



VERIFICATION REPORT

CUMARE CARBON PROJECT



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Summary:

The Cumare Carbon project is a project located in Colombia, focused on department of Meta and Vichada. The project is based on the transition from extensive livestock production system to sustainable forest plantations, based on good forestry practices to obtain timber products and to capture large amounts of carbon dioxide from the atmosphere.

The purpose of verifying the GHG emissions removal statement is to ensure that it is materially correct, that the data provided to RCE can be documented, and that if errors or omissions are detected, they are corrected.

The applied methodology is CDM AR-ACM0003: A/R Large-scale Consolidated Methodology—Afforestation and reforestation of lands except wetlands (version 02.0). The sources and reservoirs that account for CO₂ are Above-Ground Biomass, Below-Ground Biomass, Soil Organic Carbon, Litter and Dead wood.

The monitoring period is: 26-November-2020 to 31-December-2023

This verification was conducted with a reasonable level of assurance and a materiality threshold of 5%.

The following criteria included:

- CDM - AR-ACM 0003 - Afforestation and reforestation of lands except wetlands. V 2.0
- VCS Standard, Version 4.7, 16 April 2024
- VCS Program Guide, Version 4.4, 29 August 2023
- AFOLU Non-Permanence Risk Tool v4.2, 03 May 2024

- ISO 14064-3:2019 “Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas statements”
- ISO 14065:2020 “General principles and requirements for bodies validating and verifying environmental information”

The verification audit involved document review, interviews with relevant personnel, and on-site inspections. During the verification process, RCE issued 16 Corrective action requests, 5 Non-Material Findings, 13 Additional Documentation Requests, and 7 Clarification Requests (the findings are included in Appendix A).

Also, during the monitoring period, 52.13 ha from the first verified period were harvested and replanted. The harvesting carried out is part of the forest management program, and the quantification approach has been tested, and, when needed, findings have been attended by the proponent. There were no material differences after recalculation. The proponent presented the affected plots as plots with zero biomass in the inventory and demonstrated that keeping the affected plots at zero turns out to be a more conservative scenario than excluding them from the quantification (see section 4.3 for more information).

RCE concludes, with a reasonable level of assurance and materiality threshold, that the Project, as described in the Monitoring Report, meets all relevant AFOLU VCS requirements and correctly applies the Methodology, with noted Project Description deviations. Therefore, RCE confirms that the Project’s statement for the third reporting period, 26 November 2020 to 31 December 2023, is 768,375 tCO_{2e} net emission reductions.

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1 INTRODUCTION

1.1 Objective

The purpose of the verification was to conduct an independent assessment of the project Cumare Carbon Project (“Project”) to determine whether the Project, now in its second monitoring period, included the GHG statement listed in Section 5.4 of the monitoring report, complies with the verification criteria, as set out in the criteria documents listed in Section 1.2 of this report. The review included confirming the MR and GHG calculation methods are materially correct and meet the Methodology requirements, complies with the previously validated PDD, and meets the requirements of the VCS program.

The purpose of the verification was to ensure that the GHG statement is materially correct, that the data provided to TÜV SÜD America Inc. (TÜV SÜD) can be documented, and, if errors or omissions are detected, they be corrected by CLIMIT Sustainable Development (“CLIMIT”).

Ruby Canyon Environmental, Inc. (“RCE”) was acquired by TÜV SÜD America Inc. (TÜV SÜD) in 2023. RCE will be used throughout this report since the contract procedure was with RCE.

1.2 Scope and Criteria

This verification was conducted for the Cumare Carbon Project (ARR) developed by CLIMIT for VCS. The applied methodology is CDM methodology AR-ACM 0003 “Methodology— Afforestation and reforestation of lands except wetlands”.

Cumare is a grouped project that seeks to obtain commercial wood products and carbon sequestration located in Colombia, in Meta and Vichada departments. The eligible project area has an extension of 5,667.94 hectares (ha), an area that resulted from plantation activities until December 2023. During the monitored period 141.30 ha of new instances were added to the Project Area.

CO₂ SSRs include Above-ground biomass (AGB), Below-ground biomass (BGB), and Soil Organic Carbon (SOC).

The reporting period goes from November 26, 2020, to December 21, 2023.

Followed criteria included:

- CDM - AR-ACM 0003 - Afforestation and reforestation of lands except wetlands. V 2.0
- VCS Standard, Version 4.7, 16 April 2024
- VCS Program Guide, Version 4.4, 29 August 2023
- AFOLU Non-Permanence Risk Tool v4.2, 03 May 2024
- ISO 14064-3:2019 “Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas statements”

- ISO 14065:2020 “General principles and requirements for bodies validating and verifying environmental information”

1.3 Level of Assurance

This verification was conducted with a reasonable level of assurance and a materiality threshold of 5%. Additionally, RCE considered qualitative non-conformances with criteria requirements to be material during the verification process.

1.4 Summary Description of the Project

The Cumare Carbon project is a project located in Colombia, focused on department of Meta and Vichada. The project is based on the transition from an extensive livestock production system to sustainable forest plantations (based on sustainable forestry practices) to obtain timber products and to capture large amounts of carbon dioxide from the atmosphere.

The project crediting period is 100 years, starting on November 1st, 2016, and ending on November 1st, 2116. The current reporting period is from November 26, 2020, to December 31, 2023, and corresponds to the second verification of the project.

The eligible area of the project is 5,667.94 hectares (ha). During this second monitoring period, the project included 141.30 ha as new instances in San José and El Porvenir farms. The new forests consist of plantations of *Eucalyptus pellita*, *Eucalyptus urograndis* and *Pinus caribaea*, the same species planted in the first plantations. The Monitoring report states that the project will comprise a total area of 10,913 ha; however, only 5,667.94 ha were planted as of December 2023.

The activities implemented during the monitoring period include new planted areas, maintenance of the plantations (weed control, fertilization, ant control), soil preparation, planting and harvesting. The quantification approach has been tested, and, when needed, findings have been attended by the proponent. There were no material differences after recalculation.

The GHG statement for the actual monitoring period includes removals of 872,377 tCO₂e of total greenhouse gas (GHG) emissions reduction achieved and 767,692 tCO₂e of net (GHG) emissions reduction achieved from plantations.

2 VERIFICATION PROCESS

2.1 Method and Criteria

RCE used a risk-based approach to assess the Project against the VCS Program rules including the criteria defined in Section 1.2 of this document.

The verification process included the following independent and objective activities:

- Select a verification team – February 20, 2024.

- Perform an internal conflict of interest (COI) review - February 20, 2024.
- Conduct a kick-off meeting with all parties involved in project development, where the verification team presented the meeting agenda, Verification team, Verification Process Overview, and Requested data and supporting documentation. A general schedule for verification activities was agreed upon, and the objective, scope, and criteria were included in the documents – February 27, 2024.
- Perform a risk-based review of the Project to ensure that the Project conforms to all requirements of the VCS rules and the methodology – Continuous update during the service.
- Develop evidence gathering plan – July 02, 2024.
- Review the MR against the requirements in the VCS Standard – Continuous process during the service.
- Review the documents associated with the monitoring period for which emission reductions were issued, including databases – Continuous process during the service.
- Conduct a site visit – September 22 – 27, 2024.
- Review the accuracy of the emission reductions for the reporting period – Continuous process during the service.
- Issue corrective action requests (CARs), non-material findings (NMFs), additional documentation requests (ADRs), and clarification requests (CRs), as necessary – Continuous process during the service.
- Conduct an independent review – April 02, 2025.
- Issue a Verification Report – April 03, 2025.
- Conduct an exit meeting with all parties involved in project development.

The verification team was selected according to RCE's GHG Verification Policies & Procedures to ensure team members are qualified to perform validation activities pertaining to the Project. The verification team consisted of the following individuals:

- Lead Verifier: Zach Eyler
- Independent Reviewer: Phillip Cunningham
- Verifier team member: Francisco Uriel Chávez, Angélica Yuridia Villegas Macedo.

RCE's primary verification activity was a review of MR and supporting documents to assess the Project's compliance with VCS Program rules, as discussed in Sections 2.2 through 2.4 of this report. After reviewing the MR, supporting documents, databases, and the on-site visit, RCE delivered an initial List of Findings to CUMARE. In total, RCE delivered three rounds of findings. CLIMIT provided sufficient responses to all requests. Following the close-out of all open items, RCE completed this Verification report and submitted the verification for independent review.

2.2 Document Review

The verification consisted of a review of the Project's MR and supporting documents to demonstrate compliance with VCS requirements, Methodology requirements and associated tools. All documents reviewed are listed and explained in Appendix B.

2.3 Interviews

RCE communicated through the verification with Cumare personnel responsible for the Project, including discussions about the development of MR, eligibility criteria, GIS analysis for eligibility of new activity instances, and emission reduction estimates, as well as communicating data and document requests and verification findings. Cumare personnel interviewed include:

- Paula Sánchez – Legal representative, REFORESTADORA CUMARE S.A.S.
- Agustin Inthamoussu – CEO, CLIMIT
- Inés Arocena – CLIMIT
- Manuel Amigo – Operations director, Campo Forestal S.A.S.

During the site visit (September 23 to 27, 2024), RCE interviewed personnel from Campo Forestal and Campo Capital (implementing partners on the field) and the CLIMIT team. RCE gained an understanding of the land's history, the project's activities, the management team's technical background, and the project's social background. Some of the people interviewed included:

- Graciano Camargo – Operations chief, Campo Forestal S.A.S.
- Mauricio Gualdrón Rojas – Operations supervisor, Campo Forestal S.A.S.
- Sebastián Ortiz – Sustainable solutions director, Campo Capital
- Fabián Herrera – Head of planning – Campo Forestal S.A.S.
- José Luis Baquero – Operations manager, Campo Forestal S.A.S.
- Diego Pareja – Supervisor, Campo Forestal S.A.S.
- Julian Andrés G. – Operations supervisor, Campo Forestal S.A.S.
- José A. Rojas – Social management, Seguridad Selecta

From local stakeholders, the people interviewed included:

- Josefina Murillo – Habitante de la comunidad El Porvenir, beneficiaria de plantas de plátano
- Maria del Carmen Sánchez – Subdirectora del Centro Educativo Serranías del Melúa

The interviews were nonstructured but consisted of a talk between RCE and the stakeholders. For technical-specific background, the RCE team asked for an on-site explanation of how the parcel plots were located and inventoried and how the activities reported for this monitoring

period were carried out. Other technical evidence was collected during the site visit, as discussed in point 2.4.

The first day of the site visit was used for in-person interviews with local stakeholders. First, Mrs. Josefina Murillo talked to us about her orchard for bananas. According to her testimony, she and five other people from the community (6 in total) received in-kind contributions such as banana sprouts for production, Giant chickens, and pigs. Every farmer proposed his or her own project. Mrs. Murillo mentioned that she sells her products in the community. However, it was mentioned that these projects were implemented during the pandemic (2018 or 2019). To date, most of the other beneficiaries have lost their production. From this interview, a CAR was raised to differentiate the current monitoring period activities with stakeholders from previous monitoring reports.

Maria del Carmen Sánchez, the subdirector of the school “Centro Educativo Serranías del Melúa” showed the verification team the infrastructure of the school and how Campo Forestal has helped during current monitoring period with environmental talks for kids, garden cleaning for avoidance of snakes and spiders, as well as food for an event, and iron windows for protection of the classroom. In this interview, it was also mentioned that the school supported around 74 families, and the only source of work for the community is Campo Forestal and petroleum companies.

2.4 Site Visits

The verification team conducted the site visit in person between September 23 to 27, 2024. The main objective of the site visit was to assess the quality of the monitoring database and testify about the management activities related to the project reporting period. Before the site visit, an agenda was provided to the proponent, including the scope, the list of plots to be visited, the sampling design (Proportional Stratified Random Sampling), and the working plan.

As planned, the site visit included inspection tours through the Project area, permanent plots, and reviewing the consistency of its boundaries with the Project's GIS database, using digital maps in apps like SWmaps and Avenza, and GPS geopositioning. Interviews were held with Campo Forestal and Campo Capital personnel and implementation partners (see section 2.3). The remeasurement of dasometric variables in the tree-to-tree plots (diameter and height) was executed in 29 randomly selected plots, including plots from every species and planted year in the project area. The number of plots to be remeasured per strata was determined as a proportion of the rate of surface. Therefore, with the remeasurements, the verification team estimated the sum of volume (m^3) per plot to compare it with the proponent database using a paired T-test with equal variances.

