



THE ARR HORIZONTE CARBON PROJECT VERIFICATION REPORT



Document Prepared by EPIC Sustainability Services Private Limited

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Summary:

EPIC Sustainability Services Private Limited, (hereinafter identified as EPIC) was contracted by Suzano S.A (hereinafter referred to as Project Proponent) to perform the second verification of achieved carbon emission removals for the project registered under Verified Carbon Standard (VCS) program titled “The ARR Horizonte Carbon Project” (VCS ID: 3350) against the relevant requirements of VCS standard v4.7.

The ARR Horizonte Carbon Project is developed as a carbon offset project by Suzano S.A. located in the Cerrado Biome, in the state of Mato Grosso do Sul, Brazil. It is a grouped project with 27 PAIs added in the second instance in the locations of Três Lagoas, Brasilândia, Santa Rita do Pardo, Selviria, Bataguassu, Água Clara and Aparecida do Taboado. The project primarily increases forest cover through restoration of degraded pasture lands by using eucalyptus species. The project was started on 02-November 2017 with planting conducted in 40 Project Activity Instances (PAIs) with a project area of 14,427.66 ha. During the second monitoring period (22 February 2022 to 03 April 2023), 27 new PAIs were included, covering an area of 14,315.54 hectares. This increased the total eucalyptus reforestation area to 28,665.25 hectares, achieved through the recovery of pasturelands and degraded areas.

The inventoried area considered for the ER calculations in the project is 13,193.24 ha based on the forest inventory eligibility criteria fulfilment for the PAIs. The newly added PAIs in the second monitoring period is excluded from ER calculations and Verified Carbon Unit (VCU) generation as the planting of these areas occurred between 2022 and 2023, and the PAIs have not yet reached the two-year maturity requirement for the current monitoring period.

The purpose of this verification is to conduct an independent evaluation and objective review of the monitored GHG emission removals applicable for the second monitoring period from 22 February 2022 to 03 April 2023. Further, to assess the project’s compliance with the requirements of VCS Standard v4.7 and the applied methodology AR-ACM0003 version 2.0, “Afforestation and Reforestation of Lands Except Wetlands” for the newly added PAIs. The verification assessment and its verification opinion are based on information and data reported in the latest version of the VCS Monitoring Report along with the registered VCS PD&MR v6 (dated 09/02/2023) and other supporting documents made available to the project team.

The verification activity performed includes confirming the GHG statement claimed by the PP for the current monitoring period and the implementation of monitoring plan as provided in the registered PD&MR v6, which is in accordance with 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 verification process was conducted through a combination of a desk review of the latest version of the VCS MR, the registered PD&MR v6, the Joint Validation and Verification Report v2.4 of the first monitoring period, and other supporting evidence documents. Additionally, an on-site visit to the project area was carried out and interviews were conducted with the project proponent and local stakeholders involved in the project activities. The proposed VCS project activity has adhered to the baseline and monitoring methodologies as per relevant requirements of VCS Standard v4.7.

The audit team has adopted a risk-based approach to perform the verification assessment and in its due course has raised 03 Clarification requests (CLs), 11 Corrective Action requests (CARs), and 01 Forward Action requests (FARs) for the second monitoring period. The findings details are documented in Appendix III of this report. All such findings raised were confirmed as being sufficiently addressed by the PP through the completion of a revised version of the VCS Monitoring Report.

As per the observation by the audit team, there are no uncertainties associated with the project implementation. The uncertainties associated with the carbon stocks estimates are assessed as per the equation 15 of the AR-TOOL14 - Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities, Version 4.2 in the project.

Based on verified information, the audit team confirms that all newly added PAIs during the second monitoring period meet the eligibility criteria of grouped projects specified in the VCS Standard v4.7 and registered PD&MR v6. The audit team reviewed the ER calculations and confirmed that the project's implementation and operations resulted in achieved GHG emission removals of 640,503.00 tCO₂e for the second monitoring period (22 February 2022 to 03 April 2023, inclusive of both days). Of this total, 271,803.00 tCO₂e VCUs are eligible for issuance in the project after a buffer credits deduction of 166,531.00 tCO₂e from the net GHG emission removals accounting for 26% non-permanence risk estimated in the project using NPRT v4.2. The audit team confirmed with reasonable level of assurance that the project complies with all the verification criteria specified in VCS Standard v4.7.

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1 INTRODUCTION

1.1 Objective

EPIC Sustainability Services Pvt Ltd, hereinafter identified as EPIC, was contracted by Suzano S.A to perform second verification assessment of the registered VCS project titled “The ARR Horizonte Carbon Project” for the monitoring period from 22 February 2022 to 03 April 2023 (herein referred to as current monitoring period) against the relevant requirements of VCS standard v4.7.

The verification objective entails an impartial evaluation by a third party to assess implemented project activities against defined criteria in the guidance document stated in section 1.2 of this report.

The purpose of the verification is to ensure that the project activity aligns with the qualification criteria outlined in the VCS Standard v4.7. This process evaluates whether the project achieves real, measurable, additional, and permanent removals in GHG emissions. The verification statement serves as a formal assurance that the project fully complies with all relevant VCS requirements and can deliver the specified emission removals throughout the project’s crediting period.

To verify that the current monitoring system and procedures fully comply with those described in the registered PD&MR v6, as well as with the applicable methodology AR-ACM0003 A/R Large-Scale Consolidated Methodology, “Afforestation and Reforestation of Lands Except Wetlands,” version 2.0.

To verify the reported data is accurate, complete, consistent, transparent and free of material error or omission by checking monitoring records and the ex-post emission removals calculation.

To verify and certify the reported GHG emission removals achieved by the project for the current monitoring period from 22 February 2022 to 03 April 2023.

1.2 Scope and Criteria

The verification scope is defined as an independent and objective review of the latest version of Monitoring Report against VCS Standard requirements, applied methodology, and information in registered VCS PD&MR v6.

The scope was defined as follows for the PAIs included in the current monitoring period:

- Assessment of project’s baseline scenario and implementation technologies
- To verify the GHG sources, sinks and/or reservoirs those are applicable to the project.
- The types of GHGs that are applicable to the project.
- Project start date and the project crediting period.

Criteria for the verification of proposed VCS project activity is defined in addition to the requirements of ISO 14064-3:2019 (E) guide. The verification criteria encompass the following documents:

- VCS Standard, v4.7, dated 16th April 2024/^{1/}
- VCS Program definitions, v4.5, dated 16th April 2024/^{2/}
- VCS Program Guide, v4.4, dated 29th August 2023/^{3/}
- VCS Registration and Issuance Process, v4.5, dated 16th April 2024/^{4/}
- VCS_Validation_Verification_Manual_v3.2, dated 19th October 2016/^{5/}
- AR-ACM0003: Afforestation and Reforestation of Lands Except Wetlands, version 2 – A/R Largescale Consolidated Methodology/^{6/}
- PD+MR_ARR Horizonte Carbon Project v6 - Clean version, dated 09 February 2023/^{7/}
- Clean_VCS-Joint-Validation Verification Horizonte, dated 23 February 2023/^{8/}
- VCS MR Project ID 3350 22022022-03042023/^{144/}
- AFOLU Non-Permanence Risk Tool, v4.2, dated 3rd May 2024/^{122/}
- AR-TOOL02: “Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities” v1.0/^{125/}
- AR-TOOL08: “Estimation of non-CO2 greenhouse gas (GHG) emissions resulting from burning of biomass attributable to an A/R CDM project activity” v4.0/^{126/}
- AR-TOOL12: “Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities” v3.1./^{127/}
- AR-TOOL14: “Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities” v4.2./^{128/}
- AR-TOOL15: “Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity” v2.0./^{129/}
- AR-TOOL16: “Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities” v1.1./^{130/}
- VT0001 Tool for the Demonstration and Assessment of Additionality in VCS AFOLU Project Activities, v3.0, dated 1st February 2012/^{9/}

The verification is based on the information made available to EPIC audit team by PP and also independent assessment of the information available in public. The verification assessment is not meant to provide any consultancy to the project proponent (hereinafter referred as PP). However, stated requests for clarifications and/or corrective actions may eventually provide input(s) for improvement of the monitoring report.

1.3 Level of Assurance

The verification aimed to assess the credibility of assumptions, limitations and methods supporting the Project Proponent's statement regarding the project outcomes. Verification intends to provide a reasonable level of assurance regarding compliance with defined audit criteria and materiality thresholds within the audit scope. Based on the audit findings, a satisfactory conclusion assures that the project's GHG assertions are materially accurate and provide fair representation of GHG data and information.

In line with VCS requirements and as per ISO 14064-3:2019, Para 5.1.3, a reasonable level of assurance has been applied for the verification of the project. Based on the desired level of accuracy, EPIC has established an internal quality control process and assures that the information provided in the MR is materially correct, represents the actual project details fairly, and is prepared in accordance with the VCS requirements and the applied CDM methodology for GHG quantification, monitoring, and reporting. The validation process for newly added PAIs and the verification process have been carried out as per the VCS requirements, with details presented under 'Validation Findings' and 'Verification Findings' in Sections 3 and 4 of this report.

The Verification report underwent an independent internal technical review and quality check before submission to the client. This review ensured that all verification activities were carried out in accordance with EPIC instructions. The technical review was conducted by the qualified technical reviewer following EPIC's qualification scheme for VCS validation and verification. Altogether, the assumptions, limitations, and methods for quantification of GHG's emission removals are reasonable. There was acceptable level of assurance for verifications, with respect to material errors, omissions, and misrepresentations.

1.4 Summary Description of the Project

The ARR Horizonte Carbon Project is an afforestation, reforestation, and revegetation (ARR) initiative led by Suzano S.A. in Mato Grosso do Sul State, Brazil. It falls under sectoral scope 14, which covers afforestation, forestation, and other land use activities. The project follows the AR-ACM0003 methodology – "Afforestation and Reforestation of Lands Except Wetlands" (Version 2.0) for baseline and monitoring activities. This is a grouped project with 27 new PAIs added in the second instance, located in Três Lagoas, Brasilândia, Santa Rita do Pardo, Selviria, Bataguassu, Água Clara, and Aparecida do Taboado. The project's crediting period is 35 years, from 02 November 2017 to 01 November 2052. The project primarily increases forest cover by restoring degraded pasturelands using eucalyptus species. The project was started on 2 November 2017 and planting was conducted in 40 Project Activity Instances (PAIs) with a project area of 14,427.66 ha. During the second monitoring period (22 February 2022 to 03 April 2023), 27 new PAIs are established, covering an area of 14,315.54 hectares. This increased the total eucalyptus reforestation area to 28,665.25 hectares, achieved through the recovery of pasturelands and degraded areas.

During the first verification, the forest inventory was conducted for an area of 12,121.87 hectares, focusing solely on eligible plots that had met the two-year maturity requirement for conducting the inventory. The data from these plots were considered in the calculations for Emission Reductions (ER) in the project. For the second verification, the inventoried area increased to 13,193.24 hectares with the inclusion of Stratum 7 farmlands, which had become eligible for inventory. The newly added 27 PAIs plots are excluded from ER calculations and Verified Carbon Unit (VCU) generation because planting in these areas occurred between 2022 and 2023 and had not fulfilled the two-year maturity requirement for the current monitoring period.

The project is implemented on farmlands owned or leased by Suzano S.A. and its controlled companies. In the project, other entities such as WayCarbon Soluções Ambientais e Projetos de Carbono LTDA, 2Tree Consultoria e Meio Ambiente LTDA, and Agroicone are responsible for providing technical assistance. Suzano S.A. has established its own protocols and procedures for identification and management of risks in the project activities. Fire monitoring towers are set up as part of technological measures to manage fire events in the project area. As part of its ecological restoration efforts, Suzano S.A. aims to plant native species inside the APPs (Permanent Preservation Areas) and RLs (Legal Reserves) without claiming the carbon credits for the planting activity. In addition, the native species planting will be carried out on identified farms comprising of 999.10 ha outside the APPs and RLs, during the next monitoring period is considered for claiming carbon credits in the project.

The eucalyptus plantations are harvested once every 7 years. Biodiversity monitoring activities are carried out in 5 HCVs (High Conservation Value) areas at determined periodic intervals. As a social contribution, the Inclusive Recycling Project is carried out by Suzano S.A. and Arara Azul – Corpazul. A Conscious Wall was inaugurated, which serves as a volunteer waste drop-off point, reducing improper waste disposal. The project, through eucalyptus restoration, has generated GHG emission removals of 640,503.00 tCO₂e during the second monitoring period (22 February 2022 to 03 April 2023, inclusive). Of this total, 271,803.00 tCO₂e VCUs are eligible for issuance.

With a reasonable level of assurance, the project complies with all the verification criteria specified in VCS Standard v4.7 and the applied AR-ACM0003 methodology – “Afforestation and Reforestation of Lands Except Wetlands” v2.0.

2 VERIFICATION PROCESS

2.1 Method and Criteria

The verification of the project was conducted through a combination of documents review, on-site inspections, and interviews with the project proponent and local stakeholders, as detailed in Sections 2.2, 2.3, and 2.4 of this report.

The verification process included a review of the registered PD&MR v6, the Joint Validation and Verification Report v2.4, ER calculation spreadsheets, and other supporting documents submitted by the project proponent. This was followed by an on-site visit, field assessments,

interviews with the project proponent and relevant stakeholders, resolution of findings, and the preparation of the VCS Verification Report. Throughout the verification process, the project was assessed for conformance to the criteria described in Section 1.2: Scope and Criteria of this report.

The evidence-gathering activities were conducted from 10 June to 15 July 2024, during which the audit team carried out a detailed review of key documents. These included the registered VCS PD&MR v6, the Joint Validation and Verification Report v2.4, financial analysis, non-permanence risk report, GHG quantification ER workbooks, ownership documents, and other relevant documents listed in Appendix II of this report.

The audit visit, scheduled from 23 September to 27 September 2024, involved a comprehensive assessment of evidence documents and interviews with the project proponent and project management team regarding the project start date, project activity implementation, FSC certification, employment provision, financial investments, worker training records, QA/QC procedures of inventory data and other supporting documentation. Additionally, interviews were conducted with stakeholders and community members to gather information on the stakeholder consultation process, the FPIC (Free, Prior, and Informed Consent) process, and the project's impact on the communities.

The audit team developed an audit plan for the project based on EPIC's procedures for verifying project activities. This plan outlined the risks of material errors, as well as the types of data and information to be assessed. To identify these risks, the audit team employed risk-based sampling to detect any non-conformities or potential material discrepancies.

The verification process followed the outlined approach:

- A desk review of registered VCS PD&MR v6, Joint Validation and Verification Report v2.4, GHG emission reduction spreadsheets, financial analysis documents, and supporting evidence to ensure the project's conformance with VCS Standard v4.7 and applied methodology AR-ACM0003 v2.0.
- Preparation of the audit plan.
- On-site visit and assessment by the audit team (interviews with the project proponent and local stakeholders). Verification of compliance of the newly added PAIs with the eligibility criteria specified in registered VCS PD&MR v6 and VCS Standard v4.7. Verification of loss events in the project for the instances planted during the 1st monitoring period.
- Issue of findings (CARs/CLs/FARs).
- Preparation of the draft verification report.
- Resolution of findings (CARs/CLs/FARs).
- Preparation of the final verification report.

- Independent technical review of the report.
- Quality check of the report.
- Final approval of the verification report.

Evidence gathering plan included assessment of documents submitted to VVB, field sampling and techniques, interviews with stakeholders and background check based on the project parameters, scope and professional judgement of the audit team to meet a reasonable level of assurance.

Table 01: Timeline of Key Verification Events are as follows:

Sl. no	Project Events	Date (or period) of the event
1	Kick-off meeting	07 June 2024
2	Receipt of Project documents for review	07 June 2024
3	Document Review	10 June 2024 to 15 July 2024
4	Submission of NOVS form	02 September 2024
5	Onsite audit- Opening meeting	23 September 2024
6	Onsite audit inspection	23 September 2024 to 27 September 2024
7	Issuance of findings	15 October 2024

Table 02: Audit team composition for the ARR Horizonte Carbon Project

Name	Role	Responsibility
Mr. A Prabu Das	Lead Auditor	Documentation review, Background investigation, Preparation of questionnaire for interviews, Onsite audit, Issuance and closure of audit findings, Preparation of draft and final verification report.
Ms. Swetha S	Auditor	Documentation review, Background investigation, Preparation of questionnaire for interviews, Onsite audit, Issuance and closure of audit findings, Preparation of draft and final verification report.

Mrs. Sheela H K	Auditor	Documentation review, Background investigation, Issuance and closure of audit findings.
Mr. Ewerton Alves Nazareno	Technical Expert	On-site audit visit, Interviews with community and local stakeholders, Review of project compliance with host country laws and regulations.
Mr. Vijayaraghavan R	Technical Reviewer (TR)	Technical Review
Mr. Santhosh D T	Technical Expert Assisting Technical Reviewer	Technical Review

Mr. A Prabu Das holds a Master's degree in science. He has 14 years of VVB experience. He has participated in the validation/verification of various CDM/VCS/GS/GCC other GHG and VCS Validation Report Template, v4.4 11 sustainability projects globally. He is qualified as a lead auditor for various AFOLU GHG / Energy reduction projects audits in various countries under various standards and protocols.

Ms. Swetha S holds a Master's degree in Forestry and Environmental Science and Bachelor's degree in Forestry (Hons). She has two years extensive research experience in the field of Biodiversity and Conservation. She is qualified as an auditor for various AFOLU GHG reduction projects audits in various countries under various standards and protocols

Mrs. Sheela H K holds a Master's degree in Agriculture. She has four years' experience in agriculture and forestry field. She has worked as a research fellow & assistant professor in various forestry research institutes. She has hands on experience in data analysis during her academics. She is qualified as an auditor for various AFOLU GHG reduction projects audits in various countries under various standards and protocols.

Mr. Ewerton Alves Nazareno holds a bachelor's degree in forestry engineering and environmental Management Course. He also done Forest Technician Course with Expertise on Native and Planted Woods (Enclosed Ombrophillus Forests). He is fluent in Portuguese and English. He is qualified as technical expert and host country expert for Brazil in accordance with EPIC procedures with respect to various global GHG schemes, standards and protocols. He has hands on experience in handling various AFOLU projects and involved in community engagement in Brazil.

Mr. Vijayaraghavan R holds a Master's degree in Science. He has 20 years of working experience in AFOLU GHG /energy sector including validation / verification of CDM, VCS, GCC, JCM and GS

projects. He is qualified as a lead auditor for various AFOLU GHG / Energy reduction projects audits in various countries under various standards and protocols.

Mr. Santhosh D.T. has both a postgraduate and undergraduate degree in the field of forestry. He has more than 2 years of experience in forestry research and academics, demonstrating a deep understanding of this discipline. He is qualified as an auditor for conducting audits related to Greenhouse Gas (GHG) reduction and removals projects in various countries, adhering to various international standards and protocols as per EPIC's accreditation procedures.

2.2 Document Review

The verification was performed primarily through document review of the registered VCS PD&MR v6, dated 09 February 2023, VCS-Joint-Validation Verification Report, dated 23 February 2023, VCS Monitoring Report (v1.0 and v2.0) for the current monitoring period and associated documents as stated in detail in Appendix II of this report. All documents were provided digitally to the audit team through data reference room (SharePoint folder). The assessment is carried out by the audit team using a verification protocol which includes the use of standard auditing techniques to assess the project activity. As a first step of verification assessment, the audit team reviewed the VCS Monitoring Report v1.0 (initial MR submitted by PP) and emission reduction spread sheet against the VCS standard v4.7 and applied methodology AR-ACM0003 v2.0 requirements. Information provided in the initial MR is crosschecked with the supporting evidence submitted by PP and publicly available data from other sources.

A complete list of documents and other source of information used for project verification is provided in Appendix II of this report. The initial MR v1.0 submitted by the PP and additional evidence documents related to the PD&MR v6 and the current operation of the project activity were reviewed in the verification process. Based on the review, the audit team issued findings as corrective action request (CARs) for the non-conformities against the VCS standard v4.7 requirements and clarification request (CLs) for the insufficient information. Similarly, a forward action request (FAR) is raised for issues that require review during the subsequent Verification of the VCS Project Activity. The PP has incorporated the corrections and submitted the revised VCS Monitoring Report v2.0 accordingly.

2.3 Interviews

An onsite visit was conducted from 23 September to 27 September 2024 to Tres Lagoas, Mato Grosso do Sul for verification of the implementation of project activities and validation of new PAIs included in the current monitoring period. With reference to the evaluation of the VCS PD&MR v6, MR v1.0 and associated documents, interviews were conducted the Project Proponent, Project Management Team, Local Stakeholders, and Government authority representatives to assess the impacts of project activities. The following members were interviewed during the onsite visit on the implementation of project activities.

Table 03: List of personnel interviewed for verification process of the Horizonte Carbon Project.

Sl. No.	Name	Designation/ Organization	Date of Interview	Responsibility of the person interviewed / Topic of Discussion
1	Julio Natalense	Consultant, Suzano S.A.	23 September 2024	Suzano's Representative. For new PAIs included in second monitoring period. - Organization, roles and responsibilities - Project Start Date - Project ownership - Financial Sustainability for the project - Relevant laws and regulations related to the project. - Legal status and property rights Verification of PAIs for first verification period. - Implementation of the project activities - Double claiming / Participation under other GHG Programs - Project contributions to SDGs - Review of Baseline Scenario - Mitigation and preventive measures for the identified risks.
2	Rafaela Guimaraes Silva	Data Specialist – Consultant, Way Carbon	23 September 2024	Way Carbon Representative - Assessment of VCS MR - Assessment of ER sheet - Compliance to monitoring plan given in PD - QA/QC procedures
3	Taisi Bech Sorrini	Carbon Initiatives Analyst, Suzano S.A.	23 September 2024	- Implementation of the project activities - Project Area GIS Analysis - Non- Permanence Risk Analysis

4	Ana Luiza Marcelo	Carbon Initiatives Analyst, Suzano S.A.	23 September 2024	- Grievance redress procedures - Stakeholder identification and consultation process - Training Programmes for project staff and Local communities.
5	Aline Ribeiro (Remote)	Carbon Initiatives Coordinator, Suzano S.A.	23 September 2024	
6	Gina Kersia e Alessandro	Forest Safety Coordinator and Occupational Safety Engineer, Suzano S.A.	23 September 2024	Safety and Security Team Representative - Worker's safety policies and procedures - Safety training Programmes for worker
7	Leila Regina Budin (Remote)	Ethics and Ombudsman Coordinator, Suzano S.A.	23 September 2024	Ethics and Compliance - /Ombudsman Team - Grievances redressal procedure - Ombudsman Channel, - Knowledge about handling complaints, disputes and appeals from the project.
8	Fernanda Roberta (Remote)	Human Resources Analyst, Suzano S.A.	23 September 2024	Human Resource Team - Hiring Procedures established by Suzano S.A - Rights and Benefits to employees - Code of Conducts - Project Risks to Employees - Recruitment Process
9	Jaqueline De Souza (Remote)	Human Resources Analyst, Suzano S.A.	23 September 2024	
10	Sara Montandon	Human Resources Analyst, Suzano S.A.	23 September 2024	

11	Monica Pereira	Human Resource Manager, Suzano S.A.	23 September 2024	- Issues related to discrimination, sexual harassment, forced labor and child labor. - Complaint Redressal Process .
12	Renato Cipriano Rocha	Forest Environmental Coordinator, Suzano S.A.	23 September 2024	Biodiversity Monitoring Team - Identification of threatened and endemic species in HCVs
13	Eloar Dos Santos	Forest Environmental Analyst, Suzano S.A.	23 September 2024	- Biodiversity monitoring procedures and methods - Monitoring frequency of biodiversity areas - Mitigation and preventive measures for the identified risks - Edge effect in the HCVs
14	Thiago Reggiani	Forestry Manager, Suzano S.A.	23 September 2024	- Quality Management of Eucalyptus nursery - Fertilizer usage, Harvesting procedures - Forest Implementation Process - Pest and Disease control - Technologies used in nursery
15	Monalisa Nolasco	Forestry Measurement Analyst, Suzano S.A.	23 September 2024	Field inventory team - Assumptions considered during measurements - Methods of measurement of tree DBH and height - Procedures for enumeration of trees - Trainings provided for field data collection.

				- QA/AC Procedures of forest inventory data - FSC certification
16	Julia Poggetto	Forest Planning Consultant, Suzano S.A.	23 September 2024	GIS Team - Review of Project Maps - Pre-implementation status of the PAIs, Ecosystem Conversion, Native restoration areas, Degraded Pastureland Analysis, Marvin Blue Platform - Preparation of Microplanning Maps for field inventory - GIS – Post Planting Analysis - Forest Mapping procedures established by Suzano S.A.
17	Lais Daleffe	Geoprocessing and Forest Registration Analyst, Suzano S.A.	23 September 2024	
18	Soriano (Remote)	Secretary of Administration of Brasilandia municipality	23 September 2024	- Awareness of project design and status of monitoring report. - Impacts due to project implementation - Stakeholder consultation - Grievance redress mechanisms - Benefit sharing and other information
19	Fernanda Ziviani (Remote)	Secretary of Administration of Aparecida do Taboado municipality	23 September 2024	
20	Jefferson Vargas	Technical Coordinator, RS Florestal	24 September 2024	Third Party – Field Inventory Team - Assumptions considered during measurements - Methods of measurement of tree DBH and height
21	Wellington Ferreira	Field Technician, RS Florestal	24 September 2024	

22	Moises da Silva	Field Technician, RS Florestal	24 September 2024	- Procedures for enumeration of trees - Trainings provided for field data collection.
23	Matheus Nogueira	Forest Measurement Technician, Suzano S.A.	25 September 2024	Suzano – Field Inventory Team - Assumptions considered during measurements - Methods of measurement of tree DBH and height
24	Claudemar Rodrigues	Forest Measurement Technician, Suzano S.A.	25 September 2024	- Procedures for enumeration of trees - Trainings provided for field data collection. - QA/AC Procedures of forest inventory data, FSC certification
25	Samuel Felix	President, Almanara Settlement	26 September 2024	Representative of Almanara Settlement - Awareness of project design and status of monitoring report. - Impacts due to project implementation - Stakeholder consultation - Grievance redress mechanisms - Benefit sharing and other information
26	Ana Liliam	Social Development Coordinator, Suzano S.A.	27 September 2024	Social Development Team - Identification of local stakeholders - Frequency of stakeholder consultation
27	Paula Bomfim	Social Development Consultant, Suzano S.A.	27 September 2024	- Relationship management process, SISPART System, Social Impact matrix.

28	Eloir Peseiro	President, Corpazul	27 September 2024	Representative of CORPAZUAL - Impacts due to project implementation.
29	Sabrina Apada	Secretary, Corpazul	27 September 2024	- Benefit to employees - Assessment of recycling process - Training activities and Awareness programs - Contribution towards sustainable development goals
30	Adriano Arruda	Social Development Consultant, Simbiose	27 September 2024	- Installation of conscious wall - Assessment of voluntary waste drop-off points.
31	Laércio Silva	Social Development Consultant, Simbiose	27 September 2024	- Contribution towards sustainable development goals
32	Wellington Andrew	Regional Director, Youth Peniel Challenge	27 September 2024	Personnel from Adolescent Youth Centre - Installation of waste collection units
33	Jose Fernandes	Volunteer, Youth Peniel Challenge	27 September 2024	- Evaluation of nursery partnership details for native species with Suzano
34	Maria Eva	Ponte Velha Community	27 September 2024	Representatives of Ponte Velha Community - Awareness of project design and status of monitoring report. - Impacts due to project implementation - Stakeholder consultation - Grievance redress mechanisms

				- Benefit sharing and other information
35	Thainam Weender	Forest Security Supervisor, Suzano S.A.	27 September 2024	Monitoring Team of Alerts and Fires - Monitoring of Fire Breakouts
36	Danilo Monari	Assets Intelligence Consultant, Suzano S.A.	27 September 2024	- Methods for Fire Management - Fire Alert System - Training Programmes for fire prevention
37	Otair (Remote)	Representative of Paulistinha Settlement	05 October 2024	- Awareness of project design and status of monitoring report. - Impacts due to project implementation
38	Joyce (Remote)	Neighbours of Piaba Settlement	05 October 2024	- Stakeholder consultation - Grievance redress mechanisms - Benefit sharing and other information

2.4 Site Visits

The audit team conducted on-site visits to Tres Lagoas, Mato Grosso Do Sul, Brazil from 23 September to 27 September 2024. The onsite was scheduled with an objective to validate (new PAIs) and verify the implementation of project activities, as documented in the registered VCS PD&MR v6, Joint Validation and Verification Report v2.4 and initial MR v1.0.

The audit aimed to:

- Verify the soundness and compliance of the project design and monitoring report.
- Confirm the credibility and quality of Verified Carbon Units (VCUs) generated in the project
- Assess the project's contribution to Sustainable Development Goals (SDGs).
- Ensure compliance with relevant laws, regulations, and the VCS Standard v4.7

- To assess the impacts of project activities on local stakeholders and ecosystems.

Table 04: Details of audit visit.

Date	Activity
23 September 2024	Opening meeting at plant office of Suzano. S.A in the city of Tres Lagoas, Mato Grosso Do Sul, Brazil. Introduction about the audit team and briefing about the verification audit process. Introduction of Project Proponent and Project Management Team and briefing of the project activities. Interviews were conducted with the following teams: • Interview with top management to verify project information with respect to newly added instances and project activities implemented as part of current monitoring period. • Virtual interview with representative of Aparecida do Taboado municipality (Fernanda Ziviani - Secretary of Administration of Aparecida do Taboado/MS) • Safety and Security Team (Gina Kersia e Alessandro)- • WayCarbon team for assessing details on ER calculations (Rafaela Guimaraes Silva) • Human Resource Team (Monica Pereira) and Ethics and Compliance/Ombudsman Team (Leila Budin) • Biodiversity Monitoring Team (Renato Cipriano and Eloar dos Santos) • Virtual interview with representative of Brasilândia municipality (Soriano - Secretary of Administration of Aparecida do Taboado/MS) • Forest Operations Executive Manager at Suzano (Thiago Reggiani) • Field inventory team (Monalisa Nolasco) • GIS Team (Julia Poggetto) Review of project documentation regarding implementation, risks analysis, and stakeholder engagement.
24 September 2024	In the project, the PP has carried out stratification of the plots as per section 5.3 of "AR-ACM0003 A/R Consolidated Large Scale Methodology Afforestation and reforestation of lands except wetlands. v2.0" for improving the precision of biomass estimation. The PP had established 851 sample plots and classified it under seven stratum for the current monitoring period. The audit team randomly selected 23 sample plots such that it covered all the 7 stratum to assess the variations between stratum. Additionally, 9 PAIs were selected from total 38 new PAIs included in the second instance to verify planting of eucalyptus species. The selected sampling intensity is in line with the "IAF Guidance on the Application of ISO/IEC Guide 66" (Page no. 26: G.5.3.12), which states that the minimum number of sites to be visited per audit for the surveillance audit visit is $(y = 0.6 \sqrt{x})$, where y is the number of samples and x is the total population, rounded to the upper whole number.

	Also, for the initial audit, which is the case of new PAIs, the minimum number of sites to be visited per initial audit is $(y = \sqrt{x})$. As the forest inventory was carried out only for plantations which fulfilled the maturity period of 2 years, no measurements were conducted in new PAIs. According to the above-mentioned document, the minimum number of samples to be visited is 18 for sample plots established in 40 PAIs from first monitoring period and 7 PAIs from the total 38 newly added PAIs. EPIC visited 23 sample plots and 9 PAIs in the project. Clinometer and measuring tape were used for estimating the height and CAP (Diameter at breast height) of the trees. The field inventory was carried out by RS Florestal team and Suzano S.A team. Suzano S.A. has a developed procedures for calibration of the instruments used in inventory process. E. grandis, E. urophylla and hybrid from the two species, E. grandis x E. urophylla species was planted in the sample plots. <u>Activities carried out by audit team:</u> - Visit to JOAMAR, MONTE ALTO, and SANTO ANTÔNIO IV farms to assess sample plot inventories. - Visit to High Conservation Value Areas (HCVAs) in MATAO farm. In the plots, the audit team verified the boundaries of the project, presence of sparse trees, species planted in each plot, location – geocoordinates of the selected sample plot, inventory procedures, QA/QC procedure for inventory data and remeasured the trees to crosscheck the inventory data as per the monitoring plan. During visit to HCVs, the audit team verified the presence of vulnerable species, biodiversity survey methods and precautions adopted by the PP to protect the HCVs areas.
25 September 2024	- Visit to the SÃO LUCAS farm, SANTA TEREZINHA II Farm and VISTA ALEGRE II farm for assessment of sample plot inventory data. - Visit to New instances of the project area: DA MATA IV farm, TUPAHUÊ farm, TIO MUNICO farm, RANCHO ALEGRE II farm, SPUMAR farm, PECUARIA FRD farm
26 September 2024	- Visit to the SUCURIU farm, BARRA DO CERVO farm. - Visit to HCVA in in RIO VERDE A farm and DUAS MARIAS farm - Visit to New instances of the project area: LUA CHEIA farm, VALE DOURADO farm, NOSSA SENHORA APARECIDA I farm. Interview with Almanara Settlement to assess the impacts of project activities on local stakeholders and verified the stakeholder consultation process.
27 September 2024	Visit to Cooperativa Arara Azul and Conscious Wall in Três Lagoas. at Tres Lagoas, Mato Grosso Do Sul, Brazil Interviews with social development and monitoring teams regarding fire management and conservation practices.

	Closing meeting at Suzano Plant office to summarize findings and outline next steps involved in the project verification.
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The details of sample plots selected for the onsite visit is detailed in APPENDIX IV of this report.

2.5 Resolution of Findings

During the second verification, the nominated audit team raised different types of findings for non-conformance identified in the project. The identification of the findings was based on a desk review analysis of documentation made available to the audit team, on-site inspections and background investigation of publicly available information.

The findings pertain to non-compliance with the VCS Standard v4.7, local environmental laws and regulations, and/or approved methodological procedures, registered VCS PD&MR v6^{7/}, Joint Validation and Verification Report v2.4 v^{8/}, VCS MR template requirements^{137/}. The information and data were reviewed for consistency to ensure there were no errors, omissions, or misrepresentations in the project

A Clarification Request (CL) is raised if the information is insufficient or unclear to determine whether the applicable VCS requirements have been met.

A Corrective Action Request (CAR) is raised if one of the following situations occurs:

- Non-compliance with the methodology, or applicable requirement from the monitoring plan and/or applied baseline and monitored methodology as identified from the registered VCS PD&MR v6. If inadequately documented by the project proponents or if the provided evidence is insufficient.
- For mistakes done in applying assumptions, data, or calculations of GHG reductions or removals that will impact the quantification of VCUs for the current verification period.

A Forward Action Request (FAR) is issued for actions if the monitoring and reporting require attention and/or adjustment for the next verification period.

For the current monitoring period, 03 CLs, 11 CARs, and 01 FARs were raised by the audit team. All findings were resolved after obtaining proper justification and making changes to the project documents such as VCS MR, ER calculations spreadsheet, Financial investment sheet and Non-permanence Risk Report. All corrective actions have been incorporated into the revised documents. To ensure transparency in the verification process, Appendix III of this report summarizes the findings and the responses from the project proponent.

2.5.1 Forward Action Requests

01 Forward Action Request (FARs) is raised as part of the performed verification assessment. Additionally, the audit team through examining of Joint Validation and Verification Report v2.4 corresponding to this project activity confirmed that no FARs were previously raised during the validation and 1st verification assessment of the Horizonte Carbon project activity. The description of the FAR raised during the current monitoring period is detailed in Appendix III of this report.

2.6 Eligibility for Validation Activities

This section is not applicable as the EPIC Sustainability Services Pvt. Ltd. holds accreditation for all VCS sectors for conducting validation as well as verification. The validation/verification body verified all the data and information to provide reasonable assurance and to meet the materiality requirements of AFOLU projects under the 14 Sectoral Scope.

3 VALIDATION FINDINGS

3.1 Methodology Deviations

The audit team reviewed section 3.2.1 of the VCS Monitoring Report v2.0 and crosschecked the applicability conditions, data and parameters considered in the ER calculations and equations used in the methodology. Further, the audit team conducted Interviews with the PP and WayCarbon Team and concludes that no methodology deviations are applied in the project.

3.2 Project Description Deviations

The audit team reviewed the information provided in section 3.2.2 of the VCS MR v2.0 and assessed it against the information provided in registered PD&MR v6 to verify the credibility of the project description deviations identified in the second verification. Based on the assessment, the audit team provides the following conclusions:

- Removal of Ariranha farm (T5AB): During the first verification, 41 PAIs were identified for eucalyptus planting, comprising a total project area of 14,427.66 hectares. However, only 12,121.87 hectares were inventoried and considered for carbon removal estimations and VCU generation. As outlined in Section 3.2.2 of the VCS MR version 1.8, the Ariranha farm (T5AB) was initially included in the project activity during the first verification period but has since been excluded from the project.

The audit team reviewed the estimated/^{131/} and monitored ER/^{25/} Calculations workbook, which detailed the PAIs, and confirmed that the Ariranha farm was neither included in the earlier inventoried area nor in the current ER estimations. Consequently, the removal of this farm does not impact the appropriateness or credibility of the project. The audit team confirmed that the reported project deviation complies with numeral 2 of Section 3.21.2 of the VCS Standard version 4.7 requirements.

- **GIS Analysis of post planting:** The post-planting analysis is conducted by the PP to assess the ground truth conditions after the planting activity has been carried out, based on initial micro-planning maps provided by the GIS team to the field teams/^{92/}. Through this process, the variations observed between the initial project area and post-planting conditions are updated in the project area data sheets and ER calculation workbooks. The audit team reviewed the inventoried area/^{25/131/} of the project for the first and second monitoring periods and confirms that the deviations reported do not impact the project's ERs generated or the applicability of the methodology as the analysis is conducted in the initial stages of the forest inventory process and updated in the project before the calculations of emissions removals.
- **Removal of A and Ai_bsl parameters from validation:** The project area and the area of stratum validated are subject to constant changes as the Horizonte Carbon Project is a grouped project, with new PAIs included in each monitoring period, resulting in changes to these parameters. As the increase in the actual project area due to the inclusion of new PAIs is appropriately monitored and accounted during each verification period, the audit team affirms that the reported deviation does not impact the project's applicability conditions or baseline scenario. The audit team reviewed Section 5.1, Table 4 of the registered PD&MR v6, and Section 4.2 of the VCS MR v2.0, confirming that the actual project area is measured and accounted for in the data and parameters monitored during each verification.
- **Inclusion of new entities involved in the project:** During the current monitoring period, the PP engaged with three entities - WayCarbon, 2Tree, and Agricone to support the project's implementation. These entities have been contracted to provide consulting services, assist with field monitoring and forest data analysis, and offer technical support for the ecological restoration of degraded ecosystems using native species in the project. Detailed information on the new entities is documented in section 4.2.6.1 of this verification report. The audit team reviewed section 1.6 of the registered PD&MR v6 and the agreements between Suzano S.A. and the other entities/^{30/}, confirming that the reported project deviation does not affect the applicability of the methodology, additionality or the appropriateness of the baseline scenario. The involvement of these entities is intended to enhance the monitoring techniques and execution of the project. Therefore, the audit team concludes that the reported deviation complies with the requirements outlined in section 3.21 of the VCS Standard v4.7.

