>	Alto	<input checked="" type="checkbox"/>
	Alto	Medio	<input type="checkbox"/>	Alto	<input type="checkbox"/>	Muy alto	<input type="checkbox"/>

Plan de Muestreo ⁴				
Parámetros	Enfoque Muestreo ⁵	Tipo Muestreo ⁶	Población ⁷	Tamaño muestra ⁸
Observación	No estadístico	6 estratos	La plantación está dividida en 6 estratos	Parcelas temporales en total 17, divididas en 6 estratos.
Indagación	No estadístico	Entrevistas	Personal relacionado con el proyecto: trabajadores encargados de la plantación y entidades ambientales relacionadas con el proyecto.	Entrevista con el 100% del personal responsable del manejo de plantación y con algunos operarios.

⁴ Referirse al PRO-108 Validación y Verificación apartado "Muestreo".

⁵ Enfoque de Muestreo: Estadístico (E) o No Estadístico (NE)

⁶ **Aleatorio (A):** Selección aleatoria de muestras requiere de una herramienta que asegure una selección verdaderamente aleatoria, independiente del juicio o preferencias del muestreador. Esto es importante para asegurar que todos los elementos en la población tengan una oportunidad igual de ser muestreados.

Sistemático (S): Toma de muestras de manera aleatoria, a partir de un punto y después aplicando una regla sistemática para la selección de las siguientes muestras (cada 10, después del primero, etc.)

Basado en Riesgo (BR): Muestreo aleatorio basado en una selección no-estadística de elementos (azar).

⁷ Número total de individuos existentes para el parámetro

⁸ Número de individuos (del total) a ser revisados para el parámetro. Deberá ser igual o mayor que la raíz cuadrada del total del número de individuos.

Confirmación	No estadístico	Revisión documental	Confirmación del cumplimiento de los criterios de validación mediante la revisión del 100% de los registros y de la evidencia aportada por el responsable del proyecto.	100% de la documentación entregada por el responsable del proyecto
Recálculo	Estadístico	Revisión de procedimientos y recalcu.	Revisión del 100% de las fórmulas para la estimación de los FSR por gas y recalcu para confirmar que las estimaciones son correctas.	100% de las hojas de cálculo y de los índices y/o numerales del PDD y RM.
Corroboración	No estadístico	Revisión documental	Confirmación del cumplimiento de los criterios de validación mediante la revisión del 100% de los registros y de la evidencia aportada por el	100% de la documentación entregada por el responsable del proyecto

			responsable del proyecto	
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Fechas auditoría	17/07/2023 - DD/MM/YYYY
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Día	Hora	Auditor	Actividad ⁹
07/07/2023		Diana Rauchwerger Cesar Marín	Análisis de riesgo y plan de evidencia
10/07/2023		Diana Rauchwerger Cesar Marín	Plan de auditoría
11/07/2023		Diana Rauchwerger Cesar Marín	Socialización con el cliente del plan de auditoría.
17/07/2023	7:00-7:30	Diana Rauchwerger	Reunión de apertura y presentación del equipo auditor.
17/07/2023	7:30-12:30	Desarrollos Madereros S.A.	Presentación del proyecto Plantación mixta de especies nativas y foráneas en Paraguay-I descripción del proyecto: manejo de la plantación, áreas elegibles del proyecto, línea Base y adicionalidad, estratificación, manejo de la incertidumbre remoción por sumideros, fugas, plan de monitoreo y procedimientos de control de la calidad y aseguramiento de la calidad.
17/07/2023	12:30-4:00	Desarrollos Madereros S.A.	Entrevistas: 1. 100% del personal responsable del manejo de la plantación, por ejemplo: ing. agrónomo y/o forestal, técnicos de campo y operarios. 2. Otros interesados: entidades nacionales y/o regionales ambientales presentes en el área de estudio.

⁹ Considerar actividades propuestas en el procedimiento de evaluación del riesgo

			3. Propietarios y socios de la plantación.
18/07/2023	7:00AM-4:00PM	Diana Rauchwerger Cesar Marín	Visita a campo a los 3 estratos ubicados en el área de Tapytá. "Levantamiento de parcelas temporales" y visita a las parcelas fijas.
19/07/2023	7:00AM-4:00PM	Diana Rauchwerger Cesar Marín	Visita a campo a los 4 estratos ubicados en el área de Hernandarias. "Levantamiento de parcelas temporales" y visita a las parcelas fijas.
20/07/2023	7:00AM-4:00PM	Diana Rauchwerger Cesar Marín	Visita a campo a los 4 estratos ubicados en el área de Hernandarias. "Levantamiento de parcelas temporales" y visita a las parcelas fijas.
20/07/2023	6:00AM-8:00PM	Diana Rauchwerger Cesar Marín	Reunión de cierre de la visita a campo.
24/07/2023	5:00AM-6:00PM	Diana Rauchwerger Cesar Marín	Entrega y socialización de hallazgos ronda 1.
14/08/2023		Desarrollos Madereros S.A.	Entrega de la respuesta a los hallazgos de la ronda 1 al equipo auditor.
Por definir		Diana Rauchwerger Cesar Marín	Entrega y socialización de hallazgos ronda 2.
Por definir		Desarrollos Madereros S.A.	Entrega de la respuesta a los hallazgos de la ronda 2 al equipo auditor.
Por definir		Diana Rauchwerger Cesar Marín	Entrega y socialización de hallazgos ronda 3.
Por definir		Desarrollos Madereros S.A.	Entrega de la respuesta a los hallazgos de la ronda 3 al equipo auditor.
Por definir		Diana Rauchwerger Cesar Marín	Entrega y socialización de hallazgos ronda 4.