Verification plot selection method

Proportional Stratified Random Sampling (PSRS) was the statistical method used for plot selection since the project presents a stratification according to the plantation year and species.

Therefore, the total sample size was calculated over the total project area and the totality of the plots established by the stratum. To determine the sample size and distribute that sample inside the strata, the verification team used a maximum permissible error of $\pm 20\%$ and a confidence level of 80%. The equation used is shown below.

$$n = \frac{\frac{k^2 S^2}{B^2}}{1 + \frac{1}{N} \left(\frac{k^2 S^2}{B^2} - 1 \right)}$$

Where:

n = Number of plots to be sampled

N= population size

B= maximum error

S= Variance estimator

k= Percentile (1-α/2)x100 from normal distribution.

n estimation resulted in 25 plots. The second step was to randomize the plots and select the sample size. It was done in Excel using the function “Rand()” and reorganizing the plots according to random number. The selected plots included are listed in the following table. During the site visit, 4 more plots from the random list were selected due to differences in stocks; however, after the site visit, it was demonstrated that the difference was related to the natural growth of stands, not due to measurement error. See **Site Visit Verification Results**.

Table 1. Plots selected for verification activities.

Verification order	Plot	Plantation year	Specie
1	170	2016	<i>E pellita</i>
2	179	2016	<i>E pellita</i>
3	194	2016	<i>E pellita</i>
4	202	2016	<i>E pellita</i>
5	211	2016	<i>E pellita</i>
6	222	2016	<i>E pellita</i>
7	230	2016	<i>E pellita</i>
8	248	2017	<i>E pellita</i>
9	253	2017	<i>E pellita</i>
10	257	2017	<i>E pellita</i>
11	273	2017	<i>E pellita</i>
12	303	2017	<i>E pellita</i>
13	304	2017	<i>E pellita</i>
14	361	2017	<i>E urograndis</i>
15	404	2018	<i>E pellita</i>
16	417	2018	<i>E pellita</i>
17	419	2018	<i>E pellita</i>
18	421	2018	<i>E pellita</i>
19	454	2018	<i>E urograndis</i>

20	463	2018	<i>E urophylla</i>
21	476	2019	<i>E pellita</i>
22	479	2019	<i>E pellita</i>
23	495	2019	<i>E urograndis</i>
24	516	2017	<i>P caribaea</i>
25	306	2017	<i>E pellita</i>
26	307	2017	<i>E pellita</i>
27	276	2017	<i>E pellita</i>
28	251	2017	<i>E pellita</i>
29	300	2017	<i>E pellita</i>

Remeasured variables

Once in the field, the verification team traveled through the project area up to the selected permanent monitoring plots. The reference location of the plot was corroborated with GPS, and the radius of the plot was corroborated for edge trees. The height and diameter at breast height (standardized at 1.3m) were measured for every tree inside the plot.

Measurements taken by the verification team were used to estimate volume (m³) according to the allometric equations used by the developer:

- *E. pellita*, *E. urograndis*:

$$V = 0,0000695500969644492 * DBH^{1,80136294480371} * H^{1,08292976147938}$$

- *P. caribaea*:

$$V = 0.002658 + 0.000024 * d^2 * h$$

The allometric equations used for volume estimation changed from the equations validated on PD. Therefore, the verification team verified it as a PD deviation (see section 3.2 Project Description deviation).

The sum of volume per plot obtained from remeasurements was then compared to the volume per plot estimated by the proponent. The comparison was made with a paired T-test for equal variances.

Site Visit Verification Results

During the inspection, stops were made to observe stands when required and compare them with digital field maps in apps like SWmaps and Avenza. It was confirmed that the stand boundaries corresponded to the polygons provided (in KML and SHP) and that planted trees were inside the shapefile boundaries, as documented.



Figure 1 GIS inspections for the project's parcels and remeasurement of forest inventory plots.

Regarding monitoring activities, it was confirmed that the sampled/remeasured plots were accurately classified within their respective strata and adhered to the criteria for including or excluding trees within the boundaries of each sampling plot. If a few differences were found due to regrown or forked trees, these differences didn't cause a statistical difference after growth data was compared.

The T-test was run during the site visit, and statistical differences were found on 25 and 29 plots (4 added during the SV); however, these differences can be explained by the natural growth of the trees; Due to the time passed between the end of the monitoring period and the site visit (one year), it was expected to find differences. Evidence was required to demonstrate that the differences were related to natural growth. The proponent grew their data to the date of the site visit, and the t-test passed, demonstrating that such differences were due to natural growth, not measurement mistakes or transcription of data.

Grown data was provided by the developer after the site visit, and the results of the T-test indicated that the sample means were statistically "equal," as illustrated in the following table. These results are interpreted as follows: if the t-statistic is less than the t-critical value, then the means of both samples are not significantly different.

Table 2. Above-ground biomass per parcel as result of the verification site visit

No.	Specie	Year	Plot #	Sample 1 VVB (Xa)	Muestra 2 Project (Xb)	Xa-Xb	d2
1	<i>E pellita</i>	2016	170	8.134573192	8.381619687	-0.24705	0.06103
2	<i>E pellita</i>	2016	179	11.26658349	10.7353977	0.53119	0.28216
3	<i>E pellita</i>	2016	194	7.473253877	7.204035359	0.26922	0.07248
4	<i>E pellita</i>	2016	202	14.19418331	14.32269727	-0.12851	0.01652
5	<i>E pellita</i>	2016	211	15.40756802	14.53380707	0.87376	0.76346
6	<i>E pellita</i>	2016	222	6.587835108	6.493157552	0.09468	0.00896
7	<i>E pellita</i>	2016	230	14.24604947	13.48482329	0.76123	0.57947
8	<i>E pellita</i>	2017	248	10.08279185	9.360957534	0.72183	0.52104
9	<i>E pellita</i>	2017	253	16.7146103	14.81079387	1.90382	3.62452

10	<i>E pellita</i>	2017	257	17.82524003	14.28671748	3.53852	12.52114
11	<i>E pellita</i>	2017	273	5.537321171	5.252911849	0.28441	0.08089
12	<i>E pellita</i>	2017	303	8.0871847	7.877156962	0.21003	0.04411
13	<i>E pellita</i>	2017	304	7.207618386	6.654655023	0.55296	0.30577
14	<i>E urograndis</i>	2017	361	5.798726904	5.68785954	0.11087	0.01229
15	<i>E pellita</i>	2018	404	9.400202564	7.645582683	1.75462	3.07869
16	<i>E pellita</i>	2018	417	11.01401366	9.491925921	1.52209	2.31675
17	<i>E pellita</i>	2018	419	9.145538383	8.139408646	1.00613	1.01230
18	<i>E urograndis</i>	2018	454	11.35173421	9.662423154	1.68931	2.85377
19	<i>E urophylla</i>	2018	463	8.765654985	7.665831916	1.09982	1.20961
20	<i>E pellita</i>	2019	476	8.756908518	7.791517179	0.96539	0.93198
21	<i>E pellita</i>	2019	479	5.019897659	4.686934123	0.33296	0.11086
22	<i>E urograndis</i>	2019	495	5.333555639	4.787396247	0.54616	0.29829
23	<i>P caribaea</i>	2017	516	3.93821532	6.519735783	-2.58152	6.66425
24	<i>E pellita</i>	2018	421	8.455032368	7.691076475	0.76396	0.58363
25	<i>E pellita</i>	2017	306	10.14069968	9.231003898	0.90970	0.82755
26	<i>E pellita</i>	2017	307	9.305129277	9.045907547	0.25922	0.06720
27	<i>E pellita</i>	2017	276	7.645479798	6.788112217	0.85737	0.73508
28	<i>E pellita</i>	2017	251	16.9999707	15.11757034	1.88240	3.54343
29	<i>E pellita</i>	2017	300	8.182617387	7.389837616	0.79278	0.62850
			sum	282.01819	260.7408539		
			Mean	9.724765171	8.991063929		

The two-sample t-test with equal variances is used to determine if there is a significant difference between the means of two independent groups, assuming that the variances of the two populations are equal. Thus, a comparison of the calculated t-value to the critical t-value from the t-distribution table (given significance level and degrees of freedom) is made. Suppose the calculated t-value is below the critical value. In that case, the samples can be considered “statistically equal”, and it can be assumed that the provided monitoring information has been verified during the site visit.

Table 3. F-Test Two-Sample for Variances

	Variable 1	Variable 2
Mean	9.724765171	8.99106393
Variance	14.00708538	10.0450579
Observations	29	29
df	28	28
F	1.394425551	
P(F<=f) one-tail	0.192185401	
F Critical one-tail	1.634173763	

Since the value of the F statistic is less than the critical value of F, the null hypothesis is not rejected, and it is concluded that the variances of the populations are equal.

Table 4. t-Test: Two-Sample Assuming Equal Variances

	Variable 1	Variable 2
Mean	9.724765171	8.99106393
Variance	14.00708538	10.0450579
Observations	29	29
Pooled Variance	12.02607163	
Hypothesized Mean Difference	0	
df	56	
t Stat	0.805640634	
P(T<=t) one-tail	0.211928941	
t Critical one-tail	1.296852673	
P(T<=t) two-tail	0.423857883	
t Critical two-tail	1.672522303	

Conclusions and details of facilities from the visited project areas.

- The verification team held an introductory meeting with representatives to present the objectives of the site visit and review the program of activities.
- The verification team confirmed on-site that the project's geographic area, as reported in the MR and the accompanying KML files, is in conformance with Section 3.11.1 of the VCS Standard v4.7.
- The verification team collected GPS tracking data, waypoints, and georeferenced photographs to help correlate observations with mapping data supplied by the client in a KML file.
- The verification team collected and recorded data to assess whether data collection techniques conformed to the monitoring plan and related documentation and to evaluate data quality control systems.
- The verification team selected samples of data and information to verify new instances and concluded with a reasonable level of assurance that the areas met the project's materiality requirements, as required by Section 3.6.17 of the VCS Standard v4.7.
- The verification team talked with the project proponents to confirm in detail the project activities and monitoring activities, among others.

The actual monitoring report for the project covers the period from November 26, 2020, to December 31, 2023, and the site visit was performed after the end of the monitoring period. Therefore, additional evidence-gathering activities were not necessary to demonstrate that a reasonable level of assurance was achieved for verification prior to the end of the monitoring period (Related to section 4.1.14 of VCS v4.7).

2.5 Resolution of Findings

RCE communicated the findings to CUMARE in the List of Findings (LOF) document. During the verification process, RCE issued 16 Corrective Action Requests (CAR), 5 Non-Material Findings (NMF), 13 Additional Documentation Requests (ADR), and seven Clarification Requests (CR). The findings are included in Appendix A. CLIMIT has addressed all findings, and a List of Findings with all closed items has been provided to the developer.

2.5.1 Forward Action Requests

Within the initial validation and verification report, two FARs are described, were addressed during the verification:

FAR 01: The validation and first verification were carried out exclusively for the first instance (El Porvenir farm). As of 2022, the PP intends to add Caricare farm to the group as a second instance. This last farm will have to previously validated for the subsequent or simultaneous verification for the issuance of its VCU, given that only the El Porvenir farm has been included in this current validation. Therefore, the PP must provide the necessary information to the VVB for this purpose.

Caricare farm was not included as a new instance during the current monitoring period. The MR describes that the project will comprise a total area of 10,913 ha; however, as of December 2023 (the end of the monitoring period), only 5,667.94 ha had been planted. To validate the PA boundaries, the VVB recalculated the polygon surface areas using the Projected Coordinate System WGS84 UTM Zone 18N under a planimetric projection. The attribute table was exported, and the areas were classified by year of planting, allowing differentiation between original and new instances.

Regarding the initially validated and verified area, the project area increased by 141.30 ha of new instances.. Section 3.3 of the MR describes compliance with the eligibility criteria for the introduction of the new instances.

During the validation process for the new instances, the OVV confirmed the following:

- The implemented project activity consists of the introduction of tree species where there was no forest before and is classified as Afforestation, Reforestation, and Revegetation (ARR) for AFLOU activities. The conditions of the new instances fall within the scope of the AR-ACM 003 methodology.