Through document review and interviews with the project management team, the audit team confirmed that none of the project description deviations reported in Section 3.2.2 of the VCS MR v2.0 impact the applicability of the methodology, additionality, or appropriateness of the baseline scenario in the project. Thus, the project is in conformance with numeral 2 of Section 3.21.2 of the VCS Standard requirements.

3.3 New Project Activity Instances in Grouped Projects

The PP included 27 new PAIs in the second monitoring period, located in the Cerrado Biome near Três Lagoas, Brasilândia, Santa Rita do Pardo, Selvíria, Bataguassu, Água Clara, and Aparecida do Taboado, in the State of Mato Grosso do Sul, Brazil. In the initial MR v1.0, the PP had included 38 PAIs for the project assessment. However, as planting activities for 11 PAIs were conducted outside the scope of the current monitoring period, they have been excluded from the current assessment. During site visits, the audit team conducted risk-based sampling and confirmed that planting activities were carried out in all 38 PAIs.

Table 05: 27 PAIs included in the current monitoring period.

Newly added PAIs	Planted area	Planting date
Santa Lucia	1,627.07	18/08/2021
Taquarussu III	156.02	22/09/2022
São João JY	193.71	16/09/2022
J.A.I	169.86	22/02/2023
Palmito II	290.96	06/02/2023
Pouso Alto I	1269.11	14/11/2022
Nossa Senhora Aparecida VI	1,269.11	07/10/2022
Santa Angélica	171.33	29/09/2022
Tio Munico	927.36	01/11/2022
São João Vale Do Pombo	435.74	21/11/2022
Pombinho Euro	206.58	15/11/2022
Marca B2	133.49	13/01/2023
Vale Dourado	569.72	16/05/2022
Recanto Dos Carvalhos	148.25	03/11/2022
Nossa Senhora Aparecida I	170.41	19/10/2022
Da Mata IV	211.31	07/10/2022
Esperança	275.46	01/09/2022
São Lourenço II	942.05	13/10/2022

Mariana	362.48	12/10/2022
São Lourenço III	468.63	22/11/2022
Rancho Alegre II	64.62	13/02/2023
Lua Cheia	278.71	01/02/2023
Bandeirantes	246.85	13/12/2022
Mata Verde	154.73	05/01/2023
Jatiuca	2,804.97	08/04/2022
Vale Dourado II	583.04	02/12/2022
Pecuária FRD	669.53	12/07/2022
Total	14,315.54	

The audit team reviewed the “Database sheet” of estimated ER Calculations workbook/^{131/} and verified the information of planting area, planting date, species planted in each farm and forest management category (Suzano S.A or funds) of newly added PAIs. Furthermore, the information of removed instances along with its planting date and area are confirmed through review of “Removed instances sheet”/^{131/}.

The audit team reviewed the information provided in section 1.4.1 of the registered VCS PD&MR v6 and section 3.3 of the VCS MR v2.0 enlisting the eligibility criteria’s to be fulfilled for new PAIs included in the project and conducted site inspections to analyse the project site conditions. Based on the review of documented evidence, site inspections and interviews with the PP and project management team, the audit team confirms that the newly added PAIs meet one or more set of requirements outlined in the registered VCS PD&MR v6 and AR-ACM0003 methodology. Thus, the 27 new PAIs included in the project are in conformance with section 4.1.28 to 4.1.30 of the VCS Standard v4.7 requirements.

Table 06: Eligibility Criteria Analysis for the new PAIs included in the second monitoring period.

SL No.	Eligibility Criteria	Evidence gathering activities, evidence checked, and assessment conclusion
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1	The lands subject to the project activity does not fall in wetland category	The audit team verified the project area of new PAIs in the Marvin Blue Platform ^{/31/} and reviewed the Marvin Horizon - Farm Report - T1CV - MapBiomass - 2022 maps ^{/133/} submitted by PP and through site inspections confirmed that the PAIs does not contain water bodies or meets the definition of wetland category. Thus, the audit team confirms that the newly added PAIs do not fall under wetland category.
2	Soil disturbance attributable to the project activity does not cover more than 10 per cent of area in each of the following types of land, when these lands are included within the project boundary: (i) Land containing organic soils; (ii) Land which, in the baseline, is subjected to land-use and management practices and receives inputs listed in appendices 1 and 2 of the methodology	As outlined in section 2.4 of VCS MR v2.0, the project is implemented in degraded pasture lands^{/33/}. The audit team reviewed the project area details in MARVIN BLUE Platform for all the PAIs (Wave 1 (40 PAIs) and Wave 2 (27 PAIs) in Marvin) and observed the official LAPIG classification for pasture degradation for each year^{/31/}. The classification displayed the degradation levels (severe, moderate and not degraded) within the farm polygons, as well as the boundaries of the UPs that are part of the project^{/33/}. Soil collection and area diagnosis^{/97/} is conducted to all the eligible farmlands as part of land prospection process to assess the soil quality. Soil Sampling procedure^{/135/} and Soil Analysis results for 2022-2023^{/135/} for the new PAIs were submitted by PP which confirmed that the SOC was not hampered due to project activities in the new PAIs. Thus, the audit team through site visits and interviews with the PP and Biodiversity Monitoring team confirms that the new PAIs were implemented on degraded pasture lands, thereby minimal tillage was carried out in accordance with methodology to implement the project activities. The audit team reviewed FSC audit reports^{/64/} and confirmed that the new PAIs fulfilled the outlined eligibility criteria.
3	Use the technologies or measures specified in the project description	

4	Apply the technologies or measures in the same manner as specified in the project description	The audit team reviewed information in section 3.1 of VCS MR v2.0 - monitoring plan and verified the Suzano S.A's field manuals/ ^{134/} , internal audit policy/ ^{134/} , forest fires fighting mechanism/ ^{134/114/} and inventory maps/ ^{134/} . Additionally, through site visit and interviews with the PP, Field Inventory team, and Fire monitoring and alerts team, the audit team confirms that the QA/QC procedures, forest inventory methods and fire events monitoring technologies are the same for the new PAIs as that of specified in the registered VCS PD&MR v6.
5	Are subject to the baseline scenario determined in the project description for the specified project activity and geographic area:	As per the validated VCS PD&MR v6, the baseline scenario in the absence of the Horizonte project consists of large areas of grassland with sparse trees, which is the case for the new PAIs included in the current monitoring period. The audit team confirmed this baseline scenario through interviews with the PP and field observations of degraded pasturelands with sparse trees on private farms not included in the Horizonte Project. Additionally, the audit team reviewed the project area details in Marvin Blue Platform/ ^{31/} and ecosystem conversion map analysis for each PAIs/ ^{32/} and confirmed that no ecosystem conversion has been carried out in the project for the new PAIs.
6	Have characteristics with respect to additionality that are consistent with the initial instances for the specified project activity and geographic area	The audit team reviewed the financial analysis documents/ ^{78-87/} and confirmed that the new PAIs included in the current monitoring period are additional and are consistent with the initial instances included during validation of the project. The audit team conducted interviews with PP and confirmed that the new PAIs are additional under Barrier Analysis assessment.

7	New areas must be certified or seek certification under a recognized and high-level market sustainability program, for example the FSC	The audit team verified the “current areas in scope of FSC certification” table from Forest Management FSC reports 2022/ ^{64/} and audit documents for 2023/ ^{64/} and confirms that the new PAIs are undergoing the FSC certification process, with some PAIs already FSC-certified as part of the project. The audit team also reviewed the partnership agreement with LACAN/ ^{64/} and confirmed that the eucalyptus restored PAIs in partnership with LACAN are FSC-certified.
8	Plant only eucalyptus species from the positive list provided by Suzano	The audit team reviewed the “SAC_20230627”/ ^{52/} and Project Management Q2 a Species Planted/ ^{72/} and conducted site inspections using risk-based sampling and confirms that the PP has only planted eucalyptus species in the project area. The PP follows no deforestation policy/ ^{65/} and retained the existing trees in the plot. The existing native trees in the eucalyptus plots are not considered in the ER calculations. They are marked in the maps/ ^{28/} and excluded from the project area. Thus, based on interviews with PP and local communities, the audit team confirmed that only eucalyptus species (E. grandis, E. urophylla and hybrid from the two species, E. grandis x E. urophylla)/ ^{71/} are planted on the previously degraded and pasture lands./ ^{33/}
9	The pre-existing land use of the grouped project instance area must be degraded pasture	The audit team crosschecked the pre-project implementation status maps/ ^{33/} and degraded pasture lands maps/ ^{33/} for newly added PAIs using the Marvin Blue Platform/ ^{31/} . Marvin Blue is a land monitoring platform that integrates open-source imagery from sources such as Landsat and Sentinel, along with temporal land-use classifications provided by MapBiomias.

		The audit team reviewed the project area details in MARVIN BLUE Platform for all the PAIs (Wave 1 (40 PAIs) and Wave 2 (27 PAIs) in Marvin) and observed the official LAPIG classification analyzing the pasture degradation/^{31/}. The classification displayed the degradation levels (severe, moderate and not degraded) within the farm polygons, as well as the boundaries of the Ups that are part of the project/^{33/}. During site visit, the audit team witnessed the degraded pasture farmlands near the PAIs not included in the Horizonte project and concluded that the new PAIs included were earlier degraded pasture lands.
10	Land owned or leased by Suzano	All the PAIs included in the current monitoring period is owned or leased by Suzano S.A. The affirmation is provided through review of land ownership documents/^{101/102/103/}, lease agreements/^{90/91/} and interviews with the PP and communities. The project area is a private property owned or leased by Suzano. S.A and its controlled companies through legal lease agreements. The PP is the sole beneficiary of the carbon credits and wood revenue generated in the project. Through site inspections, the audit team confirms that no communities are reliant on project area for any resources.
11	Located at the Cerrado biome, state of Mato Grosso do Sul.	The audit team reviewed the KML files/^{26/}, project area summary/^{29/} and maps/^{132/} of eucalyptus planting project area, farmlands and native restoration project areas/^{27/} in Google Earth Pro (Pro) indicating the locations of all the PAIs included in the project so far and confirmed that the new PAIs are located within the Cerrado Biome, state of Mato Grosso do Sul. Additionally, the audit team conducted interviews with the GIS Team to verify the locations of all the PAIs added in the current monitoring period.

12	Actively restore and maintain native vegetation at RL and APP areas, and financially support the implementation of social activities developed by the grouped project	The project activities involved native restoration in APPs and RLs near the PAIs in the project. As a result of these restoration efforts, the project area acts as a shelter for various fauna^{/61/}. This ecological benefit was confirmed through site visits and interviews with the PP and Biodiversity Monitoring team. Further, the PP has established a conscious wall as a part of Inclusive Recycling initiative linked to the Horizonte Carbon Project to create awareness among the public on proper waste disposal and to use the wall as a volunteer waste drop-off point. The conscious wall is developed in partnership with Salesian Mission of Mato Grosso (MSMT), the Jesus Adolescent Youth Centre and Corpazul (Arara Azul Recycling Cooperative)^{/22/}. The audit team visited the conscious wall and interviewed the representatives of Corpazul and confirmed that the waste generated at Conscious wall is collected at frequent intervals and recycled at Corpazul^{23/24/21/}. The quantity of waste collected through conscious wall and recycled data were verified during site inspection.
14	New areas must have a start date on or after the project start date of the first project instance of 02/11/2017.	The audit team reviewed the “SAC_20230627”^{/52/} document indicating the project start date of each PAIs and conducted interviews with the PP and field inventory map and confirmed that the project activities such as land preparations activities for planting eucalyptus seedlings was conducted after 02/11/2017. Thus, the audit team confirms that the project start date of the new PAIs included in the current monitoring period falls between 2021 to 2023 i.e., after the project start date of the first PAI as per registered PD&MR v6.

15	For native vegetation recovery areas. Plantation of native species most adequate for the area in question.	The native planting activities outside the APPs and RLs were carried out in July 2023, which falls outside the scope of the current monitoring period. However, the audit team visited the native vegetation recovered areas during site visit and confirmed that native species are planted in these areas. An extensive list of native species ^{72/} is prepared by the Suzano S.A's monitoring team and local community members are employed to collect the native seeds, thus providing the economic support to the communities and enhancing the native ecosystem floral diversity. The audit team reviewed the maps ^{132/27/} indicating the locations of native planted areas within Mato Grosso do Sul, native species list and conducted interviews with the PP, Biodiversity Monitoring Team and local communities to confirm that the native planting areas adheres to the eligibility criteria outlined in registered VCS PD&MR v6.
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3.4 Baseline Reassessment

Did the project undergo baseline reassessment during the monitoring period?

☐ Yes ☒ No

Not applicable as the project did not undergo baseline reassessment during the second monitoring period.

4 VERIFICATION FINDINGS

4.1 Project Details

Item	Evidence gathering activities, evidence checked, and assessment conclusion:
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Audit history	EPIC Sustainability Services Private Limited (EPIC) was contracted by Suzano S.A to perform second verification of “The ARR Horizonte Carbon Project” for monitoring period from 22 February 2022 to 03 April 2023/ ^{136/} . The audit team conducted the second verification based on assessment of the registered VCS Joint PD&MR v6/ ^{7/} , VCS Joint Validation & Verification Report v2.4/ ^{8/} , Information available at VERRA Registry for Project 3350 (https://registry.verra.org/app/projectDetail/VCS/3350) and supporting evidences submitted by PP. Based on evidence, the audit team verified the information provided in the VCS Monitoring Report v2.0.				
	Audit type	Period	Program	Validation/Verification body name	Number of years
	Validation	02 November 2017 - 01 November 2052	VCS	Earthood	35 Years (Project crediting period)
	1 st verification	02 November 2017 – 21 February 2022	VCS	Earthood	6 Years
	2 nd Verification	22 February 2022 – 03 April 2023	VCS	EPIC Sustainability Services Private Limited	1 Year
Double counting and participation under other GHG programs	The audit team crosschecked both voluntary and regulated registries across different standards. The project is exclusively registered under VCS program and carbon credits have been issued for the 1 st verification period. The EPIC audit team reviewed the “Double-count_Letter_Horizonte”/ ^{10/} declaration provided by the PP, which states that the project does not seek, receive or plan to receive credit from another GHG-related programs other than VCS program.				

	The EPIC audit team conducted an independent search of the registries of different standards, namely the International Carbon Registry^{/11/}, Gold Standard^{/12/}, Plan Vivo^{/13/}, BCR Standard^{/14/}, CDM^{/15/} and CERCARBONO^{/16/} and through interviews with the PP, concluded that the project is not registered or rejected by other GHG programs and is in accordance with 3.23.1 section of the VCS Standard v4.7.
No double claiming with emissions trading programs or binding emission limits	The project is solely registered under the VCS program, as declared by the PP in the “Double-count_Letter_Horizonte”^{/10/}. The audit team reviewed for potential overlaps with other projects by examining other program registries such as International Carbon Registry^{/11/}, Gold Standard^{/12/}, Plan Vivo^{/13/}, BCR Standard^{/14/}, CDM^{/15/} and CERCARBONO^{/16/}. It is affirmed that the project has not sought, received, nor is planning to receive credit for the same GHG emission reductions under any emission trading program or binding emission limits, except through the VCS program. The reductions and removals arising from the carbon initiative are not included in a regulated emissions trading program, as well as in a binding emission limit. This affirmation is based on the review of other GHG program registries, information provided in Section 1.11.1 of the VCS MR v2.0 and interviews held with the PP during the site visit. Thus, the audit team concludes that the project is in accordance with 3.24.3 section of the VCS Standard v4.7.
No double claiming with other forms of environmental credit	The project is solely registered under the VCS program, as declared by the PP in the “Double-count_Letter_Horizonte”^{/10/}. The audit team reviewed for potential overlaps with other projects by examining other program registries such as International Carbon Registry^{/11/}, Gold Standard^{/12/}, Plan Vivo^{/13/}, BCR Standard^{/14/}, CDM^{/15/} and CERCARBONO^{/16/}. It is affirmed that the project has not sought, received, nor is planning to receive credits from another GHG-related environmental credit system except the VCS program. This affirmation is based on the review of other GHG program registries, information provided in Section 1.11.2 of the VCS MR v2.0 and interviews held with the PP during the site visit. Thus, the audit team concludes that the project is in accordance with 3.24.5 section of the VCS Standard v4.7.

Supply chain (scope 3) emissions double claiming	The audit team reviewed the information in section 1.11.3 of VCS MR v2.0 and declaration letter “Double-count_Letter_Horizonte”^{/10/} submitted by PP for supply chain (Scope 3) emissions and confirmed that the carbon initiative activities do not affect the emissions footprint of any products (goods or services) that are part of a supply chain. Thus, the audit team based on document review and interview with PP concludes that neither the project proponent nor any authorized representative of the project activity is buyers/sellers of products whose emissions footprint are changed by the project activity.
Sustainable development contributions	Brazil is committed to the United Nation’s Sustainable Development Goals (SDGs) and adopted the 2030 Agenda to achieve sustainable development^{/17/}. In the project, efforts are made by PP to align the project’s social activities to meet goals for SDG 10 (Reduce inequality within and among countries), SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action). The audit team reviewed section 1.12 of VCS MR v2.0. and conducted interviews with PP and local stakeholders to assess the project’s contributions towards SDGs. The audit team’s assessment and conclusion on project’s contribution to the defined SDGs are as follows: SDG 10: Reduce inequality within and among countries^{/17/} SDG Indicator 10.2. By 2030, Empower and promote the social, economic and political inclusion of all irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status. Arara Azul - Corpazul is a waste recycling association located in Tres Lagoas, which also manages waste collectors operating since 2014. The Arara Azul Cooperative (Corpazul) is identified as a stakeholder represented by Bairro Vila Maria community in the project. In the section 1.17.1 of the VCS PD&MR v6, the PP has detailed Corpazul’s activities stating to be included in the project’s SDGs contributions.

A partnership began in 2021, and a contract was signed between Suzano S.A. and Corpazul in 2023/^{20/} to socialize the carbon project and to provide specialized consultancy, training and create awareness among the populations about the importance of correct disposal of waste. The audit team reviewed “Baseline indicators of Arara Azul Recycling Cooperative – Corpazul”/^{19/} and “Inclusive Recycling Project – Annex I”/^{19/} and concludes that the project promotes gender diversity and provides equal employment opportunities for all the people irrespective of their age, race, ethnicity at workplace. The project is expected to reach 80 families, positively impacting the lives of 248 people. Of the total 48 direct project workers in Corpazul, 25 are women and 23 are men. Through interviews with the employees, the audit team confirmed that equal employment opportunities are provided irrespective of their race, ethnicity and origin. The inclusive recycling project empowers around 157 indirect beneficiaries through employment and financial support from waste recycling and collection. 45 direct participants below poverty line are uplifted through the project. 94.9 % of the indirect beneficiaries projected to be below poverty line are benefitted through the project.

During site inspections, the audit team visited the Corpazul office and crosschecked the employee records/^{19/}, salary records/^{19/}, waste collection and revenue records/^{19/} and interviewed the President of Corpazul to verify the promotion of gender diversity and economic uplift of the workers involved in the Inclusive recycling initiative. Through interactions with waste collection workers in Corpazul, the audit team confirmed that the profit generated from waste recycling was distributed to the workers and used to purchase the safety gears (PPE kits) and infrastructure development.

Further, the audit team conducted an independent research and reviewed the articles/^{18/} in internet which stated that the Suzano S.A’s partnership and support to Corpazul lead to 22% increase in average family income in 2022. Thus, the audit team is of the opinion that the project effectively contributed to reducing inequality, promotes the employees below poverty line and meets the requirements of SDG Indicator 10.2.

SDG 12: Responsible Consumption and Production/^{17/}

SDG Indicator 12.5. By 2030, Substantially reduce waste generation through prevention, reduction, recycling and reuse.

In June 2023, the PP established a conscious wall as a part of Inclusive Recycling initiative linked to the Horizonte Carbon Project to create awareness among the public on proper waste disposal and to use the wall as a volunteer waste drop-off point. The conscious wall is developed in partnership with Salesian Mission of Mato Grosso (MSMT), the Jesus Adolescent Youth Centre and Corpazul (Arara Azul Recycling Cooperative)^{/22/}. The audit team visited the conscious wall and interviewed the representatives of Corpazul and confirmed that the waste generated at Conscious wall is collected at frequent intervals and recycled at Corpazul. The quantity of waste collected through conscious wall and recycled data were verified during site inspection.

Additionally, training programmes and lectures are conducted at public schools and public areas to create awareness on waste reduction, segregation and proper disposal. The audit team crosschecked the proposal for conscious wall^{/23/}, conscious wall inauguration photographs^{/24/}, presentations of the inclusive recycling initiative^{/21/}, training records^{/21/}, waste collection records^{/21/} and revenue record and confirmed that the information provided in Table 1 of VCS MR v2.0 is appropriate,

SDG 13: Climate Action^{/17/}

SDG Indicator 13.0. Tonnes of greenhouse gas emissions avoided or removed.

In the ARR Horizonte Carbon Project, carbon emissions are removed from atmosphere by establishing eucalyptus plantations in degraded pasture lands. The audit team crosschecked the ER_Monitored Calculations workbook^{/25/} and concludes that the project removed 271,803 tCO₂ from reforestation using eucalyptus species during the current monitoring period. Thus, the audit team confirms that the information provided in Table 1 of VCS MR v2.0 is appropriate, and project effectively contributes to removing carbon emissions meeting the requirements of SDG 13.

SDG 15: Life on Land^{/17/}

	SDG Indicator 15.1. By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements. During the second monitoring period, the PP has undertaken planting of eucalyptus species, covering an area of 14,315.54 hectares. This increased the total eucalyptus reforestation area to 28,665.25 hectares, achieved through the recovery of pasturelands and degraded areas. The audit team reviewed the project KML files/^{26/29/} and confirmed the area of the PAIs planted in the second monitoring period. Additionally, the audit team visited the restored plots during site visit/^{Appendix IV/} and conducted interviews with the project management team to confirm the project contributions data stated in Table 1 of the VCS MR v2.0 The audit team based on review of information in section 1.12 of VCS MR v.2.0 and supporting evidence concludes that the project activities implemented by PP positively contribute to meet the 3 SDGs objectives and fulfills the requirement specified in section 3.17.1 of the VCS Standard v4.7.
Additional information relevant to the project	The PP has classified the Project budget statements and Land ownership documents as commercially sensitive information in section 1.13 of the VCS MR v2.0. The audit team verified all the commercially sensitive information made available to the VVB assessment and confirms that the documents include crucial information such as financial sourcing details for managing the project until it reaches breakeven point, land lessee and lessors' details, land acquisition procedures, lease agreements containing financial details and wood purchase pricing details. Thus, the audit team is of the opinion that the documents categorized as commercially sensitive information are in accordance with the requirements specified in section 3.5.2 and 3.5.3 of VCS Standard v4.7. The commercially sensitive information documents are listed in Appendix I of this report.

4.2 Safeguards and Stakeholder Engagement

4.2.1 Stakeholder Identification

Item	Evidence gathering activities, evidence checked, and assessment conclusion
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Stakeholder identification	The audit team reviewed the established procedures “Relationship Management Manual”^{/34/} and Operational Dialogue^{/39/} developed by the PP to identify and manage the stakeholders impacted by the project. The Social Development Area team conducts social inventory once in 4 years, wherein the stakeholders are identified directly through onsite visit and explained on the project scope. Details are collected of interested entities and further contacted through regular consultation process. The consultation happens at two levels, at local communities and local authorities. Through the information of identified stakeholders, the social inventory team has created a local stakeholder – Communities Map^{/104/} locating all the communities and municipalities observed with the 3 km radius of each project activity instance. In the project, 6 communities and 2 municipalities have been identified including communities from the first monitoring period. The Arara Azul Cooperative comprising of Bairro Vila Maria community is located in Tres Lagoas and identified as a partner in Inclusive recycling project. Under the social sphere, Suzano. S.A has implemented Inclusive recycling project to promote the inclusion of the members of the recycling community, so as to uplift their economic status and improve public health by reducing the amount of waste disposal. The audit team crosschecked the stakeholder consultations attendance records^{/105/}, Consultation photographs, Stakeholders meeting schedule and Public stakeholders – Horizon excel sheet^{/44/} consisting of stakeholder’s personal details identified near each farm to confirm the credibility of stakeholder identification process carried out by the PP. Further, the audit team reviewed the stakeholder identification details mentioned in registered VCS PD&MR v6, Joint Validation and Verification report and section 2.1.1 of the VCS MR v2.0 and concludes that the stakeholder identification process has not been changed since the validation of the Horizonte Carbon Project. Thus, the audit team affirms that the stakeholders has been identified as per the requirements stated in section 3.18.1 of VCS Standard v4.7.
Legal or customary tenure/access rights	The project area is owned or leased by Suzano. S.A. 69% of the project area are leased^{/94/} by the PP through proper lease agreements for the project crediting period. Rest 25% of the project area are owned by Suzano S.A. and 6% managed in partnership with its controlled companies. The audit team crosschecked the Lease agreements^{/90/91/}

and affirms that the PP is the sole beneficiary and entitled to carbon credits and wood revenue generated from the project.

Additionally, Suzano S.A. has established procedures i.e., land prospecting^{/97/} and acquisition of rural properties^{/96/}, wherein a survey is conducted by the Forestry Business area to assess the ownership documents of potential farmlands before contracting them in the project to avoid any potential disputes in the property rights. A legal due diligence report (DDJ) is prepared to analyse the legal situation of the lessors, the farmland's previous owners for the last 4 years and to ensure that the property is in condition to be leased in accordance with Brazil's current legislation. The DDJ report is validated by Suzano's Management or Legal Advisory^{/95/}.

The audit team verified the land ownership (updated property registration documents)^{/101/102/103/} for each farm, Rural Property Registration Certificates (CCIR), Property Tax records (ITR for the last 5 years), Negative Debts Certificate issued by Federal Revenue, Lease agreements^{/90/91/}, Environmental Declaratory Act - ADA (Law 9,393/96) documents and Funding Contracts^{/83/84/}. The projects CAR records^{/101/102/103/} were verified in official state database portals of Brazil.

<https://consultapublica.car.gov.br/publico/estados/downloads>,

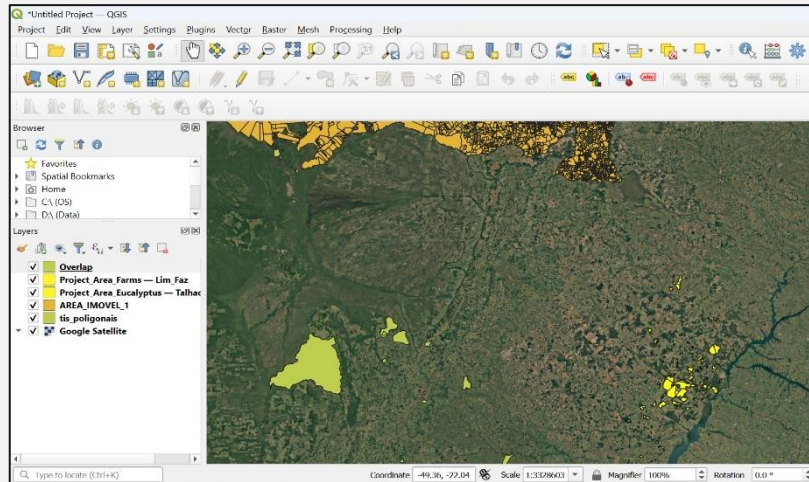


Figure 01 a: Vector Overlay Analysis/146/ between project area, Quilombolas lands and Indigenous Lands of Brazil.

Overlap — Features Total: 78, Filtered: 78, Selected: 0

	OBJEID	CODFAZ	NOME	AREA_HA	CODFAZ_ANT	BIOMA	AREA_IMOVE	AREA_IMO_1	tis poligo	tis pol. 1
1	175468	T6CG	SUCURIU	2664.59999999...	NULL	Cerrado	0	0	0	0
2	176269	T8BA	SÃO JOSÉ	181.006000000...	NULL	Cerrado	0	0	0	0
3	181076	T1CU	NOSSA SENHO...	313.124000000...	NULL	Cerrado	0	0	0	0
4	184286	T8BB	JATUCA	3950.90999999...	NULL	Cerrado	0	0	0	0
5	191900	T6CL	VALE DOURADO	744.846999999...	NULL	Cerrado	0	0	0	0
6	191901	T8BC	VALE DOURADO...	854.855999999...	NULL	Cerrado	0	0	0	0
7	191903	T6CM	RECANTO DOS ...	211.144000000...	NULL	Cerrado	0	0	0	0
8	191904	T6CN	NOSSA SENHO...	240.954000000...	NULL	Cerrado	0	0	0	0
9	192703	T5AQ	SANTA ADÉLIA	488.267999999...	NULL	Cerrado	0	0	0	0
10	197524	T6CO	DA MATA IV	259.682999999...	NULL	Cerrado	0	0	0	0
11	206819	T6CP	ESPERANÇA	875.274000000...	NULL	Cerrado	0	0	0	0
12	211242	T5AT	SÃO JOÃO VAL...	632.794999999...	NULL	Cerrado	0	0	0	0
13	212445	T1CV	TAQUARUSSU III	217.356999999...	NULL	Cerrado	0	0	0	0
14	225270	T1CX	SÃO JOÃO IV	249.246000000...	NULL	Cerrado	0	0	0	0
15	228073	T5AU	POMBINHO EU...	331.932000000...	NULL	Cerrado	0	0	0	0
16	230074	T6CR	SÃO LOURENÇ...	1238.50999999...	NULL	Cerrado	0	0	0	0
17	230477	T6CS	MARIANA	433.951999999...	NULL	Cerrado	0	0	0	0
18	230880	T6CU	RANCHO ALEG...	82.663399999...	NULL	Cerrado	0	0	0	0
19	231278	T6CT	SÃO LOURENÇ...	618.038000000...	NULL	Cerrado	0	0	0	0

Show All Features

Figure 01 b: Result of Vector Overlay Analysis/146/ between project area, Quilombolas lands and Indigenous Lands of Brazil.

The audit team conducted an independent assessment to verify any existing conflict for land ownership or overlap in project tenure rights between the PP and Indigenous communities. An Overlap analysis was carried out using KML files of the project area/26/, Quilombolas lands/146/ and Indigenous Lands of Brazil/146/ in QGIS v3.36.1. Figure 01 b shows the results of the overlap analysis indicating absence of overlap between the project area and Quilombolas/Indigenous lands.

During onsite, the PP demonstrated that the project activities does not affect the stakeholder's property or their resources through documentary evidence. Thus, the audit team considers that the information submitted by PP and interviews with local communities

	are sufficient, and the project adheres to numeral 2, of section 3.18.1 of VCS Standard v4.7.
Stakeholder diversity and changes over time	In section 2.2 of the registered VCS PD&MR v6, Suzano's social inventory had identified 3 communities within 3km radius from the project's operation unit for 40 PAIs and 55 neighbors were visited for stakeholder consultation process. In the current monitoring period, upon inclusion of 27 PAIs, total 6 communities and 2 municipalities have been identified including communities from the first monitoring period. A total of 282 neighbors^{/44/} have been documented from the public stakeholder's consultation process. The stakeholder's diversity remains constant, and no changes have occurred since the first monitoring period. The audit team reviewed the Local Stakeholder's – Communities Map^{/104/} indicating the locations of all the communities identified till date in the project and conducted interviews with the representatives of communities to confirm the diversity of stakeholders involved in the project. The diversity of stakeholders corresponds to livestock and agriculture sectors. Based on review of project information from registered VCS PD&MR v6, Joint Validation and Verification Report v2.4, VCS MR v2.0, documented evidence and onsite inspections, the audit team confirms the project compliance with the requirement specified numeral 3 of section 3.18.1 of VCS Standard v4.7.
Expected changes in well-being	In section 2.1.1. of VCS MR v2.0, the PP has explained the expected changes in well-being of local communities and ecosystem. As part of the project's social activities, the Inclusive Recycling initiative has been launched in partnership with Corpazul to integrate all the waste pickers and provide them with a stable employment opportunity which increased their financial stability and reduced economic disparity in the communities. Around 48 direct project workers^{/19/} benefited from the Inclusive recycling project. A certain portion of profit generated through the project is distributed among the workers involved in the project and utilized for the development of infrastructure and purchase of PPE kits.

	Self-Dropping waste points constructed has led to reduction of improper waste disposal in the public leading to maintenance of hygiene conditions in the society. A significant amount of waste has been recycled thereby reducing the pressure on landfills. The audit team crosschecked presentations of the inclusive recycling initiative/^{24/}, proposal for conscious wall/^{23/}, training records/^{21/}, waste collection records/^{21/} and confirmed that training programmes and lectures were conducted at periodic intervals to create awareness on waste segregation and disposal. Further, the audit team conducted an independent research and reviewed the articles/^{18/} on the internet which stated that the Suzano S.A's partnership and support to Corpazul lead to 22% increase in average family income in 2022. During onsite visit, the audit team witnessed the restoration of degraded areas, APP's and RLs areas using native species leading to increase in biodiversity and habitat connectivity in the project area. It promoted preservation of hydrological resources and conservation of soil leading to wellbeing of the communities. Interviews were conducted with communities and biodiversity monitoring team to confirm the changes in the well-being of stakeholders. Thus, the audit team concludes that the well-being stated by PP are credible and align with the requirements of section 3.18.1 (5) of VCS Standard v4.7.
Location of stakeholders	The local stakeholders are identified in Municipality of Tres Lagoas and Brasilândia, at Mato Grosso do Sul, Brazil where the project activities are implemented by the PP. The audit team reviewed the local stakeholders – Communities Map/^{104/} indicating the locations of specific communities and municipalities located within 3km radius of project area. 8 communities and 61 indigenous units were found in the state of Mato Grosso do Sul. The audit team conducted interviews with all the identified communities and municipality representatives and concludes that the locations of the stakeholders have been referenced in adequate manner by the PP and is aligned to section 3.18.1 (6) of VCS Standard v4.7.
Location of resources	The PP demonstrated the ownership rights and land resources usage rights acquired legally from farm owners through lease agreements. The Horizonte Project is implemented is private owned and leased farmlands by Suzano S.A. The PAIs and all the identified stakeholders

	are located in Municipality of Tres Lagoas and Brasilândia, at Mato Grosso do Sul, Brazil. The audit team verified the legal ownership documents including (updated property registration documents)/^{101/102/103} for each farm, Rural Property Registration Certificates (CCIR), (CAR) documents, Property Tax records (ITR for the last 5 years), Negative Debts Certificate issued by Federal Revenue, Lease agreements/^{90/91}, Environmental Declaratory Act - ADA (Law 9,393/96) documents and Funding Contracts/^{83/84} submitted by the PP. Interviews with communities confirmed that they are not reliant on project area for any resources. Thus, the audit team concludes that the information stated by PP in section 2.1.1 of VCS MR v2.0 is appropriate and adheres to section 3.18.1 (7) of VCS Standard v4.7.
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4.2.2 Stakeholder Consultation and Ongoing Communication

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Ongoing consultation	As outlined in section 2.1.2 of VCS MR v2.0, the PP has conducted the stakeholder consultation process from 26th July 2022 to 28th July 2022 and also in 2024 from 13th May to 1st July. The social development area team and Simboise team have conducted stakeholder meetings to inform the communities on the progress of the project and to assess any demands from the stakeholders. The audit team verified the following documental evidence submitted by PP to ensure continuous engagement and transparency with stakeholders. • Horizonte Carbon Project ppts/⁴⁵/ used in training programs to educate the communities on project's developments. • e-mails/⁴⁶/ sent to various institutions and identified stakeholders informing them on the upcoming field audit for second verification along with briefing on the project's status and carbon emission removals achieved from 1st phase of the project implementation. • Stakeholders Mailing records/⁴⁶/ used for sending PD draft and key concept documents/⁴⁷/ • Project Flyers/⁴⁸/ and Videos of stakeholder meetings/⁴⁹/ • Stakeholder consultation photographs/⁴⁹/ with each community along with their consent forms and attendance records./⁵⁰/

	Stakeholder consultation schedule./^{105/} The audit team conducted interviews with the representatives of the communities and confirmed that the social inventory team are in constant interaction with them and any demands/complaints from the communities are mailed to creditosedecarbono@suzano.com.br. The communities also confirmed the awareness on the project status, ombudsman channel details and specified that no negative impacts have been experienced so far due to the implementation of the project activities. Therefore, the audit team confirmed that the established mechanism for ongoing communication is in accordance with section 3.18.5 of the VCS Standard v4.7.
Date(s) of stakeholder consultation	The PP has conducted the stakeholder consultation process from 26th July 2022 to 28th July 2022 and also in 2024 from 13th May to 1st July. The audit team reviewed the e-mails/^{46/} sent to various institutions and identified stakeholders, Stakeholder consultation photographs/^{49/} with each community along with their consent forms and attendance records/^{50/} and confirmed that information provided in section 2.1.2 of VCS MR v2.0 is appropriate.
Communication of monitored results	The audit team reviewed the Horizonte Carbon Project ppts/^{45/} and e-mails/^{46/} sent to various institutions and local stakeholders to assess the communication of monitored results to the communities. The PP through the emails has informed all the local authorities and communities on the project's status and carbon emission removals achieved from 1st phase of the project implementation. Also, the communities were aware of the upcoming field audit for second verification. The social development team conducted stakeholders meeting with Paulistinha communities and flyers were distributed to communicate the current project's status. During site visit, the audit team conducted independent interviews in the absence of PP and Project team and confirmed that the stakeholders were made aware of the project's developments through regular consultations and no negative impact was reported by communities due to implementation of the project activities.
Consultation records	In the project, Suzano S.A. has developed various protocols for identification and engagement with the local stakeholders. The communities are consulted by Social Development Area team at pre-

	determined intervals and provided trainings on social activities, educated on the Horizonte project activities and all the demands expressed by communities are acknowledged by the PP and registered in SISPART system. The audit team verified the Suzano's stakeholder consultation procedures/^{34-39/} and documentation evidence submitted by PP for conducting stakeholder consultation such as emails records, training records, consent forms, attendance records, consultation photographs and videos and confirmed that the PP has sufficiently demonstrated all actions taken in respect to recording the consultation process carried out during project implementation and operation process. Thus, the information provided in section 2.1.2 of VCS MR v2.0 is acceptable.
Stakeholder input	The audit team crosschecked the ombudsman channel and creditosedecarbono@suzano.com.br email records to confirm if any demands or project inputs are sent by the local stakeholders to the PP. No requests were reported for any benefit sharing activities through the assigned channels for the current monitoring period. As the project is implemented in a private property, the communities are not dependent on the project area for any benefits. However, as part of social activities, the PP has developed "Inclusive Recycling Initiative" to integrate all the waste pickers and provide economic support and established a Conscious Wall which is a volunteer waste drop-off point to reduce the improper waste disposal in the city. During site visit, the audit team conducted interviews with the representatives of communities and municipalities, where the Ponte Velha community representative expressed their interest to receive training on waste segregation and inclusive recycling in the upcoming project days. The audit team has raised a FAR 01 seeking the PP to address this demand for the next verification. The demand was noted by the social development area for future implementation. Thus, the audit team confirmed that there were no inputs from stakeholders for the current monitoring period and the information stated by PP is in accordance with the requirements outlined in section 3.18.3 of the VCS Standard v4.7.