Por definir		Desarrollos Madereros S.A.	Entrega de la respuesta a los hallazgos de la ronda 4 al equipo auditor.
Por definir		Lucas Rivera	Revisión Técnica
Por definir		Diana Rauchwerger Cesar Marín	Resolución de hallazgos de la revisión técnica
Por definir		Equipo VERSA	Entrega de la opinión del proceso de validación y verificación conjunta.

Anexo 1: documentos requeridos para validación (disponibles durante auditoría)

Nº	Consideración temprana y aprobaciones	
1	Aprobaciones para la operación	X
2	Notificación al programa de GEI y/o RENARE	
3	Acuerdo de compra de reducción de emisiones	X
4	Calendario de implementación del proyecto	X
5	Licencias y permisos	X

Nº	Diseño técnico y tecnología	
1	Diseño del borrador de proyecto	X
2	Listado de los equipos usados en las actividades del proyecto	X
3	Especificación de los equipos principales	X
4	Documento que justifique la vida útil operacional del proyecto	X
5	Cronograma del proyecto	X

Nº	Análisis financiero / Barreras de inversión	
1	Contrato de compra de energía	
2	Desglose del costo de los equipos	x
3	Desglose de la inversión total y % capital/deuda	X
4	Contratos de préstamos bancarios	
5	Tasa de depreciación permitida por el gobierno en el país anfitrión	
6	Evidencia de tasas aplicadas de impuestos	
7	Cotización del proveedor de los equipos por operación y mantenimiento	
8	Fuente de gobierno usada en las tasas de cambio para dólares y euros,	
9	Promedio histórico de las tarifas para plantas eléctricas en el país anfitrión	

Nº	Operación del proyecto	
1	Organigrama de las actividades del proyecto	X
2	Diagrama de conexión a la red con ubicación de los puntos de medición	

3	Procedimientos de aseguramiento y control de calidad	X
4	Manual de operación y bitácoras	X
5	Procedimientos de operación y mantenimiento	X
6	Procedimientos de calibración	X

Nº	Reducción de emisiones	
1	Hoja de cálculo de reducción de emisiones	X
2	Documentos soporte de los cálculos presentados	X

Nº	Consulta partes interesadas	
1	Invitación a las partes interesadas	X
2	Presentación de la reunión a los interesados	X
3	Acta de reunión de las partes interesadas, lista de preguntas, fotos	X
4	Lista de asistencia.	X
5	Respuesta a los comentarios alzados	X

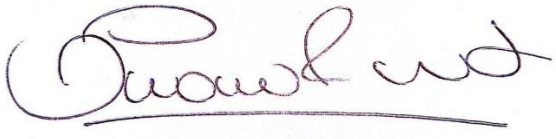
Anexo 2: documentos requeridos para verificación (disponibles durante auditoría)

Nº	Parámetros a monitorear	
1	Bitácoras de operación y mantenimiento	X
2	Lecturas de generación y consumo de energía (Datos Primarios)	
3	Certificados de calibración	X
4	Procedimientos de calibración, operación y mantenimiento	X

Nº	Reducción de emisiones /Cálculo Emisiones GEI	
1	Hoja de calculo	X
2	Documentos soporte de los cálculos presentados	X

Notas adicionales

- Durante la validación y verificación, son posibles desviaciones al plan original. Favor notificar cuando considere necesario extender el tiempo del servicio.
- Las hojas de vida de los miembros del equipo de validación y verificación están disponibles a solicitud del cliente. En caso de objeciones sobre el equipo, notificar a **Versa Expertos en Certificación S.A.S.** antes de la visita en sitio.
- Si se requiere equipo de protección personal o de personal especializado en alguna de las áreas que serán visitadas, agradeceremos nos sea informado antes de la visita en sitio.
- Para la presentación del plan de validación y verificación, revisión documental y entrevistas, el cliente deberá proporcionar el espacio y un entorno adecuado para tal fin.
- Los objetivos y el alcance del servicio de validación y verificación están descritos en la propuesta de validación y verificación emitida para el proyecto y/o inventario de GEI.


Bogotá, 10/07/2023
Diana Rauchwerger Londoño