- The new instances reflected only areas that met eligibility requirements, including prior land use conditions, vegetation cover, and establishment timing. Through Global Forest Watch imagery, it was demonstrated that no forest or native ecosystem transformation has occurred in the last 10 years since the start of the reforestation activities.
- The forestation activities of the new instances meet Colombia's definition of a planted forest for commercial purposes, with a short rotation cycle, and the timber produced is marketed.
- The new instances are located within the department of Meta, Colombia, and according to the land use classification, are not considered wetlands.

The VVB also confirmed that the new instances are in compliance with the requirements of Section 3.6.17 of the VCS v4.7 standard. Also, all new instances incorporated into the project in subsequent verifications must be validated according to the requirements of the applicable methodologies and standards

FAR 02: Next VCS verification requires the VVB to include an onsite inspection as part the process (issued during the previous verification).

In compliance with this requirement, the VVB conducted a field visit during the current verification, which was described in detail in Section 2.4 of the VR report.

The inspection allowed for direct validation of the project area conditions, verification of the location of the instances, and confirmation of the correspondence between geospatial data and the planting activities reported. As a result, FAR 02 was considered addressed and closed, ensuring compliance with the accuracy principle outlined in Section 2.2.1 of the VCS v4.7 standard..

2.6 Eligibility for Validation Activities

TÜV SÜD America, Inc. (TÜV SÜD), is an ANSI National Accreditation Board (ANAB) accredited and an Entidad Mexicana de Acreditación (EMA) accredited, third-party GHG validation and verification body under ISO 14065:2019 Greenhouse Gases-Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition. RCE is able to perform verifications related to GHG emissions and removal at both the "project level" and "organizational level" and is also accredited to validate assertions related to GHG emission reductions and removals for the AFOLU scope. Please find the list and public statements at: <https://rubycanyonenv.com/index.php/publicstatements/>.

3 VALIDATION FINDINGS

The following sections describe validation activities that have been progressively implemented to improve the quality, efficiency, and results of the project and that are reported for this monitoring period, including the incorporation of new instances of the project activity (as required by VCS Standard v4.7 sections 3.6.16 to 3.6.21).

3.1 Methodology Deviations

No methodology deviations were applied during the monitoring period.

3.2 Project Description Deviations

The MR describes one Project Deviation for this monitoring period regarding the allometric equations.

Allometric equations

The project adopted a new allometric equation for this monitoring period, which aligns with the requirements of the methodological tool "Demonstrating Appropriateness of Allometric Equations for Estimation of Aboveground Tree Biomass in A/R CDM Project Activities."

The verification team verified and confirmed the appropriateness of changing the allometric equation, in accordance with the requirements of section 6 of the tool, which indicates that an equation is considered appropriate if at least one of its conditions is met.

In this case, principles b and c of section 6 were met for both updated equations.

For the *Eucalyptus* species, the proponent calibrated its own equation, obtained from in situ measurements. The calibration study was conducted at the "El Porvenir" farm, which corresponds to the first instance of the project. The formulation of the general volume model was consolidated from a sample of 420 trees belonging to the species *Eucalyptus pellita* and *Eucalyptus urograndis* in fourteen different strata, achieving a coefficient of determination (R^2) greater than 0.95; therefore, the selection of the new allometric equation complies with section 6, subsection c):

c) The equation was derived from a data set of at least 30 sample trees, and the coefficient of determination (R^2) obtained was no less than 0.85.

For *Pinus caribaea*, the proponent used an equation published in PROCLIMA (2013), indicating that it is an official body that has used this equation for more than ten years, complying with section 6, subsection b):

b) The equation has been used in the commercial forestry sector of the host Party for ten years or more.

The verification team consulted the PROCLIMA source, and the calibration study developed by the proponent for the equation update; it was confirmed that both equations comply with VCS requirements, and the parameters used were clearly described in the quantification database.

The source document of the calibration of the allometric equation for *Pinus caribaea* (referenced by PROCLIMA) was on the knowledge of the Verification team, Lopez-Aguirre (2013), who specifies an equation with and without bark. Even when it was found that the estimations of the proponent were using the equation without bark, the VVB corroborated that it didn't cause a material difference,

Therefore, this deviation results in a more conservative result compared to the original equation certified in the validation. It does not affect the applicability of the methodology, the project's additionality, or the baseline scenario previously validated in the PDD. Furthermore, it ensures that the project meets the requirements of the AR-AM 17 v.1 (II.6) tool and section 3.21.2 of the VCS v4.7 standard.

3.3 New Project Activity Instances in Grouped Projects

The Cumare Carbon project is a grouped project that incorporated 141.30 ha of new instances corresponding to the most recent plantations established between 2021 and 2023, as well as areas that had been excluded during the initial validation and the first verification period. These areas were added to the Project Area as part of the new instances during the second monitoring period. The incorporation of new instances was also described in the FAR 1 resolution (see section 2.5.1).

The verification team sought to confirm with the MR (Section 3.3) and the documentary evidence provided by the proponent that the Project met the requirements specified in the VCS Standard v4.7 regarding the inclusion of new project activity instances:

- Section 3.6.16, where it is mentioned the eligibility criteria for new project activity instances. For new instances, the eligibility criteria described and approved in the PDD were met:
 - The new instances are located within the geographic boundaries specified in the PDD (section 1.12 of the PDD).
 - The new project instances have not been deforested in the last 10 years, do not fall within the definition of "forest," and the proponent has clear land-use rights without land tenure conflicts and are outside any conservation areas or economic concessions.
 - The activities implemented in the new instances meet the definition of a planted forest; their purpose is commercial, and the plantation design has a short rotation cycle. The work program, financial analysis, and geographic location are aligned with the designed and validated project program.

- The proponent provided evidence of project ownership and landownership from the start of the implemented activities; that is, the proponent already had ownership before starting activities in the new instances.
- The new instances have a start date equal to that of the grouped project.
- The new instances are only accrediting VCU from the start of activities, associated with the year the new instances were established, which occurred during the current monitoring period.
- The new instances are not and have not been enrolled in another VCS project.
- The new instances meet the grouping and capacity limit requirements established in sections 3.6.8 and 3.6.9 of the VCS Standard v4.7.

The verification team reviewed technical, financial, geographic, and record files and information provided by the PP to justify the new instances' compliance with the above-mentioned project eligibility criteria. Specifically, the steps taken to validate the inclusion of new project instances were:

- An examination of the title document for the new instances (San José and El Provenir) and the activities implemented during the monitoring period evaluated.
- A double-check through a GIS was made to confirm that each new instance's boundaries to discard with any other AFOLU project's zone or actual instances of the project.
- A double-check through a GIS was made to confirm each new instance's extension and verify the legal possession.
- A technical review of the PP process to identify that new instances were not deforested in the last 10 years and do not belong to a conservation area or economic concession.
- A database examination to authenticate that the start date for each new instance was equal or later than the grouped project start date.

Therefore, the verification team confirmed that all new instances have proper evidence to demonstrate project ownership and meet the eligibility criteria for inclusion in the project.

Regarding the assessment of zero leakage claimed for the current monitoring period, including new instances, the verification team applied the previously validated assessment criteria according to the PDD and its corresponding validation report. These documents conclude that there is no risk of displacement of pre-project agricultural activities based on the analysis conducted for the new areas (planted during the 2021-2023 monitoring period); These areas did not have any activity to displace at the start of the project. The area where the new areas were implemented has been abandoned since 2017.

The result of agricultural leakage was zero, because there was no displacement of activities; the previous land use was grassland. However, according to the analysis described by the proponent, the Department of Meta has experienced an annual growth in carrying capacity of 3.86% since 2018, when the cattle herd was recorded at 0.44 head per hectare. Considering that the national carrying capacity is estimated at 0.87 head per hectare of grazing land according to the national census, the rangeland carrying capacity in the Department of Meta is still below the national census.

Based on the analysis provided by the proponent and in compliance with the applicable conditions of AR-TOOL 15, it can be concluded that the implementation of the forestation project has not resulted in an overload of the rangeland capacity in the Department of Meta.

In this context, the verification team first confirmed that the land classification of the new instances corresponded to the definition of grassland described by the proponent, in accordance with the land use previously validated in the PDD. Second, the verification team confirmed the justification that the displaced livestock do not have the potential to exceed the carrying capacity calculated for the Department of Meta, based on official data on the average number of livestock per farm in the region.

3.4 Baseline Reassessment

Did the project undergo baseline reassessment during the monitoring period?

☐ Yes ☒ No

4 VERIFICATION FINDINGS

4.1 Project Details

Item	Evidence gathering activities, evidence checked, and assessment conclusion:
Audit history	Aenor verification body performed the validation and first verification of the Cumare Carbon project for a reporting period of four years (01-November-2016 to 25-November-2020). The present verification (second) is developed by RCE (now TÜV SÜD America Inc.) for a reporting period of three years and one month (26-November-2020 to 31-December-2023). The same information was corroborated in the MR; therefore, there is compliance with the VCS Monitoring Report Template v4.4.

Double counting and participation under other GHG programs	The MR states that GHG removals are not double counted, as the Project does not seek credit for the same GHG removals under the VCS Program and other GHG programs. Once the verification team performed a double-check on the possible overlap of the project area with other projects in different programs and mechanisms (Cercarbono, Bio Carbon, Gold Standard, etc.)
No double claiming with emissions trading programs or binding emission limits	The MR states that project reductions/removals and activities do not seek credit in an emissions trading program or binding emission limit. Once the verification consulted registration pages such as the RGGI COATS platform and the Open Data Portal of Canada's Output-Based Pricing System, it was confirmed that there is no double claiming with Emissions Trading Programs or Binding Emission Limits.
No double claiming with other forms of environmental credit	The MR states that project reductions/removals and activities do not seek credit in an emissions trading program or binding emission limit. The verification body confirmed that the project activities did not receive or plan to receive credit from another GHG-related environmental credit system, such as energy attribute certificates (EAC) or guarantee of origin (GO).
Supply chain (scope 3) emissions double claiming	The MR states that the project activities do not affect the emissions footprint of any product (goods or services) in a supply chain. The verification body confirmed that the project activities are not executed by an organization that is part of a network of organizations (such as manufacturers, wholesalers, distributors, and retailers) involved in the production, delivery, and sale of a product or service to the consumer.
Sustainable development contributions	The MR describes that no new activities that contribute to the SDGs have been implemented during the monitoring period; however, they have provided continuity in the implementation of activities described during the first verified monitoring period. The Project's SD Contributions are described in Table 1 of the MR.

	The selected SDG targets corresponded to goals 1.1, 2.3, and 13 through indicators 1.1.1 Proportion of population below the international prosperity line, 2.3.2 Average income of small-scale food producers, by sex and indigenous status. For SFS 13.0, the indicator was Tonnes of greenhouse gas emissions removed. Through the evidence provided in the CAR 13 response, the verification team was able to confirm the continued contribution to the declared SDGs.
Additional information relevant to the project	No commercially sensitive information has been excluded from the public version of the Project documents.

4.2 Safeguards and Stakeholder Engagement

4.2.1 Stakeholder Identification

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Stakeholder identification	NA. No changes in stakeholder makeup since validation was reported or detected by the verification team.
Legal or customary tenure/access rights	NA. No changes in stakeholder makeup since validation was reported or detected by the verification team.
Stakeholder diversity and changes over time	NA. No changes in stakeholder makeup since validation was reported or detected by the verification team.
Expected changes in well-being	NA. No changes in stakeholder makeup since validation was reported or detected by the verification team.
Location of stakeholders	NA. No changes in stakeholder makeup since validation was reported or detected by the verification team.
Location of resources	NA. No changes in stakeholder makeup since validation was reported or detected by the verification team.