4.2.3 Free, Prior, and Informed Consent

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	The project is implemented in areas owned or leased by Suzano S.A. and its controlled companies. The audit team verified the land ownership documents^{/101/102/103/}, fund contracts^{/83/84/} and lease agreements of all the PAIs^{/90/91/} added in the current monitoring period and confirmed that the rights to use land resources, wood revenue and carbon credits generated through implementation of Horizonte Project vests with the PPs. In addition, the PP has developed “Relationship Management Manual”^{/34/} and operational dialogue^{/39/} to resolve any disputes arising in the project. The stakeholders’ consultation process has been carried out by the PP to create awareness on the project design and social activities are implemented for benefiting the communities and ecosystem. Interviews with communities and government authorities confirmed the ownership of the project area. Also, no negatives impacts have been observed so far in the project. Consequently, the documental evidence and site visits highlighted that no communities are reliant on project area for any benefits. Thus, the audit team deems that the information in section 2.1.3 of VCS MR v2.0 is acceptable.
Outcome of FPIC discussion	Given the information detailed above, the FPIC process is not applicable for this project as the land access and usage rights vests with the PP. During site visit, no disputes were observed, also no forced relocations or displacements are carried out in the project as the project is implemented in a private property.

4.2.4 Grievance Redress Procedure

Item	Evidence gathering activities, evidence checked, and assessment conclusion
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Grievance received and steps taken to resolve the grievance including the outcomes of the resolution	The PP has submitted the records^{/51/} of all the grievances received during the current monitoring period. The grievances were reported to Suzano S.A's telephonic number and through operational dialogue. Suzano S.A. has established procedure for identification and assessment of social aspects and impacts^{/35/} which highlights the procedure adopted by the PP to resolve any grievance reported in the project. All the grievances were closed through consultations, meetings and adopting corrective measures^{/51/} for the issues reported. Some of the grievances received^{51/} for the project are as follows: 1. Smell from the industrial plant 2. Damage to property (Public and private) 3. Fence Agreement The steps followed to resolve the grievances recorded as similar for the issues. 1. Registration of the grievance 2. Assessment/ evaluation of the issue 3. Communication to the applicant 4. Action adopted to resolve the issue 5. Closing of the grievance For the first grievance recorded^{/51/}, the Suzano S.A's Industrial Environment Team has evaluated the situation and taken steps to address the issue in connection with the plant coordination department. For Damage to property and Fence Agreement issues^{/51/}, the PP has fixed the damage through hiring of labors and new fences have been installed in the applicant's property upon confirmation of damage or fence deterioration. During site visit, the audit team conducted interviews with PP, Social Development team and local stakeholders and confirmed that all the grievances are appropriately closed in the project. Further, the audit team reviewed the grievance records^{/51/} and affirmed that all the grievances recorded for the current monitoring period are addressed and resolved by the PP. Therefore, the information provided by PP in section 2.1.4 of the VCS MR v2.0 is acceptable.
Grievance redress procedure	The PP has developed SISPART system wherein all the demands mentioned by the communities are recorded for further assessment.

The employees and field staff are provided with training to register the demands from the stakeholders and inform them about the relevant communication channels for recording the occurrences or impacts such as Suzano S.A's ombudsman channel, telephonic details, email ids. Based on the intensity and relevance of the demand, the grievances are resolved between 45 to 90 days. For exceptional demands seeking longer periods, the issue is communicated to the applicant via telephone, email or other communication channels.

Steps followed to resolve a grievance are as follows:

6. Registration of the grievance
7. Assessment/ evaluation of the issue
8. Communication to the applicant
9. Action adopted to resolve the issue
10. Closing of the grievance

Through established procedure "Identification and assessment of social aspects and impacts"^{35/}, the PP focuses on managing and reducing negative social and environmental impacts caused by its operations. The procedure identifies all the impacts occurring in the surrounding communities due to project implementation and grades them based on severity through social impact matrix. For each significant negative impact, Suzano S.A has defined actions to avoid, minimize and repair the damage. On an annual basis, the local shared value committee assesses whether the impact management plan needs to be updated based on monitoring results and stakeholders' feedback.

The audit team through interviews with PP and Social Development Area team concludes that all the grievances are resolved as per Suzano's procedures^{35-39/} and all the grievances recorded for the current monitoring period were resolved by the PP. Affirmation is provided that the developed grievance redressal procedure complies with the requirements of section 3.18.4 of the VCS Standard v 4.

4.2.5 Public Comments

The ARR Horizonte Carbon Project was open for public comment period from 08/08/2022 to 07/09/2022 as per the information in section 2.4 of registered VCS PD v6. Further, the project has not received any public comments outside the public comment period during the second monitoring period. The audit team crosscheck the VERRA registry "VCS Other Documents" (<https://registry.terra.org/app/projectDetail/VCS/3350>) and confirmed that no comments have been submitted in the VERRA registry for the project.

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
No public comments were received outside the public comment period.	No action is necessary as no comments have been received for the project outside public comment period.	The audit team confirmed through assessment of the project's webpage at the VERRA Registry, that no comments were received so far.

4.2.6 Risks to Local Stakeholders and the Environment

4.2.6.1 Management Experience

As evidence to support their Management Experience, the PP submitted all relevant documentation, including Curriculum Vitae, certifications, and other credentials of the Horizonte Project team. The audit team verified the CVs/^{74/75/} of the PP, and all personnel involved in the project's development and implementation to assess the team's competency required for managing the project.

During the site visit, the audit team conducted specific interviews with the PP, the Way Carbon Team, and representatives from the Human Resources, Safety and Security, Ombudsman Team, GIS Team, Forest Inventory Team, Fire Monitoring and Alerts Team, Social Development Team, Simbiose Team, and Biodiversity Monitoring Team and affirmed that the management team possessed all the requisite skills for effective management of the project.

Further, Suzano S.A. has established partnerships with several other entities to provide specialized consultancy for handling AFOLU projects, including:

- 2TREE CONSULTORIA E MEIO AMBIENTE LTDA
- AGROICONE LTDA
- WAYCARBON SOLUCOES AMBIENTAIS E PROJETOS DE CARBONO SA

Suzano S.A is one of the largest companies in Brazil working for creation of sustainable products. It has 100 years of history and largest pulp manufacturer in the world. They manage large areas of eucalyptus plantations for the purpose of paper production. The Horizonte project area is owned and managed by Suzano S.A for raising eucalyptus plantations on the degraded pasture lands. (<https://www.suzano.com.br/en>)

2TREE AMBIENTAL provides environmental services in a personalized and innovative way for over 10 years in the carbon market, having a wide range of focus on environmental licensing process, forest management certifications, chain of custody and commercialization of carbon credits. In the Horizonte project, the scope of 2TREE AMBIENTAL is to provide environmental monitoring services to assist in the development of operational activities in the forest areas where Suzano S.A operates in Mato Grosso do Sul. (<https://www.2tree.com.br/>)

Agroicone is a consultancy founded in 2013, transforming the Brazilian agriculture through innovative solutions and facing challenges of sustainable development. The organization provides services in public policies, climate change and biodiversity, ecological restoration and agroforestry systems. It provides technical support to Suzano S.A for carrying out ecological restoration of native areas in Horizonte Project. (<https://agroicone.com.br/>)

WayCarbon is a global company founded in 2006, recognized for its expertise in solutions that combine scientific and business knowledge, leveraged by technology, to support companies and governments in the climate transition. It has a portfolio of over 500 private sector clients, as well as extensive experience in the public sector and serving multilateral organizations (UNDP, CAF, World Bank and IADB) in the areas of mitigation, adaptation and structuring of carbon emission reduction and removal projects. WayCarbon provides technical service for VCS monitoring to Horizonte Project developed by Suzano S.A. (<https://waycarbon.com/pt/sobre-nos/>)

The audit team reviewed the agreement between Suzano S.A and other entities^{/30/} and is of the opinion that each entity involved in the project has significant experience in every role defined in the project. The audit team concludes that the Suzano S.A.'s management team possess significant experience and potential skills required for implementing carbon project and is in compliance with section 3.19.6 of VCS Standard v4.7.

4.2.6.2 Risk Assessment

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Natural and human induced risks to stakeholders' wellbeing	No risks were detected in the project. The PP has developed lease agreements^{/90/91/} with certain farmland owners and thus, monetary benefit has been provided to the relevant stakeholders. The implementation of the project activity is carried out in degraded pasture^{/33/} lands which promotes vegetation coverage. Additionally, In the project, the Permanent Preservation Areas (APPs) and Legal Reserve areas (RLs) are restored through native planting. The fire monitoring and alerts team is established in the project to monitor and detect early fire incidents and send alerts to the local stakeholders. Suzano S.A. has developed policies^{/77/} to anticipate and monitor all the

	risks that might arise in the project. The PP has established environmental monitoring procedures^{/62/} to monitor any negative impacts of the project on the environment. The audit team conducted site inspections and interviews with the PP, Project Management team and local stakeholders and opined that the justification provided by PP is acceptable and is in compliance with the section 3.19.4 of the VCS Standard v4.7.
Risks to stakeholder participation	The audit team engaged with local stakeholders during site visits to assess any potential risks related to stakeholder participation. The Social Development Team and Simboise team are developed by PP for relationship management with local stakeholders. The representative of the communities confirmed that regular stakeholder consultations are conducted by the PP and expressed their interest in participating in the project. The audit team verified the relationship management manual^{/34/}, operational dialogue^{/39/} developed by Suzano S.A. for strengthening the relationship between the communities and the company and other policies^{/35/36/37/38/} for managing the social demands and confirms that there are no risks to the stakeholder participation in the project. Thus, the project is in compliance with the requirements of sections 3.19.5 of the VCS Standard v4.7.
Working conditions	The PP has formulated rules and regulations to prioritize the safety of employees in the workplace. The audit team verified the “Code of Ethics and Conduct”^{/40/} developed by Suzano S.A. which provides guidelines for safety and security management. The Code of Ethics and Conduct is in compliance with the laws and regulations in force, in particular Decree-Law No. 5.452/1943 (Consolidation of Labor Laws). Further, the audit team through interviews with the representative of safety and security team, confirmed that all the workers in Suzano S.A. received periodic training on safety and security protocols and technical aspects of their work. During site inspections and visit to Suzano S.A. office, the audit team identified the workers in their safety gears and witnessed the safety signal boards at various locations. The Personal Protective Equipment (PPE) gears are provided to all the employees based on their work role requirement. In the field, the audit team were briefed about safety protocols to be maintained in the eucalyptus plantations before entering the plots. Additionally, the field inventory team confirmed receiving training on safety protocols, equipment handling within joining the organization and at periodic intervals. Thus, the audit team based on the review of safety

	manual and site inspections confirms that the risk controls are in place within the project area and thereby, the justification provided in section 2.2.2 of the VCS MR v2.0 is appropriate and in accordance with section 3.19.7 of the VCS Standard v4.7.
Safety of women and girls	Suzano S.A. explicitly prioritizes the women safety and provides equal opportunities for women staff at workplace. Through site inspections and interviews with the project management team, the audit team confirmed that there are no risks to safety of women at workplace. A provision for milk expression rooms is made at the workplace. The organization also supports the staff during pregnancies through prenatal, postpartum, nutritional and psychological support programs. A channel called “OMBUDSMAN” is created to anonymously report any complaints for the employees working in Suzano S.A. A detailed investigation and stringent disciplinary measures are adopted in the case of misconduct. Further, the audit team verified the “Code of Ethics and Conduct”^{/40/} and Disciplinary Measures Policy^{/41/} and concludes that there are no safety risks to women and girls resulting from project activities, thus, the project is in compliance with section 3.19.8 of the VCS Standard v4.7.
Safety of minority and marginalized groups, including children	The audit team through site inspections and interview with the PP and Human Resource Team confirmed that there are no risks for the minority or marginalized groups due to project activities. In the Suzano S.A. special reservation is provided to recruit employees from all the groups to uplift the minorities or marginalized groups. No children are employed in the project. The audit team verified the “Code of Ethics and Conduct”^{/40/} developed by Suzano S.A. which stated that the long-term goal of the company is to ensure greater representation of minority groups and greater inclusion with respect. Also, the Code of Ethics and Conduct is in compliance with the laws and regulations in force, in particular Decree-Law No. 5.452/1943 (Consolidation of Labor Laws). Suzano S.A’s Corporate Human Rights Policy^{/43/} adheres to International Bill of Human Rights, composed of the Universal Declaration of Human Rights, and United Nations Guiding Principles on Business and Human Rights. Thus, the project is in accordance with section 3.19.9 of the VCS Standard v4.7.

Pollutants (air, noise, discharges to water, generation and release of hazardous materials and chemical pesticides and fertilizers

The implementation of project activities involves usage of water resources in the initial days of planting and fertilizers application for soil correction as the planting activity is carried out in degraded soils^{/33/}. To prevent the excessive use of water resources or any alternations in the ground water level, the PP has developed a procedure “Control of surface and groundwater collection for forestry operations”^{/54/} which defines guidelines and procedures for controlling the usage of groundwater and surface water for Suzano S.A’s forest management activities. For efficient use of water resources, the PP has obtained certificate of declaration of use of water resources (DURH)^{/55/} for each PAIs issued by Environmental Institute of Mato Grosso Do Sul – IMASUL. The certificates include the water usage details by the PP for each PAIs which is within the prescribed usage limit. The audit team, through interviews with the PP confirmed that the irrigation activities are carried out by distributing water into the pits between 2 to 5 days of planting^{/92/}. Based on assessment whether seedlings adapt to the field, further irrigation is carried out until the seedlings have taken roots. The planting activity is carried out in rainy season to prevent pressure on natural water bodies. Throughout the project, the PP has conducted water resources monitoring to prevent any potential risk to water resources due to project implementation. The audit team verified the water resources monitoring plan^{/56/} and micro-watershed maps^{/57/} indicating the water availability in the project area and deems that the PP has taken appropriate measures to mitigate water risk.

Additionally, In the project, fertilizers are applied at the prescribed quantity for correcting the soil and establishment of eucalyptus plantations. A soil assessment is carried out by forest business area before finalizing the farmlands to include in the project^{/92/}. The soil samples are assessed, and land quality is analyzed to predict the fertilizer requirement for making the farmland suitable for establishment of eucalyptus plantations^{/97/}. The audit team reviewed the “BD_SAP_atividades”^{/58/} fertilizer recommendation document which details the quantity of fertilizer applied in each PAI for the current monitoring period and confirmed that no hazardous impacts are recognized from the fertilizers used in the project.

To prevent the incidents of over usage of fertilizers, Suzano S.A. has established training manuals for fertilizer applications^{/59/}, packing returns manual^{/59/} describing guidelines to control pesticide and fertilizer packaging waste generated by UNF Três Lagoas – MS and solid waste management^{/59/} procedure to minimize environmental impacts. The fertilizers are applied manually, mechanized and aerially in the project.

Guidelines manual is developed for all the methods and adequate training is provided to the employees in the project^{60/}. The audit through site inspections, interviews with PP and field staffs and review of documental evidence affirms that the mitigation measures adopted by PP for identified risks are appropriate. Therefore, the project is in compliance with section 3.19.10 of the VCS standard v 4.7.

4.2.7 Respect for Human Rights and Equity

4.2.7.1 Labor and Work

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Discrimination	The audit team reviewed the “Code of Ethics and Conduct”^{40/} wherein the PP prohibits any form of discrimination based on race, ethnicity, gender, religion, sexual orientation, nationality, ancestry, political affiliation, criminal history, social status, age, marital status, pregnancy, disability, body weight, height, lifestyle, or any other personal characteristic. The PP also maintains a human rights policy^{43/} which complies with the labor laws in force in Brazil and prevents any sort of injustice in relation to remuneration, benefits, worktime, periodic vacations and rest among the employees. These rules and regulations also apply to staff and contracted workers employed by third parties. Further, an Ombudsman channel is established in Suzano S.A to report any complaints anonymously. During site visit, the audit team crosschecked the channels to verify the complaints and measures adopted to resolve the complaints. No discrimination complaints were registered so far through the channel. The audit team also verified the salary payslips of employees and confirmed that equal remuneration is provided to employees working in same job role with similar work experience. Interviews were conducted with Human Resource team and confirmed that equal job opportunities are provided for all the employees for work and promotion. Based on the interviews conducted with employees and review of Suzano S.A’s Diversity and Inclusion Policy^{42/} which prevents discrimination at workplace, the audit team affirms that no discrimination exists between the employees and the project adheres to requirements stated in section 3.19.11 of VCS Standard v4.7.

Sexual harassment	Suzano S.A.'s Code of Ethics and Conduct/^{40/} policy prohibit any form of shaming or intimidation, such as verbal, physical or psychological violence, as well as any forms of discrimination, moral or sexual harassment. It also established "Disciplinary Measures Policy"/^{41/} which outlines stringent penalties and opening of criminal and civil proceedings in case of misconduct. The audit team conducted interviews with the employees involved in the project and verified the "Ombudsman channel" and is opined that the preventive measure taken in the project is acceptable and thus, the project is in compliance with requirements stated section 3.19.11 of VCS Standard v4.7.
Gender equity in labor and work	The PP promotes gender equity through its policies/^{40/42/43/} which outlines equal work opportunities to employees irrespective of gender and promotes International Bill of Human Rights, composed of the Universal Declaration of Human Rights. For uplifting the minority groups like LGBTQ, a certain percentage of job vacancies are reserved in the company. The audit team verified the employee details during site visit and conducted interviews with the Human Resource Team to assess any instances of gender bias. Further, the salary pay slips were examined which highlighted equal pay among the employees for the same job task carried out in the project. Through interviews with the employees, the audit team affirms that all candidates are provided the same opportunity to apply for any job vacancy. The job vacancies are posted in the Suzano S.A website and based on scores obtained for each resume, the candidates are listed for job opportunity. Thus, the audit team is of the opinion that the project effectivity promotes gender equity in the project and fulfils the requirement specified in section 3.19.12 to 3.19.14 of VCS Standard v4.7.
Forced labor	Suzano S.A. promotes a balance between the employees professional and personal lives/^{43/}. Adhering to the labor rights, the organization respects the internationally recognized human rights. The policies framed are in accordance with International Labour Organization (ILO) Declaration on Principles and Rights beyond Convention No. 169 and aligns to Convention No.29, concerning Forced or Compulsory Labour. Through interviews with the Human Resource Team and employees, the audit team confirmed that the organization prohibits overtime work carried out by employees and promotes work life balance. The audit

	team through site inspections and review of Suzano S.A's policies/^{40/43/} affirms that no instances of forced labor are identified in the project. Thus, the preventive measures stated in section 2.3.1 of VCS MR v2.0 is acceptable, and the project is in compliance with section 3.19.15 of VCS Standard v4.7.
Child labor	The audit team reviewed the Code of Ethics and Conduct/^{40/} policy and Human Rights Policy/^{43/} which stated that Suzano S.A. repudiate the exploitation of forced labor, child labor, human trafficking or any other form of exploitation that violates human dignity and current labor legislation highlighting its efforts to prevents any degrading forms of labor. The Suzano S.A policies/^{43/} are in accordance with International Labour Organization (ILO) Declaration on Principles and Rights beyond Convention No. 169 and aligns to Convention No. 182, concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour. Through site inspections and interview with the Human Resource team, it was confirmed that the minimum age for the employment is strictly maintained in the project and no children are employed in the project. Also, the PP has advertised the contact details of the Ombudsman channel in its website, which is available 24 hours a day, throughout the week and can be reached by calling 0800 771 4060, by emailing ouvidoriaexterna@austernet.com.br for all the Suzano S.A staff and local communities. Thereby, the audit team is opined that the preventive measure adopted by PP in section 2.3.1 of VCS MR v2.0 is acceptable and aligns with the requirements of section 3.19.15 of VCS Standard v 4.7.
Human trafficking	The audit team conducted site inspections and interviews with the PP, Project Management team, representatives of local communities and government authorities to verify any human trafficking threats existing in the project area. The audit team assessed Code of Ethics and Conduct/^{40/} policy and Human Rights Policy/^{43/} which repudiate human trafficking for any purpose. The audit team concludes that there are no risks related to human trafficking associated with the project and all operations conducted by the PP aligns with recent Brazil's labor laws. Thus, the project is in accordance with requirements of section 3.19.15 of VCS Standard v4.7.

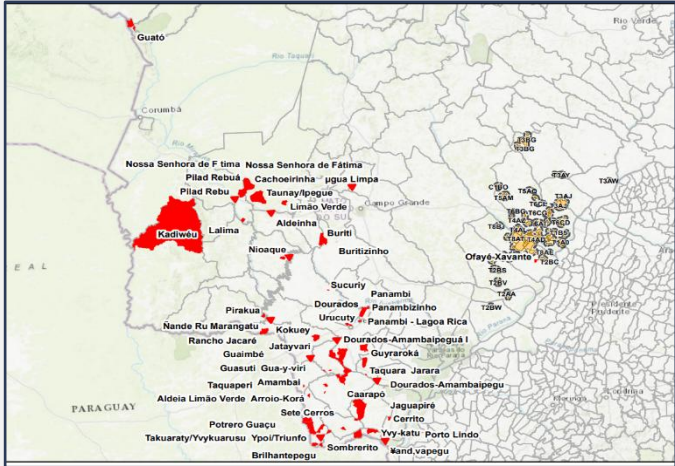
4.2.7.2 Human Rights

The audit team reviewed the information provided in section 2.3.2 of VCS MR v2.0 and verified the project's compliance with human rights principles outlined by various international and national organizations, including the United Nations Declaration on the Rights of Indigenous Peoples, ILO Convention 169, and Fundamental Rights at Work and its eight Fundamental Conventions on Indigenous and Tribal Peoples. The audit team interviewed the PP and relevant personnel to assess the risks posed by the project to the local communities present in the vicinity of the project. The audit team's assessment and conclusions are outlined as follows:

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risks identified to Human Rights	The project is implemented in private property/^{101/102/103/} wherein the PP holds all the legal rights/^{90/91/} to utilize the land resources and carbon credits revenue. As the land ownership rights are acquired by the PP, no disputes exist between the PP and stakeholders. The Social Development Area team is continuously engaged in stakeholder consultations and the project has carried out Free, Prior and Informed Consent (FPIC)/^{49/50/} to address any issues or demands of the local stakeholders located near the project area. Suzano S..A has developed "Corporate Human Rights Policy"/^{43/} in commitment to respecting human rights, recognize the importance of the cultural heritage, diversity and way of life of indigenous and tribal people. The human rights policy adheres to International Bill of Human Rights, composed of the Universal Declaration of Human Rights, International Labour Organization (ILO) Declaration on Principles and Rights beyond Convention No. 169 and Fundamental Rights at Work and its eight Fundamental Conventions on Indigenous and Tribal Peoples. The audit team through site inspections and interviews with communities and government authorities confirmed that no IPs or LCs are dependent on the project area for any benefits. Thus, the audit team affirms the justification provided by the PP in section 2.3.2 of VCS MR v2.0 is appropriate and in accordance with the requirements of sections 3.19.17 and 3.19.18 of VCS Standard v 4.7.

4.2.7.3 Indigenous Peoples and Cultural Heritage

The ARR Horizonte Carbon Project is implemented on private property owned or leased by Suzano S.A and its controlled companies. The land access rights and resource usage rights for the leased farms are obtained by PP through lease agreements^{/90/91/} for the project crediting period. The PP has established a Social Development Area Team to identify all the communities allocated in the 3km vicinity of the project area to assess any potential risks caused by the implementation of the project activity. The EPIC audit team's assessments and conclusions regarding risks related to the protection of the rights of Indigenous Peoples (IPs), Local Communities (LCs), and customary rights holders are detailed in the table below.

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risks identified to Indigenous Peoples and Cultural Heritage	All the Indigenous People and local communities located near to the project area are mapped in the project. The local stakeholders – Communities Map^{/104/} and Indigenous Map^{/68/} indicating the locations of specific communities and indigenous units located near the project area were crosschecked to confirm that no overlap exists in the land use rights. 8 communities and 61 indigenous units were found in the state of Mato Grosso do Sul. The audit team conducted interviews with all the identified communities and municipality representatives and opined that the project doesn't bear any risks to the IP's, LCs and customary right holders.  Figure 02: Location of 61 indigenous units identified in the State of Mato Grosso do Sul. The PP has established “PC.00.0012, Corporate Human Rights Policy”^{/43/} showcasing its commitment for recognizing, respecting

	and protecting the diversity, cultural heritage, rights of Indigenous, tribal peoples and traditional communities. The Social Development Area manage the relationships with indigenous and tribal people through dialogue and regular engagements in line with Brazilian legislation and ILO Convention No. 169 of the World Labor Organization (ILO). Additionally, the “policy on relations with IPs and Traditional communities” ^{/69/} providing guidelines for managing relations with IPs, LCs, Quilombola communities and other traditional communities adopted by PP in areas of Suzano’s operations is publicized in the Suzano S.A. website ^{/67/} . Thus, the audit team based on the crosscheck of land ownership documents ^{/101/102/103/} , Suzano S.A website ^{/67/} and through site inspections confirms that the project adheres to requirements of section 3.19.17 – 3.19.18 of VCS Standard v4.7 and the information provided in the section 2.3.3 of VCS MR v2.0 is appropriate.
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4.2.7.4 Property Rights

The ARR Horizonte Carbon Project is implemented on private property owned or leased by Suzano S.A and its controlled companies. The PP has its own procedure for identification of farmlands for establishment of eucalyptus plantations and native restoration in the project. The PP has carried out planting in 40 area during first monitoring period. Additionally, 27 Project activity instances are added to the project in the second monitoring period. The audit team verified the lease agreements between Suzano S.A. and farm owners and confirmed the grant of authorization for land access and use rights to PP. Interviews were conducted with PP and local stakeholders to assess the risks associated with property rights. The audit team's assessment and opinions are detailed in the table below.

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risks identified to the property rights of Ips, LCs and Customary right holders	As a part of evidence, the audit team verified the project area maps ^{/28/} and land ownership documents of both the land parcels owned and leased by Suzano S.A and its subsidiaries. In support of ownership, the PP has submitted Registration service records of each PAI ^{/101/102/103/} , Property Taxation records (ITR for the last 5 years), Negative Debts Certificate issued by Federal Revenue, Rural Property Registration Certificates (CCIR), Rural Environmental Registry (CAR) documents, Environmental Declaratory Act - ADA (Law 9,393/96) documents and Funding Contracts ^{/83/84/} .

	Further, Lease agreements^{/90/91/} were crosschecked for provision of land access and usage rights to PP. As per the contracts, the PP is the sole beneficiary and entitled to carbon credits and wood revenue generated from the project. Additionally, Suzano S.A. has established procedures i.e., land prospecting^{/97/} and acquisition of rural properties^{/96/}, wherein a survey is conducted by the Forestry Business area to assess the ownership documents of potential farmlands before contracting them in the project to avoid any potential disputes in the property rights. A legal due diligence report (DDJ) is prepared to analyse the legal situation of the lessors, the farmland's previous owners for the last 4 years and to ensure that the property is in condition to be leased in accordance with Brazil's current legislation. The DDJ report is validated by Suzano's Management or Legal Advisory^{/95/}. The audit team through interviews with the local communities and government authorities confirming that the project activity is implemented in private properties and there is no overlap or disputes between the communities and project's property rights fulfilling the requirements specified in section 3.19.19 – 3.19.21 of the VCS Standard v 4.7. Thereby, the information provided in the section 2.3.4 of VCS MR v2.0 is acceptable.
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4.2.7.5 Benefit Sharing

The Horizonte Carbon project is implemented in areas either owned or leased by the PP and its controlled companies. Thus, the PP acts as the sole beneficiary of carbon credits revenue generated due to implementation of the project activities. However, as part of social activities, the PP has designed few benefit programs to the local stakeholders located in the vicinity of the project area. The audit team's assessment and conclusions of the benefit sharing plan are detailed in the table below.

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Summary of the benefit sharing plan	The audit team verified the land ownership documents ^{/101/102/103/} , fund contracts ^{/83/84/} and lease agreements of all the PAIs ^{/90/91/} added in the current monitoring period and confirmed that the rights to use land resources, wood revenue and carbon credits generated through implementation of Horizonte Project vests with the PPs. Thus, the PP is considered as the sole beneficiary of the project.

	However, the PP has implemented certain social activities from carbon credits revenue for benefit of local communities located near to the project area. Through site inspections and interviews with PP, the audit team confirms the implementation of restoration activities of native areas^{/27/}, support to Inclusive recycling initiative^{/21/23/}, environmental monitoring and training programs to local communities on waste recycling^{/21/}. The audit team reviewed the information in registered PD&MR v6, section 2.3.5 of the VCS MR v2.0. and opined that the social activities implemented improve the economic stability of the local communities.
Benefit sharing during the monitoring period	During the current monitoring period, the PP implemented Inclusive Recycling initiative linked to the Horizonte Carbon Project to integrate hand pickers and create awareness among the public on waste reduction, segregation and proper disposal. The audit team crosschecked presentations of the inclusive recycling initiative^{/21/}, proposal for conscious wall^{/23/}, training records^{/21/}, waste collection records^{/21/} and confirmed that training programmes and lectures were conducted at periodic intervals to create awareness on waste segregation and disposal. Further, the audit team conducted an independent research and reviewed the articles^{/18/} on the internet which stated that the Suzano S.A's partnership and support to Corpazul lead to 22% increase in average family income in 2022. As part of its benefit sharing activities, the PP aimed to collaborate with Youth Peniel Challenge to procure native and ornamental seedlings for native areas restoration as mentioned in the registered VCS PD&MR v6. However, due to challenges with documentation, the partnership wasn't successful. This initiative aimed to economically support 40 families. The audit team crosschecked the meeting photographs with Youth Peniel team, Seedling Nursery Project Plan and the Partnership decline email from Youth Peniel and conducted interviews with Youth Peniel Representative to confirm the decision to forgo the seedling nursery project. Further, through interviews with the PP and Biodiversity team, the audit team confirmed that the PP aims to integrate seed collectors, providing them employment opportunities through channelizing them to collect native seeds for use in native area restoration activities. During site visit, the audit team visited the native restored areas and verified the information.

4.2.8 Ecosystem Health

The PP has assessed the potential risks that can impact the ecosystem health due to implementation of the project activity. The audit team reviewed the FSC certification issued in 2023 for the PAIs managed by Suzano S.A in agreement with Lucan. The FSC has certified the PP stating Suzano for fulfilling all the audit requirements^{/64/}. The PP has conducted Survey of Environmental Aspects and Impacts (EIA) for forestry processes, considering the legal diplomas and compliance with the current legislation^{/64/}. During site inspections, interviews were conducted with the PP, Biodiversity Monitoring team and local communities to confirm the impact of any potential risks identified in the section 2.4 of VCS MR v1.2. The audit team's assessment and conclusions are outlined as follows:

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Impacts on biodiversity and ecosystems	Suzano S.A has a designated Biodiversity Monitoring Team to conduct routine checks to assess the impact of project activities on the flora and fauna existing in the project area and Cerrado Biome. Biodiversity surveys are carried out at predetermined intervals in the identified 5 HCV areas to record floral and faunal diversity (mammals, reptiles aves, amphibians and aquatic fauna). Abasto, Barra do Moeda, Matão, Rio Verde A and Duas Marias farms are categorized as HCVs areas due to their vast area and presence of higher biological diversity^{/61/}. Additionally, the PP has made a research partnership with Federal university of Mato Grosso du Sul to study the impact of edge effect in Duas Marias Farm^{/63/}. The project activities involved vegetation restoration on degraded areas as well as native restoration in APPs and RLs. As a result of these restoration efforts, the project area acts as a shelter for various fauna. This ecological benefit was confirmed through site visits, wherein the audit team observed ant-eater mammals and various birds in the eucalyptus plantations. Sign boards are installed in each PAIs and HCVs with a list of prohibited activities^{/Appendix v/} by the PP to reduce any potential risks. • Prohibition of hunting, fishing and collection of plants in the company property. • Avoid intentional fires. • Prohibition of extraction of sand and wood collection. • Avoid disposal of litter. • Emergency contact details to be contacted in case of fire events.

	As a precautionary measure, an initiative called “De Olho No Bicho”^{/61/} (Keeping an eye on the animal) is developed by PP wherein the local pedestrians and EPS field inventory team can record the animals spotted along with location, time, plot details and submit it to MAF (Meio Ambiente Florestal -MS). The audit team reviewed the “Biodiversity Monitoring” Procedure^{/61/} developed by Suzano S.A and is opined that all efforts are made by PP to assess the potential impacts on biodiversity due to project implementation. Thus, the audit team concludes that the project doesn’t have any negative impacts on biodiversity and is in accordance with section 3.19.25 of the VCS Standard v4.7.
Soil degradation and soil erosion	As outlined in section 2.4 of VCS MR v2.0, the project is implemented in degraded pasture lands^{/33/}. The audit team reviewed the project area details in MARVIN BLUE Platform for all the PAIs (Wave 1 (40 PAIs) and Wave 2 (27 PAIs) in Marvin) and observed the official LAPIG classification for pasture degradation for each year^{/31/}. The classification displayed the degradation levels (severe, moderate and not degraded) within the farm polygons, as well as the boundaries of the Ups that are part of the project^{/33/}. Further, as part of project activity, eucalyptus plantations are established in the previously degraded pasture lands for vegetative restoration. The audit team reviewed the scientific literatures supporting the environmental benefits of eucalyptus planting.^{/66/} Soil collection and area diagnosis^{/97/} is conducted to all the eligible farmlands as part of land prospection process to assess the soil quality. Based on the soil assessment, fertilizer application is recommended by soil experts for soil quality correction and nutritional monitoring. The audit team reviewed the “BD_SAP_atividades.xlsx”^{/58/} and verified the fertilizers application details. Fertilizer application manuals^{/59/} are developed by PP for conducting training programs to field staffs. During site visit to eucalyptus plots, the audit team witnessed the lower trenches created at the ends of the project boundaries to prevent soil erosion in the project area. Thus, the audit team through site inspections, interviews with the field inventory team and review of documental evidence, confirmed that the preventive measures adopted by PP is appropriate.

Water consumption and stress	The implementation of project activities involves usage of water resources in the initial days of planting between 2 to 5 days. To prevent the excessive use of water resources or any alternations in the ground water level, the PP has developed a procedure “Control of surface and groundwater collection for forestry operations”^{/54/} which defines guidelines and procedures for controlling the usage of groundwater and surface water for Suzano S.A’s forest management activities. For efficient use of water resources, the PP has obtained certificate of declaration of use of water resources (DURH)^{/55/} for each PAIs issued by Environmental Institute of Mato Grosso Do Sul – IMASUL for the current monitoring period. The certificates include the water usage details by the PP for each PAIs which is within the prescribed usage limit. The audit team, through interviews with the PP confirmed that the irrigation activities are carried out by distributing water into the pits between 2 to 5 days of planting^{/92/}. Based on assessment whether seedlings adapt to the field, further irrigation is carried out until the seedlings have taken roots. The planting activity is carried out in rainy season to prevent pressure on natural water bodies. Throughout the project, the PP has conducted water resources monitoring to prevent any potential risk to water resources due to project implementation. Micro-watershed maps were prepared for various PAIs locating the water bodies for water resources monitoring. The audit team verified the water resources monitoring plan for 2022 and 2023^{/56/} and micro-watershed maps^{/57/} indicating the water availability in the project area and deems that the PP has taken appropriate measures to mitigate water risk. Thus, the project activities does not drain or degrade the hydrological functions of ecosystems and adheres to section 3.19.28 requirement of VCS Standard v4.7.
Usage of fertilizers	In the project, fertilizers are applied at the prescribed quantity for soil correction as the planting activity is carried out in degraded soils^{/33/}. Soil assessment is carried out by forest business area team before finalizing the farmlands to include in the project^{/92/}. The soil samples are assessed, and land quality is analyzed to predict the fertilizer requirement for making the farmland suitable for establishment of eucalyptus plantations^{/97/}. The audit team reviewed the “BD_SAP_atividades”^{/58/} fertilizer recommendation document which details the quantity of fertilizer applied in each PAI for the current

monitoring period and confirmed that no hazardous impacts are recognized from the fertilizers used in the project.

To prevent the incidents of over usage of fertilizers, Suzano S.A. has established training manuals for fertilizer applications^{/59/}, packing returns manual^{/59/} describing guidelines to control pesticide and fertilizer packaging waste generated by UNF Três Lagoas – MS and solid waste management^{/59/} procedure to minimize environmental impacts. The fertilizers are applied manually, mechanized and aerially in the project. Guidelines manual is developed for all the methods and adequate training is provided to the employees in the project^{/60/}. The audit through site inspections, interviews with PP and field staffs and review of documental evidence affirms that the mitigation measures adopted by PP for identified risks are appropriate. Therefore, the project is in compliance with section 3.19.10 of the VCS standard v 4.7.

4.2.8.1 Rare, Threatened, and Endangered species

The ARR Horizonte Carbon Project primarily focuses on ecological restoration through establishment of eucalyptus plantations in degraded areas and conducting native restoration in APPs and RLs. During the current monitoring period, the PP has only established eucalyptus plantations. The native restoration is planned to be executed in next monitoring period at different fragmented areas, also promote fauna biodiversity in the region.^{/61/} The FSC Audit Report 2023^{/64/} confirmed that species are monitored, including those considered rare or endangered, in High Conservation Value Areas and other relevant fragments with the aim of diagnosing the biological community.