4.2.2 Stakeholder Consultation and Ongoing Communication

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Ongoing consultation	Section 2.1.2 emphasizes that it maintains a permanent channel of communication with stakeholders on the development of the project; the description presented is in line with the description validated in the PD on local stakeholder consultation. The verification team confirmed the accuracy of the above during the interviews conducted during the site visit and in evidence presented as support for CR4, which presents the work plan of the project's Social Strategy and the record of communications with stakeholders. During the site visit, the verification team did not observe evidence of conflicts, such as encroachments or invasions. Interviews with local personnel confirmed that the nearby community had neither used resources from nor accessed the Project area without authorization, as it has historically been a clearly recognized private property.
Date(s) of stakeholder consultation	The MR cites that communication with stakeholders is continuous. The verification team confirmed the records of communication with the different stakeholders in the supporting evidence of CR4 and CAR13.
Communication of monitored results	The results of the monitoring associated with the risks, costs and benefits that the project brings to the stakeholders are made known through the FSC-certified communication channels for the project, the verification team confirmed the description of this mechanism in the implemented Social Strategy plan, the records of the audits carried out by FSC and evidence of the communication records between the parties (the reviewed evidence is part of the response of CR4, CAR13 and ADR6).
Consultation records	The verification team confirmed the record of the communications developed between stakeholder and the proponent through the communications log (presented as an annex to CR4), within the annex 10 communication records were identified in 2021, 39 records in 2022 and 66 records in 2023.
Stakeholder input	The MR describes that there were comments and feedback for the strengthening of the Social Management plan received during the consultation and socialization meetings; within the evidence of CR4, these consultations are duly documented, and the Social

	Management Plan evidences the mechanism for dealing with complaints.
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4.2.3 Free, Prior, and Informed Consent

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	The Project proponent has the ownership of property rights and as such the free, prior, and informed consent (FPIC) process is not applicable to this Project activity. There are no ongoing or unresolved conflicts, and the Project does not exacerbate nor influence the outcomes of unresolved conflicts.
Outcome of FPIC discussion	Not applicable, since the proponent is the only personality who has property rights.

4.2.4 Grievance Redress Procedure

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Grievance received and steps taken to resolve the grievance including the outcomes of the resolution	No grievance was raised during the monitoring period.
Grievance redress procedure	Not applicable.

4.2.5 Public Comments

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
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Not applicable since the verification team did not receive any notification from Verra that comments were received outside of the Public Comment Period.	Not applicable.	Not applicable.
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4.2.6 Risks to Local Stakeholders and the Environment

4.2.6.1 Management Experience

Section 2.2.1 of the MR describes FSC certification as evidence of skills and experience for the implementation of project activities, as well as partnerships with organisations such as CAIA and CLIMIT, who have experience in the development and implementation of AFOLU projects.

The verification team confirmed the above statement by conducting on-site interviews to assess the Cumare team and implementing partners' capabilities in field data collection, processing, and monitoring activities. The conclusion was that Cumare personnel possess the necessary expertise for the Project's development, and the implementing partners demonstrate their active presence and their rigor in applying the forest inventory methodology. Likewise, once finding ADR4 (related to FSC certification) and ADR6 (related to evidence of the proposer's technical capabilities) was addressed, the verification team confirmed that the management teams involved in the Project have the skills for implementing carbon projects and land management projects, complying with section 3.19.6 of the 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	In section 2.2.2, the MR states that "no risks were identified" because the well-being of the stakeholders was not compromised by the project implementation. Among the mitigation measures described is open communication and engagement with stakeholders during the life of the project, as a result is the Social Strategy that implements the project.
Risks to stakeholder participation	In section 2.2.2, the MR states that "no risks were identified"; within the mitigation measures include the analysis and mapping of relevant stakeholders (local communities, GMOs and NGOs, industry partners).The description presented by the monitoring report is consistent with the

	description presented by the PDD validated. This information was confirmed with the staff, during the site visit.
Working conditions	In section 2.2.2, the MR states that "no risks were identified", MR presents justification for the absence of risks, through FSC certification, which evidences compliance with labor legislation and international labor conventions. The verification team confirmed this statement within the FSC evidence submitted by the proponent.
Safety of women and girls	In section 2.2.2, the MR states that "no risks were identified", MR presents justification for the absence of risks, through FSC certification, which requires preventing gender violence, harassment, discrimination and seeks to promote equal opportunities for women. The verification team confirmed this statement within the FSC evidence submitted by the proponent.
Safety of minority and marginalized groups, including children	In section 2.2.2, the MR states that "no risks were identified", MR presents justification for the absence of risks, through FSC certification, the proponent guarantees respect for the rights of Indigenous Peoples, the prohibition of child labor, the protection of ethnic minorities, migrants and marginalized communities. The verification team confirmed this statement within the FSC evidence submitted by the proponent.
Pollutants (air, noise, discharges to water, generation and release of hazardous materials and chemical pesticides and fertilizers)	In section 2.2.2, the MR states that "no risks were identified", MR points out that the project does not generate pollutants. It also describes that the use of pesticides is minimal and only occurs during the planting season, among the pesticides used is fipronil, used as an agent against ants. Among the evidence presented as an annex to CR5, the specifications of the product and its relevance within environmental regulations are described. Likewise, the FSC certification that the project has requires the responsible use of agrochemicals to minimize environmental risks. The verification team confirmed this statement within the FSC evidence submitted by the proponent and supporting evidence of CR5.

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	

Sexual harassment	In each risk of section 2.3.1, the MR states that "no risks were identified", the project complies with Colombian labor legislation and ILO conventions that prohibit discrimination on the basis of gender, ethnicity, religion, age, disability or any other protected characteristic, it also presents mechanisms and tools that seek to prevent the occurrence of any event of sexual harassment, which promotes gender equity in the workplace, that prohibits forced labor, child labor, and human trafficking. For discrimination and sexual harassment, gender equity in labour and work, human trafficking, forced labour, and child labour, no evidence has been found by the verification team that the Project does not comply with the requirement, nor in the site visit or during the interviews and data analysis. It can be confirmed that the Project is committed to providing an environment free of discrimination, where all individuals are treated with respect and dignity.
Gender equity in labor and work	
Forced labor	
Child labor	
Human trafficking	

4.2.7.2 Human Rights

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risk identified	The Project activities recognize, respect, and promote the protection of Human Rights in line with the ILO Declaration on Fundamental Principles and Rights at Work. This has been confirmed by interviews with the staff during the site visit and document review.

4.2.7.3 Indigenous Peoples and Cultural Heritage

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risk identified	The MR states and demonstrates that there are no legal or customary tenure/access rights to territories and resources, including collective and conflicting rights, held by indigenous people (IPs) in the Project area, as the proponent owns the private properties. The verification team confirmed during the site visit interviews that local communities exist outside of the project area and that project activities do not interfere with any cultural practice, tradition, etc. Likewise, the verification team confirmed that in the area of influence of the properties included in the project there is no presence of reservations and/or indigenous communities.

4.2.7.4 Property Rights

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risk identified	In the MR doesn't identify risks about property rights or about disputes over rights to territories and resources. This was confirmed by the verification team during the interviews carried out during the site visit and the confirmation of the property rights held by the proponent over the project area.

4.2.7.5 Benefit Sharing

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Summary of the benefit sharing plan	Not applicable: The Project does not impact property rights and as it is privately owned, there is not a benefit-sharing agreement in place.
Benefit sharing during the monitoring period	Not applicable: The Project does not impact property rights and as it is privately owned, there is not a benefit-sharing agreement in place.

4.2.8 Ecosystem Health

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Impacts on biodiversity and ecosystems	No risks were identified during the reported monitoring period, as the project focuses on afforestation with species adapted to the environmental conditions. The species used in the project are not classified as native to the region, even though they are commonly used in plantations and are adapted to the environmental conditions, as confirmed by the verification team during the site visit. The verification team also confirmed through the project's GIS information and official government information on protected natural areas that the PA is located outside of any protected natural areas. The project activities were not identified as having negative effects on the soil and the verification team confirmed during the site visit that the project's plantations do not involve soil disturbance or water stress. In addition
Soil degradation and soil erosion	
Water consumption and stress	

to this, the project is FSC certified, which establishes guidelines for the preservation of health in ecosystems.

4.2.8.1 Rare, Threatened, and Endangered species

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Species or habitat	No risks were identified. MR describes how the project does not affect rare, threatened or endangered species; The species used are adapted to the conditions of the country, so their behavior does not refer to an invasive species. Monitoring protocols are followed to ensure that trees remain healthy and do not act as vectors of pests or pathogens that may affect rare or vulnerable species. In addition, regular environmental monitoring is carried out to detect and mitigate any possible undesired effects on the flora and fauna within the project's area of influence.
Areas needed for habitat connectivity	No risks were identified on the ecological corridors and conservation areas established in its forest management plan, according to this, the plantations are planned in a way that does not fragment sensitive ecosystems or interfere with the connectivity of wildlife populations; Likewise, through afforestation activities in areas that were originally grasslands, the project promotes habitat connectivity.

	Evidence gathering activities, evidence checked, and assessment conclusion
Habitats for rare, threatened, and endangered species	No risks were identified. According to the MR, the species planted in the project are integrated into a responsible management scheme that minimizes any risk of altering the composition of the native flora. The project also ensures that it does not bring diseases that could affect local biodiversity. Monitoring protocols are followed to ensure that trees are healthy and do not act as vectors for pests or pathogens that may affect rare or vulnerable species. The project also complies with sustainability certification standards, such as FSC criteria, which require an assessment of the impact on vulnerable species and the implementation of mitigation measures where necessary. The verification team confirmed the claims submitted by the project through the project's forest management plan and FSC certification.
Areas for habitat connectivity	No risks were identified. The Cumare Forest Management Plan presents a strategy for the protection of environmental values,

landscape patterns and biological corridors within the environmental management of the project; in this sense, the management plan presented is FSC certified. The verification team confirmed the information through the information presented in ADR6.

4.2.8.2 Introduction of Species

Species introduced	Evidence gathering activities, evidence checked, and assessment conclusion
<i>Eucalyptus pellita</i> , <i>Eucalyptus urophylla</i> , <i>Eucalyptus urograndis</i> and <i>Pinus caribaea</i>	Section 2.4.2 of the MR states that this species has no negative environmental effects and was not planted during the monitoring period or will be in the future in the PA validated previously. For new instances, the planting occurred during the monitoring period and the species introduced were the same species validated previously. Although the species used in the project are not classified as native, they do exist in the region where the project is taking place.

Existing invasive species	Evidence gathering activities, evidence checked, and assessment conclusion
N/A	MR states that the project has not introduced any invasive. The verification team confirmed this through interviews conducted on site. After the proponent addressed the ADR6 finding through the project's forest management program, it was confirmed that the project complies with section 3.19.27 of the VCS v4.7 standard.

Evidence gathering activities, evidence checked, and assessment conclusion	
Invasive species	N/A

4.2.8.3 Ecosystem conversion

Item	Evidence gathering activities and evidence checked
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Ecosystem conversion

MR describes a satellite imagery analysis performed to confirm that the new instances were not cleared of native ecosystems at least 10 years prior to the project start date. The verification team reviewed this analysis and compared it with secondary information on historic land cover from the Institute of Hydrology, Meteorology and Environmental Studies (IDEAM). Additionally, the verification team conducted interviews during the site visit in which local stakeholders mentioned that the lands where the project is implemented were historically dedicated to livestock farming. This suggests that there were no native ecosystems at the start of the project.

For the PA validated previously, the verification team confirmed that there is no ecosystem conversion, the land cover is maintained through the monitoring period. The verification team can confirm that no ecosystem conversion is occurring in the Project area.

4.3 Accuracy of Reduction and Removal Calculations

The developer calculated the Project's emission reductions following the equations in the Methodology and applicable tools, validated PDD, and proposed deviations. RCE reviewed all data, parameters, inputs, assumptions, and calculations provided by CUMARE for this monitoring period. The Project data used to calculate the GHG emission reductions and removals included project area, planted area per strata, sampling design, number of plots, plot location, and per-plot trees measurements as DBH (cm), and Height (m).

The usage of default factors and parameters included Biomass expansion factor for conversion of stem biomass, Carbon fraction of tree biomass for species or group of species, Basic wood density, Root to Shoot ratio, Reference SOC stock, Conservative default factor expressing carbon stock in dead wood and litter as a percentage of carbon stock in tree biomass (see section 4.1 from MR). As for the project deviation applied to this monitoring period, information can be found in section 3.2.2 of the MR where fully described. All data and parameters used for GHG calculation comply with the validated PDD, and they followed the guidelines of all applicable methodologies (see section 3.2 and Appendix C for details).

RCE completed a full recalculation of the emission reductions and removals for the monitoring period. This included:

- Reviewing the accuracy and consistency of spreadsheet formulas, conversions, and data aggregation.

- Reviewing whether the Project follows the methods and formulas outlined in the project description for baseline emissions, project emissions, and leakage, as well as related tools, including AR-AM-TOOL-17, AR-AM-TOOL-16, AR-AM-TOOL-15, AR-AM-TOOL-14, AR-AM-TOOL-12, AR-AM-TOOL-08, AR-AM-TOOL-02. It should be noted that the project quantified zero leakage emissions resulting from a non-displacement of agricultural activities for this monitoring period. Therefore, following equations 1-3 of the AR-TOOL15, with zero displaced agricultural activity areas, $LK_t = LK_{AGRIC,t} = 0$. The VVB team verified this information during the verification process (during site visit interviews with the technical teams) and the methodology detailed and used by the PP to corroborate a non-native ecosystem conversion in the field, also examined the previously validated PDD and previous validation and verification report, confirming that the declaration of zero leakage has been consistently maintained for the project. As such, compliance with the rules of the AR-ACM0003 v2.0 methodology was confirmed.
- Reviewing default values used and their appropriateness.
- Reviewing and confirming the updated project GIS parcels information.

After recalculation and document review, as well as the interviews during the site visit, it was noticed that some plots were being averaged as zero stocks. The proponent clarified that these plots corresponded to harvested stands due to low productivity or damaged trees, a common decision during wood management. Section 3.1 of the MR describes that the forest harvesting activities carried out over an area of 73 ha and includes detailed information on the reasons for harvesting and the replanting density used as part of post-harvest management activities.

The verification team identified a risk of overestimation if the selected method did not represent accurately the carbon stock at the end of the monitoring period, then, CAR 6 was raised, and the proponent provided evidence of conservativeness, demonstrating that using the average of plots with zero stocks in the same previous stand penalizes the average and gets a lower stock of carbon than separating a new stratum with zero stocks. Regarding the estimates presented, the VVB verified the following:

- The harvested area was confirmed through the review of geospatial files provided by the PP.
- Inventory plots located within the harvested polygons were correctly reported with null values in the ERR spreadsheet, reflecting that no carbon was claimed for harvested areas without regeneration.
- The PP claimed VCU only for planted and inventoried areas

Then, the approach was verified successfully.

According to the uncertainty assessment of the monitoring data, following guidance from AR-AM-TOOL-14, as indicated in AR-ACM-0003, the verification team, after recalculating, found the same 5.73% uncertainty value. Since the estimated value was less than 10 percent, the uncertainty discount was zero, applied according to the procedure provided in Appendix 2 of AR-AM-TOOL-14, and the verification team confirmed the correct use of the uncertainty discount factors.

Regarding overall recalculations, the verification team did not find differences in project removals, Net GHG emission reductions or removals, and VCU's available for issuance (see equation below).

$$\begin{aligned} \% \text{Difference} &= \text{abs} \left(\frac{\text{Total removals declared} - \text{Total removals recalculated}}{\text{Total removals recalculated}} \right) \times 100 \\ \% \text{Difference} &= \text{abs} \left(\frac{872,377 \text{ tCO}_2\text{e} - 872,377 \text{ tCO}_2\text{e}}{872,377 \text{ tCO}_2\text{e}} \right) \times 100 = 0\% \end{aligned}$$

Based on the evidence provided, the monitoring data, and the methods followed to estimate the GHG emissions and reductions, this project's GHG statement has been quantified correctly by the monitoring plan and applied methodology.

4.4 Quality of Evidence to Determine Reductions and Removals

The first step in assessing the quality of the monitoring information was to evaluate the quantity and quality of the information. To confirm this, the verification team took samples of the forest inventory monitoring plots and re-measured them during the site visit. Subsequently, a t-test was performed using the data collected from 29 randomly sampled plots. The test result indicated no statistical differences between the developer's and the verification team's inventory data (see section 2.4 for more details).

During the site visit, the team corroborated the correct installation of the inventory plots through a tour and inspection, the strict identification of the number of trees, and compliance with the measurement protocols established in the validated PDD. The re-measurements were carried out with suitable and calibrated instruments such as a diameter tape, a measuring tape, and a hypsometer, which were handled by highly trained personnel from the verification team. The second step for quality control of the developer's spreadsheets included the following:

- Check the clarity and cross-reference of the raw database of the plantation plots with their GIS information.
- Sample correlated data between databases and conducting data duplication analysis using dynamic tables.
- Ensure that all assumptions and parameters are correctly assigned in the calculation spreadsheets.

- Verify that the formulas were accurately entered in the spreadsheet and perform recalculations (entry of equations and calculation style).
- Review cells with calculated values to detect cell referencing errors.
- Confirming the correct linkage between spreadsheets is an essential step to ensuring the accuracy of the project's estimates.

Where errors were found, requests for clarification or corrective actions were added to the List of Findings (Appendix A).

Data generation, recording, calculation, and transfer of final information to the MR were described by stakeholders during site visit interviews and documented in the corresponding sections of the MR (sections 3, 4, and 5). No inconsistencies were found in the process, and where a lack of information was found in the databases or MR description, requests for additional documentation were issued in the List of Findings (Appendix A).

The data and parameters used for calculations come from accepted tools for the methodology and publicly available information sources from external official or peer-reviewed sources (see Appendix C).

Based on the evidence provided and the processes described above for quality control and accuracy assessment, it can be concluded that the monitoring information used for this project statement is of sufficient quantity and quality to determine reductions and removals.

4.5 Non-Permanence Risk Analysis

The verification team reviewed the NPRT report to evaluate the values assigned to each risk factor and their justification. In addition, documentary evidence supporting the rated risk factors was examined, complemented with information obtained during the resolution of the findings (Appendix A). In general, the team considers that the evidence provided is of quality, comes from reliable sources, and could be independently confirmed and evaluated by the verification team. Among others, the documentation reviewed for the NPRT report assessment included financial analysis of the Project and alternative activities, land tenure documents, operational documents and internal Project surveys, World Governance Indicators (WGI) database, peer-reviewed literature, and reports from public entities.

Therefore, the verification team considers that the total risk score assigned (12%) is adequate for the Project and reflects its actual risk conditions and mitigation measures. Below is a summary of the verification team's analysis and comments on the final score assigned to each of the risk indicators.

Table 5. Summary of the analysis performed for the NPR Report of the Project.

Risk factor		Risk rating	TÜV SÜD final assessment or justification of the correct risk rating
Internal risk			
Project management	Q1. Does the Project have an adaptive management plan in place that includes a monitoring plan? If no, the Project fails the risk assessment. If yes, proceed to Q2.	The verification team confirmed that the Project has a management plan, including a monitoring plan that includes monitoring of Project implementation and of GHG emission removals. The management program proposes what actions to implement in different scenarios, so the project complies with having an adaptive management plan on site	
	Q2. Do any of the following project management risks apply to the project?	0	a) As the documentary support demonstrates, the species used in the project have been demonstrated to be adapted to the project's conditions.
		0	b) No enforcement is necessary to prevent encroachment by outside actors, as all trees are planted on parcels and are not targeted by intrusion. The verification team confirmed that all the land is private; therefore, no invasion has been presented.
		0	c) The management team includes individuals with significant experience in all the skills needed to successfully carry out the project activities
		0	d) The implementation team is located in the project area, so it has the ability to respond to the needs of the project.
		0	e) The Proponent has not submitted any events under the definition of loss.
		0	f) N/A. This is not an ALM Project.
		0	g) N/A. This is not an ALM Project.
	Q3. Do any of the following mitigations apply to the project?	-2	a) Mitigation is applicable since the Project developer, CLIMIT, boasts substantial expertise in AFOLU Project design and implementation and proficiency in carbon accounting and reporting under the VCS program.
		0	b) N/A. This is not an ALM Project.
	Total PM	0	

Risk factor		Risk rating	TÜV SÜD final assessment or justification of the correct risk rating
Financial viability	Q1. How long is the project's payback period (i.e., how many years will it take to breakeven)?	0	a) N/A
		0	b) N/A
		0	c) N/A
		0	d) N/A
		0	e) The payback period is four years or less from the current risk assessment. According to the forest management plan, the trees will be harvested at the age of 10 years. This means that forests planted in 2016 will be cut down around 2025. Revenues from the sale of timber are expected to enable the project to break even in 2025, i.e. two years longer than the current risk assessment period (2023).
	Q2. What percentage of funding has the project secured to cover the total cash out required before the project reaches breakeven?	0	f) N/A
		0	g) N/A
		0	h) N/A
		0	i) Project has secured 80% or more of the funding needed to cover the total cash out before the project reaches breakeven. The project has already covered 99% of the total cash before the project breaks even. The withdrawal remaining before the break-even point represents 1% of the total.
	Q3. Does the following mitigation apply to the project?	0	j) Project has available, as callable and secured financial resources, at least 80 percent of total cash out before the project reaches breakeven.
	Total FV	0	
Opportunity cost	Q1. Are the baseline activities subsistence-driven? If No, proceed to Q2. If Yes, proceed to Q3.	The activities in question are not of subsistence.	

Risk factor		Risk rating	TÜV SÜD final assessment or justification of the correct risk rating
	Q2. What is the NPV of the most profitable alternative land use activity compared to the NPV of the project activity? A response is only required if the answer to Q1 is No.	0	a) N/A
		0	b) N/A
		0	c) N/A
		0	d) N/A
		0	e) N/A
		-4	f) NPV of project activities is expected to be over 50 percent more profitable than that of the most profitable alternative land use activity. The response in NPRT is constant with respect to the previously validated NPRT, according to analyses, NPV of project activities is over 100% more profitable than cattle activities (alternative).
	Q3. Does the project have net positive community impacts? A response is only required if the answer to Q1 is Yes.	0	i) N/A
		0	h) Net positive community impacts of project activities are demonstrated. Within the complementary information of the MR, the positive impacts of the project on the community have been evidenced.
	Q4. Do any of the following mitigations apply to the project?	0	i) N/A. Project did not apply for this mitigation factor.
		0	j) N/A. Project did not apply for this mitigation factor.
		0	k) N/A. Project did not apply for this mitigation factor.
	Total OC	0	
Project longevity	Did the project request registration on or after 1 January 2024?	The project was registered before January 1, 2024.	

Risk factor		Risk rating	TÜV SÜD final assessment or justification of the correct risk rating
	Does the project have a legally binding agreement that covers at least a 100-year period from the project's start date?		The project doesn't have a legally binding agreement that covers at least a 100-year period from the project's start date.
	What is the project longevity in years?		The longevity of the Project is 100 years.
	Does the project have a management, financial and monitoring plan for the entire project longevity?		The project has a management program that can be extended to 100 years of the project, the proponent has demonstrated the legal tenure of the land where the project is developed, the management program does not establish a defined period on the life of the project; the project is ARR with harvesting and is designed to replant the surfaces once they are used through cutting cycles. The project is FSC certified for sustainable forest management.
	Is the project an ARR or IFM project with harvesting?		The project is of the ARR type with harvesting.
	Can the project demonstrate a commitment to continue the management practice, replant or allow re-growth?		Project can demonstrate a commitment to continue the management practices and replant. The forest management program, FSC certification criteria, and infrastructure investment made during the first years of the project were presented as evidence of the commitment to continue with the project's activities; The financial flow evidences the continuity of the project in the replanting costs.
	Does the project have a legal Agreement or requirement to continue the management practice(s)? If No, proceed to a. If Yes, proceed to b.	5	a) The project doesn't have a legal agreement or requirement to continue the management practice.
		0	b) N/A

Risk factor		Risk rating	TÜV SÜD final assessment or justification of the correct risk rating
	Is the project a grouped project where contract durations with individual project activity instances are less than the project longevity?	N/A	
	Total PL	5	
Total Internal Risk (PM + FV + OC + PL)		5	
External risk			
Land tenure and Resource Access/Impacts	Q1. Has due process been undertaken to discover any disputes over ownership and land, resource access, or use rights?	Due diligence has been carried out for the acquisition of the properties, in compliance with national regulations and established procedures. FSC certification describes the due diligence process on land acquisition.	
	Q2. Has the project executed a binding legal agreement(s) (such as a contract) securing the legal right to control and operate project activities over the entire project area with all entities that have verified ownership claims or verified land, resource access or use rights (such as customary rights holders)?	CUMARE has the legal rights of ownership and use over the project area, so it has the power to operate and control the activities of the project throughout the useful life of the project.	
	Q3. Do the same or different entities hold	0	a) CUMARE has ownership and legal rights to the project area.