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Species or habitat	In the project, 5 PAIs are classified as HCVs areas in the project. The Biodiversity monitoring team is responsible for conducting periodic flora and fauna assessment existing in the project area and Cerrado Biome. Biodiversity surveys are carried out at predetermined intervals in the identified 5 HCV areas to record floral and faunal diversity (mammals, reptiles aves, amphibians and aquatic fauna). Abasto, Barra do Moeda, Matão, Rio Verde A and Duas Marias farms are categorized as HCVs areas due to their vast area and presence of higher biological diversity ^{/61/} . The biodiversity census is carried out at 4 situations: inside and on the edge of the native vegetation fragment, inside and on the edge of the forest plantations (eucalyptus plot). Atleast 6 census points are used in each type of sampled environment, with native vegetation environments (3

points on the edge and 3 inside) and eucalyptus plantations (3 points on the edge and 3 inside) being sampled.

The audit team reviewed the Biodiversity_Fauna_analysis_2022-2023.xlsx^{61/} and Biodiversity_Flora_analysis_2022-2023.xlsx documents^{61/} wherein all the species identified in 5 HCVs are listed and categorized according to their IUCN Status. Information on the endemic species is also outlined in the biodiversity analysis. 34 Vulnerable and 4 Near Threatened species were recorded in the 2022-2023 Biodiversity Fauna analysis and 2 Vulnerable, 3 Endangered and 16 Near Threatened species were recorded in Floral diversity analysis.

The project activities involved vegetation restoration on degraded areas as well as native restoration in APPs and RLs. As a result of these restoration efforts, the project area acts as a shelter for various fauna. This ecological benefit was confirmed through site visits, wherein the audit team observed ant-eater mammals and various birds in the eucalyptus plantations. Sign boards are installed in each PAIs and HCVs with a list of prohibited activities^{/Appendix v/} by the PP to reduce any potential risks.

- Prohibition of hunting, fishing and collection of plants in the company property.
- Avoid intentional fires.
- Prohibition of extraction of sand and wood collection.
- Avoid disposal of litter.
- Emergency contact details to be contacted in case of fire events.

As a precautionary measure, an initiative called “De Olho No Bicho”^{/61/} (Keeping an eye on the animal) is developed by PP wherein the local pedestrians and EPS field inventory team can record the animals spotted along with location, time, plot details and submit it to MAF(Meio Ambiente Florestal -MS).

The audit team conducted interviews with Biodiversity monitoring team and fire monitoring team and confirmed that the fire monitoring towers installed in the project areas recorded the diverse bird’s species and other mammals located in the project areas. This information was consolidated and submitted to biodiversity team for further assessment. Also, camera traps are installed in specific locations to monitor the diversity and movements of animals.

The audit team based on documented evidence such as biodiversity monitoring reports submitted by PP and site inspections affirms that no negative impacts are observed so far due to implementation of the project

	activities. Thus, the project is compliance with section 3.19.26 of VCS Standard v 4.7.
Areas needed for habitat connectivity	The audit team reviewed the “Monitoring of flora and fauna report” ^{/61/} and confirms that the diversity and abundance of several species of mammals remained constant in the project. The Biodiversity surveys have revealed that eucalyptus plantations also provide shelter to different types of birds and mammals. However, the identified HCVs areas are protected over the years as they are significant in area and home to numerous endemic species of Cerrado. Through site inspections and interviews with the biodiversity team, it is confirmed that the implementation of project activities doesn't impact the HCV areas, or any areas needed for habitat activity. Thus, the project is compliance with section 3.19.26 of VCS Standard v 4.7.

The PP has identified all the potential risks associated with floral and faunal biodiversity habitat management in the project and adequate measures are adopted to manage the risks. The audit team conducted site visits to all the HCVs area and interviewed biodiversity monitoring team to verify the potential impact of project activities on the existing biodiversity in the project region.

Evidence gathering activities, evidence checked, and assessment conclusion	
Habitats for rare, threatened, and endangered species	No risks are detected in the project. At Suzano, Biodiversity Monitoring is understood as the monitoring of the development and changes in components and parameters of the landscape and fauna and flora communities, aiming to evaluate the effects of forest management on the environment. The Biodiversity monitoring is conducted in the identified HCVs areas, and Cerrado Biome. Special conservation efforts are carried out for protecting endangered species habitats. Native restoration activities are planned for enhancing the floral diversity of the region. As a precautionary measure, an initiative called “De Olho No Bicho”^{/61/} (Keeping an eye on the animal) is developed by PP wherein the local pedestrians and EPS field inventory team can record the animals spotted along with location, time, plot details and submit it to MAF(Meio Ambiente Florestal -MS). Also, SOS Fauna stream has been developed to report wildlife distress incidents.^{/61/} The audit team reviewed the Biodiversity_Fauna_analysis_2022-2023.xlsx^{/61/} and Biodiversity_Flora_analysis_2022-2023.xlsx documents^{/61} and conducted interviews with PP and biodiversity

	monitoring team to confirm that no risks are posed to flora and faunal populations due to implementation of project activities. Thus, the justification provided by PP in VCS MR v2.0 is acceptable.
Areas for habitat connectivity	Suzano S.A.'s Biodiversity monitoring team has observed edge effect, which is change in community structure occurring at boundaries of two habitats. A partnership has been made by the PP to conduct studies on this edge effect with Federal university of Mato Grosso do Sul. The audit team reviewed the Work plan ^{/63/} and partnership agreement ^{/63/} wherein the PP funds the research team for carrying out the research work. Edge effects will be assessed in three forest fragments: Fazenda Duas Marias, Horto do Matão and fragment of Rio Verde A. Camera trap stations are set up both on the edge and inside the three Cerrado fragments used in this study. Thus, based on the interviews with the PP and biodiversity team, the audit team confirmed that the adopted mitigation measure for the identified risks is acceptable. Thus, the project adheres to section 3.19.26 of VCS Standard v 4.7.

4.2.8.2 Introduction of Species

No changes have been observed in the species composition from the registered VCS PD&MR v6. In the project, Eucalyptus species (E. grandis, E. urophylla and hybrid from the two species, E. grandis x E. urophylla)^{/71/} are extensively used for restoration of degraded lands as they are proven to be widely adapted to the Brazil's climatic zones and as that of project area. During site inspections, the audit team visited the plots and confirmed that no invasive species were planted as part of the project in the project area. The PP and Biodiversity monitoring team has further identified 939 potential species^{/72/} well adapted to Cerrado Biome to carry out native restoration in the project during next verification. The audit team's assessment and conclusions are reported in the table below.

Species introduced	Evidence gathering activities, evidence checked, and assessment conclusion
<i>Eucalyptus urophylla</i>	The species is classified as non-native to Brazil and used in the establishment of plantations ^{/52/} due to its high adaptability to the project area's climatic conditions. Eucalyptus is known to perform well even in limited water availability areas.
<i>Eucalyptus grandis</i>	
<i>Eucalyptus grandis</i> x	
<i>Eucalyptus urophylla</i> (Hybrid)	The audit team reviewed the "IBA Annual Report 2022" ^{/70/} which highlights the adaptability of eucalyptus species throughout Brazil. The highest eucalyptus productivity of 38.9 m ³ /ha/year was recorded in 2021. The audit team crosschecked the species details in "Global Invasive Species Database" ^{/52/} and confirms that eucalyptus is not considered as invasive to Brazil though it is extensively used for establishment of commercial plantations.

	To prevent its expansion to native area such as APPs and RLs, the forest inventory team and biodiversity monitoring team constantly monitors the project area and HCVs at periodic intervals. Training has been provided to inventory team to report any invasive species witnessed in the project area while conducting the forest inventory. Through site inspections and interviews with the PP, forest inventory team and biodiversity monitoring team, the audit team determines that the activities concerning the listed species are well-managed by the PP. Thus, the audit team affirms that the justification provided in section 2.4.2 of VCS MR v2.0 is acceptable, and the project is in compliance with section 3.19.27 of VCS Standard v 4.7.
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The biodiversity monitoring team is responsible for conducting flora and fauna monitoring surveys in the project area. The frequency of flora monitoring is every two years (Twice a year - dry season and rainy season) for the Barra do Moeda farm and every four years for the other HCV sites (only at the end of the rainy season).

Existing invasive species	Evidence gathering activities, evidence checked, and assessment conclusion
<i>Leucena leucocephala</i> <i>Ricinus communis</i> <i>Cortaderia selloana</i> <i>Artocarpus heterophyllus</i> <i>Azadirachta indica</i> <i>Casuarina equisetifolia</i> <i>Mangifera indica</i> <i>Psidium guajava</i> <i>Syzygium cumini</i> <i>Actinocladum verticillatum</i>	The expansion of existing invasive species is monitored through periodic biodiversity surveys^{61/} in the project area. To prevent any risk to the native vegetation, they are suppressed using herbicide solution or removals of the trees based on their expansion. The audit team verified the “Forest Environment Exotic Control Manual”^{53/} and “Identification Manual for invasive species”^{53/} wherein the PP has outlined the steps for identification of invasive species and methods to follow for controlling or suppressing the invasive species. Trainings are provided for the forestry inventory team to record the invasive species observed in the project area. The audit team crosschecked the scientific literatures^{53/} and the “Global Invasive Species Database”^{145/} and confirmed that certain species pose serious threat to the native vegetation when left unmonitored. The Suzano S.A’ Biodiversity team through periodic flora surveys monitors the existence of invasive species in the HCVs areas. Also, “Portal do Instituto Horus” (<u>Base de Dados Instituto Hórus</u>)^{53/}, a database network for monitoring invasive exotic species is used by the PP. Thus, preventing the expansion and any potential threats to native species.

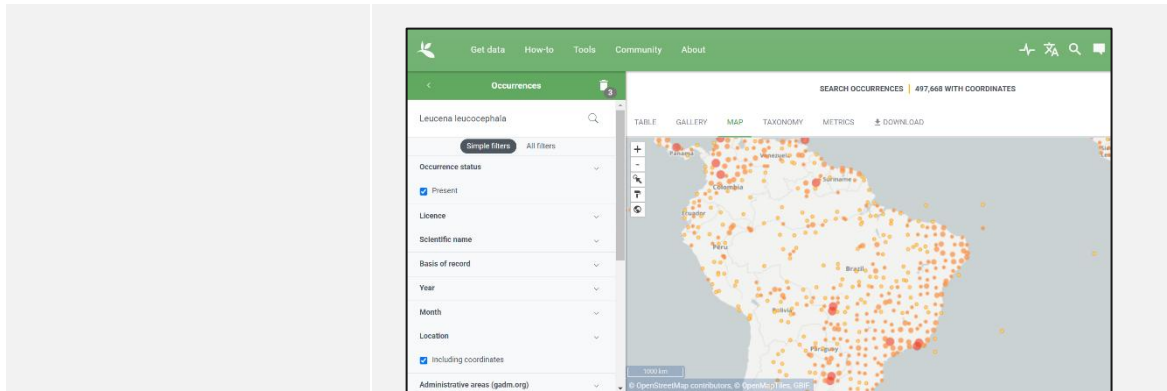


Figure 03: Verification of Invasive species in Global Invasive Species Database

The audit team conducted interviews with the forest inventory team and biodiversity monitoring team and confirmed that the existing invasive species are thoroughly monitored in the project area and removed if in case of any threat to the native vegetation.

The Horizonte project does not include planting of any invasive species as per the field inventory planting data “SAC”^{52/} and potential native species^{72/} is prepared by biodiversity monitoring team for carrying out native restoration.

Evidence gathering activities, evidence checked, and assessment conclusion	
Invasive species	The audit team reviewed the “Forest Environment Exotic Control Manual”^{53/} and “Identification Manual for invasive species”^{53/} and confirms that sufficient precautionary measures are adopted by the PP to prevent the expansion of existing invasive species in the identified HCVs areas. Further, suppressing the invasive species using herbicide solution or other methods is considered as per the requirement of the situation. The audit team visited the HCVs areas and conducted interviews with the biodiversity team to confirm that the existing invasive species are monitored in the project through periodic surveys. Thus, the audit team confirms that the mitigation measure adopted by PP in section 2.4.2 of VCS MR v2.0 is acceptable.

4.2.8.3 Ecosystem conversion

The EPIC audit team conducted site inspections and interviews with the PP, GIS Team and local communities and confirmed that the project’s activities doesn’t lead to the conversion of native vegetation during the current monitoring period. The audit team verified evidence to assess the risks of ecosystem conversion, as detailed in the table below.

Item	Evidence gathering activities and evidence checked
Ecosystem conversion	The audit team crosschecked for incidents of ecosystem conversion for newly added PAIs using the Marvin Blue Platform^{/31/}. Marvin Blue is a land monitoring platform that integrates open-source imagery from sources such as Landsat and Sentinel, along with temporal land-use classifications provided by MapBiomas. Using the Land Use – Land Cover MapBiomas classification for each year, the audit team examined the project areas at different time intervals and confirmed that no land was cleared or drained from existing natural ecosystems for the implementation of project activities. Additionally, cartographic documents related of native conversion analysis were submitted by the PP for each PAI^{/32/}. The analysis was conducted for different time intervals - 2006 to 2008, 2008 to 2015, 2015 to 2020 and after 2020. The audit team crosschecked the cartographic documents and confirmed that there were no incidents of native ecosystem conversion in the last 10 years in the newly added PAIs. The project activities were implemented in the degraded pasture lands^{/33/}. Thus, the audit team is of the opinion that the justification provided by the PP for no risks in section 2.4.3 of VCS MR v2.0 is acceptable and adheres to requirements stated in section 3.19.29 of the VCS Standard v4.7.

4.3 Accuracy of Reduction and Removal Calculations

The audit team reviewed all the data submitted by PP comprising the registered VCS PD&MR v6, VCS MR v2.0, non-permanence risk reports, ER calculations Workbooks, Uncertainty analysis, Long-Term Average quantification, UP Parcel Inventory data Analysis, Methodology Deviations, Project Deviations, Data and Parameters, Assumptions and any other relevant Documents. This assessment aimed to ensure that the applied approaches and methods aligns with the requirements set out in the VCS Standard v4.7, Applied Methodology AR-ACM0003 and other supporting tools. No errors were identified that materially affected the estimated GHG emission removals of the project during the current monitoring period.

Baseline emissions

The baseline net GHG removals by sinks were estimated using equation 1 of the AR-ACM0003 v2.0.

$$\Delta C_{BSL,t} = \Delta C_{TREESL,t} + \Delta C_{SHRUBSL,t} + C_{DWBSL,t} + \Delta C_{LIBSL,t}$$

Where:

$\Delta C_{BSL,t}$ Baseline net GHG removals by sinks in year t; tCO₂-e

$\Delta CTREEBSL,t$ Change in carbon stock in baseline tree biomass within the project boundary in year t, as estimated in the tool “Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities”; t CO2-e

$\Delta CSHRUBBSL,t$ Change in carbon stock in baseline shrub biomass within the project boundary, in year t, as estimated in the tool “Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities”; t CO2-e

$CDWBSL,t$ Change in carbon stock in baseline dead wood biomass within the project boundary, in year t, as estimated in the tool “Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities”; t CO2-e

$\Delta CLIBSL,t$ Change in carbon stock in baseline litter biomass within the project boundary, in year t, as estimated in the tool “Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities”; t CO2-e

The baseline scenario as per the registered VCS PD&MR v6 is the presence of large areas of degraded grasslands with sparse trees. The project involves removing these existing trees from few instances which are currently not inventoried through a process called as CANI (Cutting of isolated Native Trees). The audit team reviewed the suppressed sparse trees (CANI) maps/^{139/} for the instances where the native trees are removed. In the project, the baseline emissions from harvesting of sparse trees in the newly added PAIs has been accounted for the LTA calculations.. Additionally, the PP has considered the baseline emissions from the previous monitoring period from the sparsed trees removed, together with the newly added PAIs to calculate the total to-date baseline emissions for defining Long-term average GHG benefit. Currently, in the inventoried area considered for ER calculations, none of the sparse trees are removed/^{138/25/}.

In the project for the inventoried area, the baseline carbon stock in trees and shrubs are accounted as zero as the project activity is implemented on a degraded or barren lands with no existing vegetation. For estimating the carbon stock in dead wood and litter, the PP has used 1% conservative default factor as per Default value defined in table 5 and table 6 by the AR-TOOL12, version 3.1. Considering the baseline scenario as degraded lands, baseline emissions are accounted as zero for the PAIs included in the first monitoring period.

Project emissions

The actual net project emissions are calculated using equation 2 of the AR-ACM0003 v2.0 methodology.

$$\Delta C_{ACTUAL,t} = \Delta C_{P,t} - GHG_{E,t}$$

Where:

$\Delta C_{ACTUAL,t}$ Actual net GHG removals by sinks, in year t; t CO2-e

$\Delta C_{P,t}$ Change in the carbon stocks in project, occurring in the selected carbon pools, in year t; t CO2-e

$GHG_{E,t}$ Increase in non-CO2 GHG emissions within the project boundary as a result of the implementation of the A/R CDM project activity, in year t, as estimated in the tool “Estimation of non-CO2 GHG emissions resulting from burning of biomass attributable to an A/R CDM project activity”; t CO2-e

The project emissions are calculated through actual field measurements. The audit team reviewed the monitoring plan information in the registered VCS PD&MR v6 and VCS MR v2.0 and confirmed that the PP has carried out estimations are per the procedures in monitoring plan.

Leakage Emissions

The leakage emissions are calculated as per equation 4 of the AR-ACM0003 v2.0

$$LK_t = LK_{AGRIC,t}$$

Where:

LK_t = Leakage emission due to the displacement of agricultural activities in year t

$LK_{AGRIC,t}$ = Leakage emission resulting from displacement of agricultural activities in year t ; t CO₂e

In the project, Leakage emissions are considered as insignificant, and the value is accounted as zero. The assessment is based on several factors, a significant decrease in pastureland within the project area, a reduction in the number of cattle, and the implementation of social activities^{/19/} provided alternative income sources for the local communities. Additionally, the audit team reviewed the project area KML files^{/132/} and confirmed that the PP owned most of the forest areas near the project, further reducing the risk of leakage^{/101/102/103/}.

Estimation of Uncertainty

The uncertainty in the project is calculated using equation 15 of the AR-TOOL14.

$$u_c = \frac{t_{VAL} \times \sqrt{\sum_{i=1}^M w_i^2 \times \frac{s_i^2}{n_i}}}{b_{TREE}}$$

Where:

U_c = Uncertainty in CTREE

t_{VAL} = Two-sided Student's t-value for a confidence level of 90 per cent and degrees of freedom equal to $n - M$, where n is total number of sample plots within the tree biomass estimation strata and M is the total number of tree biomass estimation strata

s_i^2 = Variance of tree biomass per hectare across all sample plots in stratum i ; (t d.m. ha⁻¹)²

n_i Number of sample plots in stratum i .

$b_{TREE,i}$ Mean tree biomass per hectare in stratum i ; t d.m. ha⁻¹

In the project, the PP has calculated uncertainty associated with optimization of forest inventory data. The audit team reviewed the cell M12 of "Stratum Uncertainty sheet" in monitored ER calculations workbook^{/25/} and confirmed that the uncertainty associated with the project are estimated as per the AR-TOOL14. The uncertainty associated with the project is 1.28%, which is considered negligible as it is below the 10% threshold allowed as per the requirements of Equation 15 in AR-TOOL14. Thus, the audit team confirmed that the justification provided by the PP in Section 5.2.2.1 of the VCS MR v2.0 is appropriate.

Net GHG Emission Reductions and Removals

The net GHG removals by sinks are calculated using equation 5 of the AR-ACM0003 methodology,

$$\Delta C_{AR-CDM,t} = \Delta C_{ACTUAL,t} - \Delta C_{BSL,t} - LKt$$

Where:

$\Delta C_{AR-CDM,t}$ = Net anthropogenic GHG removals by sinks, in year t; t CO₂-e

$\Delta C_{ACTUAL,t}$ = Actual net GHG removals by sinks, in year t; t CO₂-e

$\Delta C_{BSL,t}$ = Baseline net GHG removals by sinks, in year t; t CO₂-e LKt = GHG emissions due to leakage, in year t; t CO₂-e

The audit team reviewed the G4 column of the ER monitored/^{25/} calculations workbook and confirms that the PP has estimated the net GHG emissions as per equation 5 of the applied methodology. The total to-date baseline emissions are calculated in the project. Leakage emissions is accounted as zero as it is considered insignificant. The actual project emissions are accounted using field measurements.

Table 07: Net GHG Emission Removals generated in the project.

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions / removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Removal VCU (tCO ₂ e)	Buffer pool allocation	Total VCUs (tCO ₂ e)
22/02/2022 to 31/12/2022	42,485.93	503,023.00	0	-130,786.00	170,068.00	130,786.00
01/01/2023 to 03/04/2023	58,401.37	137,480.00	0	-35,745.00	101,735.00	35,745.00
Total	100,887.30	640,503.00	0	271,803.00	166,531.00	271,803.00

The total GHG removals calculated as the sum of carbon stock changes along the current monitoring period from 22/02/2022 to 03/04/2023 is 640,503.00 tCO₂e. The overall non-permanence risk rating is 26%. Therefore, the total number of credits to be deposited in the buffer account is 166,531.00 VCUs and the total VCUs to be issued are 271,803 tCO₂e.

The long-term average GHG benefit

In the project, the Long-term average is calculated as per section 3.2.20 of VCS Standard 4.7. the formula applied to calculate the Long-term average is as follows:

$$LTA = \frac{\sum_{t=0}^{n_t} PE_t - BE_t}{n}$$

Where:

LTA = The long-term average GHG benefit

PEt = The total to-date GHG emission reductions and removals generated in the project scenario (tCO₂e). Project scenario emission reductions and removals shall also consider project emissions of CO₂, N₂O, CH₄, and leakage.

BEt = The total to-date GHG emission reductions and removals projected for the baseline scenario (tCO₂e).

t = Year.

n = Total number of years in the established time period

In this project, the loss of carbon due to harvesting is included in the quantification of the project emissions and all the emission removals quantified have been considered for calculating Long-Term Average^{1/}. The audit team confirmed that the methods employed, and the values quantified are appropriate and as per registered VCS PD&MR v6. The audit team reviewed the monitored ER calculations workbook “cell J6 of LTA Calculation sheet” and confirmed that the long-term average for the total inventoried area is 2,339,242.40 tCO₂e. Additionally, the PP calculated LTA for the overall PAs including newly added 27 instances in the current monitoring period resulting in 5,113,780.04 tCO₂e for the project crediting period. The audit team verified R6 Cell of “Net GHG Removal sheet” of estimated ER calculations workbook^{/131/} and concludes that the LTA calculated is as per the VCS Standard v4.7 requirements and registered VCS PD&MR v6.

The audit team concludes that the ER quantification workbooks^{/25/131/} provided by PP containing the information of input data and equations, enabled the audit team to recalibrate and verify the accuracy of data, application of methodology, equations and calculations. Verification affirmed that the presented data and calculations are devoid of errors and any material misinterpretations. Following the information collected from interviews with PP and WayCarbon Team regarding the data collection, processing and details as outlined in the monitoring plan of VCS PD&MR v6 and VCS MR v2.0, it is affirmed the abovementioned information are appropriate. The verification confirmed that the data and other information are transparent, sufficient, accurate, error-free and consistent with the VCS PD&MR v6, VCS MR v2.0, and Applied Methodology.

Furthermore, site visits to the project area included interviews with local stakeholders and the project management team, an inventory of permanent monitoring plots, and inspections of eucalyptus plots. These activities substantiate and validate the accuracy of the project claims as outlined in VCS MR v2.0, in accordance with the Applied Methodology. Based on these findings, the audit team has drawn the following conclusions.

Table 08: Data and Parameters validated in the project for quantification of GHG removals.

Sl. No	Data and Parameter validated	Value	Description	Assessment of source of the parameters and VVB Conclusion
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1	CF (tC/t d.m.)	0.47	Biomass proportion corresponding to carbon, named Carbon Fraction	Default value defined by the AR-TOOL14, version 4.2 The audit team reviewed “Baseline Parameters sheet” of ER calculations workbook/^{25/131/} and confirmed that the default value used for GHG quantification in the current monitoring period is as per the registered VCS PD&MR v6.
2	b _{FOREST} (t d.m./ha)	110.12	Mean above-ground biomass in forest in the region or country where the project is located	The value is sourced from MIRANDA, et al. 2014. Regional variations in biomass distribution in Brazilian Savanna woodland. Data for biomass above and below ground for forest formations. The audit team reviewed “Baseline Parameters sheet” of ER calculations workbook/^{25/131/} and scientific journal and confirmed that the value used for GHG quantification is appropriate.
3	R _{TREE} dimensionless	0.25	Root-shoot ratio for trees in the baseline	Default value defined by the AR-TOOL14, version 4.2 The audit team reviewed “Baseline Parameters sheet” of ER calculations workbook/^{25/131/} and confirmed that the default value used for GHG quantification is appropriate.
4	CC _{TREE_BSL,i} dimensionless	1.01%	Crown cover of trees in baseline stratum i, at the start of the project activity, expressed as a fraction	Shapefiles pointing trees authorized to be suppressed at the CANI, which are located inside the project area.

				Additionally, The audit team reviewed Cani DATA Base in “Baseline Parameters sheet” of monitored ER calculations workbook^{/25/} and confirmed that the value used for baseline GHG emissions quantification is appropriate.
5	DF _{DW} (%)	1	Conservative default factor expressing carbon stock in dead wood as a percentage of carbon stock in tree biomass	Default value defined by the AR-TOOL12, version 3.1 The audit team reviewed “Baseline Parameters sheet” of ER calculations workbook^{/25/131/} and confirmed that the default value used for GHG quantification is appropriate.
6	DF _{LI} (%)	1	Conservative default factor expressing carbon stock in Litter as a percentage of carbon stock in tree biomass	Default value defined by the AR-TOOL12, version 3.1 The audit team reviewed “Baseline Parameters sheet” of ER calculations workbook^{/25/131/} and confirmed that the default value used for GHG quantification is appropriate.
7	Ai _{pa} (ha)	Stratum 1 – 3275.66 Stratum 2 – 2,438.70 Stratum 3 – 234.52 Stratum 4 – 714.07 Stratum 5 – 5,202.27 Stratum 6 – 256.65	Area of stratum i at project activity	The planted areas in each stratum. The audit team reviewed “Stratum Uncertainty sheet” of monitored ER calculations workbook^{/25/} and confirmed that the values used for GHG quantification is appropriate.

		Stratum 7 – 1,071.37 Total = 13,193.24 ha		
8	Mean annual Increment in Volume (IV) (m ³ ha ⁻¹ yr ⁻¹)	E. grandis: 32.5 E. urophylla: 36.1 E. grandis x E. urophylla: 34.8 Eucalyptus spp: 34.6	It is the average annual net increment in volume of trees to be planted on the project area, and it's used to calculate the tree carbon stock on Eucalyptus plantations	The values are adopted based on previous inventory data for areas near the Project area owned by Suzano. S.A. The audit team reviewed “Calculation basis – Eucalyptus sheet” of estimated ER calculations workbook/ ^{131/} and confirmed that the values used for GHG quantification is appropriate.
9	Above ground net biomass growth (t.d.m/ha/yr)	For natural forests ≤20y – 7.00 For natural forests >20y – 2.00	It is the average annual net increment in volume of native trees to be planted on the project area, and it's used to calculate the Tree carbon stock on native restoration activities.	The values are obtained from 2006 IPCC Guidelines for National Greenhouse Gas Inventories, chapter 4: Forest Land – table 4.9, value for tropical moist deciduous forest. The audit team reviewed 2006 IPCC Guidelines and confirmed that the values used for GHG quantification is appropriate.
10	Wood density (D) (t d.m./m ³)	E. grandis: 0.44 E. urophylla: 0.48 E. grandis x E. urophylla: 0.44 Eucalyptus spp: 0.47	Wood density is used to convert the sparse trees volume into tree biomass under the project activity	The value is sourced from Average annual net increment in volume and Density.

				The audit team reviewed “Calculation basis - Eucalyptus sheet” of estimated ER calculations workbook/ ^{131/} and confirmed that the values used for GHG quantification is appropriate.
11	SOCREF,i tC/ha	39	SOC stock at the beginning of the A/R CDM project activity in stratum i of the areas of land	AR-TOOL16, version 1.1.0, table 3, value for tropical moist climate region and sandy soils. The values will be applied for the estimation of change in SOC in the areas of native planting.
12	fLU,i Dimensionless	1	Relative stock change factor for baseline land use in stratum i of the areas of land	AR-TOOL16, version 1.1.0, table 6, value for all climate regime The values will be applied for the estimation of change in SOC in the areas of native planting.
13	fMG,i Dimensionless	0.70	Relative stock change factor for baseline management regime in stratum i of the areas of land	AR-TOOL16, version 1.1.0, table 6, value for severely degraded level. The values will be applied for the estimation of change in SOC in the areas of native planting.
14	fIN,i Dimensionless	1	Relative stock change factor for baseline input regime (e.g., crop residue returns, manure) in stratum i of the areas of land	AR-TOOL16, version 1.1.0, table 6, value for Low/Medium level. The values will be applied for the estimation of change in SOC in the areas of native planting.

The audit team verified all the data and parameters provided in the monitoring plan and deems that the methods adopted, and default values used for GHG quantification is in compliance with the applied methodology AR-ACM0003 requirements and information in registered VCS PD&MR v6.

Table 09: Data and Parameters monitored during the current monitoring period for quantification of GHG removals in the project

SI. No	Data and Parameter monitored	Value	Description	Assessment of accuracy of GHG emission removals	VVB Assessment and Conclusion
1	A (ha)	13,193.24 ha (Inventoried area)	Project Area (planted inventoried area)	The audit team independently recalculated spatial datasets provided using QGIS v3.36.1 and affirmed that the total project area and individual area of PAIs are reasonably accurate ^{/26/} . Additionally, the audit team concluded that these areas are documented and utilized for estimation of total GHG emission removals ^{/25/131/} in the project.	The methods employed and the values quantified are appropriate.
2	Ai (Ha)	2nd monitoring period: Stratum 1: 3,275.66 Stratum 2: 2,438.70 Stratum 3: 234.52 Stratum 4: 714.07 Stratum 5: 5,202.27 Stratum 6: 256.65 Stratum 7: 1,071.37	Area of stratum i	The audit team independently recalculated spatial datasets provided using QGIS v3.36.1 and affirmed that the total project area and individual area of PAIs are reasonably accurate ^{/26/} .	The methods employed and the values quantified are appropriate.

		Total = 13,193.24 ha		Additionally, the audit team concluded that these areas are documented and for estimation of total GHG emission removals ^{/25/131/} in the project.	
3	Ap.i (m ²)	2nd monitoring period: Stratum 1: 42,400.00 Stratum 2: 36,800.00 Stratum 3: 7,600.00 Stratum 4: 20,400.00 Stratum 5: 190,800.00 Stratum 6: 9,200.00 Stratum 7: 33,200.00	Area of sample plot in stratum i	The audit team independently recalculated the area of permanent monitoring plots using the remote sensing data provided by the PP. Additionally, the team affirmed that the procedures followed for quantification of areas of sample plots in stratum i, are as per the monitoring plan.	The methods employed and the values quantified are appropriate.
4	N (Dimensionless)	2nd monitoring period: Stratum 1 – 106 (remeasured) Stratum 2 – 92 (remeasured) Stratum 3 – 19 (remeasured) Stratum 4 – 51 (remeasured) Stratum 5 – 477 (remeasured) Stratum 6 – 23 (remeasured) Stratum 7 – 83 (new plots measured for the 1st time)	Number of plots to be established in the project area	The audit team crosschecked the Inventory data KML files ^{/140/} and “Carbon Project – UP Parcel Individual Inventory Data” ^{/141/} spreadsheets and affirmed that the number of plots established in the project are reasonably accurate.	The methods employed and the values quantified are appropriate.

		TOTAL– 851 plots		Additionally, the audit team concluded that these areas are documented as per monitoring plan and utilized for estimation of total GHG emission removals/ ^{25/131/} in the project.	
5	Plot location (Latitude/Longitude)	Refer “Parcels sheet, E and F column” of Monitored ER calculations workbook/ ^{25/}	Localization for each sampling plot	The audit team crosschecked the project area KML files/^{26/}, eucalyptus restoration maps/^{28/} and “Carbon Project – UP Parcel Individual Inventory Data”/^{141/} and following an onsite visit affirmed that the location of sample plots laid in the project are reasonably accurate. Additionally, the audit team concluded that these areas are documented and utilized for estimation of total GHG emission removals/^{25/131/} in the project.	The methods employed for determining location of sample plots are appropriate.

6	DBH (cm)	Refer "Parcels data sheet, O column" of Monitored ER calculations workbook/ ^{25/}	Diameter at breast height of the trees	The audit team independently reassessed DBH of trees during onsite visit in the permanent monitoring plots using measuring tape. The audit team affirmed that the accuracy of DBH calculated in monitored sample plot is reasonably accurate in comparison with the UP-Parcel inventory data/^{141/} recorded by the PP.	The methods employed and the values quantified are appropriate
7	Height (m)	Refer "Parcels data sheet, P column" of Monitored ER calculations workbook/ ^{25/}	Total height of trees	The audit team impartially recalculated height of trees during site visit in the permanent monitoring plots using Clinometer. The team affirmed that accuracy of height calculated in monitored sample plot is reasonably accurate in comparison with the UP-Parcel inventory data/^{141/} recorded by the PP.	The methods employed and the values quantified are appropriate

8	Time (year)	1 year (t2-t1)	Period between two successive estimations of carbon stock in trees and shrubs	The audit team crosschecked the “Carbon Project – UP Parcel Individual Inventory Data”/141/ and affirmed that the period between two successive estimations of carbon stock in trees and shrubs in the project is 1 year. Additionally, the audit team reviewed “cell H4 of VCUs calculations sheet” of monitored ER calculations workbook and concluded that the time period (t2-t1) is applied for calculations of project emissions and utilized for estimation of total GHG emission removals/25/.	The methods employed and the values quantified are appropriate
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The audit team concluded that the overall GHG emission removals outlined in the project’s GHG statement have been quantified accurately aligning with the monitoring plan and applied methodology AR-ACM0003 for the verification period from 22 February 2022 to 03 April 2023. Further, the section 4 of VCS MR v2.0 includes all necessary data and parameters with appropriate details on data sources, measurement procedures, monitoring frequency, equipment, and QA/QC procedures in compliance with the applied methodology AR-ACM0003 requirements.

4.4 Quality of Evidence to Determine Reductions and Removals

In the Horizonte Project, Suzano S.A employed various forest inventory methods and used the Continuous Forest Inventory to monitor parameters and estimate carbon stocks for eucalyptus plantations. As per the qualitative inventory procedures^{/143/}, the project areas less than two years is not monitored, as carbon stock estimations and credit generation will only occur once these project areas reach two years maturity, and a quantitative inventory is conducted. The field inventory team estimated the forest stock in volume and tree count, monitors growth, and adjusts production models. The monitoring activity is carried out annually and before the harvest events, but only for areas older than two years from the planting date.

The audit conducted interviews with the field inventory team representative and confirmed that the field data collection activities for forest inventory are quantitatively structured to ensure accuracy and consistency in data generation and monitoring. The Field Supervisor managed field teams, performed first-level audits, equipment maintenance, preparation of quality reports, addressing deviations, and reinforced safety procedures in collaboration with the Safety Technician.

Based on the verification of the monitoring plan and site visits, the audit team confirms that the sample plot specifications adhere to the AR-TOOL14 guidelines for estimating carbon stocks in A/R CDM projects. The plots laid are circular, permanent, and typically set at 400m². In instances where a 400m² plot is not feasible due to the stratum's shape or size, a 200m² plot is established in the project. Data collection included tree heights, circumference at breast height (CAP), geographic coordinates, and qualitative classifications. Equipment calibration is performed rigorously, with daily checks for measuring tapes and weekly calibrations for hypsometers, GPS devices, and DAB 1.3m posts.

For each sample plot, the PP has conducted the measurement of trees count, circumference at breast height, the height of 4 normal trees, the height of 4 dominant trees, treetop height for 4 trees, leaf area index (IAF), and grassland competition. Additionally, central trees and plot boundaries are marked for identification. During site visit, the field inventory team exhibited the procedure followed for establishing a sample plot and data collected which is verified to be as per the monitoring plan details. The plots are permanently established in Eucalyptus plantations, consistent with the Continued Forest Inventory.

The section 5.3 of the registered VCS PD&MR v6 specified the calibration frequency for monitoring equipment and the equipment calibration procedures followed for forest inventory data collection. The audit team, through site visits and interviews with the RS Florestal team, affirmed that the calibration frequency and implemented practices are appropriate based on the calibration procedures^{/142/}. Additionally, the data collection equipment (GPS Device, DAB 1.3m posts, and clinometer) is calibrated weekly and measuring tape is calibrated daily in on-site each time data collection activities are conducted by the RS Florestal Team and Suzano Forest Inventory Team. Measuring tapes, surveyor cables, and DAB 1.3m posts are calibrated on-site by comparison with a certified measuring tape prior to use, ensuring real-time accuracy. Similarly, clinometers are calibrated against verified reference points on a tower at 10m, 20m, and 30m.

Furthermore, the field inventory team confirmed that any equipment found to be outside the allowable limits set by Suzano is promptly replaced, maintaining measurement reliability. Training is provided to the field inventory team to ensure accurate and error-free data collection. The audit team reviewed the field inventory training records^{142/}, attendance record, photographs, and training manual, confirming that the approach effectively mitigates risks associated with inaccurate readings.

The field inventory team has employed a Qualitative Forest Inventory (QFI) process assess the development and quality of forests shortly after establishment. The inventory is conducted at various stages, such as 90 days, 120 days, 180 days and 12 months, with each stage involving a series of tasks like plot delimitation, collecting geographic coordinates, measuring altitude, slope, and counting holes within the plot. At each stage, tree height is measured, and a qualitative classification of the trees is performed, categorizing them as dead, failed, or normal, while also assessing their phytosanitary status, grassland competition, pests, and diseases. The audit team through interviews with RS-Florestal field team confirmed that the field inventory data collected is further processed, consolidated and verified by the Suzano S.A's field Data Analyst. All the inconsistencies observed in the data are addressed adequately ensuring data quality.

The audit team reviewed the contract between Suzano S.A and WayCarbon^{30/} and concludes that the verified field inventory data is utilized by Waycarbon team in the calculation of GHG emission removals in the project.

Following the review of information in registered PD&MR v6^{7/}, VCS MR v2.0, Forest Inventory Scope^{143/}, Estimated and Monitored ER Quantification Spreadsheets^{25/131/}, review of supporting Documents, Onsite visits to Biomass Inventory Monitoring Plots, Interviews with PP, WayCarbon Team and Forest Inventory Team, the audit team concludes that the information gathered to quantify GHG removals during the verification period is sufficient, transparent, accurate and of acceptable quality.