Risk factor		Risk rating	TÜV SÜD final assessment or justification of the correct risk rating
	land ownership and resource access or use rights?	0	b) N/A
	Q4. Is the project in a country/jurisdiction with a history of national, sub-national, or local government ("Government") intervention in land or resource use?	0	c) N/A
		0	d) N/A
		0	e) There have been no cases of government intervention in the last 20 years, nor have there been any events of expropriation and/or government intervention over the territorial rights of the project area.
	Q5. What percent of the project area is affected by disputes over land tenure or ownership?	0	f) N/A
		0	g) N/A
		0	h) There are no land tenure disputes over the project area, the property titles held by the proponent support the legal tenure of the area covered by the project, this was confirmed through the property titles.
	Q6. What percent of the project area has disputes over access or use rights?	0	i) N/A
		0	j) N/A
		0	k) There are no disputes about the rights of access and/or use of the project area, CUMARE has the rights over the area covered by the project, this was confirmed through the property titles.
	Q7. Have the risks of upstream and sea impacts undermining the carbon stocks of a WRC project been demonstrated as insignificant or effectively mitigated for the ten years that follow the risk assessment?	0	l) N/A
		0	m) Potential upstream and offshore impacts are not applicable for the project area, this is according to the location of the project area.

Risk factor		Risk rating	TÜV SÜD final assessment or justification of the correct risk rating
	Q8. Do any of the following mitigations apply to the project?	0	n) N/A. Project did not apply for this mitigation factor.
		0	o) N/A. Project did not apply for this mitigation factor.
	Total LT	0	
Stakeholder engagement	Q1. Are local populations, including those living in the project area or within 20 km of the boundary of the project area, reliant on the project area? If No, the risk rating for stakeholder engagement is zero and you can proceed to political risk.	There are no local populations living within the project area, local populations within a radius of 20 km from the project area do not depend on it, the project area corresponds to private property.	
	Q2. Have more or less than 50 percent of stakeholders living within and reliant on the project area been consulted?	N/A. This is not applicable since none of the identified communities live inside the Project area or depend on it for subsistence.	
	Q3. Have more or 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 been consulted?	N/A. This is not applicable since none of the identified communities live inside the Project area or depend on it for subsistence.	
	Total SE	0	
Political Risk	Q1. What is the governance score for the country?	2	The governance score for the country is -0.20. The verification team independently confirmed that Colombia's governance score, calculated from the Mean Governance Scores across the six World Bank Institute's Worldwide Governance Indicators (WGI), is -0.20, that is, within the -0.32 and 0.19 range.

Risk factor		Risk rating	TÜV SÜD final assessment or justification of the correct risk rating
	Q2. Does the following mitigation apply to the project?	-2	The verification team confirmed that Colombia is a party to the Paris Agreement and has submitted an NDC to the UNFCCC in 2020.
	Total PR	0	
Total External Risk (LT + CE + PC)		0	
Natural risk			
Fire (F)		0.25	Natural risk of fire; section 7.6 "Fire Prevention Plan" is cited in the Forest Management Plan as the basis for the response, the verification team confirmed within the Forest Management Plan the design of the fire prevention plan.
Pest and Disease Outbreaks (PD)		0.5	For pests and diseases, a pest and disease monitoring and management plan is cited, the verification team confirmed within section 7.5 of the Forest Management Plan, the design of the integrated pest and disease monitoring and management plan.
Extreme Weather (W)		0.5	For extreme weather, it is described that preventive measures are applied to reduce the risk of damage in the event of extreme weather conditions, activities such as: site selection, species selection, silvicultural practices, infrastructure maintenance, monitoring, among other activities, please add evidence of compliance with the implementation and/or planning of these activities. The verification team identified the mechanisms identified within sections 11. Environmental management, occupational health and safety and 12 Plan for the identification, protection and monitoring of natural environments and protected species the Forest Management Plan.
Geological Risk (G)		0	No geological risks were identified in the project area, the verification confirmed that according to the topography of the land, there are no risks of landslides.
Total Natural Risk (as applicable, F + PD + W + G + ON)		1.25	
Future Climate Impact	Heat and cold	1.33	The verification team confirmed that 100% of the project area is within the N.W. South-America reference region.

Risk factor		Risk rating	TÜV SÜD final assessment or justification of the correct risk rating
			Mean air temperature; The predicted increase in temperature is not expected to have an impact on plantations. The impact on the project does not apply.
			Extreme heat; Extreme heat events could damage trees during the early stages of their growth and encourage wildfires. The impact is negative.
			Cold waves; By having a decrease in cold waves, a greater effect of extreme heat is encouraged. The impact is negative.
	Wet and dry	1.83	The verification team confirmed that 100% of the project area is within the N.W. South-America reference region.
			Mean precipitation: The increase in rainfall does not have a negative impact on the plantations of the project.
			River flood: Flooding is not expected to affect the project area, according to the design and location of the plantations, it is not expected that the overflow of rivers due to increased rainfall will have effects on the plantations.
			Landslide: Based on the topography of the project area, no landslide effects are expected within the project area.
			Soil moisture: According to the signs of tool change, no extreme changes in soil moisture are projected; According to the abiotic conditions that exist in the project area, it is not considered an applicable risk.
			Agricultural and ecological drought: According to the tool's signs of change, confidence in increased drought is low, in accordance with the abiotic conditions that exist in the project area; However, in association with extreme heat events, the project considers it as a negative event.

Risk factor		Risk rating	TÜV SÜD final assessment or justification of the correct risk rating
			Fire weather: According to the signs of tool change, confidence in the increase in fires is low, according to the abiotic conditions that exist in the project area; However, in association with extreme heat events, the project considers it as a negative event.
	Wind	NA	The verification team confirmed that 100% of the project area is within the N.W. South-America reference region.
			Mean wind speed: According to the signs of tool change, no extreme changes are projected on the average wind speed; According to the abiotic conditions that exist in the project area, it is not considered an applicable risk.
SLR Impact Level	Coastal	NA	N/A. According to the Calculation tool guidance, it only applies if the Project is in a coastal area. The verification team confirmed with the GIS information provided for the Project that the plantations are not on the coast.
Overall CID IS		2.25	
SLR Risk	Ecosystem degradation	NA	N/A. According to the Calculation tool guidance, it only applies if the Project is in a coastal area. The verification team confirmed with the GIS information provided for the Project that the plantations are not on the coast.
	Coastal flooding	NA	
	Coastal erosion	NA	
	Degree of salinization	NA	
Total Natural Risk (as applicable, F + PD + W + G + ON)		12	

5 VERIFICATION OPINION

5.1 Verification Summary

During the site visit, the verification team reviewed the procedures established for conducting biomass inventories, confirming that there are no material discrepancies between the current monitoring system, the monitoring plan established in the PDD, and the methodologies applied.

It was also confirmed that the project proponent effectively monitors the parameters required to determine the Project's removals by sinks and emissions by sources as required by the monitoring plan and the applicable methodologies. This was verified through the Project deviation declared for this Monitoring period and described in the corresponding sections of the MR and by checking the list of parameters in the MR.

Finally, the verification team reproduced the calculations to obtain the same results and considered that these had been reported clearly and accurately since it was possible to trace the calculations directly from the data sources of the field measurements of the inventory. The formulas comply with the monitoring plan, the methodologies, and the default values used to determine the appropriate parameters. Therefore, the net amount of VCU to be issued is accurate and objective.

The Project remains compliant with the VCS rules and is fully implemented. Discrepancies between the Project and the PDD have been clearly discussed in the MR, and RCE has assessed its suitability. However, RCE states that the GHG statement is the project proponent's responsibility.

5.2 Verification Conclusion

TÜV SÜD America Inc. (TÜV SÜD) through RCE conducted the verification of the Cumare carbon project according to the requirements found in ISO 14064-3:2019, 14065:2020, & 17029:2019. The objective of this verification was to ensure that the GHG statement is materially correct and conforms to all relevant criteria. The GHG statement is the responsibility of REFORESTADORA CUMARE S.A.S. A summary of the GHG statement is as follows:

- GHG-related activity: Afforestation and reforestation of lands except wetlands.
- GHG statement: 26-November-2020 to 31-December-2023
- Criteria:
 - VCS Standard v4.7 – 16 April 2024.
 - VCS Program Guide v4.4 – 29 August 2023
 - AR-AMS0003: A/R Large-scale Consolidated Methodology v2.0 – 04 October 2013.

- VCS JOINT PROJECT DESCRIPTION & MONITORING REPORT CUMARE CARBON PROJECT – 04 July 2022.
- AFOLU Non-Permanence Risk Tool v4.2 – 03 May 2024.
- ISO 14064-3:2019 “Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas statements”

The data and information supporting the GHG statement were project and historical in nature.

TÜV SÜD has ensured the Project’s effective use of controls related to the GHG statement. TÜV SÜD concludes that there is sufficient and appropriate evidence to support the Project’s GHG statement and is issuing an Unmodified Opinion.

Based on reasonable level of assurance TÜV SÜD confirms that there is no evidence that the GHG statement has not been prepared:

- Without material discrepancy,
- In accordance with all applicable criteria, and

Verified to a reasonable level of assurance.

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Verified GHG emission reductions and removals are presented below. The GHG statement provided by REFORESTADORA CUMARE S.A.S. and verified by TÜV SÜD America, Inc., estimates a total of GHG emissions reduction or removal of 872,377 tCO₂e (before accounting for the buffer pool) by the project during the verification period: 26-November-2020 to 31-December-2023. After accounting for the 12% buffer pool allocation (104,685 tCO₂e) based on the non-permanence risk assessment tool, the total VCU eligible for issuance is 767,692 tCO₂e.

Verification period: From: 26-November-2020 to 31-December-2023.

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

The non-permanence risk rating (%)	12
If applicable, the Long-term Average (LTA), whether it has been properly updated, and if it has been reached.	1,729,336
Whether a loss has been appropriately accounted for, in accordance with the VCS Program rules, if applicable.	N/A. No losses, including loss events or reversals, occurred during this monitoring period.

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Buffer pool allocation (tCO ₂ e)	Reductions VCU (tCO ₂ e)	Removals VCU (tCO ₂ e)	Total VCU issuance (tCO ₂ e)
26-Nov-2020 to 31-Dec-2020	0	0	0	3,242	0	27,021	23,778
01-Jan-2021 to 31-Dec-2021	0	0	0	33,814	0	281,786	247,971
01-Jan-2022 to 21-Dec-2022	0	0	0	33,814	0	281,786	247,971
01-Jan-2023 to 31-Dec-2023	0	0	0	33,814	0	281,786	247,971
Total	0	0	0	104,685	0	872,377	767,692

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
26-Nov-2020 to 31-Dec-2020	35,201	27,021	-23.2%	The PP compared projected carbon dioxide removals with those achieved during the monitoring period, which revealed a smaller difference than initially expected (although specific years exceeded projections). The PP explained that the ex-ante estimate is based on a growth model that is a simplification of reality and that the ex-ante estimates also consider a plantation of 500 ha in 2022; otherwise, for ex-post estimates they
01-Jan-2021 to 31-Dec-2021	322,216	281,786	-12.5%	
01-Jan-2022 to 21-Dec-2022	255,962	281,786	10.1%	
01-Jan-2023 to 31-Dec-2023	193,439	281,786	45.7%	
Total	806,818	872,377	8.1%	

				consider the values of the total inventory area. However, the PP points out that a difference of 8.1% with respect to the ex-ante estimates results in a very precise result. To verify the latter, the verification team examined the PP calculations for the ex-post and ex-ante estimates, confirming the accuracy of the percentage differences reported for each year. During the review, the VVB confirmed the following: - The areas used for the LTA calculation corresponded to those reported in the PA, including both the initial and newly incorporated instances during this period. - Carbon stocks were estimated based on the planted area, the forest species used, and the year of planting, considering only data from the monitored period. - The LTA appropriately incorporated harvesting events, and it was demonstrated that after each harvest cycle, the sequestered carbon progressively recovered over time, in line with the forest growth dynamics modeled in the project.
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APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

The Project does not label any document as commercially sensitive.

<i>Section</i>	<i>Information</i>	<i>Justification</i>	<i>Assessment method and conclusion</i>
NA	NA	NA	NA

APPENDIX A: LIST OF FINDINGS

Corrective Action Request, Non-Material Finding, Additional Documentation Request, or Clarification Request	Finding and date
CAR 1	July 10th, 2024. Please, describe detailed in the Monitoring Report how the new instance 58.13 ha compliances with eligibility criteria of the 3.6.17 VCS Standard v4.7.
Section of Protocol/ Methodology or Program Document	3.6 Project Design. VCS Standard v4.7
Project Developer Response and Date	5/8/202 Section 3.3 of the MR has been updated to reflect that the area of San José complies with every requirement to be included in this grouped project.
RCM response and Date	October 14th, 2024. Pending to close until solve CAR 5.
Additional Project Developer Response and Date	CAR 5 has been answered. 58.08 ha have been planted in San Jose.
Additional RCM Response and Date	Jan 22th, 2025. Developer included in the section 3.3 of the MR a description of the compliance legibility criteria cited in the 3.6.17 section of the Standard 4.7.
CAR 2	July 10th, 2024. There are differences between the VCU's declared in Table 4. VCU's requested by campo Forestal by vintage of the monitoring report in compare than "C stocks 26032024_protegido.xlsx" sheet: Ex post accurate. The developer must define the real VCU´s estimate and to assure the concordance in xlsx file and monitoring report document.
Section of Protocol/ Methodology or Program Document	VCS-Monitoring-Report-Template-v4.4. Section 5.

Project Developer Response and Date	5/08/2024 For some reason, the "C stocks 26032024_protegido.xlsx" sheet: Ex post accurate does not have the correct figures. The latest version of this calculations are provided: "C stocks 03082024_protegido.xlsx", which coincides with the Monitoring Report
RCM response and Date	October 14th, 2024. Pending to close until solve areas and quantification file (CAR 4, CAR 5, CAR 6)
Additional Project Developer Response and Date	CAR 4 to CAR 6 have been answered. Expost spreadsheet has been updated accordingly
Additional RCM Response and Date	January 22th, 2025. The developer updated the Table 4 VCU´s of the MR according the Ex post estimations.
CAR 3	July 10th, 2024. The monitoring report has same information from de PD, particularly in APPENDIX 3: RELEVANT OUTCOMES FROM INTERESTED PARTY CONSULTATION AND MECHANISMS FOR ON GOING COMMUNICATION. Then, the developer must describe just activities made it during the present Monitoring period November 26, 2020 to December, 31th, 2023 and delete others.
Section of Protocol/ Methodology or Program Document	VCS-Monitoring-Report-Template-v4.4. Section Appendix and 2.
Project Developer Response and Date	05/08/2024 Annex 3 has been deleted and the information related to stakeholders is kept in section 2.
RCM response and Date	October 14th, 2024. The appendix 3 has been deleted in the monitoring report.
Additional Project Developer Response and Date	Jan 22th, 2025. The developer fixed the Monitoring Report deleting the APPENDIX 3.
CAR 4	November 4th, 2024. The developer is requested to review the planting year label for plot 129 (Eucalyptus pellita) of the BD (file C stocks 03082024_protegido.xls) since it is dated 2015 and this year falls outside the project period and monitoring period. In any case, he must correct it and perform his calculations again.
Section of Protocol/	file C stocks 03082024_protegido.xls

Methodology or Program Document	
Project Developer Response and Date	Ok, plot 129 has been removed from the database and calculations have been updated accordingly. Please refer to spreadsheet: "C stocks 29112024.xls/x". Other plots were revised and everything fits perfectly between plots and land use shapefiles and carbon stocks calculations.
RCM response and Date	January 23th, 2025. The developer updated the C Socks.xls file and analysis deleting the plot number 129.
CAR 5	November 4th, 2024. According to the information provided by the CUMARE forestry technical team during the site visit and the verification of areas during the site visit, the new instances total is 92.92 ha, so the MR must be adjusted to this last value, providing the cartographic file (shp. or kmz) of these new surfaces.
Section of Protocol/ Methodology or Program Document	Site visit
Project Developer Response and Date	The new areas included in the project (not contemplated in the first verification) totalize in 92.27 ha: refer to shapefile provided in "newareas-ver2.zip".
RCM response and Date	January 23th, 2025. The developer updated in the monitoring report the new instances sufaces and provided the cartographic files.
CAR 6	November 4th, 2024. After reviewing the areas and verifying the plots during the site visit, there are areas from the initial validation that were harvested and replanted during the Monitoring Period. For this reason, a detailed report containing the scenario analysis must be submitted, (1) demonstrating that the stock estimates are more CONSERVATIVE by averaging the affected plots (0 tCO₂e/ha), in their previous stratum, or (2) creating a stratum without stocks. For both scenarios, evaluate the uncertainty with the available plots for each affected stratum.
Section of Protocol/ Methodology or Program Document	Site visit
Project Developer Response and Date	The plots which were harvested were left as 0. By averaging this plots as 0 in their previous stratum, it is demonstrated that the total C stock is 1,376,557 while, if this plots are not considered the total stocks would be 1,391,862 t CO ₂ . This way, it is demonstrated that averaging plots with 0 is a more conservative approach. Please

	refer to spreadsheets: "C stocks 29112024.xlsx" and "C stocks 29112024_sin parcelas 0"
RCM response and Date	January 23th, 2025. The developer updated the monitoring and spreadsheet estimations using the zero carbon stocks being more conservative approach the removals. Feb 28, 2025: Why does the surface area of E. Pellita 2019 not change from 539 in the scenario without Zero Plots?
Additional Project Developer Response and Date	05/03/2025: Plot 485 is reported as 0 since the field inventory team did not find it during the measurement session. The polygon where it is reported has not been harvested or affected by ants. The conclusion presented in the first round remains: "it is demonstrated that averaging plots with 0 is amore conservative approach".
Additional RCM Response and Date	March 14, 2025: Considering that plot 485 reports a zero inventory, the VVB confirmed that both assumptions in the scenarios presented resulted in the average with plots at zero being a more conservative approach.
CAR 7	November 4th, 2024. The developer must clarify with VERRA why in the public version of the "Project Description" hosted on the program's web portal there are 5,424 ha validated and in the Validation and Verification Report they record 5,526.6 ha, so this response will be necessary to continue with the analysis of the project's removals and update the Monitoring Report.
Section of Protocol/ Methodology or Program Document	VCS MR 2532 08082024.pdf
Project Developer Response and Date	There wouldnt be necessary to communicate to Verra: 5,424ha is from an outdated report. The final PDMR submitted to Verra and publicly available shows a planted area of 5,526 ha (we are also providing the "final_primeraverificacion_5526ha.zip") and an inventoried area of 5,288 ha (we also provide "areamonitoreada_primeraver-5288ha.zip") included in the first monitoring event. Please refer to provided shapefiles and Verra website: https://registry.verra.org/app/projectDetail/VCS/2532

RCM response and Date	<i>Janaury 23th, 2025.</i> The verification team verified that the Monitoring report, cartographic data of the MR and data analysis was aligned with the same surface information registred in the VERRA website in 5,526.60 ha.
CAR 8	November 4th, 2024. The Developer must clarify or update with VERRA the cartographic file (shp. or kmz.) of the planted/reforested area of the project since the registry web portal only contains the cartographic file of the property area and this last polygon includes roads, palm groves, infrastructure, etc. At the same time, the developer must ensure that the project area exactly matches the area initially validated and verified.
Section of Protocol/ Methodology or Program Document	VCS MR 2532 08082024.pdf and areas
Project Developer Response and Date	Refer to CAR 7 for area initially validated and verified. New instances have been included now as well as replanted areas. The total area for this verification totalizes in 5,700 ha. We will communicate to Verra about the exact project area, because at the moment the public registry does only have a kml with the total boundares of the farm and not the net area
RCM response and Date	<i>Janaury 23th, 2025.</i> The verification team verified that the Monitoring report, cartographic data of the MR and data analysis was aligned with the same surface information registred in the VERRA website in 5,526.60 ha.
CAR 9	November 4th, 2024. The MR describes an adjustment in the boundaries of the stands causing an increase in the surface that was initially validated. This change cannot be accepted since it is not within the scope of the service and a first validation report of eligible areas has already been issued, therefore only new instances that were verified can be added.
Section of Protocol/ Methodology or Program Document	VCS MR 2532 08082024.pdf
Project Developer Response and Date	Cartography adjustments have been left aside. The project area has been updated to 5,700 ha including 92 ha of new plantations in San José and El Porvenir, 29 ha which were left out of previous verification because they were damaged and the rest 53 ha correspond to replanted areas.
RCM response and Date	January 23th, 2025. The developer remained using the surface (data and cartographic information) 5,526.60 ha such as the validation report and Project Document describes.

CAR 10	November 4th, 2024. Since the project considers timber harvest, the developer is requested to include the Long-Term-Average estimate (the Excel spreadsheet) as described in Standard v4.7, Projects with harvesting activities shall calculate the long-term average for the area of each stratum and cover the entire project area.
Section of Protocol/ Methodology or Program Document	Site visit
Project Developer Response and Date	The LTA has been updated with the correct area values and is now available under the file "Carbon stocks - ex ante LTA_2da verificacion.xlsx"
RCM response and Date	January 23th, 2025. The developer provided the LTA analysis in the "Carbon stocks - ex ante LTA_2da verificacion.xlsx" file.
CAR 11	November 4th, 2024. Due to the (non-commercial) timber harvesting in project areas during the Monitoring Period, you must comply with the provisions of section 3.2.30 of Standard v4.7, which states: Where ARR or IFM projects include harvesting, the loss of carbon due to harvesting shall be Project included in the quantification of project emissions. Therefore, you must include this quantification in the Excel spreadsheet.
Section of Protocol/ Methodology or Program Document	Site visit
Project Developer Response and Date	The method to estimate carbon removals is based on the IPCC approach "stock-change method". Differently from the "gain-loss" method in whcih emissions are part of the calculation, the method used does only refers to carbon stocks in two points in time. In other words, the emissions are already accounted for in the forest growth models, inventories and LTA estimationsin the project.
RCM response and Date	Juanyary 22th, 2025. The developer includes the zero biomass (by loss event) permanent plots for each stata to assess the removals being a conservative approach. However, in the monitoring report must include the description that this "Loss" is less than five percent accomplishing the definition of the " Loss event " described in the "VCS Program Definitios".
Additional Project Developer Response and Date	As per the VCS Program definitions, "loss" refers to events that affects carbon stocks in pools included in the project boundary and that are expected to be sequestrated and/or maintained under the project scenario. Examples include illegal logging, tillage, and fuelwood collection. The zero carbon ((or biomass) plots included as part of the forest inventory is not a loss event. It is part of the managment plan including harvesting of mature trees.

Additional RCM Response and Date	March 1st, 2025: The VVB confirmed that carbon stock losses from harvesting during the monitoring period do not reflect a loss event. However, section 3.1 of the MR does not report this carbon stock loss event. Even though the harvest carried out is not classified as a loss event or a reversal, the template indicates that it must be reported. The justification for CAR6 was also not identified in the MR.
Additional Project Developer Response and Date	5/3/2025 Section 3.1 has been improved
Additional RCM Response and Date	March 14, 2025: The VVB confirmed the update to section 3.1, which notes the use carried out as part of the management plan and that carbon losses resulting from this do not represent a loss event.
CAR 12	November 4th, 2024. During the site visit, a total of 29 plots were verified and when statistically evaluating the volume against the project measurement, it was not possible to obtain conclusions about the T-student test, for this reason the developer is requested to grow the data to September 23, 2024 using information from growth models or other methods that he proposes, he must also document the procedure and deliver it in an attached word document and excel database. (See Sheet SV Plots)
Section of Protocol/ Methodology or Program Document	Site visit
Project Developer Response and Date	To answer this, the following procedure was conducted: 1)measurements taken in different years were filtered by planting year. The average measurement per year was calculated for diameter and height. 2) Generation of DAP and Ht curves: Using the parameter averages, scatter plots were created for each planting year evaluated. A logarithmic regression line was then generated to obtain the model. 3) Data projection: The data was projected 8.5 months, corresponding approximately to the time difference between the measurement dates of the submitted data and the audit measurement. The obtained model was then applied to estimate DAP and Ht values. 4) Adjustment of 2023 measured data: Finally, the difference between the estimated value and the previous year's average was calculated. This value represents the increment to be added to the data of the 29 audited plots. The corresponding analyses can be found in the Excel file titled "Proyección parcelas 2023 - Ruby Canyon" .
RCM response and Date	Jan 22th, 2025. This CAR will stay open until receive and analyze the file cited in ADR 13.