4.5 Non-Permanence Risk Analysis

The PP conducted the risk analysis in accordance with the requirements specified in AFOLU Non-Permanence Risk Tool v4.2. The project is evaluated against each of the risk factors, i.e., internal risks, external risks and natural risks. The audit team reviewed the VCS NPRT Report^{98/}, AFOLU-NPRT-Calculations Workbook^{122/} and other supporting evidence to assess the risks associated with the “The ARR Horizonte Carbon Project” and to check the appropriateness of the assumptions, justifications and documentations supporting risk rating determined by the PP in the NPRT report dated 29th April 2025 for the second monitoring period. The assessment and conclusions of the audit team for the risk scores applied for each risk factor are described in the table as follows.

Table 10: Analysis of the project’s risk factors in each category and sub-category.

Risk Assessment – Project Management

Risk factor	The EPIC audit team Assessment	Risk rating and Conclusion
PROJECT MANAGEMENT	a) In the project, Eucalyptus species (E. grandis, E. urophylla and hybrid from the two species, E. grandis x E. urophylla)^{/71/} are extensively used for restoration of degraded lands and are proven to be widely adapted to the climatic zones as that of project area. The audit team reviewed the “IBA Annual Report 2022”^{/70/} which highlights the adaptability of eucalyptus species throughout Brazil. The highest eucalyptus productivity of 38.9 m³/ha/year was recorded in 2021. Further, 939 potential species^{/72/} well adapted to Cerrado Biome is identified to carryout native restoration in the project.	(0) Risk rating is acceptable
	b) The project area is a private property owned and leased by Suzano S.A. The audit team through field inspections confirmed that the plots have well defined boundaries with proper fencing and monitoring technologies to prevent any instances of encroachment and damage to the property by external factors. The audit team reviewed the “PO.24.01.0028, Florestal MS – Environmental Incident Procedure”^{/73/} developed by Suzano S.A., wherein the types and severity of external occurrences are detailed along with their monitoring measures. The monitoring activities are carried out on a biannual basis throughout the project area. Thus, the audit team confirmed that adequate measures are adopted to protect the carbon stocks in the project.	(0) Risk rating is acceptable
	c) The audit team reviewed the CVs^{/74/} and credentials of the project management team and confirmed that the individuals involved in the project possess significant experience in handling carbon projects. Furthermore, the audit team conducted interviews with the specific domain experts, such as PP, GIS Team, Biodiversity Team, Human Resource Management Team, Social Development Team and WayCarbon Team to verify the team competency for the management of project in Brazil.	(0) Risk rating is acceptable
	d) Through review of CVs^{/74/} and interviews with the PP and project management team, the audit team confirmed that the entire team involved in the project is based in Brazil.	(0) Risk rating is acceptable

	Additionally, a part of the project management team/^{75/} acting as focal points are located near to the project area, less than a day away from all the instances that are part of the project. These focal points perform various activities such as geoprocessing, forestry operations, inventories, communication with stakeholders and restoration activities in the project.	
	e) The audit team conducted interviews with the PP and project management team and confirmed that there is no history of loss events in the project/^{76/}. Furthermore, the audit team reviewed the adaptive management plan/^{77/} and PO.24.01.0028, Florestal MS – Environmental Incident Procedure”/^{73/} and is of the opinion that all the potential risks to project such as illegal logging, fuelwood collection, fire events are identified and monitored in the project.	(0) Risk rating is acceptable
	f) The ARR Horizonte Carbon Project is an ARR Project. Not applicable	(0) Risk rating is acceptable
	g) The ARR Horizonte Carbon Project is an ARR Project. Not applicable	(0) Risk rating is acceptable
	h) Mitigation: The audit team reviewed the CVs/^{74/75/} and credentials of the project management team and confirmed that the individuals involved in the project possess significant experience in handling carbon projects under VCS Program or other approved GHG programs. The ARR Horizonte Carbon Project has been successfully registered	(-2) Risk rating is acceptable
	i) Mitigation: The ARR Horizonte Carbon Project is an ARR Project. Not applicable	(0) Risk rating is acceptable
	TOTAL PROJECT MANAGEMENT (PM) [h] = (-2)	(0) The risk rating is acceptable as per the criteria mentioned in the NPRT tool v 4.2.

Internal Risk Assessment – Financial Viability

Risk factor	The EPIC audit team Assessment	Risk rating and Conclusion
FINANCIAL VIABILITY	a) The payback period is greater than 20 years from the current risk assessment. ▪ Not applicable	(0) Risk rating is acceptable
	b) The payback period is greater than 10 years from the current risk assessment, but less than or equal to 20 years. ▪ Not applicable	(0) Risk rating is acceptable
	c) The payback period is 9 years from the current risk assessment. ▪ The audit team reviewed the project cashflow breakeven point (Cell B39 of Cash Flow sheet) in “Financial Analysis” workbook/ ^{78/} and conducted an independent assessment to confirm that the project’s payback period is 9 years from the project implementation.	(2) Risk rating is acceptable
	d) The payback period is greater than four and up to and including seven years from the current risk assessment. ▪ Not applicable	(0) Risk rating is acceptable
	e) The payback period is four years or less from the current risk assessment. ▪ Not applicable	(0) Risk rating is acceptable
	f) Project has secured less than 15% of the funding needed to cover the total cash out before the project reaches breakeven. ▪ Not applicable	(0) Risk rating is acceptable
	g) Project has secured from 15% to less than 40% of the funding needed to cover the total cash out required before the project reaches breakeven. ▪ Not applicable	(0) Risk rating is acceptable
	h) Project has secured from 40% to less than 80% of the funding needed to cover the total cash out required before the project reaches breakeven. ▪ Not applicable	(0) Risk rating is acceptable

	i) The audit team reviewed the “Financial Analysis” workbook (Cell C7 of Non-permanence risk data sheet)^{/78/} and confirms that the wood revenue generated in the project covers all the funding needed to cover the total cash out before the project reaches breakeven. Additionally, the funding contracts between Suzano S.A and their partners^{/83/84/} were verified to confirm provision of funds to the ARR Horizonte Carbon Project. ▪ The audit team reviewed the “Relatório de Arrendamento de Terras”^{/85/} and “Agrianual 2020”^{/80/} to verify the market value for land lease in Ribas do Rio Pardo and wood price used for estimation of wood revenue. The audit team evaluated the supporting evidences^{/79/82/} used for financial assumptions and confirms that the project has secured more than 80% of the funding in the project.	(0) Risk rating is acceptable
	j) Mitigation: The audit team verified the “Financial Analysis” workbook (Cell C7 and C13 of Non-permanence risk data sheet)^{/78/} and concludes that the project has secured financial resources more than 80% of total cash out before the project reaches breakeven. ▪ Further, the audit team conducted interviews with the PP and reviewed the “Suzano’s Consolidated Financial Statements dated December 2022”^{/81/} and other supporting evidences^{/79/80/83/84/} used for financial assumptions and confirmed that the project has received more than 80% funds for implementation of the project.	(-2) Risk rating is acceptable
	TOTAL FINANCIAL VIABILITY (FV) [c+(i+j)] = (2)	(2) The risk rating is acceptable as per the criteria mentioned in the NPRT tool v 4.2.

Internal Risk Assessment – Opportunity Cost

Risk factor	The EPIC audit team Assessment	Risk rating and Conclusion
OPPORTUNITY	a) NPV of the most profitable alternative land use activity is expected to be at least 100% more than that of the project activities.	(0)

	▪ Not applicable	Risk rating is acceptable
	b) NPV from the most profitable alternative land use activity is expected to be greater than 50% and up to 100% more than that of project activities ▪ Not applicable	(0) Risk rating is acceptable
	c) NPV from the most profitable alternative land use activity is expected to be greater than 20% and including 50% more than that of project activities ▪ Not applicable	(0) Risk rating is acceptable
	d) NPV from the most profitable alternative land use activity is expected to be 20% more or less than that of project activities. ▪ Not applicable	(0) Risk rating is acceptable
	e) The identified most profitable baseline scenario of the ARR Horizonte Carbon Project is soy farming which is widely practiced activity in Brazil. The audit team reviewed the scientific literature “economic dimension of crop-livestock integration systems” ^{/86/} and confirmed that soybean farming has higher competitive rate of returns compared to all other baseline scenarios. ▪ The “Financial Analysis”^{/78/} document includes a comparative analysis between the NPV of the ARR Horizonte Carbon Project and Soy Farming. Based on the interview with the PP and review of supporting financial documents^{/80/82/87/}, the audit team concludes that the NPV of project activities including revenue from the carbon credits is 43.44% more profitable than that of the most profitable alternative land use activity.	(-2) Risk rating is acceptable
	f) NPV of project activities is expected to be over 50% more profitable than that of the most profitable alternative land use activity. ▪ Not applicable	(0) Risk rating is acceptable
	g) Net positive community impacts of project activities are not demonstrated ▪ Not applicable as the baseline activity is not subsistence-driven activity.	(0) Risk rating is acceptable
	h) Net positive community impacts of project activities are demonstrated ▪ Not applicable as the baseline activity is not subsistence-driven activity.	(0) Risk rating is acceptable

	i) Mitigation: The audit team verified the farms lease agreements/^{90/91/} between Suzano S.A. and farm owners and confirms that the project intends to continue the management practices that protect the credited carbon stocks over the duration of the project crediting period. Additionally, the project has a 100% success rate for renewal of lease contracts signed in 2022/2023/^{89/}. The audit team verified the contract renewal emails/^{89/}, Suzano S.A. company website/^{88/} and conducted interview with the PP and concluded that the project is maintained for the overall project crediting period. Thus, the risk rating is acceptable.	(-2) Risk rating is acceptable
	j) Mitigation: Project is protected by legally binding agreement to continue management practices that protect the credited carbon stocks for at least 100 years. Not applicable	(0) Risk rating is acceptable
	k) Mitigation: Where there is a potential for revenue loss compared to the most profitable alternative land use activity, project is a non-profit or has additional financial support (e.g., via grants, government funding, ecosystem service payments or SD VISTA assets) to overcome expected revenue loss. Not applicable as the project does not seek additional financial support from any government funding organizations or SD VISTA assets.	(0) Risk rating is acceptable
	TOTAL OPPORTUNITY COST (OC) [e+i] = (-4)	(0) The risk rating is acceptable as per the criteria mentioned in the NPRT tool v 4.2.

Internal Risk Assessment – Project Longevity

Risk factor	The EPIC audit team Assessment	Risk rating and Conclusion
PROJECT LONGEVITY	a) Without legal agreement or requirement to continue the management practice The audit team verified the monitoring plan/^{77/}, Land lease or Rural Partnership Procedures/^{92/95/96/97/}, farm contracts/^{90/91/} of all the project activity instances and	(18) Risk rating is acceptable

	conducted interviews with the PP and confirmed that the PP is committed to engage in the management practice or replanting of the project area. The land lease agreements are renewed^{93/94/} at a periodic interval to keep the project active for the overall project longevity period. Though the Suzano S.A. company aims to sustainably manage the project, yet there is no legal requirement to continue the management practice for the entire project longevity. Thus, the audit team confirms that the risk rating is acceptable. The ARR Horizonte Carbon project longevity is 35 years. $25 - (35/5) = 18$	
	b) With legal agreement or requirement to continue the management practice. ▪ Not applicable	(0) Risk rating is acceptable
	TOTAL PROJECT LONGEVITY (PL) [a] = (18)	(18) The risk rating is acceptable as per the criteria mentioned in the NPRT tool v 4.2.

TOTAL INTERNAL RISK	(PM + FV + OC + PL) = (2+18) = 20	(20) The overall risk rating is acceptable as per the criteria mentioned in the NPRT tool v 4.2.
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External Risk Assessment – Land Tenure and Resource Access or Impacts

Risk factor	The EPIC audit team Assessment	Risk rating and Conclusion
LAND TENURE AND RESOURCE ACCESS	a) Ownership and resource access or use rights are held by the same entity(ies). ▪ Not applicable	(0) Risk rating is acceptable
	b) Ownership and resource access or use rights are held by different entity(ies) (e.g., the government own the land, and the project proponent holds a lease or concession).	(2) Risk rating is acceptable

	In the project, certain land parcels are leased by Suzano S.A. for establishment of eucalyptus plantations. The audit team verified the land ownership documents^{/101/102/103/}, “Project Area sheet” of Financial Analysis^{/78/} and Farm management contracts (Gestão de contratos)^{/94/} and confirmed that 69% of the project area is leased whereas 25% are owned by Suzano and 6% managed in partnership with other entities (Brasilwood, Lacan and Quilombo). Through the lease agreements, the PP holds the rights over the carbon credits and wood revenue generated in the project area. The audit team interviewed the PP and Project Management Team and confirms that there are well established procedures for land identification^{/97/}, acquisition of rural properties^{/96/} and management of lease contracts^{/95/}. Additionally, the project has a 100% success rate for renewal of lease contracts signed in 2022/2023^{/89/}. The lease contracts allowed the lessee to exercise their preference in the renewal of the lease contracts in accordance with Brazilian Land Statute (Law No. 4,504, of November 30, 1964). Further, the audit team conducted interviews with the PP confirmed that the risk rating selected in the NPRT report^{/98/} is acceptable.	
	c) Government has previously expropriated significant areas of land (i.e., 10% or more) in the project area in the past 20 years. Not applicable	(0) Risk rating is acceptable
	d) Government has previously changed land rights in the project's jurisdiction (e.g., cancelled, or blocked land titles, expropriated land or issued overlapping land titles) in the past 20 years. INCRA (National Institute for Colonization and Agrarian Reform), a federal government authority of the public administration of Brazil, has previously intervened and changed the land rights in Mato Grosso do Sul in the past 20 years, where the project is being implemented. Land titles were granted to certain settlements / families by INCRA. The audit team reviewed the Brazilian Law N° 8.629, of February 25, 1993^{/100/} which states that “Union is responsible for expropriating, in the social interest for agrarian reform purposes” and crosschecked peer-reviewed articles^{/99/} supporting land title changes in project’s jurisdiction. Thus, the audit team concludes that the chosen risk rating is appropriate.	(5) Risk rating is acceptable

e) No instances of Government intervention in the past 20 years or specific instances of expropriation and government intervention in land rights in the project area have been conclusively resolved against the government in a court of competent jurisdiction.	(0) Risk rating is acceptable
▪ Not applicable	
f) Disputes exist in more than 5 percent of the project area.	(0) Risk rating is acceptable
▪ Not applicable	
g) Disputes exist in up to and including 5 percent of the project area.	(0) Risk rating is acceptable
▪ Not applicable	
h) No disputes exist.	(0) Risk rating is acceptable
▪ In the Horizonte Project, the project area is owned or leased by Suzano. S.A. 69% of the project area are leased ^{/94/} by the PP through proper lease agreements for the project crediting period. The farm owner's preference is considered in deciding the terms of the contracts. Rest 25% of the project area are owned by Suzano S.A. and 6% managed in partnership with its controlled companies. The audit team verified the Suzano S.A. established procedures for land prospecting ^{/95/97/} , acquisition of rural properties ^{/96/} , land ownership (updated property registration documents) ^{/101/102/103} for each farm, Rural Property Registration Certificates (CCIR), (CAR) documents, Property Tax records (ITR for the last 5 years), Negative Debts Certificate issued by Federal Revenue, Lease agreements ^{/90/91/} , Environmental Declaratory Act - ADA (Law 9,393/96) documents and Funding Contracts ^{/83/84/} .	
Further, the audit team through interviews with PP and communities confirmed that no overlap or disputes exists over ownership in the project area and thus concludes that the justification provided by the PP in NPRT report ^{/98/} is appropriate.	
i) Disputes exist in more than 5 percent of the project area.	(0) Risk rating is acceptable
▪ Not applicable	
j) Disputes exist in up to and including 5 percent of the project area.	(0) Risk rating is acceptable
▪ Not applicable	

	k) The audit team affirms that no disputes exist in the project area with respect to land access or use rights. The affirmation is provided through review of land ownership documents/^{101/102/103/}, lease agreements/^{90/91/} and interviews with the PP and communities. The project area is a private property owned or leased by Suzano. S.A and its controlled companies through legal lease agreements. The PP is the sole beneficiary of the carbon credits and wood revenue generated in the project. Through site inspections, the audit team confirms that no communities are reliant on project area for any resources and no disputes exist in the project area. Thus, the justification provided in the NPRT report/^{98/} is acceptable.	(0) Risk rating is acceptable
	l) Potential upstream and sea impacts are not demonstrated to be insignificant or effectively mitigated. Not applicable	(0) Risk rating is acceptable
	m) Potential upstream and sea impacts are demonstrated to be insignificant or effectively mitigated. The ARR Horizonte Carbon Project qualifies as a ARR project and does not include any wetland areas in its property limits. Thereby, the audit team confirms that the selected risk score in the NPRT report/^{98/} is acceptable.	(0) Risk rating is acceptable
	n) Mitigation: Project area is protected by a legally binding commitment (e.g., a license, conservation easement, conservation servitude, or protected area) to continue management practices that protect carbon stocks for the duration of the project crediting period. The affirmation is provided by the audit team through verification of the farms lease agreements/^{90/91/} between Suzano S.A. and farm owners. The project intends to continue the management practices that protect the credited carbon stocks over the duration of the project crediting period. Additionally, the project has a 100% success rate for renewal of lease contracts signed in 2022/2023/^{89/}. The audit team verified the contract renewal emails/^{89/}, Suzano S.A. company website/^{88/} and conducted interview with the PP and concluded that the project is maintained for the overall project crediting period. Thus, the risk rating is acceptable.	(-2) Risk rating is acceptable
	o) Mitigation: Where disputes over land tenure, ownership or access or use rights exist, documented evidence is provided	(0) Risk rating is acceptable

	that demonstrates the project is taking action to try to resolve the disputes or clarify overlapping claims. The audit conducted interviews with the PP and communities to confirm that no disputes exist in the project area with respect to land tenure, ownership or access or use rights. Additionally, Suzano S.A. has established procedures “PGMA_Project Horizonte”^{77/}, SISPART – Suzano S.A’s corporate stakeholder relationship management system^{34/} and Social Development Team to resolve the any disputes arising in the project area. Thus, the audit team concludes that the mitigation measure is not applicable as no disputes exist in the project area and the justification provided by PP is appropriate.	
	TOTAL LAND TENURE AND RESOURCE ACCESS (LT) [b+d+h+k+m+n] = (5)	(5) The risk rating is acceptable as per the criteria mentioned in the NPRT tool v 4.2.

External Risk Assessment – Stakeholder Engagement

Risk factor	The EPIC audit team Assessment	Risk rating and Conclusion
STAKEHOLDER ENGAGEMENT	a) Less than 50 percent of stakeholders living within the project area and who are reliant on the project area have been consulted. Not applicable	(0) Risk rating is acceptable
	b) More than 50 percent of stakeholders living within the project area and who are reliant on the project have been consulted. The audit team verified the “Local Stakeholders – Communities Map”^{104/} wherein the location of communities residing within 3km radius of each farm boundaries were identified and delineated by the PP. 6 communities and 2 municipalities were identified in the project. Through interviews with the community and municipality representatives, the audit team confirmed that	(0) Risk rating is acceptable

	no communities are reliant on the project area for any resources. Further, the audit team crosschecked the stakeholder consultation records ^{105/} , meeting photographs and conducted interviews with PP and Social Development Team and concludes that more than 50% of stakeholders were consulted at regular periodic intervals throughout the project.	
	c) Less than 20 percent of stakeholders living outside the project area within 20 km of the project area, and who are reliant on the project area have been consulted. Not applicable	(0) Risk rating is acceptable
	d) More than 20 percent of stakeholders living outside the project area within 20 km of the project area, and who are reliant on the project area have been consulted. The audit team conducted interviews with PP, Social Development Team and identified stakeholders and confirmed that no stakeholders are dependent on the project area for any forest resources and the stakeholder consultation process is carried out at regular periodic intervals. Based on the review of “Local Stakeholders – Communities Map”^{104/}, stakeholder consultation photographs and Cronograma_Credito_Carbono^{105/}, the audit team affirmed that the PP has consulted more than 20% of stakeholders living outside the project area. Therefore, the justification provided in NPRT report is deemed acceptable.	(0) Risk rating is acceptable
	TOTAL – STAKEHOLDER ENGAGEMENT (SE) [b+d] = (0)	(0) The risk rating is acceptable as per the criteria mentioned in the NPRT tool v 4.2.

External Risk Assessment – Political Risk

Risk factor	The EPIC audit team Assessment	Risk rating and Conclusion
POLITICAL	a) Governance score of less than -0.79 Not applicable	(0) Risk rating is acceptable

	b) Governance score of -0.79 to less than -0.32 Not applicable	(0) Risk rating is acceptable
	c) Governance score of -0.32 to less than 0.19 The audit team through an independent quantification affirms that the most recent 5-year average governance score for Brazil is -0.26 through utilizing the World Bank Institute's WGI data/^{107/} for Brazil. The EPIC audit team reviewed Worldwide Governance Indicators (WGI) calculation document/^{106/} and independently quantified the governance score for most recent 5 years from 2019 to 2023 across 6 major indicators. (Interactive Data Access Worldwide Governance Indicators) Thus, the audit team confirmed that the selected score rating is appropriate.	(2) Risk rating is acceptable
	d) Governance score of 0.19 to less than 0.82 Not applicable	(0) Risk rating is acceptable
	e) Governance score of 0.82 or more. Not applicable	(0) Risk rating is acceptable
	f) Mitigation: The project is in a country that: 1) is party to the Paris Agreement and has submitted an NDC to the UNFCCC Secretariat in the last five years; 2) includes AFOLU commitments (conditional or unconditional) in its NDC, and 3) has a documented and active climate change plan that includes the project activity. The EPIC audit team assessed Brazil NDC 2023 document/ ^{108/} and confirmed that mitigation risk score selected is acceptable. - Brazil is party to the Paris Agreement and has submitted an NDC to the UNFCCC Secretariat in 2023. It demonstrated its commitment to Paris Agreement by committing to reduce 1.32 GtCO_{2e} of net GHG emission by 2025. Also, It aims to curb its net GHG emissions to 1.20 GtCO_{2e} by 2030. - Brazil has included AFOLU commitments in its NDC and aims to achieve zero deforestation by 2030, as per Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm).As per Brazil's NDC claims, it is committed to reduce GHG emissions and achieve climate neutrality by 2050.	(-2) Risk rating is acceptable

	Brazil has a documented and active climate change plan “National Plan for the Recovery of Native Vegetation”/^{109/} which states the importance of afforestation and restoration of native vegetation in large scales. Thereby, the document promotes restoration of carbon stocks through plantations which includes the agenda of the current project activity implemented by the PP. Thus, the audit team through review of peer-reviewed journals confirms that the justification provided in the NPRT report is acceptable.	
	TOTAL POLITICAL RISK (PC) [c+f] = (0)	(0) The risk rating is acceptable as per the criteria mentioned in the NPRT tool v 4.2.

TOTAL EXTERNAL RISK	(LT + SE + PC) = (5)	(5) The overall risk rating is acceptable as per the criteria mentioned in the NPRT tool v 4.2.
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Natural Risks Assessment

Risk factor	The EPIC audit team Assessment	Risk rating and Conclusion
FIRE	a) The occurrence of fire spots is more frequent in Brazil/^{111/}. In project state “Mato Grosso do Sul”, the Suzano’s Fire Monitoring Team has identified 137 fire spots in 2020. To manage the fire incidents effectively, the PP has established Fire Monitoring Stations and Operational Alert Teams. During site inspections, the audit team visited the Fire Monitoring Station and interviewed the personnels engaged in detecting fire spots. Suzano S.A. has access to 13 satellites enabling them to monitor fire activity across the project area in real time. The team is responsible for detection of early forest fires occurrence and send alerts to the fire teams/^{112/} and local communities. Incidents of fire spots (less than 5% insignificant) in the project area has been recorded, and data is maintained by the PP. The	LS*M = (0.50) Risk rating is acceptable

	fire incidents have been effectively contained in the past to prevent any major loss to the carbon stocks owned by the PP/^{110/}. The audit team crosschecked “Focos_INPE_2021-2023”/^{113/} document wherein each PAI’s precipitation, fire risk and monitoring satellite details are outlined for 2021 to 2023. Further, information on the fire outbreaks in Suzano S.A’s areas are publicised in its official website. In the project state, Mato Grosso do Sul, a decremental trend is observed in the number of fire outbreaks from 2019 to 2022/^{115/}. To mitigate the fire risk, Suzano S.A has established a procedure “PG.35.01.0002 - Prevention and Fighting of Forest Fires”/^{114/}, which provides specific guidelines for combating forest fires and safety protocols for firefighting personnel. The audit team through interviews with PP and fire monitoring team confirmed that thermal detection cameras capable of detecting temperature anomalies are utilized in the project. This technology ensured night-time efficiency in fire monitoring and prevention efforts. Significance = Major (25 percent to less than 50 percent loss of carbon stocks) Historical Likelihood Score (LS) = 2 Mitigation Measure (M) = 0.25 ▪ Thus, the audit team deems that the likelihood of occurrence of major fire risk considered as once every 100 years or less frequently for the project and the mitigation score is appropriate.	
PEST AND DISEASE OUTBREAKS	b) The audit team crosschecked the peer-reviewed journals/^{116/} and confirms that the occurrence of pest and disease outbreak in eucalyptus plantations are a rare event due to its proven resistance and resilience to pest and disease outbreaks. Further, the eucalyptus species can withstand severe conditions and recover carbon stocks within 5 years/^{117/}. ▪ The audit team conducted interviews with PP and Forest Operations Representative and confirmed that Suzano S.A procures high quality eucalyptus seedlings for planting from its own nursery wherein the seedlings are tested for its genetic ability to resist pest and diseases. Further, fertilizer application records and nursery quality management records, photos were verified during the site inspections. An operational procedure “PO.25.01.001”/^{118/} has been developed by Suzano S.A to manage the forest health.	LS*M = (0) Risk rating is acceptable

	RAPID project (Pest Analysis, Enemies and Natural Diseases) network is installed in each Suzano's unit for pest detection. Historical Likelihood Score (LS) = 0 Mitigation Measure (M) = 0.50 Thus, the audit deems that the likelihood of pest and disease outbreaks considered as not applicable with occurrence once every 100 years or less for the project and the mitigation score is appropriate.	
EXTREME WEATHER	c) The audit team reviewed scientific literatures/^{119/} on event of floods, droughts, hurricanes, cyclones and other extreme weather events and confirmed that the project area is not susceptible to natural disasters and in the case of occurrence of extreme events, the recovery of lost carbon stocks is expected within 5 years of any event. The audit team interviewed the PP and project management team and affirmed that the project area is not prone to the impact of extreme weather. Historical Likelihood Score (LS) = 0 Mitigation Measure (M) = 0.50 Thus, the audit team deems that the likelihood of extreme weather events considered as not applicable with occurrence once every 100 years or less for the project and the mitigation score is appropriate.	LS*M = (0) Risk rating is acceptable
GEOLOGICAL RISK	d) The EPIC audit team reviewed scientific reports/^{120/} and confirmed that Brazil is situated outside hurricane paths, lacks active volcanoes and is not prone to earthquakes. Given that the project focuses on carbon credits and establishment of forests, it is unlikely to be affected by geological events. The audit team verified the Seismic records occurred in Brazil/^{121/} and interviewed PP and deems that geological risks are not applicable to the project area. Historical Likelihood Score (LS) = 0 Mitigation Measure (M) = 1 The audit team deems that the likelihood of geological risk events considered as not applicable with occurrence once every 100 years or less for the project and the mitigation score is appropriate.	LS*M = (0) Risk rating is acceptable

OTHER NATURAL RISKS (ON1), (ON2), (ON3)	e) The EPIC audit team conducted interviews with PP and project personnel and concludes that there is no presence of any other natural risks for forests existing in the project area. Not applicable	LS*M = (0) Risk rating is acceptable
SEA-LEVEL RISE	h) The EPIC audit team reviewed the NPRT report/^{98/}, conducted interviews with PP and project management team and is of the opinion that the project is not affected by the sea level rise as there is no demonstrated history of risk event. Not applicable	LS*M = (0) Risk rating is acceptable

Projected Future Climate Change Impact on Natural Risk

The Future Climate Change is estimated based on the CID (Climate Impact Drivers) default mean values obtained for the selected reference region/^{124/}. For Horizonte Project, 13 CID categories are selected and grouped into 4 types. CID categories with a “negative impact” on the project are considered for overall CID Impact Score calculation. The audit team conducted a comprehensive review of the scientific literatures/^{123/} supporting each CID category provided by PP. Further, the audit team verified the “Future Climate Impact” sheet of NPRT v4.2 Calculation workbook/^{122/} and independently replicated the calculations outlined in the workbook and confirmed the resulting overall CID Impact score of 2.5 and the future climate impact factor of 1.20.

Projected Climate Impact On Natural Risk	Future Change Impact On Natural Risk	Aggregated Sub-total Risk	Future Climate Change Impact Factor	Total	The EPIC audit team Assessment and Conclusion
Natural risk associated with climate change impact (NR-c)		(a+b+c) = 0.50	1.20	0.60	The natural risks (Fire, Pest and Disease Outbreaks, Extreme Weather) are impacted by the climate change. The EPIC audit team verified the “Natural Risk” sheet of NPRT v4.2 calculation workbook/^{122/} and confirms that the future climate impact factor is calculated as per the NPRT tool

				v 4.2 requirements. Thus, the risk rating is acceptable.
Natural risk NOT associated with climate change impact (NR-nc)	(d) = 0	1	0	The Geological risk is not impacted by the climate change as stated in NPRT v 4.2. The EPIC audit team verified the “Natural Risk” sheet of NPRT v4.2 calculation workbook/^{122/} and confirms that the future climate impact factor is calculated as per the NPRT tool v 4.2 requirements. Thus, the risk rating is acceptable.

TOTAL NATURAL RISK	(NR-c + NR-nc + SLR) = 0.60	(0.60)
		The overall risk rating is acceptable as per the criteria mentioned in the NPRT tool v 4.2.

Overall Risk rating calculation and the EPIC audit team conclusion

Sl.no	Risk Category	Rating	Risk rating and Conclusion
a	Total Internal Risk	20	20
b	Total External Risk	5	5
C	Total Natural Risk	0.60	0.60
OVERALL RISK RATING (a+b+c) = 26			(26)
The risk scores have been rounded up as a conservative approach as specified in the Non-Permanence Risk Tool v 4.2.			Risk rating is acceptable

The total Non-Permanence Risk rating is 26%. The EPIC audit team confirms that the information in the NPRT report/^{98/} and NPRT Calculation Workbook/^{122/} is consistent with the provided documentation and scientific references to support the selected risk scores. Each factor has been meticulously evaluated for alignment with the rationale, justifications and assumptions made in the project. The EPIC audit team finds the quality of information submitted by PP reliable and appropriate for the chosen risk rating. Therefore, the overall risk rating is deemed credible, and a 26% buffer has been established for the ARR Horizonte Carbon Project and 166,531.00 tCO_{2e} of carbon removals is deposited to VCS buffer account for the second monitoring period (22 February 2022 to 03 April 2023).

5 VERIFICATION OPINION

5.1 Verification Summary

EPIC Sustainability Services Private Limited (EPIC) performed the second verification of the GHG emission removals achieved by the VCS project titled "The ARR Horizonte Carbon Project" (VCS ID: 3350) contracted by Suzano S.A. The verification was carried out to independently assess whether the project confirms to the VCS qualification criteria and requirements, including the applied baseline and monitoring methodology. The verification of GHG emission removals quantification of this project activity was performed in accordance with ISO 14064-3:2019 standards. The verification was conducted by applying a risk-based approach, reviewing of the registered VCS PD&MR v6, VCS MR (v1.0 and v2.0) and the subsequent follow-up interviews conducted by the audit team with sufficient evidence to determine the compliance of the stated criteria. The GHG emission calculations are documented in a complete and transparent manner. The formulae and methodologies for accounting GHG emissions are appropriate and emission factors are deemed to be of sufficient accuracy.

The monitoring plan is in line with the applied methodology of AR-ACM0003 v2.0. The monitoring plan adequately addresses all necessary information for monitoring and reporting of emissions removals from the project activity. Responsibilities and authorities for project management, monitoring and reporting, and the data quality assurance and control procedures have been described in the final MR version 2.0.

The verification was carried out in accordance with the requirements of the VCS Validation and Verification Manual v3.2 and VCS Standard v4.7. As a result of the process, the audit team confirms the following for the current monitoring period:

- All operations of the project were implemented as described in the registered PD&MR v6
- The monitoring plan is in accordance with the applied methodology AR-ACM0003 v2.0 applied by the project activity.
- The monitoring has been carried out in accordance with the monitoring plan described in VCS MR v2.0.
- The PAIs included in the second monitoring period is in conformance with the validated project design and eligibility criteria specified in registered VCS PD&MR v6 and VCS Standards v4.7 requirements.
- The GHG emission removals achieved are calculated in conformance with applied methodology AR-ACM0003 v2.0 and its associated tools.

The audit team confirms that the GHG emission removals are calculated accurately, with no material misstatements, for the current monitoring period. The verification opinion is based on the reported GHG emission removals, along with the registered project baseline and monitoring documents submitted to the VVB by the PP. The audit team with a reasonable level of assurance confirms that the quantity of GHG emission removals achieved by the project during this current monitoring period is as per applied methodology and as provided in the project's GHG statement. The project's GHG Statement is the responsibility of the Project Proponent. Hereby, the audit team certifies that the project's implementation and operations resulted in achieved GHG emission removals of 640,503.00 tCO₂e for the second monitoring period (22 February 2022 to 03 April 2023, inclusive of both days). Of this total, 271,803.00 tCO₂e VCU are eligible for issuance in the project for the current monitoring period after a buffer credits deduction of 166,531.00 tCO₂e from the net GHG emission removals accounting for 26% non-permanence risk estimated in the project. The audit team confirms with reasonable level of assurance that the project complies with all the verification criteria specified in VCS Standard v 4.7.

5.2 Verification Conclusion

EPIC Sustainability Services Private Limited (EPIC) has been contracted by Suzano S.A. to conduct the independent second verification of the registered VCS project activity titled "The ARR Horizonte Carbon Project" (VCS ID: 3350). The objective of this verification is to assess and certify the emission removals reported for the project activity during the monitoring period from 22nd February 2022 to 3rd April 2023 (both days included). In the project, the Project Proponent (PP) is responsible for data collection in line with the monitoring plan and reporting the GHG emission removals from the project activity. EPIC is responsible for issuing the independent verification statement on the reported GHG emission removals.

The audit team confirms that the project complies with all requirements outlined in the VCS Standard v4.7, with no limitations. The financial stability of the project, including the PAIs for the second monitoring period, is well-justified. The monitoring plans are transparent and comprehensive. The quantification of baseline emissions, project emissions, and potential leakage has been conducted in a transparent and conservative manner, considering significant long-term GHG benefits.

The audit team with a reasonable level of assurance confirms that the quantity of GHG emission removals achieved by the project during this current monitoring period is as per applied methodology and as provided in the project's GHG statement. The project's GHG Statement is the responsibility of the Project Proponent. The total GHG removals calculated as the sum of carbon stock changes during the current monitoring period (22 February 2022 to 03 April 2023) is 640,503.00 tCO₂e. The overall non-permanence risk rating is 26%. As a result, the total number of credits to be deposited into the buffer account is 166,531.00 VCUs, and the total VCUs to be issued amounts to 271,803 tCO₂e for the current monitoring period. The verification criteria of the project are in accordance with the requirements of ISO 14064-3:2019

Verification period: 22/02/2022 to 03/04/2023

Verified GHG emission reductions and carbon dioxide removals for the above verification period

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Reductions VCU (tCO ₂ e)	Removal VCU (tCO ₂ e)	Buffer pool allocation	Total VCUs (tCO ₂ e)
22/02/2022 to 31/12/2022	42,485.93	503,023.00	0	-	170,068.00	130,786.00	170,068.00
01/01/2023 to 03/04/2023	58,401.37	137,480.00	0	-	101,735.00	35,745.00	101,735.00
Total	100,887.30	640,503.00	0	-	271,803.00	166,531.00	271,803.00

The non-permanence risk rating (%)	26
If applicable, the Long-term Average (LTA), whether it has been properly updated, and if it has been reached.	The PP has adequately assessed the Long-Term Average benefits as per section 3.2.20 of VCS Standard 4.7. The audit team reviewed the monitored ER calculations workbook “cell J6 of LTA Calculation sheet” and confirmed that the long-term average for the current inventoried area is 2,339,242.40 tCO₂e. During the current monitoring period, the project achieved GHG emission removals of 640,503.00 tCO₂e, which are subject to LTA calculation. The audit team verified the overall net GHG removals achieved from the 1st and current monitoring period and confirms that the project has reached its LTA, as the total to-date GHG benefit is 2,541,411 tCo2e. As a result, 202,168.60 VCUs were deducted from the current claim to avoid exceeding the LTA cap and only 271,803 tCo2e VCUs are considered eligible for issuance during the current monitoring period. Currently, the estimated LTA consists of 5,113,780.04 tCo2e representing the removals achieved for 28,665.25 ha of reforestation. Although the monitored LTA has been achieved in this verification, in future monitoring, along with the increase in the inventoried area, which is currently 13,139.24 ha, it is expected that the monitored

	LTA will increase, enabling the generation of additional credits.
Whether a loss has been appropriately accounted for, in accordance with the VCS Program rules, if applicable.	Not applicable as no loss event has occurred in the project. The audit team conducted site visits to the planted areas and interviewed the PP and Project management team and confirmed that no loss events has occurred in the project.

5.3 Ex-ante vs Ex-post ERR Comparison

Vintage period	Ex-ante estimated reductions/removals	Achieved reductions/removals	Percent difference	Explanation for the difference
22/02/2022 to 31/12/2022	798,012.00	503,023.00	-37%	The audit team crosschecked the estimated/ ^{131/} and monitored/ ^{25/} ER calculations workbook to assess the percentage difference between the estimated and achieved emission removals.
01/01/2023 to 03/04/2023	364,068.00	137,480.00	-62%	
Total	1,162,080.00	640,503.00	-45%	The audit team reviewed the “NET GHG Removal” and “ex-ante x ex-post” sheet of the estimated ER calculations workbook/^{131/}, where the PP carried out ex-ante estimations for the overall project area. This included 40 PAIs from the 1st monitoring period and 27 PAIs newly added in the second monitoring period, resulting in 1,162,080 tCO₂e (ROUND DOWN to be conservative) for the current monitoring period. Additionally, the audit team reviewed the VCU's Gross Account column in the “VCUs Calculation sheet” of the monitored ER calculations workbook/^{25/} and confirmed that the project achieved overall emission removals of

				640,503 tCO₂e (ROUND DOWN to be conservative) for the inventoried area of 13,193.24 ha during the current monitoring period. Thus, the audit team concludes that the observed percentage difference in estimated and achieved removals is due to the exclusion of the newly added PAIs area from the verified calculations. This exclusion occurred because the forest inventory was conducted only for plantations that had fulfilled the maturity period of two years. Therefore, no measurements were conducted in the newly added PAIs, as they were planted in 2022–2023. Consequently, the verified removals, based solely on field-inventoried areas, are lower than the estimated removals.
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APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

Section	Information	Justification	Assessment method and conclusion
2	Land Ownership documents	Land ownership documents, such as leases and land acquisition contracts for the development of project activities, are confidential to the company and cannot be made public.	The audit team reviewed the land ownership documents ^{/90/91/101/102/103/} which contains lessee and lessors' personal information, leasing amount details and terms of the contracts. The land acquisition procedures are internal policies developed by Suzano S.A for acquiring farmlands. Additionally, the document includes information on the land investments and internal policy decisions in the project which confirms it as sensitive information as per VCS Program Definitions v4.5.
5	Project budget statements	The project budget statements used to demonstrate that Suzano has the financial means to secure the project until it reaches breakeven are internal company documents.	The audit team verified the Financial analysis statements ^{/78-87/} of the Horizonte project and confirms that the statements include financial projections for the management of project. Further, it contains financial investment details made by different entities. Thus, the audit team confirms it as commercially sensitive information as per VCS Program Definitions v4.5.

APPENDIX II : LIST OF DOCUMENTS REVIEWED DURING VERIFICATION

Sl.No	Topic	Document
1	VCS Documents	VCS Standard, v4.7, dated 16th April 2024
2		VCS Program definitions, v4.5, dated 16th April 2024
3		VCS Program Guide, v4.4, dated 29th August 2023
4		VCS Registration and Issuance Process, v4.5, dated 16th April 2024
5		VCS_Validation_Verification_Manual_v3.2, dated 19th October 2016
6	AR-ACM0003	AR-ACM0003: Afforestation and Reforestation of Lands Except Wetlands, version 2 – A/R Largescale Consolidated Methodology
7	Registered PD&MR	PD+MR_ARR Horizonte Carbon Project v6 - Clean version, dated 09 February 2023
8	Joint VVR	Clean_VCS-Joint-Validation Verification Horizonte, dated 23 February 2023
9	VT0001	VT0001 Tool for the Demonstration and Assessment of Additionality in VCS AFOLU Project Activities, v3.0, dated 1st February 2012.
10	Double-count_Letter_Horizonte	
11	International Carbon Registry	https://www.carbonregistry.com/credits
12	Gold Standard	https://registry.goldstandard.org/projects?q=&page=1
13	Plan Vivo	https://www.planvivo.org/markit-registry
14	BCR Standard	https://globalcarbontrace.io/carbon-credits
15	CDM	https://cdm.unfccc.int/Registry/vc_attest/index.html
16	CERCARBONO	https://www.ecoregistry.io/projects-list/cercarbono-co2
17	Sustainable Development Goals	https://indicators.report/targets/10-2/
		https://indicators.report/targets/12-5/
		https://indicators.report/targets/15-1/
		https://sdgs.un.org/goals
18		https://www.suzano.com.br/noticia/com-apoio-da-suzano-cooperativa-arara-azul-fecha-o-ano-com-incremento-de-22-na-renda-media-das-familias

19	SDG 10.2	Relatório Parcial (TO) - Reciclagem Inclusiva_V0 (1) (1).pdf Ata_Eleição_2021.pdf (Election Minutes) Planejamento Corpazul 2024.xlsx (Empolyee records) 00_Apresentação-Institucional_Reciclagem-Inclusiva 01_ANEXO I - DESCRIÇÃO DO PROJETO RECICLAGEM INCLUSIVA	
20		CONTRATO PRESTAÇÃO DE SERVIÇOS ISABELA X ARARA AZUL ASSINADO (1).pdf	
21	SDG 12.5	Planejamento Projeto Horizonte de Carbono - RECICLAGEM INCLUSIVA 2023. TL. V01.xlsx Corpazul projetos.pptx Apresentação Projeto Reciclagem Inclusiva_Proj. Horizonte de Carbono_Abril 2023.pptx Quadro Lógico, Plano de Monitoramento e Riscos - Reciclagem Inclusiva.xlsx Roteiro de Cerimonial_Cooperativa.docx E-mail Missão Salesiana - cessão do local projeto Muro Consciente.pdf	
22		Divulgação da inauguração do muro consciente no Workplace.pdf (Conscious wall inguaration annoucement as Suzano workplace) Divulgação - Fotos Banner instalado Supermercado Proença_Julho 2023.pdf (Banners for Conscious wall inauguration)	
23		Proposta - MURO CONSCIENTE - ECONOMICA CIRCULAR.pdf (Proposal for Conscious wall)	
24		Fotos evento Inauguração Muro Consciente (Conscious Wall Inaugration Photos)	
25	20250605-Project ID 3350_2verif_Monitored ER		
26	Project Location	KML_Faz	Project_Area_Eucalyptus.kml Project_Area_Farms.kml Project_Area_Restoration.kml  Project_Area_Eucalyp tus.kml  Project_Area_Farms.k ml  Project_Area_Restora tion.kml
27		Maps (Restoration of Native Areas)	Áreas de plantio de nativas - CASA BRANCA (T1B8).pdf Áreas de plantio de nativas - CRISTO REDENTOR (T8AS).pdf Áreas de plantio de nativas - CURUCACA (T6AT).pdf

			Áreas de plantio de nativas - ANA ROSA (C1BO).pdf Áreas de plantio de nativas - Barra do Moeda - T1A0.pdf Áreas de plantio de nativas - BOA ESPERANÇA III (T3AW).pdf Áreas de plantio de nativas - BOM JESUS (T8AQ).pdf Áreas de plantio de nativas - BRASILEIRA (T8AJ).pdf Áreas de plantio de nativas - DUAS MARIAS (T8AM).pdf Áreas de plantio de nativas - ESTRADÃO (T1B5).pdf Áreas de plantio de nativas - FLOR DA SERRA (T6BG).pdf Áreas de plantio de nativas - GUARA-SUIA (T8AE).pdf Áreas de plantio de nativas - LAGUNA (T1CF).pdf Áreas de plantio de nativas - MATÃO (T3AJ).pdf Áreas de plantio de nativas - PARAÍSO (T8AR).pdf Áreas de plantio de nativas - RIO VERDE A (T4AD).pdf Áreas de plantio de nativas - RIO VERDE B (T8AT).pdf Áreas de plantio de nativas - SÃO MARCOS (T4AL).pdf Áreas de plantio de nativas - VALE DO GERIVÁ (T8AL).pdf
28		Maps (Eucalyptus Restoration)	Mapa de Implantação - T1BU - ARETE (F-H297).pdf Mapa de Implantação - T1CI - BARRA DO CERVO (F-H303).pdf Mapa de Implantação - T1CQ - SÃO MIGUEL III.pdf Mapa de Implantação - T1CU - NOSSA SENHORA DE FÁTIMA.pdf Mapa de Implantação - T1CV - TAQUARUSSU III.pdf Mapa de Implantação - T1CX - SÃO JOÃO JY.pdf Mapa de Implantação - T1CY - J.A.I.pdf Mapa de Implantação - T1DA - PALMITO II.pdf Mapa de Implantação - T2A9 - MONTE ALTO (F-H287).pdf Mapa de Implantação - T2AA - FIGUEIRA (F-H296).pdf Mapa de Implantação - T2AL - SÃO JOÃO IV (F-H288).pdf Mapa de Implantação - T2BC - JANDAIA (F-H041).pdf Mapa de Implantação - T2BS - POUSO ALTO I.pdf

			Mapa de Implantação - T2BW - NOSSA SENHORA APARECIDA VI.pdf Mapa de Implantação - T2BX - CABECEIRA II.pdf Mapa de Implantação - T3AW - BOA ESPERANÇA III (F-H240).pdf Mapa de Implantação - T3AY - JOAMAR (F-H292).pdf Mapa de Implantação - T3BC - SANTA ANGÉLICA.pdf Mapa de Implantação - T3BD - JOAMAR II.pdf Mapa de Implantação - T3BF - NOSSA SENHORA APARECIDA VII.pdf Mapa de Implantação - T3BG - UNIÃO SÃO PEDRO.pdf Mapa de Implantação - T4BC - TIO MUNICO.pdf Mapa de Implantação - T4BE - SÃO FRANCISCO IV.pdf Mapa de Implantação - T4BG - TUPAHUÊ.pdf Mapa de Implantação - T5AM - SANTA INES GLEBA C (F-H270).pdf Mapa de Implantação - T5AN - SANTA INES (F-H269).pdf Mapa de Implantação - T5AQ - SANTA ADÉLIA.pdf Mapa de Implantação - T5AT - SÃO JOÃO VALE DO POMBO.pdf Mapa de Implantação - T5AU - POMBINHO EURO.pdf Mapa de Implantação - T5AV - MARCA B2.pdf Mapa de Implantação - T5AX - SANTA RITA DE CÁSSIA II.pdf Mapa de Implantação - T5AY - ARIRANHA II.pdf Mapa de Implantação - T6A1 - TRIANGULO DO VALE (F-H268).pdf Mapa de Implantação - T6AO - SÃO LUCAS (F-H283).pdf Mapa de Implantação - T6B8 - MATINHA DO BRIOSO (F-H291).pdf Mapa de Implantação - T6B9 - PONTAL DO BRIOSO (F-H276).pdf Mapa de Implantação - T6CC - VISTA ALEGRE III.pdf Mapa de Implantação - T6CD - SANTA LUCIA.pdf Mapa de Implantação - T6CE - SANTA TEREZINHA II.pdf Mapa de Implantação - T6CG - SUCURIU.pdf Mapa de Implantação - T6CL - VALE DOURADO.pdf Mapa de Implantação - T6CM - RECANTO DOS CARVALHOS.pdf
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		Mapa de Implantação - T6CN - NOSSA SENHORA APARECIDA I.pdf Mapa de Implantação - T6CO - DA MATA IV.pdf Mapa de Implantação - T6CP - ESPERANÇA.pdf Mapa de Implantação - T6CR - SÃO LOURENÇO II.pdf Mapa de Implantação - T6CS - MARIANA.pdf Mapa de Implantação - T6CT - SÃO LOURENÇO III.pdf Mapa de Implantação - T6CU - RANCHO ALEGRE II.pdf Mapa de Implantação - T6CV - LUA CHEIA.pdf Mapa de Implantação - T6CW - BANDEIRANTES.pdf Mapa de Implantação - T6CX - MATA VERDE.pdf Mapa de Implantação - T8AA - SANTO ANTONIO IV (F-H267).pdf Mapa de Implantação - T8AB - VISTA ALEGRE II (F-H299).pdf Mapa de Implantação - T8AT - RIO VERDE B (F-H07B).pdf Mapa de Implantação - T8BA - SÃO JOSÉ.pdf Mapa de Implantação - T8BB - JATIUCA.pdf Mapa de Implantação - T8BC - VALE DOURADO II.pdf Mapa de Implantação - T8BD - PECUÁRIA FRD.pdf Mapa de Implantação - T8BJ - CARACCOL II.pdf Mapa de Implantação - T8BK - SPUMAR.pdf Mapa de Implantação - T8BL - SANTA EDWIRGES.pdf
29		project_area_summary.pdf
30	Contract with other Entities involved in the Project	CONTRATO 2TREE CONTRATO AGROICONE CONTRATO WAYCARBON PROP. AGROICONE PROP. COM. 2TREE PROP_SUZANO_WAY
31	Ecosystem Conversion	https://carbon.marvinblue.earth/analysis/ Carbon Platform_MB

32		TLA_CERR_ANO_2006_2008_2015_2020_FAZ__C1B0 TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T1CU TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T1CV TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T1CX TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T1CY TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T1DA TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T2BS TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T2BW TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T2BX TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T3BC TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T3BD TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T3BF TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T3BG TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T4BC TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T4BE TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T4BG TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T5AQ TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T5AT TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T5AU TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T5AV TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T5AX TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T5AY TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CD TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CL TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CM TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CN TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CO TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CP TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CR
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		TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CS TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CT TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CU TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CV TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CW TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T6CX TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T8BB TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T8BC TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T8BD TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T8BJ TLA_CERR_ANO_2006_2008_2015_2020_FAZ__T8BK
33.	Degraded Pasture Map Analysis	Marvin Horizon Farm Report T1CV Pasture 2012.pdf Marvin Horizon Farm Report T1CX Pasture 2013.pdf Marvin Horizon Farm Report T1CY Pasture 2012.pdf Marvin Horizon Farm Report T1DA Pasture 2013.pdf Marvin Horizon Farm Report 12BS Pasture 2012.pdf Marvin Horizon-Farm Report-12BW-Pasture-2012.pdf Marvin Horizon-Farm Report-128X-Pasture - 2013.pdf Marvin Horizon - Farm Report-13BC-Pasture-2012.pdf Marvin Horizon Farm Report-T3BD-Pasture-2013.pdf Marvin Horizon-Farm ReportT3BF-Pasture-2013.pdf Marvin Horizon - Farm Report-T3BG-Pasture-2013.pdf Marvin Horizon Farm Report-T4BC-Pasture-2013.pdf Marvin Horizon - Farm Report-T4BF - Pasture - 2013.pdf Marvin Horizon Farm Report-T4BG-Pasture - 2013.pdf Marvin Horizon - Farm Report T5AQ Pasture-2013.pdf Marvin Horizon Farm Report T5AT Pasture 2012.pdf Marvin Horizon Farm Report T5AV Pasture 2013.pdf Marvin Horizon Farm Report T5AX Pasture 2013.pdf

		Marvin Horizon Farm Report T5AY Pasture 2013.pdf Marvin Horizon Farm Report T6CD Pasture 2011.pdf Marvin Horizon Farm Report T6CL Pasture 2012.pdf Marvin Horizon Farm Report T6CM Pasture 2012.pdf Marvin Horizon Farm Report T6CN Pasture 2012.pdf Marvin Horizon Farm Report T6CO Pasture 2012.pdf Marvin Horizon Farm Report T6CP Pasture 2012.pdf Marvin Horizon Farm Report T6CR Pasture 2012.pdf Marvin Horizon Farm Report T6CS Pasture 2012.pdf Marvin Horizon Farm Report T6CT Pasture 2012.pdf Marvin Horizon Farm Report T6CU Pasture 2013.pdf Marvin Horizon Farm Report T6CV Pasture 2013.pdf Marvin Horizon Farm Report T6CW Pasture 2012.pdf Marvin Horizon Farm Report T6CX Pasture 2013.pdf Marvin Horizon Farm Report T8BB Pasture 2012.pdf Marvin Horizon Farm Report T8BC Pasture 2012.pdf Marvin Horizon Farm Report T8BD Pasture 2012.pdf Marvin Horizon Farm Report T8BJ Pasture 2013.pdf
	Pre-Implementation Project Maps	Mapa de Pré implantação T1CV TAQUARUSSU III 2012X2022 Mapa de Pré implantação T1CX SÃO JOÃO JY 2012X2022 Mapa de Pré implantação T1CY J.A.I 2013x2023 Mapa de Pré-implantação T1DA-PALMITO II 2013X2023 Mapa de Pre-implantação 12BS-POUSO ALTO 2012X2022 Mapa de Pré-implantação - 12BW-NOSSA SENHORA APARECIDA VI 2013X2023 Mapa de Pre-implantação - 128X-CABECEIRA II 2013X2023 Mapa de Pré-implantação-13BC-SANTA ANGELICA 2012X2022 Mapa de Pré-implantação - T3BD-JOAMAR II 2013X2023 Mapa de Pré-implantação-T3BF-NOSSA SENHORA APARECIDA VII 2013X2023 Mapa de Pré-implantação-T3BG-UNIÃO SÃO PEDRO 2013X2023

		Mapa de Pré-implantação-T4BC-TIO MUNICO 2012X2022 Mapa de Pré-implantação - T4BE-SÃO FRANCISCO IV 2013X2023 Mapa de Pré-implantação-T4BG - TUPAHUÊ 2013X2023 Mapa de Pré-implantação T5AQ SANTA ADÉLIA 2013X2023 Mapa de Pré implantação TSAT SÃO JOÃO VALE DO POMBO 2012X2022 Mapa de Pré implantação TSAU POMBINHO EURO 2012X2022 Here are the names of the documents shown in the screenshot: Mapa de Pré implantação T6AV MARCA B2 2013X2023 Mapa de Pré implantação T6AX SANTA RITA DE CASSIA II 2013X2023 Mapa de Pre-implantação 15AY ARIRANHA II 2013X2023 Mapa de Pre-implantação 16CD-SANTA LUCIA 2011X2021 Mapa de Pre-implantação - 16CD-SANTA LUCIA 2012X2022 Mapa de Pre-implantação - 16CL-VALE DOURADO 2012X2022 Mapa de Pré-implantação-16CM-RECANTO DOS CARVALHOS 2012X2022 Mapa de Pré-implantação - T6CN-NOSSA SENHORA APARECIDA 1 2012X2022 Mapa de Pré-implantação-T6CO-DA MATA IV 2012X2022 Mapa de Pré-implantação - T6CP-ESPERANÇA 2012X2022 Mapa de Pré-implantação-T6CR-SÃO LOURENÇO II 2012X2022 Mapa de Pré-implantação - T6CS-MARIANA 2012X2022 Mapa de Pré-implantação-T6CT-SÃO LOURENÇO III-2012X2022 Mapa de Pré implantação T6CU RANCHO ALEGRE II 2013X2023 Mapa de Pré implantação T6CV LUA CHEIA 2013X2023 Mapa de Pré implantação T6CW BANDEIRANTES 2012X2022 Mapa de Pré implantação T6CX MATA VERDE 2013X2023
34	Stakeholders Consultation Procedures	MA.26.00.0001 - v.2 - Manual de Gestão de Relacionamento.pdf (Relationship Managment Manual)
35		PG.26.02.0001 - v.3 - Identificação e Avaliação de Aspectos e Impactos Sociais.pdf (Identification and Assessment of Social Aspects and Impacts)
36		PG.26.03.0001 - v.0 - Relacionamento com Comunidades Urbanas e Rurbanas.pdf (Relationship with Urban and Rural Communities)

37		PO.26.01.001 -v1 - Gestao de Demandas Sociais.pdf (Social Demand Management)
38		PO.26.02.0001 - Gestão de Ocorrências de Partes Interessadas.pdf (Stakeholder Incident Managment)
39		PO.26.03.0001 - v.1 - Diálogo Operacional.pdf (Operational Dialogue)
40	Labor and Work Policies	Code of Ethics and Conduct_Suzano PC.00.0002 Política de Código de Conduta (Code of Conduct Policy)
41		PC.00.0006 Política de Medidas Disciplinares (Disciplinary Measures Policy)
42		PC.00.0010 Política de Diversidade e Inclusão (Diversity and Inclusion Policy)
43		PC.00.0012 - Corporate Human Rights Policy (Corporate Human Rights Policy)
44	Stakeholder Identification	Partes-Interessadas_publicas_Horizonte.xlsx
45	Stakeholder Ongoing Communication	DS_Projeto de Carbono Horizonte 2024.pptx DS_Projeto de Carbono Horizonte 2024_Vizinhos.pptx
46		Evidencia_emails (/1-20/ emails) Oficios_enviados (/1-55/ emails to offices) Mailing_Parties-Interessadas_Horizonte.xlsx
47		Comunicacao_Projeto-Horizonte.pdf Oficio_Projeto_Horizonte.docx
48		folder_45x30cm_horizonte.pdf – Project Flyer
49		Stakeholder consultation videos - divulgacao-proj-horiz-ing.mp4, divulgacao-proj-horiz-port.mp4 Photographs – Almanara, Arara Azul, Assentamento Montana, Paulistinha, Ponte Velha.
50		Constent Forms and Attendance records Lista de Presença Almanara .pdf Lista de Presença Arara Azul.pdf Lista de Presença Montana .pdf Lista de Presença Ponte Velha .pdf Lista_Presença_Paulistinha.pdf Termo Almanara .pdf

		Termo Arara Azul.pdf Termo Montana .pdf Termo Ponte Velha .pdf Termo_Paulistinha.pdf
51	SISPART	Ocorrencias_Projeto_Horizonte_2022_2023.xlsx Ocorrência Mortandade de Abelhas- Horizonte Fluxos e Tratamento dos Impactos - Ocorrências
52	Introduction of species	SAC_20230627 https://www.iucngisd.org/gisd/ PO.24.01.0025 FLORESTAL MS - Restauração Ambiental de áreas destinadas à Conservação 2 (FLORESTAL MS - Environmental Restoration of areas designated for Conservation)
53	Invasive species	Manual_identificação_exóticas-MS (Identification Manual for invasive species) Manual_controle_exóticas-MS (Forest Environment Exotic Control Manual) Invasive species existing in the project area Zenni2011, Rocha2019 Silva2022 Silverio2010 Zampar2014 Mota2020 Portal Instituto Horus (Base de Dados Instituto Hórus) Chapla2014 Eleuterio2023 Fabricante2012
54	Water consumption stress	PO.24.01.0001 Controle de Captação de Água.pdf (Control of surface and groundwater collection for forestry operations)
55	Certificate of declaration of use of water resources (DURH)	Resolution CERH MS nº 25, from 3 March 2015 Certificado DURH 022523 Paraíso 002 Certificado DURH0220804 Colorado III 001

	Certificado DURH022719 Talismã do Sul 001 Certificado DURH023118 Guarã 001 Certificado DURH023144 Jatuíca 001 Certificado DURH024752 Nossa Senhora Aparecida VI 001 Certificado DURH024753 Bordon 001 Certificado DURH024754 São Lourenço III 001 Certificado DURH024757 Pouso Alto I 001 Certificado DURH024760 Pouso Alto I 002 Certificado DURH024795 Tio Munico 001 Certificado DURH024819 Tio Munico 002 Certificado DURH025247 Marca B2 001 Certificado DURH025329 Marca B2 002 Certificado DURH025554 Caracoll II 001 Certificado DURH025560 Estrella e Santo Expedito 001 Certificado DURH025563 Estrella e Santo Expedito 002 Certificado DURH025617 Faz Santa Rita de Cássia 001 Certificado DURH025619 Santa Rita de Cássia 002 Certificado DURH025621 Santa Rita de Cássia 003 Certificado DURH025637 Estrella e Santo Expedito 003 Certificado DURH025804 Cabeceira II 001 Certificado DURH025809 São Francisco IV 001 Certificado DURH025940 Água Limpa 001 Certificado DURH026033 Faz Barraca (eldorado) Certificado DURH026134 União São Pedro 003 Certificado DURH026137 União São Pedro 001 Certificado DURH026139 União São Pedro 002 Certificado DURH011003 Figueira 001 Certificado DURH011004 Figueira 002 Certificado DURH011208 Brasileira 001
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		Certificado DURH011210 São João IV 003 Certificado DURH011462 Barra do Moeda 002 Certificado DURH011991 Chuva de Prata II 001 Certificado DURH012110 Vale do Gerivá 001 Certificado DURH012320 Boa Esperança III 001 Certificado DURH013997 Duas Marias 015 Certificado DURH015184 Vista Alegre II 001 Certificado DURH015239 Vista Alegre II 002 Certificado DURH015240 Vista Alegre II 003 Certificado DURH016488 Paraíso 002 Certificado DURH018889 Rio Verde B 001 Certificado DURH019241 Duas Marias 16 (T8AM001) Certificado DURH020058 Rio Verde A 001 Certificado DURH024242 Estância Paulão 001
56	Water Monitoring Plans	Plano monitoramento hidrico 2023.pdf (Water Monitoring Plan 2023, Avix) Monitoramento hidrico 2022.pdf (Water Monitoring 2022) Monitoramento hidrico 2023.pdf (Water Monitoring 2023) PO.24.01.0009 Recursos Hidricos.pdf (Water Resources)
57	Micro-watershed maps	22032023171600 22032023171801 22032023171852 22032023172211 22032023172308 22032023172409 22032023172459
58	Use of fertilizers	BD_SAP_atividades.xlsx
59		MA.27.01.0022 ADUBAÇÃO MECANIZADA.pdf (Mechanized fertilization) MA.27.01.0028 MANUAL DE TREINAMENTO ADUBAÇÃO MANUAL.pdf (Manual fertilization)

		PO.01.03.0047 FLORESTAL MS-Devolução de Embalagens.pdf (FORESTAL MS-Return of Packaging) PO.01.03.0051 FLORESTAL MS- Aplicação Aérea.pdf (FORESTAL MS-Aerial Application) PO.01.03.0053_FLORESTAL MS- Aplicação de Defensivos.pdf (FORESTAL MS-Application of Pesticides) PO.24.01.00472 Florestal MS-Ger de Resíduos Sólidos.pdf (lorestal MS-Management of Solid Waste)
60		Matriz de Segurança Treinamentos.pptx (MATRIX OF SAFETY TRAININGS) PC.00.0011-Política de Gestão Integrada de Riscos.pdf (Integrated Risk Management Policy) PG.12.00.0015-Inspeções de Segurança, Saúde Ocupacional e Facilities.pdf (Inspections of Safety, Occupational Health and Facilities) SISTEMA DE GESTÃO DE SEGURANÇA.pptx (SYSTEM OF SAFETY MANAGEMENT.pptx)
61	Biodiversity Monitoring	PO.24.01.0022 Monitoramento de Biodiversidade.pdf (Biodiversity Monitoring) RT S7 Fauna MS 2022.pdf monitoramento da flora e fauna.pdf (Monitoring of flora and fauna) Classificação fragmentos 2021.pdf (Fragment Classification) Monitoramentos Biodiversidade AAVC_UNF MS.pdf Schedule_Biodiversity.png Biodiversity_Fauna_analysis_2022-2023.xlsx Biodiversity_Flora_analysis_2022-2023.xlsx Relatório_FaunaeFlora_AAVC BarradoMoeda_2022.pdf Relatório_FaunaeFlora_AAVC BarradoMoeda_2023.pdf
62	Environmental Monitoring	PO.24.01.0048 Monitoramentos Ambientais.pdf (Environmental Monitoring) PO.24.01.0002 Aspectos e Impactos Ambientais.pdf (Environmental Aspects and Impacts) Resolução SEMADE Nº 9 DE 13052015_pdf
63	Biodiversity – Edge effect	SEI_UFMS - 3381172 - Plano de Trabalho (autenticado) 1 (Work Plan) SEI_UFMS - 3457836 - Acordo (autenticado) 1 (Agreement)
64	FSC Certification	2021.03.19_CPA_LACAN_Exec Version_v5_pas.docx

			Anexo I_Avaliação_Inclusão Escopo_SUZANO.xlsx Auditoria de Carbono - UNF_MS Escopo. MSVerificação.23-V5_Dados_Conv. Lacan FSC FM Scope change 23 POR public Suzano MS FSC audit extra 22 POR public Suzano MS FSC reassess POR 22 public Suzano MS FSC FM audit 23_Final_v1
65	No Deforestation Policy		State Law no. 214, of March 25, 1981
66	Scientific literatures		The environmental benefits of eucalyptus planting: literature review, Amorim et al. 2021 Environmental Impact of Environmental Flower of Eucalyptus Forests of Eucalyptus, Marcos. RB 28 Impacto Ambiental de Florestas de Eucalipto_P_BD,
67	Suzano's website		https://www.suzano.com.br/en/sustainability/people/human-rights
68	Indigenous Peoples and Cultural Heritage		Indigenous Peoples_Map
69			Policy on Relations with IPs and TCs
70	Internal Risks	Project Management	relatorio-anual-iba2022
71			Banco-de-dados-auditoria-BDG_SAC_08_05_23_HORIZ_v2
72			Project Management Q2 a Species Planted
73			PO.24.01.0028 FLORESTAL MS - Procedimento de Ocorrências Ambientais UNF-MS
74			CV_Breno Rates CV_Camila de Almeida CV_Ciro Vaz CV_Aline CV_Ana CV_Eder CV_Eloar CV_Isabella CV_Julio

			CV_Taisi CV_Felipe Bittencourt CV_Henrique Pereira CV_Mirelle Souza CV_Paulo Machado CV_Julia Dal Poggetto Rodrigues CV_Monalisa Nolasco CV_Rafaela Guimarães CV_Renato Cipriano CV_Thiago Reggiani
75			CV_Clara CV_Danielle CV_Henrique CV_Breno Ricardo Bonin Goiz CV_Renan CV_Rodrigo CV_Adriano
76			Q 2 e - No Failure - Submission of a Loss Report (Statement for no loss event occurrence in the project)
77		Monitoring and Adaptive Management Plan	PMGA_Projeto_Horizonte (Monitoring Plan and Adaptive Management -Horizonte Carbon project) Arrendamento_Terras_Parceria_Rural Aspectos_Impactos_Ambientais_Significativos_MS Ferramenta_Gestao_Riscos Gerenciamento_Mudancas Gestao_Mudancas Manual_Gestao_Relacionamento Matriz_Determinação_Riscos_Saude_Seguranca Matriz_Impactos_Socioeconomicos_MS Politica_Gestão_Integrada_Riscos

				Politica_Gestao_Riscos_Financeiros Processos_Práticas_Riscos_Corporativos Relatorio_Riscos_MS_Sem-detalhamento_Jun24 Sistema_Gerenciamento_Mudancas
78		Financial Viability	20241219 - Financial analysis-v2	
79			25_CB0004_Projetos_Recurso_Carbono REV.16.05.22 1107422_suzano_projetoreddafolu_v3 Branca Lion et al. 2019 Projeto Horizonte de Carbono_Cronograma das atividades nativas-out23	
80			Agrianual 2020	
81			2022-12-DFP-EN	
82			Brazilian Law 9,249 Brazilian Law 9,430 Brazilian Law 10,637 Brazilian Law 10,833 Normative Instruction 2,152	
83			Fund Contracts	Purchase Agreement BrWood Lacan Quilombo
84			Rural Partnershi p	BRWOOD - 22.268_Contrato de Parceria Carobá Lacan Parceria Agrícola Quilombo Parceria Agrícola
85			Relatório de Arrendamento de Terras	
86		Opportunity Cost	Economic dimension of crop-livestock integration systems, JUNIOR, ALVES and CONTINI et al., 2011.	
87			Dolar Quotation - https://www.bcb.gov.br/estabilidadefinanceira/historicocotacoes SVCM - The art of integrity - Carbon credit price US\$/tCO2e (Page 7)	
88			centraldesustentabilidade.suzano.com.br	

89			Email_taxa_renovacao_contratos Taxa_renovacao_contratos
90		Lease Agreements	T1BU Contract.pdf T1CI Contract.pdf T1CQ_contract.pdf T1CU_contract.pdf T2A9_contract.pdf T2AA_contract.pdf T2AL_contract.pdf T2BC_contract.pdf T3AY_contract.pdf T5AM_contract.pdf T5AN_contract.pdf T6A1_contract.pdf T6AO_contract.pdf T6B8_contract.pdf T6B9_contract.pdf T6CC_contract.pdf T6CE_contract.pdf T6CG_contract.pdf T8AA_contract.pdf T8AB_contract.pdf T8BA_contract.pdf
91		Rural Lease Agreements	T1CV Contract.pdf T1CX Contract.pdf T1CY Contract.pdf T1DA Contract.pdf T2BS Contract.pdf T2BW Contract.pdf

			T2BX Contract.pdf
			T3BC Contract.pdf
			T3BD Contract.pdf
			T3BF Contract.pdf
			T3BG Contract.pdf
			T4BC Contract.pdf
			T4BE Contract.pdf
			T4BG Contract.pdf
			T5AQ Aditive.pdf
			T5AQ Contract.pdf
			T5AT Contract.pdf
			T5AU Contract.pdf
			T5AV Contract.pdf
			T5AX Contract.pdf
			T6CD Contract.pdf
			T6CLContract.pdf
			T6CM Contract.pdf
			T6CN Contract.pdf
			T6CO Contract.pdf
			T6CP Contract.pdf
			T6CR Contract.pdf
			T6CS Contract.pdf
			T6CT Contract.pdf
			T6CU Contract.pdf
			T6CV Contract.pdf
			T6CW Contract.pdf
			T6CX Contract.pdf
			T8BB Contract.pdf
			T8BC Contract.pdf

			T8BD Contract.pdf T8BJ Contract.pdf T8BK Contract.pdf
92			PO.12.02.001 Processo de implantação florestal (Forest Implementation Process)
93			Estatuto da Terra - Lei nº 4.504, de 30 de novembro de 1964
94			Gestão de contratos
95			PG.01.07.0002 Arrendamento de Terras ou Parceria Rural (Corporate Forestry – Land lease or Rural Partnership)
96			PG.01.07.0003 Aquisição de Imóveis Rurais (Acquisition of Rural Properties)
97			PO.36.01.0014 Manejo Florestal MS - Prospecção de Terras (Forest Management MS - Land Prospecting)
98			VCS_NPR_REP_3350_2_22_2022_4_3_2023
99	External Risks	Land Tenure and Resource Access	Em Mato Grosso do Sul, 3 mil famílias serão assentadas pelo Incra.url (https://correiodoestado-com-br.translate.google.com/cidades/em-ms-3-mil-familias-serao-assentadas-pelo-incra/429016/? x tr sl=auto& x tr tl=en& x tr hl=en& x tr pto=wapp) Endividadas, 300 fazendas em MS estão no alvo da reforma agrária.url (https://www.campograndenews-com-br.translate.google.com/brasil/cidades/endividadas-300-fazendas-em-ms-estao-no-alvo-da-reforma-agraria? x tr sl=auto& x tr tl=en& x tr hl=en& x tr pto=wapp) Mato Grosso do Sul é palco da retomada oficial da Reforma Agrária.url (https://www.msnoticias-com-br.translate.google.com/editorias/politica-mato-grosso-sul/mato-grosso-do-sul-e-palco-da-retomada-oficial-da-reforma-agraria/140903/? x tr sl=auto& x tr tl=en& x tr hl=en& x tr pto=wapp) MST invade sede do Incra no Mato Grosso do Sul e amplia pressão sobre o governo.url (https://oglobo-globo-com.translate.google.com/politica/noticia/2024/04/17/mst-invade-sede-do-incra-no-mato-grosso-do-sul-e-amplia-pressao-sobre-o-governo.ghhtml? x tr sl=auto& x tr tl=en& x tr hl=en& x tr pto=wapp)
100			Lei da Reforma Agrária - nº 8.629, de 25 de fevereiro de 1993..pdf

101		Suzano's Land Ownership Documents	C1B0 - ANA ROSA (F-H011)	2024.07.01.MATRICULA.81398.TRES.LAGOAS.MS.pdf (Registration service record) 02646900-ITR-2023-ORIGI-Declaracao.pdf (Taxation) ADA.02646900.2023.pdf (Environmental Declaratory Act) CCIR.9120340241477.2023.pdf MS-5008305-6CC6F6B1C84E4D028AB7FCAE62E9CBB4.pdf (CAR)
			T1A0 - BARRA DO MOEDA (F-H001)	2024.07.01.MATRICULA.84752.TRES.LAGOAS.MS.pdf 02646900-ITR-2023-ORIGI-Declaracao.pdf ADA.02646900.2023.pdf CCIR.9120340241809.2023.pdf MS-5008305-B40F7267DD934A99A2A5D841B6880BA2.pdf
			T1B5 - ESTRADÃO (F-H005)	2024.07.01.MATRICULA.92295.TRES.LAGOAS.MS.pdf ADA.30974119.2022.pdf CCIR.9120340084517.2023.pdf ITR.30974119.2023.pdf MS-5008305-5E415F8F496C47FFA27BECF7C938B0FD.pdf
			T1B8 - CASA BRANCA (F-H018)	2024.07.01.MATRICULA.85823.TRES.LAGOAS.MS.pdf ADA.42383064.2022.pdf CCIR.9120340201920.2023.pdf ITR.42383064.2023.pdf MS-5008305-054A9EDCE6584635BC2E335E0349CFF3.pdf
			T1CF - LAGUNA (F-H109)	2024.07.01.MATRICULA.48774.TRES.LAGOAS.MS.pdf CCIR.9120340201920.2023.pdf ITR.42383064.2023.pdf MS-5008305-E4F78FAA74FD4A799B3EE62817ACCAD5.pdf
			T3AJ - MATÃO (F-H010)	2024.07.01.MATRICULA.45506.TRES.LAGOAS.MS.pdf

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			T4AL - SÃO MARCOS (F-H102)	2024.07.01.MATRICULA.481.AGUA.CLARA.MS.pdf CCIR.9120260112668.2023.pdf ITR.02646978.2023.pdf MS-5000203- B48AD61FA75740A493FBA61F1C4E0A61.pdf
			T6AT - CURUCACA (F-H053)	2024.07.01.MATRICULA.57035.TRES.LAGOAS.MS.pdf CCIR.9120347254639.2023.pdf ITR.03560236.2023.pdf MS-5008305- E66956CD581B4EE9837D91CDCC992B63.pdf
			T6BG - FLOR DA SERRA (F-H008)	2024.07.01.MATRICULA.92416.TRES.LAGOAS.MS.pdf CCIR.9120340241558.2023.pdf ITR.02646897.2023.pdf MS-5008305- E7F26E362F6E4D35A74768936C580EE8.pdf
			T8AE - GUARA-SUIA (F-H014)	2024.07.01.MATRICULA.8945.BRASILANDIA.MS.pdf CCIR.9120260112234.2023.pdf ITR.86666509.2023.pdf MS-5002308- 03F1AFAB77494446BCD975A5E9EFC591.pdf
			T8AJ - BRASILEIRA (F-H013)	2024.07.01.MATRICULA.6429.BRASILANDIA.MS.pdf CCIR.9120268148149.2023.pdf

				ITR.84931159.2023.pdf MS-5002308-46CDCE6796B84FC9A16768B2FCE7AADA.pdf
			T8AL- VALE DO GERIVÁ (F-H103)	2024.07.01.MATRICULA.6456.BRASILANDIA.MS.pdf CCIR.9120267894106.2023.pdf ITR.86666517.2023.pdf MS-5002308-9893E1F1BD4948A8A23B0EFC88252AEC.pdf
			T8AM - DUAS MARIAS (F-H101)	2024.07.01.MATRICULA.9951.BRASILANDIA.MS.pdf ADA.84931159.2023.pdf CCIR.9120268148149.2023.pdf ITR.84931159.2023.pdf MS-5002308-C14EFAF7F9B6475FAA1F563AB63886A1.pdf
			T8AQ - BOM JESUS (F-H120)	2024.07.01.MATRICULA.7462.BRASILANDIA.MS.pdf CCIR.9120267894106.2023.pdf ITR.86666517.2023.pdf MS-5002308-D9879AD70E74455B860C4BE48196E5D4.pdf
			T 8AR - PARAISO (F-H104)	2024.07.01.MATRICULA.7424.BRASILANDIA.MS.pdf CCIR.9120267894106.2023.pdf ITR.86666517.2023.pdf MS-5002308-6F4E670A57084C30947CE3E9C7736798.pdf
			T8AS - CRISTO REDENTOR (F-H188)	2024.07.01.MATRICULA.6412.BRASILANDIA.MS.pdf CCIR.9120267894106.2023.pdf ITR.86666517.2023.pdf MS-5002308-08304E201D264029AB0FAE23B362558D.pdf
			T8AT - RIO VERDE B (F-H07B)	2024.07.01.MATRICULA.12807.BRASILANDIA.MS.pdf CCIR.9120260112668.2023.pdf

				ITR.02646978.2023.pdf MS-5002308-A942F42C7ADC49C4AC209E97ACF3D527.pdf
102		Leased Farms Ownership Documents (Onda-1)	T1BU - ARETE (F-H297)	2024.07.01.MATRICULA.85086.TRES.LAGOAS.MS.pdf ADA2020 - FAZENDA ALMEIDA.pdf CAR_Almeida (antiga Aretê).pdf dadosImovel-07352263.pdf DARF ITR2020 - FAZENDA ALMEIDA.pdf DECLARAÇÃO ITR 2020 - FAZENDA ALMEIDA.pdf Faz.Almeida-ITR-ComprovanteBB - 2020-09-09-214111.pdf RECIBO DE ENTREGA ITR 2020 - FAZENDA ALMEIDA.pdf
			T1CI_BARRA DO CERVO	1 - CCIR 2023.pdf 3 - 10788212-ITR-2023-ORIGI-Declaracao-itr.pdf 4 - 10788212-ITR-2023-ORIGI-Recibo-declsr###so itr.pdf 1876246 - Fazenda Barra Do Cervo.pdf BOLETO ITR.pdf CAR - BARRA DO SERV0.pdf CCIR55944028230.pdf CND _ T1CI_ Barra do Cervo-10788212.pdf Matricula.pdf
			T1CQ_SÃO MIGUEL III	1876251 - São Miguel III.pdf ADA 2024 - SÃO MIGUEL.pdf CAR - SÃO MIGUEL III.pdf CCIR61235093248.pdf Certidão de Onus Matricula 85.388 - Nair Peres Rodrigues.pdf CND_ T1CQ_ São Miguel III-64377091.pdf

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			T2A9_MONTE ALTO	1876247 - Fazenda Monte Alto.pdf ADA 2023.pdf CAR - Faz Monte Alto..pdf ComprovanteBB - 2023-09-14-192746.pdf Darf-2.pdf Declara##o (1).pdf MATRICULA 7.841 ARANY G LIMA.pdf Recibo de entrega.pdf Recibo declara##o CCIR.pdf
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			T2AL_SÃO JOÃO IV	1876244 - Fazenda Sao Joao.pdf 07352581-ITR-2023-ORIGI-Darf-new.pdf 07352581-ITR-2023-ORIGI-Declaracao-new.pdf 07352581-ITR-2023-ORIGI-Recibo-new.pdf ADA

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			T5AM_SANTA INES GLEBA C	2024.07.01.MATRICULA.72214.TRES.LAGOAS.MS.pdf 1876243 - Santa Ines Gleba C.pdf CAR - Faz Santa Inês Gleba C.pdf Matricula 72.214.pdf
			T5AN_SANTA INES	2024.07.01.MATRICULA.68800.TRES.LAGOAS.MS.pdf CAR - Faz Santa Ines.pdf
			T6A1_TRIANGULO DO VALE	2024.07.01.MATRICULA.3369.TRES.LAGOAS.MS.pdf 19218168-ITR-2023-ORIGI-Declaracao-new.pdf 19218168-ITR-2023-ORIGI-Recibo.pdf

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			T6B9_PONTAL DO BRIOSO	2024.07.01.MATRICULA.83278.TRES.LAGOAS.MS.pdf CAR - Pontal do Briosos.pdf DarflTR2023Pontal-MSCardassi.pdf DeclaralTR2023Pontal-MSCardassi.pdf ReciboBBDarflTR2023Pontal - MSCardassi.pdf ReciboITR2023Pontal-MSCardassi.pdf
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			T8AA_SANTO ANTONIO IV	2024.07.01.MATRICULA.14119.BATAGUASSU.MS.pdf ADA.pdf CCIR57509068239 (2).pdf Certidao-68551460.pdf ComprovanteBB - 2023-10-04-044747.pdf Manoel Augusto R da Cruz-ITR-2022-ORIGI-Declaracao.pdf Manoel Augusto R da Cruz-ITR-2023-ORIGI-Recibo.pdf MS-5007554-E47C48B6EOCB4FB6A67ADF757983BF9E.pdf
			T8AB_VISTA ALEGRE II	2024.07.01.MATRICULA.11823.BRASILANDIA.MS.pdf ADA 2023 - Faz Vista Alegre.pdf CAR - Faz Vista Alegre II.pdf CCIR62554878240.pdf Certidao-72964960.pdf COMPROVANTE - pagto ITR TEIXA.pdf ITR 2023 - FAZ Vista alegre.pdf RECIBO - ITR 2023 - FAZ VISTA ALEGRE.pdf

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103		Leased Farms Ownership Documents (Onda-2, New Instances)	T1CV_TAQUARUSSU III	2024.07.01.MATRICULA.3710.TRES.LAGOAS.MS.pdf Ada_taquarussu_24.pdf CAR - Faz Taquarussu.pdf SCAN_20240710_171436507_07102024_164815_DOC Taquarussu.pdf
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		T8BD_PECUÁRIA FRD	2024.07.01.MATRICULA.11796.BRASILANDIA.MS.pdf 64397408-ITR-2023-ORIGI-Darf I E II.pdf 64397408-ITR-2023-ORIGI-Declaracao I E II.pdf 64397408-ITR-2023-ORIGI-Recibo.pdf Agropecuaria Droppa Ltda Faz FRD I e II.pdf QUITADO.pdf AGROPECUARIA DROPPA LTDA FAZ PECUARIA FRD I E II RETIFICADO.pdf
104		Stakeholder Engagement	Stakeholders locais - Comunidades (1) (2) (Map)
105			Lista_Paulistinha (Stakeholder Consultation Attendance) Paulistinha_photos Cronograma_Credito_Carbono
106		Political Risk	WGI (Score) - Q 1 c
107			Home Worldwide Governance Indicators (https://www.worldbank.org/en/publication/worldwide-governance-indicators) Interactive Data Access Worldwide Governance Indicators
108			NDC-1.4-Brasil-27-out-2023-portugues
109			Planaveg_MMA_Brazil (National Plan for the Recovery of Native Vegetation, Brazil, 2017)

110	Natural Risks	Fire	BD Queimadas INPE (<u>BDQueimadas - Programa Queimadas - INPE</u>) Fire Risk - Evidences SUZANO. Resultados 4T21.
111			https://thinkhazard.org/en/report/7743-brazil-mato-grosso-do-sul-treslagoas/WF
112			Central-de-Indicadores-Suzano-2020_port_ Informações consolidadas base 2020. Page 252.
113			Focos_INPE_2021-2023
114			PG.35.01.0002 - Prevenção e Combate a Incêndios Florestais (Corporate Forestry – PCIF – Prevention and Fighting of Forest Fires
115			Fires in Suzano areas (2020-2023) (<u>Central de Sustentabilidade Suzano</u>)
116		Pest and Disease Outbreaks	II Symposium on Updates on Recovery of Degraded Areas with Emphasis on Riparian Forests, Barbosa2008 Resistance of Eucalyptus spp. genotypes to eucalyptus brown looper <i>Thyrintea arnobia</i> , Jesus2015 Livro_Eucalipto_Embrapa (Eucalyptus and Embrapa, 2021)
117			Relationship between native plants of the Cerrado and water, Furquim2018
118			PG.36.01.0002 Recomendações de Manejo Integrado da Sanidade e Proteção Florestal (Recommendations for Integrated Management of Forest Health and Protection)
119		Extreme Weather	Embrapa_Clima Inundacoes_ANA TORNADOS: A NEW REALITY IN BRAZIL? Lima2008 Study of the Seasonality of Rainfall in the State of Mato Grosso do Sul and Its Spatial-temporal distribution, Marcuzzo2012 Analysis of Hurricane Catarina (2004), McTaggart-Cowan2006 Evolution of the occurrence of tropical and subtropical cyclones on the Brazilian coast, Menezes2017 Suzano's Critical analysis of campaign data water resources monitoring from the Three Lagoas – MS unit, 2023 Suzano's Critical analysis of campaign data water resources monitoring from the Three Lagoas – MS unit, 2022 Water Resources Monitoring Plan, Mato Grosso do Sul, Thres Lagoas, January 2023

			Secas_ANA Vulnerabilidade_Inundacoes_MS	
120		Geological Risk	Declividade – Horizonte (Slope Map) Neotectonics of the Brazilian Platform: Preliminary outline and interpretation, Saadi 1993	
121			Últimos Terremotos Centro de Sismologia (USP), Earthquake records_ USP Seismology Center Registros-sismicos_MS	
122			AFOLU-Non-Permanence-Risk-Report-Calculation-Tool-v4.2-FINAL AFOLU Non-Permanence Risk Tool, v4.2, dated 3rd May 2024	
123		Future Climate Impact	Agricultural and ecological drought	Temporal changes in the integrity of tropical forests in Xingu Indigenous Lands: drivers of change and their implications, Oliveira, 2019.
			Cold spells, Mean air temperature	Impacts of dry periods and frost on vegetation vigor: case study for the Guariroba stream watershed, Campo Grande, Mato Grosso do Sul, Capone, 2022.
			Extreme heat	2010 Brazilian wildfire season: analysis of the historical series from 2005 to 2010 and the influence of rainfall and deforestation on the number of hotspots, Ramos, 2011.
			Fire weather	Monitoring forest fires and burnings in Brazil, Pereira, 2004.
			Landslide	Forest rebirth, Regeneration in the age of deforestation, Chazdon, 2016.
			Mean precipitation, Soil moisture	Estimation of biomass from eucalyptus plantations in Brazil, Santana, 2008
			Mean wind speed	Interaction between trees and winds: Ecophysiological and silvicultural aspects, Ataide, 2015.
			River flood	Tree community dynamics after flooding in forest fragments in Southern Minas Gerais, Brazil, Silva, 2011.
			Tropical cyclone	Changes in South Atlantic Cyclones due Climate Change, Gramscianinov, 2018.

124			Project Area (Reference for Natural risk)	 Project Area.shp  Project Area.sbx  Project Area.sbn  Project Area.prj  Project Area.dbf  Project Area.cpg
125	AR-TOOL02		AR-TOOL02: Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities v1.	
126	AR-TOOL08		AR-TOOL08: Estimation of non-CO2 greenhouse gas (GHG) emissions resulting from burning of biomass attributable to an A/R CDM project activity, v4.0	
127	AR-TOOL12		AR-TOOL12: Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities v3.1.	
128	AR-TOOL14		AR-TOOL14: Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities v4.2.	
129	AR-TOOL15		AR-TOOL15: Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity, v2.0	
130	AR-TOOL16		Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities, v1.1	
131	20250415-Project ID 3350_2verif_Estimated ER			
132	Grouped projects – Eligibility Criteria Analysis	Location of PAIs	ÁREAS DE IMPLANTAÇÃO E PLANTIO DE NATIVAS (Areas of Implementation and Planting of Native species) CROQUI DE LOCALIZAÇÃO - BIOMA CERRADO (Location Sketch – Cerrado Biome) USO E COBERTURA DO SOLO HORIZONTE (Land Use and Land Cover Horizon)	
133		Wetland Category	Marvin Horizon - Farm Report - Mapbiomas – 2022 (1-38 PAIs)	
134		Use of new technologies	MA.02.02.0005-Manual de atividade de Campo MA.02.02.0006-Manual de atividade de escritório PC.00.0015 - Política de Auditoria Interna PG.35.01.0002 - Prevenção e Combate a Incêndios Florestais PO.25.01.0001 - Manejo Florestal_Auditoria Interna	

			Projeto Carbono_-_Dados inventario UP Parcela Individuos Mapas inventário
135		Organic Soil Analysis	19.1_CB0004_Processo de amostragem de solo e planta Resultados Análise Solo MS_21-22
136	EPIC agreement with Suzano	Signed agreement_Suzano_Mikaely	
137	VCS-Monitoring-Report-Template-v4.4		
138	Baseline emission Sparse Trees - CANI	Quadro de áreas - Árvores esparsas suprimidas (CANI)_v2	
139		Árvores esparsas suprimidas (CANI) T1CV TAQUARUSSU III Arvores esparsas suprimidas (CANI) T1CX SÃO JOÃO JY Arvores esparsas suprimidas (CANI) T1CY JAI Arvores esparsas suprimidas (CANI)-T1CZ-SITIO SILU Arvores esparsas suprimidas (CANI)-11DA PALMITO II Arvores esparsas suprimidas (CANI)-1285-POUSO ALIO I Árvores esparsas suprimidas (CANI)-12BW-NOSSA SENHORA APARECID Árvores esparsas suprimidas (CANI)-12BX-CABECEIRA II Árvores esparsas suprimidas (CANI)-T3BC-SANTA ANGÉLICA Árvores esparsas suprimidas (CANI) -T3BD-JOAMAR JI Árvores esparsas suprimidas (CANI)-T3BE-ESTRELA E SANTO EXPEDITO Árvores esparsas suprimidas (CANI) -T3BF-NOSSA SENHORA APARECID Árvores esparsas suprimidas (CANI)-T3BG- UNIÃO SÃO PEDRO Árvores esparsas suprimidas (CANI)-T4BC-TIO MUNICO Árvores esparsas suprimidas (CANI) T4BE SÃO FRANCISCO IV Arvores esparsas suprimidas (CANI) T4BG TUPAHUÊ Arvores esparsas suprimidas (CANI) TSAQ SANTA ADÉLIA\ Árvores esparsas suprimidas (CANI) - T5AT - SÃO JOÃO VALE DO POMBO Árvores esparsas suprimidas (CANI) - T5AU - POMBINHO EURO Árvores esparsas suprimidas (CANI) - T5AV - MARCA B2 Árvores esparsas suprimidas (CANI) - T5AX - SANTA RITA DE CÁSSIA II	

		Árvores esparsas suprimidas (CANI) - TSAY-ARIRANHA II Árvores esparsas suprimidas (CANI)-T6CN-NOSSA SENHORA APARECID... Árvores esparsas suprimidas (CANI)-T6CO-DA MATA IV-doc Árvores esparsas suprimidas (CANI)-T6CP-ESPERANÇA Árvores esparsas suprimidas (CANI)-T6CR-SÃO LOURENÇO II Árvores esparsas suprimidas (CANI)-T6CS-MARIANA Árvores esparsas suprimidas (CANI)-T6CT-SÃO LOURENÇO III Árvores esparsas suprimidas (CANI)-T6CU RANCHO ALEGRE II Arvores esparsas suprimidas (CANI) T6CV LUA CHEIA Arvores esparsas suprimidas (CANI) T6CW BANDEIRANTES Arvores esparsas suprimidas (CANI) T6CX MATA VERDE doc Arvores esparsas suprimidas (CANI) 18BB JATIUCA Arvores esparsas suprimidas (CANI)-18BJ-CARACCOLII Arvores esparsas suprimidas (CANI)-18BK-SPUMAR Árvores esparsas suprimidas (CANI)-18BL-SANTA EDWIRGES	
140	Forest Inventory	InventoryData_2024_kml.kmz	
141		Projeto Carbono_-_Dados inventario UP Parcela Individuos (30102024) Projeto Carbono_-_Dados inventario UP Parcela Individuos	
142		Training records and manuals	Lista-presença_Treinamento-operacional-teorico Treinamento_Altura Treinamento_Altura Treinamento_Altura_fotos Treinamento_Aplicativo_Coletas-Inventario Treinamento_PILODYN.msg Treinamento_PILODYN_fotos Treinamento_Reciclagem_EPS
143	QA/QC Procedures	Forest Inventory Scope	
144	VCS MR Report (2 nd Verification)	VCS MR Project ID 3350 22022022-03042023	

145	Global Invasive Species Database website	https://www.gbif.org/dataset/b351a324-77c4-41c9-a909-f30f77268bc4
146	KML files of Quilombolas and Indigenous Lands	Quilombolas lands: http://ide.vale.ufla.br/layers/geonode:incra_areas_quilombolas/metadata_detail Indigenous lands of Brazil: https://www.gov.br/funai/pt-br/atuacao/terras-indigenas/geoprocessamento-e-mapas Overlap Analysis between project area, Quilombolas and Indigenous Lands (Shapefiles)  OVERLAP Horizonte Project.shp  OVERLAP Horizonte Project.prj  OVERLAP Horizonte Project.dbf  OVERLAP Horizonte Project.cpg  OVERLAP Horizonte Project.shx

APPENDIX III : CLARIFICATION REQUESTS (CL), CORRECTIVE ACTION REQUESTS (CAR) AND FORWARD ACTION REQUESTS (FAR)

Table 1. CLs from this verification.

CL ID	01	Section no.	1.1 Summary Description of the Implementation Status of the Project	Date: 15/10/2024
Description of CL				
Upon reviewing the information provided in Section 1.1 of MR v1.0, it is noted that the resultant project area from the inventory of the instances included in the first monitoring period is stated as 13,193.24 ha. However, the project area as per the registered PD&MR is 15,426.76 ha. The PP is requested to clarify the discrepancy in the area observed between the MR v1.0 and the registered PD&MR v.6.				
Project participant response (Round 1)				Date: 30/10/2024
As explained in CAR 08, the number of 13,193.24 hectares for this monitoring period represents the Eucalyptus planting that was inventoried and thus considered to the VCU's emissions (1). As registered in PD&MR document (2) in the 1st verification period the reported number for this was 12,121.87 hectares.				
Considering the entire project area for Eucalyptus planted area, the number increased from 14,427.66 ha to 28,665.25 ha - the number is updated considering CAR 10 of this document.				
The number of 15,426.76ha reported in PD&MR was contemplated by the Eucalyptus planted area plus the restoration of the native area that will happen in the project. For comparative analysis, this number updated to 29,664.35 ha, so there was an increase in the numbers.				
PP decided to update the way of reporting the data in the next monitoring reports to avoid further misunderstandings. Also, remains the intention of the restoration of native areas outside of Permanent Preservation Areas (APP) and Legal Reserve (RL) of 999.10 ha. MR was adjusted to be consistent with the clarifications above.				
Also, PP would like to clarify two situations that influenced the update of the project area: the removal of Ariranhã farm, which was listed in the project with 71,98 hectares, and the update for some instances areas due to the post-planting process. PP described this process in section 3.2.2 of the MR and shared the evidence for post-planting process with VVB (3).				
PP would like to highlight that the update for these instances area doesn't impact the project once they are not the instances considered in the monitored area of 13,193.24 ha - mentioned in the				

first paragraph of this CL. So, the 12,121.87 ha that were reported in the 1st verification period haven't changed.	
Documentation provided by project participant	
1) 20240909-Project ID 3350_2verif_Monitored E. xlsx 2) PD+MR_ARR Horizonte Carbon Project v6 - Clean version_ 1.pdf 3) PG02010004_GEOPROCESSAMENTO.pdf	
VVB assessment (Round 1)	Date: 16/11/2024
Based on the review of the document "PD+MR_ARR Horizonte Carbon Project v6 - Clean version_1.pdf" and the "expected-native_restoration" KML file provided in support for clarifying the project area details, the audit team confirms that 999.10 ha are designated for restoration of native areas outside of Permanent Preservation Areas (APP) and Legal Reserve (RL) in the project. However, the Project Proponent is requested to clarify the inconsistency in the inventoried project area details between the first and second verifications. According to the registered PD&MR v.6, the inventoried project area in the first verification is 12,121.87 ha. It is unclear how the inventoried area increased from 12,121.87 ha to 13,193.24 ha in the second verification, especially since no newly added instances from the second verification were considered for the forest inventory as the plantations aged less than 2 years in the project. CL 01 Open	
Project participant response (Round 2)	Date: 28/11/2024
During the first monitoring period (November 2, 2017, to February 21, 2022), a total of 12,121.87 hectares were inventoried. These areas were categorized into Stratum 1 to 6, which were reported in the PD+MR under section '6.1 Data and Parameters Monitored,' specifically in the parameter 'Ai - Area of stratum.' In the current monitoring period (February 22, 2022, to April 3, 2023), the inventoried area increased and the instances that were monitored for the first time consist of Stratum 7. This information is detailed in the current MR, section '4.2 Data and Parameters Monitored.' In the Monitored ER spreadsheet (1), these instances in Stratum 7 that were monitored for the first time can be filtered in the "Database" tab. These areas were planted in November and December 2021. Although they were listed in the first monitoring period, they were not inventoried because, by the cut-off date of February 21, 2022, they were only about three months old and not mature enough (requiring two years). However, by the end of the current monitoring period in April 2023, they had matured sufficiently to be monitored for the first time.	
Documentation provided by project participant	
1) 20241129-Project ID 3350_2verif_Monitored ER.xlsx	
VVB assessment (Round 2)	Date: 16/12/2024
The audit team verified the updated "Monitored ER Calculations" workbook submitted by the PP, which provided detailed information on the total inventoried area considered for the second verification period. With the addition of Stratum 7, the total inventoried area in the project increased from 12,121.87 ha in the first verification period to 13,193.24 ha. The 1,071.37 ha from Stratum 7 (SANTA TEREZINHA II and SUCURIU farm) was excluded during the first monitoring period because	

the farms, planted in November and December 2021, were ineligible for forest inventory as they had not yet reached the required two-year maturity.

Thus, the audit team finds the explanation provided by the PP to be sufficient and concludes that **CL 01 is closed**.

CL ID	02	Section no.	Onsite Observation	Date: 15/10/2024																																								
Description of CL																																												
The audit team reviewed the inventory data for the years 2022 and 2023, as provided in the document 'Remessa IFC Carbono' by the Project Proponent. Following the onsite visit to the permanent plot IDs T6A014 and T6CE04 on 25th September 2024, it was observed that the inventory values recorded by the RS Florestal MS - MATO field inventory team in 2023 are comparatively higher than the values recorded in the onsite by the audit team. It is unclear why the PP's sample data is higher than the VVB data, particularly given that the assessment was conducted a year later. The PP is requested to clarify the variations observed in the inventory values.																																												
<table border="1"> <thead> <tr> <th>Plot Id</th><th>Row Number</th><th>Plant Number</th><th>CAP (2023 Inventory data by PP)</th><th>CAP (Measured at onsite by Audit team)</th></tr> </thead> <tbody> <tr> <td>T6A014</td><td>3</td><td>1</td><td>35.5</td><td>34.3</td></tr> <tr> <td>T6A014</td><td>3</td><td>3</td><td>40</td><td>40</td></tr> <tr> <td>T6A014</td><td>3</td><td>4</td><td>46.7</td><td>46.6</td></tr> <tr> <td>T6CE04</td><td>2</td><td>3</td><td>40</td><td>38.5</td></tr> <tr> <td>T6CE04</td><td>4</td><td>3</td><td>32.5</td><td>31.2</td></tr> <tr> <td>T6CE04</td><td>4</td><td>6</td><td>35.9</td><td>35.8</td></tr> <tr> <td>T6CE04</td><td>6</td><td>6</td><td>37.6</td><td>37.5</td></tr> </tbody> </table>					Plot Id	Row Number	Plant Number	CAP (2023 Inventory data by PP)	CAP (Measured at onsite by Audit team)	T6A014	3	1	35.5	34.3	T6A014	3	3	40	40	T6A014	3	4	46.7	46.6	T6CE04	2	3	40	38.5	T6CE04	4	3	32.5	31.2	T6CE04	4	6	35.9	35.8	T6CE04	6	6	37.6	37.5
Plot Id	Row Number	Plant Number	CAP (2023 Inventory data by PP)	CAP (Measured at onsite by Audit team)																																								
T6A014	3	1	35.5	34.3																																								
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T6A014	3	4	46.7	46.6																																								
T6CE04	2	3	40	38.5																																								
T6CE04	4	3	32.5	31.2																																								
T6CE04	4	6	35.9	35.8																																								
T6CE04	6	6	37.6	37.5																																								
Project participant response (Round 1)				Date: 30/10/2024																																								

The process of forest inventory in eucalyptus plots follows a well-defined and rigorous methodology (1), ensuring the quality and reliability of the collected data. This procedure is essential for accurately assessing tree growth and development, as shown in the data table (2), which contains information such as DBH (Diameter at Breast Height) and estimated height on different inventory dates.

The collection of data for variables like DBH and tree height and other is carried out at regular intervals, as indicated by the inventory dates for each plot. These raw data are subjected to a critical validation and auditing phase before they are accepted and used for further analysis. During the audit, a thorough review is conducted to identify inconsistencies, potential measurement errors, or data gaps. As mentioned in "Quality Control of the Data Collected" section of the methodology (1), for each information measured there is a definition of compliant and non-compliant values and a weight that each information carries in the audit of the parcels. These values are used as the basis for generating audit scores for both 1st and 2nd level audits. Only after this technical review the data is considered reliable and used for forest planning, production estimates, and strategic decision-making.

In the case of the eucalyptus trees in plots T6A014 and T6CE04, **we can observe variations in DBH and height over time, reflecting tree growth between 2022 and 2023, the overall information by tree, by parcel and by UP. The data shows that in the last 2 inventory there was an increment meaning that the growing of the plantations are following the expected pattern.** This continuous monitoring is crucial for adjusting growth models and estimating forest productivity throughout the management cycles. However, it is important to emphasize that any decisions or analyses made with this data are only conducted after the auditing stage, which ensures that the data are correct and coherent, minimizing risks and inaccuracies. The data provided in response to this clarification have undergone the entire analysis and auditing process and were therefore shared for comparison and analysis purposes.

Therefore, considering the methodology described, the recommended approach would be to first work on the data generated in the field during the audit to meet the quality requirements followed by the forest inventory team and only then analyse and compare the data.

In any case, considering a scenario in which this requirement had been met and the data presented a performance described by the VVB in this finding "decrease in the measured CAP values", studies show that adverse climate conditions, such as water deficit, influence transpiration and some growth parameters (plant height and stem diameter) and development (number of leaves accumulated on the main stem) in Eucalyptus seedlings. PP shared a study applied in Brazil (3), published in 2008, that the results had shown how water availability affected growth, development and yield in Eucalyptus samplings, and also a study applied with *Nothofagus pumilio* species (4) which discusses the possibility of decreases in diameter in living trees being associated with physiological and physical processes such as water loss in the trunk.

Documentation provided by project participant

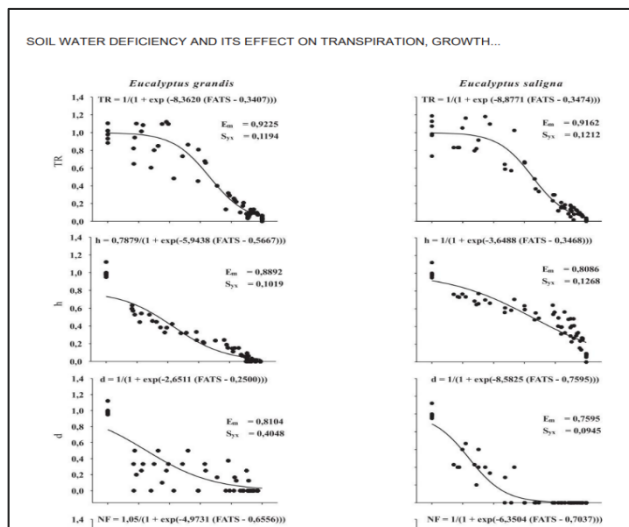
- (1) *Scope Forestal Inventory.docx*
- (2) *CL05_-_OnSiteObservations_v3.xlsx*
- (3) *martins-et-al-2008.pdf*
- (4) *pastur2006.pdf*

VVB assessment (Round 1)

Date:
16/11/2024

The audit team reviewed the inventory data evidence provided by the Project Proponent to confirm that the plots "T6AO14" and "T6CE04" exhibited a normal growth trend, i.e., an increase in CAP and tree height during 2022 and 2023.

The scientific literature "Diameter growth: can live trees decrease?" by Pastur in 2006 submitted by the PP indicated the potential causes of decrease in annual diameter growth and tree mortality due to self-thinning and variations in water depletion of the tree trunks. As per the study, trees could survive 2-5 growth seasons with continual decreases in the diameters. Additionally, the audit team reviewed the scientific literature 'Martins et al. 2008.pdf', a study conducted in Brazil on *E. grandis* and *E. saligna* species, which share similar species and climatic conditions as that of the project area. The study concludes that plant height and stem diameter can show a decreasing trend under soil, water deficit conditions. Based on this information, the audit team concludes that the justification provided by the PP is acceptable, considering the plantation age, climatic conditions and water availability in the project area.



Hence, CL 02 is closed.

CL ID	03	Section no.	Onsite observation	Date: 15/10/2024
Description of CL				
The audit team reviewed the inventory data for the years 2022 and 2023, as provided in the document 'Remessa IFC Carbono' by the Project Proponent. Following the onsite visit to the				

permanent plot ID: T6CG17, the measured height and CAP values recorded by the audit team showed a significant increase compared to the 2023 inventory values recorded by the RS Florestal MS - MATO field inventory team. In contrast, the other plots visited during the onsite inspection exhibited a more moderate increase, or in some cases, a relatively lower increase in height and CAP values.

The Project Proponent is requested to clarify the reason for the significant increase in height and CAP values observed in plot T6CG17 compared to the other plots measured during the onsite visit.

Project participant response (Round 1)

Date: 30/10/2024

The increment on eucalyptus plantations can be explained by the Current Annual Increment (ICA), which is a measure that reflects the growth of a tree or forest in a specific year. In eucalyptus plantations, ICA is highly influenced by tree age, with the most intense growth occurring in the early years, gradually decreasing as trees reach maturity. As can be seen in the columns of the document shared (1), from 2 to 3 years old, eucalyptus trees generally exhibit a growing ICA, due to the increment increasing as the plantation develops rapidly. This phase typically lasts until the trees reach juvenile maturity.

The inventory data (2) from the last two inventories of the UPs from CL02, CL05, and CL06 were analyzed to compare the increment between five UPs planted in different years. Analyzing the different stratum, we observe that the increment tends to be higher in younger areas (2-3 years), with superior growth rates in both diameter and height. As the plantations age, the increment tends to stabilize or decrease, as seen in stratum 4, where the increment in diameter and height is more modest compared to younger areas. The younger stratum shows remarkable growth vigor, which is expected in the early growth stages as described above and explained in the shared document (1).

The mentioned UP T6CG17 is 2 years old and the influence of the age together with other environmental motives can justify the increase, T6CG13 (same age, same farm) presented similar numbers. PP has shared reference (3) published in 1986 that shows this occurrence in Brazil.

Documentation provided by project participant

- 1) ICA_-_Suzano 2024.pdf
- 2) CL06_-_OnSiteObservation.xlsx
- 3) rezende-ferraz-1986.pdf

VVB assessment (Round 1)

Date: 16/11/2024

The documentary evidence submitted by the Project Proponent shows significant growth trends for *Eucalyptus urophylla* plantations within the 2–3 years age group. Based on the review of scientific literature and inventory data, the audit team confirms that the Current Annual Increment (CAI) is higher during the early stages of tree growth. Since the planting of the visited T6CG17 plot was carried out on 14th December 2021, it falls within the 2-3 years age range, which is consistent with the observed higher CAI. Further, the audit team verified the details of T6CG13 plot, whose planting was carried out on 12th December 2021 and thus, confirms that its measure height and CAP values are similar to that observed in T6CG17 plot.

Hence, CL 03 is closed.

Table 2. CARs from this Verification

CAR ID	01	Section no.	1.2 Audit History	Date: 15/10/2024
Description of CAR				
According to the information in the registered PD-MR v.6, the monitoring period for the 1st verification is stated as 02 November 2017 to 21 February 2022. However, upon reviewing the information provided in Section 1.2 of MR v1.0, the monitoring period for the 1st verification is mentioned as 02 November 2017 to 22 February 2022, with the 2nd verification period from 22 February 2022 to 03 April 2023. The Project Proponent is required to make the necessary corrections in the MR v1.0 to comply with monitoring period details as per registered PD&MR.				
Project participant response (Round 1)				Date: 30/10/2024
Corrections were made regarding the monitoring periods in section 1.2, and 3.1 of the MR: 1st verification: from 02-November-2017 to 21-February-2022 2nd verification: from 22-February-2022 to 03-April-2023				
Documentation provided by project participant				
VVB assessment (Round 1)				Date: 16/11/2024
The audit team reviewed the updated sections 1.2 and 3.1 of the revised MR v1.1 and confirms that the monitoring period details of the 1st and 2nd verifications have been corrected in accordance with the information in registered PD&MR v.6. Hence, CAR 01 is closed.				

CAR ID	02	Section no.	1.9 Title and Reference Methodology	Date: 15/10/2024
Description of CAR				
In Section 1.9 of MR v1.0, the version of the VCS AFOLU Non-Permanence Risk Tool (T-BAR) is stated as 4.0. However, based on the evidence provided to the audit team, such as the documents 'AFOLU-Non-Permanence-Risk-Report-Calculation-Tool-v4.2-FINAL' and 'Project ID 3350_2verif_Draft_VCS-NPRT', the version used for the risk assessment in the project is AFOLU NPRT v4.2. The Project Proponent is required to specify the correct version of the VCS AFOLU Non-Permanence Risk Tool applicable to the project in the 2nd verification and make the necessary corrections in the MR v1.0.				
Project participant response (Round 1)				Date: 30/10/2024
The version of the VCS AFOLU Non-Permanence Risk Tool was updated to 4.2 in section 1.9 of the MR.				
Documentation provided by project participant				

VVB assessment (Round 1)	Date: 16/11/2024
The audit team reviewed Section 1.9 of the revised MR v1.1 and found that the Project Proponent has updated the version of the VCS AFOLU Non-Permanence Risk Tool (NPRT) to v4.2 and the version is consistent with Non-Permanence Risk Tool applicable to the project and NPRT risk assessment evidence submitted for the project. Hence, CAR 02 is closed	

CAR ID	03	Section no.	1.12 Sustainable Development Contributions	Date: 15/10/2024
Description of CAR				
VCS-Standard-v4.7, section 3.17.1 states that: <i>The project proponent shall demonstrate how the project activities, or additional activities implemented by the project proponent, contribute to sustainable development, as defined by, and tracked against the SDGs. The project proponent shall demonstrate that a project contributes to at least three SDGs by the end of the first monitoring period, and in each subsequent monitoring period.</i> 1) As per the requirements of the VCS Standard-v4.7, the project proponent must demonstrate how the project contributes to at least three SDGs in each subsequent monitoring period. 2) In Table 1 of the MR v1.0, no sufficient information and evidence to support the project's current contributions status to the claimed SDG indicator 12.5 and 13.0. 3) Following the information in Table 1, the project proponent hasn't provided a brief explanation on the differentiation between the current project contributions and contributions over project's lifetime for SDG indicators 12.5 and 13.0. The project proponent must clearly state the project's contributions to achieving SDGs targets in the current monitoring period and during the project's lifetime. Supporting evidence needs to be provided in fulfilment of the claimed SDG contributions aligning with the requirement of VCS-Standard-v4.7.				
Project participant response (Round 1)				Date: 30/10/2024

1) We include SDG 10.2 - Promote Universal Social, Economic, and Political Inclusion, which goal is: By 2030, empower and promote the social, economic, and political inclusion of all individuals, regardless of age, sex, disability, race, ethnicity, origin, religion, or economic or other status.

Evidence:

The Arara Azul Cooperative (Coparzul) was founded by a woman. From 2021 to 2023, the presidency of Coparzul has been held by a man, who collaborates closely with a vice-president and a board of directors composed entirely of women. For the upcoming election, the current president is grooming the secretary/treasurer to assume leadership of the Cooperative, ensuring equal opportunities for all. Please, see the document “Ata_eleição_2021.pdf” for more information about the selection of the last president. Also, the “Relatório Parcial (T0) - Reciclagem Inclusiva_VO (1) (1).pdf” from September 2024 provides the following insights:

- Out of 48 direct project participants, 52% are women. The list of direct participants is available in the ‘Dados Catadores’ tab of the “Planejamento Corpazul 2024.xlsx” spreadsheet.
- 39.58% of participants self-identify as “pardo” (IBGE classification - Brazilian Institute of Geography and Statistics).

This data demonstrates that Coparzul has promoted inclusion across gender and economic status (particularly among individuals living below the poverty line). Additionally, the income generated from the ARR project will continue to be reinvested in enhancing current activities, upgrade equipment and infrastructure, provide personal protective equipment (PPE), and offer training for new members. These improvements aim to boost the productivity of recycled material and, consequently, increase the income of the workers involved.

2) **SDG 12.5:** Inaugurated in June 2023, the Conscious Wall has made significant strides in selective waste collection. Data from 2024 indicates that between January and May, approximately 3,543 kg of materials (including paper, plastic, iron, metal, and glass) were collected. This effort resulted in the generation of 3.54 carbon credits, valued at R\$389.40 through the *Eu Reciclo* reverse logistics program, in which the cooperative participates.

With the average value of the collected materials at R\$0.90 per kg, this translates to an income of R\$3,188.70. Additional information can be found in the “Corpazul projetos.pptx” materials. Furthermore, the ‘Catadores 2024’ tab of the “Planejamento Corpazul 2024.xlsx” file shows that an additional 916 kg of recyclable material was collected, bringing the total to 4,459 kg of material collected and recycled between January and June 2024.

We have documented the activities carried out between December 2023 and February 2024 in the ‘Relatório dez 2023 jan e fev 2024’ tab of the ‘Planejamento Corpazul 2024.xlsx’ spreadsheet. To summarize, the ongoing activities include:

- Implementation of Reception Units (UR) with the Conscious Wall: Four units have been established in schools, crèches, management centres, etc.
- Mapping Cross-Cutting Partners: Identifying partners such as neighborhood associations, CSOs, bars, restaurants, etc., for the Conscious Wall initiative.
- Partnership with the Department of the Environment: Collaborating to publicize the Conscious Wall.
- School Partnerships: Seeking collaborations with schools to promote the competition.

- Door-to-Door Awareness Campaigns: Raising awareness in areas close to the the Conscious Wall.
- Joint Action - Garden and Wall: Conducting blitz-marketing activities through the Sustainability Shop.
- Planning the Wall's 1-Year Anniversary Celebration: Initiating preparations for the celebration.

SDG 13.0: Evidence for this SDG can be found in the removal monitoring spreadsheet "20240909-Project ID 3350_2verif_Monitored ER.xlsx."

3) **SDG 12.5:** The planning stages for cooperation with Corpazul, along with the engagement activities, took place before April 2023 and are considered crucial steps for the evidence already presented to the auditor (the transfer of funds for purchasing lorry and scale, hiring third parties, and supplying PPE, among other ones). Please, check the documents below:

- "Planejamento Projeto Horizonte de Carbono - RECICLAGEM INCLUSIVA 2023. TL. V01.xlsx": Suzano's internal financial planning on the Inclusive Recycling and Conscious Wall initiative;

- "Quadro Lógico, Plano de Monitoramento e Riscos - Reciclagem Inclusiva.xlsx" - The indicators and risks were identified during the planning phase of the Inclusive Recycling and Conscious Wall initiative (before April 2023);

- "Apresentação Projeto Reciclagem Inclusiva_Proj. Horizonte de Carbono_Abril 2023.pptx" - Suzano's internal presentation on the Inclusive Recycling and Conscious Wall initiatives, to reiterate the social value of the initiative and show the costs of implementation.;

SDG 13.0: By planting eucalyptus species, which have been monitored since 2017, and native species since 2023, we have demonstrated ongoing greenhouse gas removals throughout the project. To date, our reforestation efforts with eucalyptus have removed 503,311 tCO₂ from the atmosphere. We plan to remove a total of 2,214,124 tCO₂ over the project's lifetime. Please, access the 20240909-Project ID 3350_2verif_Monitored ER.xlsx for more information.

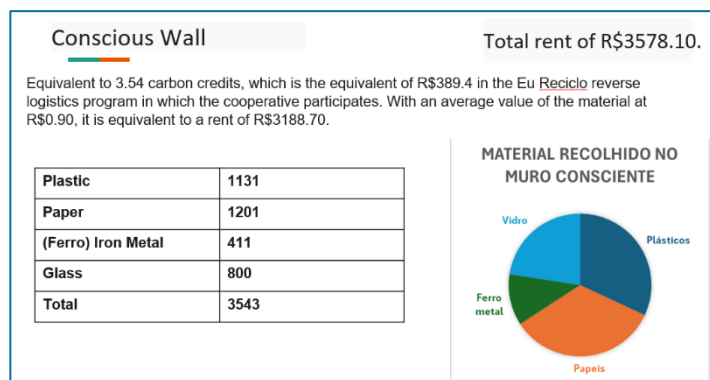
Documentation provided by project participant

- 1) Planejamento Corpazul 2024.xlsx.
- 2) Corpazul projetos.pptx
- 3) 20240909-Project ID 3350_2verif_Monitored ER.xlsx
- 4) Ata_eleição_2021.pdf
- 5) Planejamento Projeto Horizonte de Carbono - RECICLAGEM INCLUSIVA 2023. TL. V01.xlsx
- 6) Quadro Lógico, Plano de Monitoramento e Riscos - Reciclagem Inclusiva.xlsx
- 7) "Apresentação Projeto Reciclagem Inclusiva_Proj. Horizonte de Carbono_Abril 2023.pptx"
- 8) Relatório Parcial (T0) - Reciclagem Inclusiva_VO (1) (1).pdf

VVB assessment (Round 1)
Date: 16/11/2024

The audit team reviewed the evidence provided by the Project Proponent in support of SDG 10.2, where participants details are outlined. There are 48 direct participants, including 23 men and 25 women. The participants represent individuals from all races and sex, thereby maintaining gender balance and equality within the workforce.

Further, submitted evidences related to SDG 12.5 and 13.0 was reviewed, including information on waste collection categorized by type from the Conscious Wall, as well as details of employees involved in the Inclusive Recycling initiative. This evidence was verified to confirm that the project meets the SDG 12.5 goals. Additionally, the ERs Excel spreadsheets were reviewed to verify the emission reductions achieved through the reforestation of degraded areas in the project, which aligns with the information provided in Section 1.12 of the revised MR v1.1.



The Project Proponent has updated Section 1.12 of the MR. The revised MR v1.1 clearly outlines both the current project contributions and the contributions over the project's lifetime. The supporting documents provided related to SDGs 10.2, 12.5, and 13.0 are in accordance with the claims made by the Project Proponent. Based on the information reviewed, the audit team concludes that the provided evidence is adequate.

Hence, CAR 03 is closed.

CAR ID	04	Section no.	1.5 Other entities involved in the project 4.3 Monitoring Plan	Date: 15/10/2024
Description of CAR				

VCS-Standard-v4.7, section 1.2.1: *The operating language of the VCS Program is English. The project and program description, validation report, monitoring report, verification report, and all other documentation (including all and any appendices) required under the VCS Program shall be in English.*

Upon review of the information provided in Section 1.5 of MR v1.0, it was found that the details regarding the role of the Agroicone organization in the project are stated in Portuguese. Similarly, in Section 4.3 of the MR, Table 5—classification of stem situation—includes the height and dominant parameters for Normal (N) trees, which are also mentioned in Portuguese. The Project Proponent is required to make the appropriate language corrections in the MR, in accordance with the requirements of Section 1.2.1 of VCS Standard v4.7

Project participant response (Round 1)	Date: 30/10/2024
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All Portuguese terms have been translated into English in MR, including section 1.5 and table 5 from section 4.3 of MR.

Documentation provided by project participant

VVB assessment (Round 1)	Date: 16/11/2024
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The audit team reviewed the revised MR v1.1 and confirms that the Project Proponent has updated Sections 1.5 and 4.3 of the MR to include all information in English, in accordance with the requirements of VCS Standard v4.7.

Hence, CAR 04 is closed.

CAR ID	05	Section no.	2.4 Ecosystem Health	Date: 15/10/2024
Description of CAR				
The audit team reviewed the registered PD&MR and MR v1.0. While the PD&MR does not provide information regarding the monitoring frequency for flora and fauna, Section 2.4 of MR v1.0 states that <i>“the monitoring frequency for fauna is annual for the Barra do Moeda farm and every three years for the other HCV sites. The monitoring frequency for flora is every three years for the Barra do Moeda farm and every four years for the other HCV sites”</i>. However, based on field observations and interviews with the Biodiversity Monitoring Team, it was noted that the monitoring frequency for the Barra do Moeda farm is every six months, while for the other HCV sites, the frequency is not clearly specified. Due to this inconsistency in the monitoring frequency for the Barra do Moeda farm and other HCV sites, which does not align with the information cited in the MR v1.0, the Project Proponent is required to submit the following evidence to confirm the monitoring frequency for each HCV site as practiced in the project. Biodiversity survey reports (2022, 2023) Total number of species (Flora and Fauna) recorded in the HCVs Threatened/ Endemic species (Flora and Fauna) recorded in the HCVs (2022, 2023)				
Project participant response (Round 1)				Date: 30/10/2024

The Project Proponent emphasizes that fauna and flora monitoring in the Project's High Conservation Value Areas (Abasto, Duas Marias, Matão and Rio Verde A) occurs every three years and every four years, respectively. With the exception of Barra do Moeda Farm, where fauna and flora monitoring is annual and biennial; successively. Collections take place twice a year, once in the rainy season and once in the dry season. This information was further described in section 2.4 of the MR and can also be verified in detail in the documents contained in the shared repository (1).

It is worth noting that, due to the size of Barra do Moeda Farm and the heterogeneity of the vegetation physiognomies of the fragment, plots are allocated in different locations of the HCV that are monitored at alternate times; respecting the evaluation seasonality mentioned above. Thus, both the 2022 and 2023 reports, containing information on flora data in different sample plots at Fazenda Barra da Moeda, are presented to the VVB.

Furthermore, evidence on the number of fauna and flora species recorded in the HCVs in relation to their status of threat (according to the IUCN Red List) and the biodiversity monitoring reports for the aforementioned Project verification period (2022 and 2023) are present in the shared folder for due analysis by the VVB (2).

It is worth noting that these documents only mention information from Fazenda Barra do Moeda, since the aforementioned Project verification period (2022 and 2023) converges only with the seasonality of data collection and evaluation for this specific HCV.

Documentation provided by project participant

- 1) Folder "00_Biodiversity monitoring frequency" with the files "Monitoramentos Biodiversidade AAVC_UNF MS.pdf" and "Schedule_Biodiversity.png"
- 2) Folder "01_Biodiversity analysis 2022-2023" with the files "Biodiversity_Fauna_analysis_2022-2023.xlsx", "Biodiversity_Flora_analysis_2022-2023.xlsx", "Relatório_FaunaeFLora_AAVC BarradoMoeda_2022.pdf" and "Relatório_FaunaeFLora_AAVC BarradoMoeda_2023.pdf"

VVB assessment (Round 1)

Date: 16/11/2024

The Project Proponent has provided documentary evidence to demonstrate the monitoring frequency for each HCV followed in the project. Biodiversity monitoring will be conducted every three years for fauna and every four years for flora at the Abasto, Rio Verde A, Matao and Duas Marias HCVs. For Barra do Moeda HCV, monitoring will be conducted annually (twice a year, during the dry and rainy seasons) for fauna, and biennially for flora. In the second monitoring period (February 2022 – April 2023), the biodiversity assessment was carried out only for Barra do Moeda HVC due to its annual and biennial monitoring frequency.

The audit team reviewed the summarized biodiversity report on all the HCVs and confirms that the information related to endemic species and the total species observed in each HCV was recorded according to the pre-defined monitoring frequency. Further, the audit team verified the field observation photos and “Flora and Fauna Analysis workbook” for Barra do Moeda HCV and confirms that the species recorded information is acceptable.

Frequency of Biodiversity Monitoring						
Fauna • Every 3 years (in two moments: dry and rainy season) • Currency Bar: Annual (in two moments: dry and rainy season) Flora • Every 4 years (at the end of the rainy season) • Barra Moeda: Biennial (in two moments, dry and rainy season) *AAVC Barra Moeda is located on the farm where the industry is located, and is an area monitored according to environmental conditions.						
						
Seasonal Campaign Planning						
Process	Group	Local	Frequency	Previous campaigns	Next Campaign	Sampling plan
AAVC	Fauna	Rio Verde, Two Marias Matao and Rio Verde A	3 years	2011 e 2021	2024 (in progress)	DIC: Invertebrate Fauna: Functional diversity: Listening points, 4 per hectare, for 15 minutes each - Mammal Fauna: camera trap (2 per hectare, for 30 days), active search using playback for primates and observation of tracks - Herpetofauna: Active search limited by time (1 hour), day and night period
	Flora	Rio Verde, Two Marias Matao and Rio Verde A	4 years	(2011), 2016 and 2020	2024 (in progress)	Woody species: Phytosociological analysis, adults and regenerative. Permanent plots of 100 m² allocated on the edge and inside the fragments

Hence, CAR 05 is closed.

CAR ID	06	Section no.	2.2.1 Management experience	Date: 15/10/2024
Description of CAR				
VCS-Standard-v4.7, section 3.19.6: <i>The management teams involved in the project shall have expertise in and prior experience implementing similar carbon or land management projects, and community engagement at the project scale and in the local context.</i> During the onsite visit, it is noted that the management team has undergone changes for the second monitoring period. Due to the observed changes and new inclusions in the project management team, the Project Proponent is required to submit the evidence such as CV's, their credentials for the personnel/project team members listed below, in fulfilment of the VCS Standard v4.7 requirements. 1) Biodiversity Monitoring Team (Ms. Renato Cipriano) 2) Forest Operations Executive Manager at Suzano (Mr. Thiago Reggiani) 3) Field inventory team (Ms. Monalisa Nolasco) 4) GIS Team (Ms. Julia Poggetto) 5) WayCarbon Team (Ms. Rafaela Guimarães)				
Project participant response (Round 1)				Date: 30/10/2024
The additional CVs and their credentials of the project members (1), (2), (3), (4), (5) have been shared in the repository for analysis by the VVB. Also, section 2.2.1 of MR was updated to be in accordance with section 3.19.6 of VCS-Standard-v4.7.				
Documentation provided by project participant				
1) CV_Julia Dal Poggetto Rodrigues.pdf 2) CV_Monalisa Nolasco.pdf 3) CV_Rafaela Guimarães.pdf 4) CV_Renato Cipriano.pdf 5) CV_Thiago Reggiani.pdf				
VVB assessment (Round 1)				Date: 16/11/2024
The audit team reviewed the curriculum vitae and their credentials of project personnel submitted by the PP to fulfil the expertise requirements for project management. Additionally, it is verified that the Section 2.2.1 of the MR v1.1 has been updated to include information on the project personnel associated with the project in second monitoring period. Hence, CAR 06 is closed.				

CAR ID	07	Section no.	4.2 Data and Parameters Monitored 4.3 Monitoring plan	Date: 15/10/2024
Description of CAR				
MR v1.0 contains the following information: 1. Section 4.2: <i>All personnel involved in the DBH measurement procedure must have received proper training for field data collection. Data collected must be verified by a qualified person to prevent errors and ensure the implementation of best practices.</i> 2. Section 4.3: <i>The team involved in the monitoring activities receives prior training on Suzano's procedures from the service provider, as well as field safety instructions.</i> However, no training records or evidence were submitted to support the claims made in the MR v1.0. The Project Proponent needs to provide detailed information regarding the training received by the inventory team involved in field data collection and supporting training documents to be submitted for verification. Additionally, in the MR v1.0, there is no detailed information on how the accuracy of the collected data is verified in the project. The Project Proponent is required to update the MR to include details on the procedure followed for the accuracy check of inventory data and to provide documentary evidence.				
Project participant response (Round 1)				Date: 30/10/2024
Section 4.2 of the MR was updated with an explanatory text on the quality control process for the accuracy of forest inventory data. For this purpose, the internal procedure (1) shared in the repository with the VVB was used as a basis for due verification. In addition, evidence of the training of professionals involved in field data collection was added to this folder (2), in line with the second item in the note.				
Documentation provided by project participant				
1) Folder "00_Quality Control of Collected Data" with the translated file "Forest Inventory Scope" 2) Folder "01_Trainings" with the files "Lista-presença_Treinamento-operacional-teorico", "Treinamento_Altura.pdf", "Treinamento_Altura.xlsx", "Treinamento_Altura_fotos", "Treinamento_Aplicativo_Coletas-Inventario", "Treinamento_PILODYN.msg", "Treinamento_PILODYN_fotos" and "Treinamento_Reciclagem_EPS"				
VVB assessment (Round 1)				Date: 16/11/2024

The audit team reviewed the documentary evidence demonstrating the quality control and accuracy checks conducted for the inventory data in the project. The 'Forest Inventory Scope' document outlined the procedures followed to verify the quality of the data collected in the field.

However, upon reviewing the training records submitted by the Project Proponent, it was noted that the records pertain to activities conducted in 2024, which falls outside the scope of the 2nd verification period. The Project Proponent is required to provide the records for training activities conducted during the second monitoring period, from 22 February 2022 to 03 April 2023.

CAR 07 Open.

Project participant response (Round 2)	Date: 28/11/2024
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Evidence of the training conducted for the professionals involved in field data collection during the aforementioned verification period (22 February 2022 to 03 April 2023) has been added to the repository with the VVB for proper analysis (1). It is worth noting that for the next monitoring period, the collection of information is being refined in order to improve the Project's good data recording and storage practices (e.g. attendance list).

Documentation provided by project participant

(1) Folder "00_Trainings" with the files "Metodologia para Auditorias de qualidade e segurança", "Relatório auditoria Fazenda Curucaca 24 meses", "Treinamento do Uso do Pilodyn 6J para obter valores para densidade da madeira", "Treinamento para coleta de dados do IFC", "Treinamento para coleta de dados PRE CORTE" and "Workshop nova metodologia 120 dias".

VVB assessment (Round 2)	Date: 09/12/2024
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The audit team reviewed the training videos and workshop documents submitted by PP for the current monitoring period (22 February 2022 to 03 April 2023), wherein the inventory team involved in field data collection are provided prior training on DBH measurement, height estimation and procedures for establishment of plots. The videos highlighted the data collection and instruments usage trainings conducted by the Suzano's Inventory Personnels. Further, in the onsite, the audit team interviewed the inventory team personnels and confirmed that Suzano conducted periodic forest inventory workshops to the personnels involved in the field data collection.

Thus, the audit team concludes that the provided evidence aligns with the current monitoring period and is sufficient, therefore, **CAR 07 is closed.**

CAR ID	08	Section no.	1.8 Project Location	Date: 15/10/2024
Description of CAR				

Based on the information provided in Section 1.8 of MR v1.0, it was observed that the project area is stated as 38,043.29 ha, while the Permanent Preservation Areas and Legal Reserves (APP and RL) restoration area is mentioned as 44,529.54 ha leading to inconsistency with the project area details specified in the registered PD-MR v.6. Further, the project area details considered for 1st verification and 2nd verification is not clearly specified in the MR v1.0. The Project Proponent is requested to specify in detail the project area and the resultant instances considered in each verification for the implementation of project activities. • Total project area • Project area details for 1st verification period • Project area details for 2nd verification period • Permanent Preservation Areas • Legal Reserves.	
Project participant response (Round 1)	Date: 30/10/2024
The project area, as registered in PD&MR document (1) in the 1st verification period, was reported as 15,426.76 hectares, which were composed of the Eucalyptus planting area (14,427.66ha) and Native reforestation area (999.10 ha). Of the 14,427.66ha of Eucalyptus reforestation, 12,121.87 were inventoried and thus monitored in that period. In this current monitoring period, new instances were included in the project area, adding about 14,315.54 hectares of reforested Eucalyptus to the previously considered area as indicated in the new estimates of the project (2) (3) – the number is updated considering CAR10 of this document. Thus, the new project area for Eucalyptus reforestation consists of 28,665.25 hectares, of which only 13,193.24 hectares were inventoried and accounted for VCU's emission (4). It is important to highlight that only areas that are more than 2 years old are inventoried. In addition, PP updated the report for Permanent Preservation Areas (APP) and Legal Reserve (RL) areas, describing only the amount of 999.10 hectares (5) foreseen by the project to be accounted for VCU's emissions, which are being considered in the project area for the restoration scope. It is important to mention that the restoration of native areas outside of APP and RL started in December 2023 but were not included in this monitoring report as they are outside the monitoring period which runs until April 3, 2023. PP adjusted the MR to be consistent with the clarifications above.	
Documentation provided by project participant	
1) PD+MR_ARR Horizonte Carbon Project v6 - Clean version_ 1.pdf 2) 20241009-Project ID 3350_2verif_Estimated ER.xlsx 3) PA-2nd-verif.shp 4) 20240909-Project ID 3350_2verif_Monitored E. xlsx 5) expected-restoration-native.kml	
VVB assessment (Round 1)	Date: 16/11/2024

The audit team reviewed the evidence provided in support of the project area details and the updated changes in Section 1.8 of the revised MR v1.1. The area to be restored using native vegetation in the Permanent Preservation Areas and Legal Reserves (APP and RL) is corrected to 999.10 ha in the revised MR v1.1.

However, there is a discrepancy in the project area details as per the documentary evidence provided by the PP. In the Monitored ER calculations workbook, “Database” sheet indicates the inventoried area as 13,193.24 ha resulting from 343 UPs, whereas the “Parcel data” sheet indicates the inventoried area as 13,201.62 ha from 319 UPs. The total project area, according to the updated Monitored ER calculations workbook, is 28,665.25 ha. However, it is unclear how this figure was derived, as the KML file PA-2nd-verif.shp shows a total of 28,506.49 ha.

The Project Proponent is required to provide a clear explanation for the inconsistencies in the project area details between the Monitored ER spreadsheet, the MR document and the KML files. Further, the project area details need to be specified clearly for 1st and 2nd verification period in the 2nd verification MR.

CAR 08 Open.

Project participant response (Round 2)

Date: 28/11/2024

PP have identified discrepancies between the *Database* and *Parcels Data* tabs and to resolve these issues, the following corrections have been implemented:

1. **Unlisted Production Units:** a total of 24 PUs is not listed in the *Parcels Data* tab due to two reasons:
 - i. Of these, 23 PUs have areas smaller than 5 hectares and therefore do not meet the forest inventory criteria, which measures areas over 5 hectares (PU > 5ha). These areas – the 23 PUs – represents 0.31% of 13,193.24 ha inventoried and although they are not measured, it is important to remember that the uncertainty stratum is 1.28% (below the 10% threshold). Section 4.3 of the MR was updated to describe this process.
 - ii. One PU (T1A058) was harvested in December 2022 and subsequently replanted on 29 June 2023. Section 5.2.2 of MR was updated to describe this harvest process, that was already implemented in Monitored ER spreadsheet (1), “Benefit of planted areas – 2018” tab, column BK. The new planting for this PU will be considered in the next monitoring period as it happened on 29 June 2023.
 - So, the combined area of these 24 PUs is 57.96 hectares, which explains the discrepancy between the “Parcels Data” and “Database” tabs.
2. **Adjusted Area Calculation:**
 - i. Some PU areas were diverging between the “Database” tab and the “Parcels Data” tab in Monitored ER spreadsheet. To adjust it, and an excel formula (PROCV) was applied in column H of “Parcels Data” tab to correspond each PU area in the ‘Database’ tab. So, the total area in the “Parcels Data” tab has been updated to 13,135.28 hectares, which does not consider the aforementioned 24 PUs.
 - ii. To facilitate comparison, a new column (O) labeled **‘UPs Conference: Database vs. Parcels Data’** has been added to the Monitored ER spreadsheet, tab “Database”. Entries marked as **‘Not listed in Parcels Data’** in this column highlight PUs that are absent in the *Parcels Data* tab.

Despite this difference of 57.96 hectares in the ‘Parcels Data’ tab, PP would like to highlight that there is no damage to the project's calculations since column H of this tab is not used for any analysis or calculation. So, this column could be excluded from the spreadsheet without any damage.

The information from this tab that is used is the Q and R columns for estimating the average increment in volume and basic wood density, which are in column H of the ‘calculation basis’ tab, and for calculating the uncertainty, which is in column H of the ‘Stratum uncertainty’ tab.

Regarding the KML file of the project area (2), it has been updated to be consistent with the areas that have already been planted up to 03 April 2023, according to the “Database” tab of the Estimated ER calculations spreadsheet, which represents the location of the productive areas inside the farms.

Documentation provided by project participant

- 2) 20241129-Project ID 3350_2verif_Monitored ER.xlsx
- 3) PA-2nd-verif-v2.zip

VVB assessment (Round 2)

Date: 15/12/2024

The audit team reviewed the “Database and Parcels Data” tab of the Monitored ER calculations workbook and concludes that the discrepancy observed in the total inventoried area has been updated by the PP. The total inventory area is 13,193.24 ha resulting from the plots which fall under the forest inventory criteria and the same is considered in project emissions calculations in the project. In the first verification, 14,427.66 ha was considered as project area for the implementation of the project activity, Further, in the second monitoring period, 27 new instances accounting of 14,315.54 ha were considered for eucalyptus restoration in the project which resulted in total 28,665.25 ha. The KML files are corrected in alignment with the total project area resulting from 1st and 2nd monitoring period.ie., 28,665.25 ha.

Based on the information reviewed, the audit team concludes that the provided evidence is adequate.

Hence, CAR 08 is closed.

CAR ID	09	Section no.	Onsite Observation	Date: 15/10/2024
Description of CL				
During the onsite inspection, the audit team reviewed the inventory data document, 'remessa ifc carbono,' provided by the Project Proponent. The audit team observed that the field inventory data for the years 2022 and 2023 were not available with the field inventory team for plots ID: T6CG13 and T1C101. As a result, a comparative analysis of the growth trends between the latest and earlier inventory data could not be conducted. The Project Proponent is requested to provide the inventory documents for the years 2022 and 2023, along with information on the eucalyptus species planted in the mentioned plots.				
Project participant response (Round 1)				Date: 30/10/2024
The inventory information for the mentioned UPs is available in the clarification folder (1). The inventory data has been organized into: Data by UP, data by inventory plot and data by individual tree. It's important to highlight that the asked data is not contemplated within this monitoring period, which is from 22-February-2022 to 03-April-2023.				
The data for the current monitoring period (2), which is the most up-to-date official inventory data of the project and was used for the VCU calculations, was shared again with VVB.				
Documentation provided by project participant				
(1) CL02_-_OnSiteObservations_v3.xlsx				
(2) Projeto Carbono_-_Dados inventario UP Parcela Individuos.xlsx				

VVB assessment (Round 1)										Date: 16/11/2024																																																																																																																																																																																																																												
The audit team reviewed the inventory data for the years 2022 and 2023, submitted by the Project Proponent. The latest inventory data was collected on 14 May 2024 for T1C101 and on 04 November 2023 for T6CG13. Based on the inventory data, the audit team confirms that both the plots exhibit normal growth pattern observed for <i>Eucalyptus urophylla</i> species and thus, concludes																																																																																																																																																																																																																																						
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CAR ID	10	Section no.	1.6 Project Start Date	Date: 15/10/2024
Description of CL				
As per the VCS-Standard-v4.7, Section 3.6.17 states that, <i>Have a start date that is the same as or later than the grouped project start date.</i> Upon review of the information provided in MR v1.0, it was observed that plots with a project start date beyond the scope of the current monitoring period are included in the second verification. The Project Proponent is requested to justify how this meets the requirements of VCS Standard v4.7. The Plot IDs are as follows: Joamar II (T3BD), União São Pedro (T3BG), São Francisco IV (T4BE), Cabeceira II (T2BX), Tupahuê (T4BG), Santa Adélia (T5AQ), Santa Rita De Cássia II (T5AX), Ariranha II (T5AY), Caracol II (T8BJ), Nossa Senhora Aparecida VII (T2BW) and Spumar (T8BK).				
Project participant response (Round 1)				Date: 30/10/2024
These instances had a planting date after 03 April 2023 and were removed from the project area (1) for this monitoring period. The list of removed instances and their respective areas have been placed in a new "Removed Instances" tab in the 20241009-Project ID 3350_2verif_Estimated ER.xlsx (2) and the MR was updated.				
Documentation provided by project participant				
1) PA-reforest-2nd-verif.shp 2) 20241009-Project ID 3350_2verif_Estimated ER.xlsx				

VVB assessment (Round 1)	Date: 16/11/2024
The audit team reviewed the 'Removed Instances' sheet in the Estimated ER Calculations workbook, where the Project Proponent provided details regarding instances removed due to their project start date falling beyond the scope of the second monitoring period. According to the 'Removed Instances' sheet, NOSSA SENHORA APARECIDA VI is listed as removed, with a planting date of 04 April 2023. However, this planting date does not align with the information provided in the revised MR v1.1, where the planting date for NOSSA SENHORA APARECIDA VI is listed as 07 October 2022. The Project Proponent needs to provide justification for the removal of NOSSA SENHORA APARECIDA VI and explain the mismatch in the data between the Estimated ER calculations workbook and the revised MR v1.1. CAR 10 Open.	
Project participant response (Round 2)	Date: 28/11/2014
PP would like to clarify that the NOSSA SENHORA APARECIDA VI farm (T2BW) has more than one PU in the project area. The first planting on this farm took place on 07 October 2022 in three PUs (T2BW01, T2BW16 and T2BW17). This information can be analysed by applying the filter in column B or C, with the farm code or its name, in the “Database” tab of the Estimated ER Calculations workbook. For this reason, the planting date for NOSSA SENHORA APARECIDA VI is listed as 07 October 2022 in the MR. Initially, to solve the point made in this finding, PP removed from the project area all PUs that had a planting date after 03 April 2023. So, in the Estimated ER Calculations workbook, PP maintained 21 PUs of NOSSA SENHORA APARECIDA VI farm that had had been planted until 03 April 2023 and removed four PUs (T2BW06, T2BW07, T2BW22 and T2BW23) of this farm that were planted after 03 April 2023. The other farms listed in this finding – Joamar II (T3BD), União São Pedro (T3BG), São Francisco IV (T4BE), Cabeceira II (T2BX), Tupahuê (T4BG), Santa Adélia (T5AQ), Santa Rita De Cássia II (T5AX), Ariranha II (T5AY), Caracol II (T8BJ) and Spumar (T8BK) – had all their PUs removed from the project because they all have planting dates of after 03 April 2023.	
Documentation provided by project participant	
1) 20241009-Project ID 3350_2verif_Estimated ER.xlsx (Database and Removed Instances tab) – the spreadsheet was not updated, so it's the same version of before.	
VVB assessment (Round 2)	Date: 15/12/2024

The audit team reviewed the "Database and Removed Instances" tab and verified the planting details of all the UPs maintained in the NOSSA SENHORA APARECIDA VI farm and therefore concludes that the justification provided by the PP is sufficient as the first planting of three UPs (T2BW01, T2BW16, T2BW17) in NOSSA SENHORA APARECIDA VI farm were carried out on 07 October 2022 and thus, the planting date in the MR v1.1 for NOSSA SENHORA APARECIDA VI farm is stated as 07 October 2022.

Additionally, the removal of 4 UPs ((T2BW06, T2BW07, T2BW22 and T2BW23) of total 25 UPs of NOSSA SENHORA APARECIDA VI farm are appropriate as their planting is carried out beyond the second monitoring period, i.e., 22 February 2022 - 03 April 2023.

Hence, CAR 10 is closed.

CAR ID	11	Section no.	Stakeholder Inputs	Date: 15/10/2024
Description of CAR				
During the interview with the Ponte Velha community representative, the audit team noted that the communities expressed interest to receive training on waste segregation and inclusive recycling. As inclusive recycling is considered as one of the SDG indicators in the project, the project proponent is requested to update information on stakeholders' inputs and trainings in the MR and provide supporting evidence on the trainings provided to the communities.				
Project participant response				Date: 30/10/2024
Table 1 of version 1.6 of the MR has been supplemented with explanatory text on the contributions of inclusive recycling to stakeholders, with a focus on the Project's SDG indicators. In addition, evidence associated with waste management and recycling training for carbon initiative communities is shared with VVB in the aforementioned repository for proper analysis, such as presentations and photos (1 and 2). It is worth mentioning that Suzano SA's Social Development area has a formal and structured process for interacting with the Project's social actors in order to receive and deal with demands (3). In this sense, in order to improve the carbon initiative and strengthen stakeholder engagement, the Carbon Horizon Project proponent undertakes to reinforce the dissemination and acculturation of "Relacione+" with the communities during ongoing communication to receive training suggestions.				
Documentation provided by project participant				
(1) Folder "00_Trainings" with the files "DS_Projeto_Cerrado_2023", "Economia Circular - Corpazul- Três Lagoas-MS", "Matriz swot - Arara Azul" and "Projeto Reciclagem Inclusiva.2022. Apresentação Catadores_02-09-22" (2) Folder "01_Photos" (3) Folder "02_Relacione+" with the file "Demandas_RELACIONE+"				
VVB assessment				Date: 16/11/2024

The audit team reviewed the photos and training records “*Projeto Reciclagem Inclusiva.2022. Apresentação Catadores_02-09-22*” submitted by the PP and confirmed that periodic trainings are provided to the communities on Inclusive Recycling in the project . Additionally, the audit team reviewed the revised MR v1.1 and confirms that the information related to inclusive recycling and trainings has been updated in Table 1.



Hence, CAR 11 is closed and FAR 01 is raised to further verify the training activities conducted on waste segregation and inclusive recycling for the Ponte Velha communities in the next verification.

Table 3. FARs from this Verification

FAR ID	01	Section no.	Stakeholder Inputs	Date: 16/11/2024
Description of FAR				
During the interview with the Ponte Velha community representative, the audit team noted that the community representative expressed interest to receive periodic trainings on waste segregation and inclusive recycling as part of the project.				
As inclusive recycling is one of the SDG indicators for the project, the Project Proponent has stated that training on waste segregation and inclusive recycling will be provided to the community. Therefore, the audit team informs the upcoming VVB to verify the details of this training during the next verification process.				
Project participant response				Date: 28/11/2024
PP reinforces its commitment to provide training on waste segregation and inclusive recycling for the Ponte Velha Community. All generated evidence from this process will be shared with the upcoming VVB during the next verification process.				
In addition, it reiterates its commitment to communicate, disseminate and acculturate the “Relacione+” process with the carbon initiative communities in order to receive and deal with training that is synergistic with the SDG indicators for the project; as a good practice of the initiative.				
Documentation provided by project participant				

VVB assessment	Date:

APPENDIX IV : DETAILS OF SAMPLE PLOTS SELECTED FOR ONSITE VISIT

MONITORED SAMPLE PLOTS SELECTED FOR ONSITE VISIT

Sl. No	Stratum	CODFAZENDA	Plot ID	Farms/ Instances	Plot location co-ordinates	
					Latitude	Longitude
1	Stratum 1	T2A9	T2A931	MONTE ALTO FARM	- 21.24159651	- 52.76112644
2	Stratum 1	T2A9	T2A925	MONTE ALTO FARM	- 21.24786665	- 52.77730995
3	Stratum 1	T2A9	T2A950	MONTE ALTO FARM	- 21.23489423	- 52.77065165
4	Stratum 1	T8AA	T8AA08	SANTO ANTONIO IV	- 21.20222639	- 52.60699164
5	Stratum 1	T8AA	T8AA12	SANTO ANTONIO IV	- 21.19767072	- 52.59780167
6	Stratum 2	T3AY	T3AY04	JOAMAR FARM	- 19.98800115	- 51.78942258
7	Stratum 2	T3AY	T3AY16	JOAMAR FARM	- 19.98412527	- 51.79535796
8	Stratum 2	T3AY	T3AY22	JOAMAR FARM	- 19.97983467	- 51.79097806
9	Stratum 3	T3AY	T3AY28	JOAMAR FARM	- 19.96827316	- 51.77560028
10	Stratum 4	T6AO	T6AO22	SÃO LUCAS FARM	- 20.70311336	- 51.81432301
11	Stratum 4	T6AO	T6AO14	SÃO LUCAS FARM	- 20.71170368	-51.8051885
12	Stratum 5	T8AB	T8AB71	VISTA ALEGRE II FARM	- 21.18279546	- 52.45664096

13	Stratum 5	T8AB	T8AB08	VISTA ALEGRE II FARM	- 21.22790562	- 52.54323269
14	Stratum 5	T8AB	T8AB09	VISTA ALEGRE II FARM	- 21.22558736	- 52.53197539
15	Stratum 5	T8AB	T8AB11	VISTA ALEGRE II FARM	- 21.22284009	-52.5479487
16	Stratum 5	T6AO	T6AO27	SAO LUCAS	- 20.69422221	- 51.82391576
17	Stratum 6	T1CI	T1CI01	BARRA DO CERVO FARM	- 20.82591538	- 51.90869843
18	Stratum 7	T6CE	T6CE04	SANTA TEREZINHA II FARM	- 20.72461913	- 52.03282195
19	Stratum 7	T6CE	T6CE06	SANTA TEREZINHA II FARM	- 20.72605912	- 52.02468804
20	Stratum 7	T6CG	T6CG17	SUCURIU FARM	- 20.55464155	- 52.00424972
21	Stratum 7	T6CG	T6CG16	SUCURIU FARM	-20.5561060	- 52.01033151
22	Stratum 7	T6CG	T6CG13	SUCURIU FARM	-20.5594469	- 52.01377816
23	Stratum 7	T6CG	T6CG25	SUCURIU FARM	- 20.53615299	- 52.00473324

NEW INSTANCES SELECTED FOR ONSITE VISIT

Sl. no	CODFAZENDA	Farms/Instances	Plot location co-ordinates	
			Latitude	Longitude
1	T6CO	DA MATA IV	-52,05490	-20,719993
2	T6CV	LUA CHEIA	-51,96767	-20,543639
3	T8BD	PECUÁRIA FRD	-52,566442	-20,903739
4	T6CU	RANCHO ALEGRE II	-51,982094	-20,816893
5	T8BK	SPUMAR	-52,462358	-21,044897
6	T4BC	TIO MUNICO	-52,096607	-20,930092
7	T4BG	TUPAHUÊ	-52,124005	-20,81953
8	T6CL	VALE DOURADO	-52,123372	-20,410751
9	T6CN	NOSSA SENHORA APARECIDA I	-52,096582	-20,381134

APPENDIX IV : ONSITE VISIT PHOTOGRAPHS

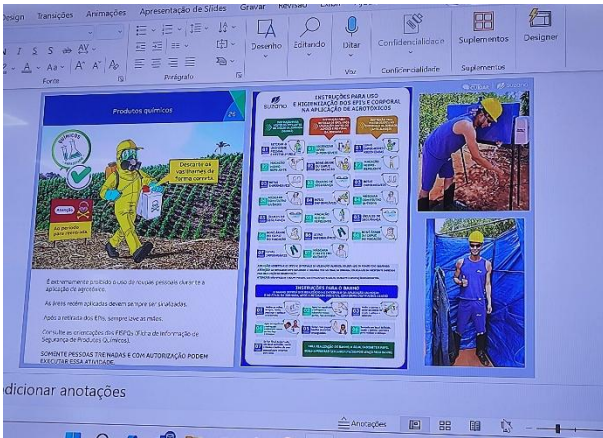
	
Interview with GIS Team	Interview with Fire Monitoring and Alerts Team
	
Visit to HCVs areas and Interview with Biodiversity Monitoring Team	Inspection of DAB equipment used in forest inventory data collection
	
Independent assessment of field inventory data	Visit to Conscious wall – Inclusive Recycling



Examination of project area co-ordinates



Observation of Baseline Scenario – Degraded Pasture lands with sparse trees



Suzano S.A Safety Manual for Employees verified during interview with Safety and Security Team



Briefing on safety guidelines and field rules and regulations – RS Florestal Team



Observation of height parameter using clinometer



Waste collection by hand pickers associated with Inclusive Recycling Project



Visit to Inclusive Recycling Unit



T-shirts issued to Inclusive Recycling Project staffs



Native species seeds collection by communities



Observation of Leaf Area Index during plot visit



Visit to farm DATA MATA IV and interview with RS-Florestal Staffs



Prohibited Activities and Fire Alert sign board installed by Suzano S.A. at Farm Lua Cheia



Total count - Markings done at the monitoring plots as per monitoring plan procedures



Prohibited Activities sign board installed at Areas of High Conservation Values



Preservation of sparse trees in the project area



Visit to native restoration areas in the project



Visit to new Project Activity Instances included in the current monitoring period



Verification of species planted in the monitoring plots



Interview with Almanara Settlements



Visit to Simbiose Office in Tres Lagoas



Verification of project boundaries during plot visits



Interview with Social Development Team



Ant-Eater mammal spotted in the Monte Alto Farm



Interview with President of Youth Peniel Challenge