Additional Project Developer Response and Date	28/01/2025 Document attached
Additional RCM Response and Date	Feb 27, 2025 The file provided estimates the projected diameter and height for 12 plots. Please provide the projected volume for the 29 plots.
Additional Project Developer Response and Date	05/03/2025: We are attaching the calculations of the projections for the plots visited in the field. These were made based on the plot image sent by Angelica during the meeting on 03/04/2025. One point to clarify: the list provided includes 28 plots
Additional RCM Response and Date	March 14, 2025: The VVB received the projected plots on the requested date and re-evaluated the t-test; conclusive results were obtained from the analysis.
CAR 13	November 4th, 2024. a) During the interviews with beneficiaries of the small producers program, it was detected that the support received by the community was only for follow-up and monitoring, so the developer is requested to describe in the MR only the activities that were executed during the reported monitoring period. b) Likewise, for school support, only the activities that were executed during the reported monitoring period must be described in the MR. c) For both cases, an annex with photographic evidence of the execution of said social safeguards is also requested.
Section of Protocol/ Methodology or Program Document	Site visit and VCS MR 2532 08082024.pdf
Project Developer Response and Date	Answers to each of this points are provided in document "CAR 13 Ingles.pdf"; "ESTRATEGIA SOCIAL CF-2024.pdf" and "Evidencia Fotográfica.pdf". Information has also been included in MR
RCM response and Date	January 22th, 2025. The developer fied the monitoring report using the information rarried out in 2021, 2022 and 2023, also it was provided the documents (CAR 13 ingles.pdf) and evidences (Evidencia fotografica.pdf) that support this activities.

CAR 14	March 1st, 2025: In sections 2.2 Risks to Stakeholders and the Environment and 2.3 Respect for Human Rights, in the points where risks from subsections 2.2.2 and 2.3.1 are not identified, no justification is presented to support their nonexistence. On the other hand, in sections 2.3 Respect for Human Rights and 2.4 Ecosystem Health, subsections 2.3.2, 2.3.4, 2.3.5, 2.4 and 2.4.1 are described as Not applicable due to having been validated with the previous version of the standard; however, no section of the standard is cited that states that it is not applicable. According to the specifications of the v4.7 standard (appendix 3) and the summary of updates and effective dates published in April 2024; it is an applicable requirement to provide justification and support for each of the cited sections.
Section of Protocol/ Methodology or Program Document	Section 3.18 from VCS standard v4.7, 2.3 from MR template
Project Developer Response and Date	06/03/2025: Section 2.2.2 and 2.3.1 has been improved. Also sections 2.3 Respect for Human Rights and 2.4 Ecosystem Health
RCM response and Date	March 14, 2025: The VVB confirmed the update of section 2.2 of the MR, including justifications for each of the identified risks in the reporting template.
CAR 15	March 1st ,2025: For Grouped Projects, the Section 3.3 of MR describes compliance with conditions 1, 2, 4, 5, and 7 described in version 4.7 of the standard; however, compliance with conditions 3, 6, and 8 of section 3.6.17 Inclusion of New Project Activity Instances is not described.
Section of Protocol/ Methodology or Program Document	Section 3.6.17 from VCS standard v4.7
Project Developer Response and Date	06/03/2025: Section 3.3 has been improved
RCM response and Date	March 14, 2025: The VVB confirmed the update of Section 3.3 of the MR. The updated report presents a description of compliance with Sections 3, 6, and 8 of the new instances.

CAR 16	March 1st, 2025: According to section 3.15.16 of the standard, the calculation of buffer credits should be based on the result of the NPRT; the buffer pool was calculated at 10%, and the result of the NPRT was 12%. The estimates must be updated based on the requirements of the standard.
Section of Protocol/ Methodology or Program Document	Section 3.15.16 from VCS standard v4.7, Section 3.8 from VCS Methodology Requirements v4.4, NPRT v4.2
Project Developer Response and Date	06/03/2025 Ok, corrected in ERR calculations and MR
RCM response and Date	March 14, 2025: The VVB confirmed the update of the buffer pool with the 12% result of the NPRT in the MR and in the project database.
NMF 1	July 10th, 2024. Please change Pinus caribea by Pinus caribaea in the monitoring report document.
Section of Protocol/ Methodology or Program Document	MR 2532 08082024.pdf
Project Developer Response and Date	05/08/2024 Every "caribea" has been changed to "caribaea".
RCM response and Date	October 21th, 2024. The developer replaced the name of pinus by the correct.
NMF 2	July 10th, 2024. Please add (in table content) of the MR the Main chapters titles such as: Project Details, Safeguards and Stakeholder engagement, Implement Status, Data and Parameters, Quantification of GHG emission reductions and removals and Appendixes.
Section of Protocol/ Methodology or Program Document	MR 2532 08082024.pdf

Project Developer Response and Date	05/08/2024 Table content seems to be broken and it couldnt be fixed for this delivery. But it will be amended asap.
RCM response and Date	October 21th, 2024. Pending to solve
Additional Project Developer Response and Date	Ok, this has been fixed now. Evidence provided: VCS MR 2532 13112024.docx
Additional RCM Response and Date	January 22, 2025. The developer fixed the main table of the monitoring report writing the correct headed such as: Project Details, Safeguards and Stakeholder engagement, Implement Status, Data and Parameters, Quantification of GHG emission reductions and removals and Appendixes.
NMF 3	July 10th, 2024. The MR describes in section 3.1 (Planning and Soil preparation) silvicultural treatments in 123.5 ha, however the real new plantation area according to the same MR in summary text is 58.13 ha. For this reason, please adjust the redaction in entire document.
Section of Protocol/ Methodology or Program Document	MR 2532 08082024.pdf
Project Developer Response and Date	05/08/2024 There is an error in the MR, but the correct number is not 58,13. After the first monitoring event, new area in El Porvenir was also planted, along with San José. The correct values per farm, species and planted year are in a new table provided in section 3.1
RCM response and Date	October 21th, 2024. Pending to close until solve CAR 5.
Additional Project Developer Response and Date	Table provided in chapter 3.1 has been modified according to updated project area. Refer to CAR 5 for shapefiles. Updated PD: "VCS MR 2532 13112024.docx"
Additional RCM Response and Date	January 22, 2025. The developer wrote along the monitoring report the correct surfaces quantity such as new plantations and silvicultural treatment area.
NMF 4	July 10th, 2024. The first paragraph in subsection 4.1 has a error: ¡Error! No se encuentra el origen de referencia. Please adjust this mistake in document.

Section of Protocol/ Methodology or Program Document	MR 2532 08082024.pdf
Project Developer Response and Date	05/08/2024 Ok, corrected.
RCM response and Date	October 21th, 2024. The developer has done the change in the Monitoring Report.
NMF 5	January 22th, 2025. The result between the area in the Validation Report/Document Project 5,526.6 ha and the total area planted at the end of the Monitoring Period 5,700.11 ha is 173.51 ha, therefore, uses the decimal quantity along the Monitoring Report.
Section of Protocol/ Methodology or Program Document	MR 2532 13112024
Project Developer Response and Date	29/01/2025 - ok, corrected
RCM response and Date	March 1st, 2025. The VVB confirmed the updates in the MR.
ADR 1	July 10th, 2024. Referring to areas. The developer must send in separate files shapefile the following: a) area initially verified 5,526.6 ha; b) New area (adjusted) 5,591.97 ha and c) New instances planted in 2022-2023 San Jose Plantations 58.13 ha.
Section of Protocol/ Methodology or Program Document	VM0047 ARR Methodology
Project Developer Response and Date	08/08/2024 The information has been provided in the PD and also as supplementary information in folders.

RCM response and Date	November 4th, 2024. Please provide the shape file according the same area than initial verification statement and according to the CAR 7 and CAR 8.
Additional Project Developer Response and Date	1) Area initially verified: 5,526 ha ; b) New area (updated): 5,700 ha ; c) New instances planted in San Jose and El Porvenir: 92.27 ha . Shapefiles are provided for each of these areas
Additional RCM Response and Date	January 22th, 2025. The Developer provided the shapefile named: "Newareas-ver2.shp" (recalc 92.3868 ha), "final_primeraverificacion.shp" (recalc 5,526.3363 ha), "final.segundaverificacion.shp" (recalc 5,700.067 ha).
ADR 2	July 10th, 2024. Referring to the Permanent Plots Shapefile. The developer must send only permanent plots inside the plantations area to be verified in the current monitoring report (5,650.1 ha), also please add UTM X and Y coordinate to each one plot in the attribute table.
Section of Protocol/ Methodology or Program Document	VM0047 ARR Methodology
Project Developer Response and Date	To be provided.
RCM response and Date	November 4th, 2024. Pending to close
Additional Project Developer Response and Date	Location of plots inside the project area is provided. Please refer to shp: "parcelas_vcs.zip". X and Y coordnates are included in the attributes table of the shp
Additional RCM Response and Date	January 22th, 2025. The Developer provided the shapefile named: "parcelas_vcs.shp" and has the "X" and "Y" coordinates for each permant plot.
ADR 3	July 10th, 2024. Provide on-site measurement database used to obtain the new allometric equation cited in the 3.2.2 section of th MR (Project Description Deviation) and also the document who describes the analisis and fix math results.
Section of Protocol/ Methodology or Program Document	VM0047 ARR Methodology

Project Developer Response and Date	05/08/2024 The documents that describes the analysis are provided. Note: this allometric equations have been checked by another members of Tüv Süd during the verification of another Cumare's carbon project.
RCM response and Date	November 4th, 2024. Data base provided during site visit. Thank you.
ADR 4	July 10th, 2024. Please, provide a copy of the FSC Certification cited in the Monitoring Report.
Section of Protocol/ Methodology or Program Document	VM0047 ARR Methodology
Project Developer Response and Date	05/08/2024 The information is provided, together with links to FSC database.
RCM response and Date	November 4th, 2024. FSC certification provided, thank you.
ADR 5	July 10th, 2024. Please, provide the document: "Resultados de Ajuste de funciones de volumen general para plantaciones forestales del género Eucalyptus ubicadas en predios de Reforestadora Cumare"
Section of Protocol/ Methodology or Program Document	VM0047 ARR Methodology
Project Developer Response and Date	05/08/2024 Attached as part of the responses to ADR 3
RCM response and Date	November 4th, 2024. Document received. Thank you.
ADR 6	July 11th, 2024. NPRT - Internal Risk. - Project Management Q1: The notes section describe that the forest management plan is constantly being updated; however, no evidence of the management plan is presented; please provide the corresponding document. Q2: For points (a) - (e), please describe how each of these risks are zero; likewise, please support with supplementary information in each point that it is considered necessary.

	Q3: Within the NPRT notes Climit's profile and Agustin Inthamoussu CVs are cited, please provide the evidence in a folder as supplementary information.
Section of Protocol/ Methodology or Program Document	AFOLU Non-Permanence Risk Tool v4.2 - Internal Risks section
Project Developer Response and Date	There seem to be an administrative error, because all what is being asked is part of the attachments to the NPR in the project Hub. We are sending all the material through email now.
RCM response and Date	November 4th, 2024. Document received. Thank you.
ADR 7	July 11th, 2024. NPRT - Internal Risk. - Financial Viability Q1 – 3: For questions 1 and 2, please provide the financial analysis reflecting the assumptions selected and described in the NPRT. Also, please submit some evidence to support the applicability of the mitigation described in question 3.
Section of Protocol/ Methodology or Program Document	AFOLU Non-Permanence Risk Tool v4.2 - Internal Risks section
Project Developer Response and Date	See comment in ADR 6
RCM response and Date	November 4th, 2024. Document received. Thank you.
ADR 8	July 11th, 2024. NPRT - Internal Risk. - Opportunity Cost Q2: The NPRT notes describes that the NPV of project activities is over 100% more profitable than cattle activities (alternative); however, the opportunity cost analysis that supports the justification of the elected category is not presented. Please provide the opportunity cost analysis with comparative profitability of each alternative scenario and the project viability, covering the requirements described in section 2.2.3 of the AFOLU Non-Permanence Risk Tool v4.2 Q3: Please describe if the project has had positive impacts on the community or not. Submit evidence as supplementary information as appropriate.
Section of Protocol/ Methodology or	AFOLU Non-Permanence Risk Tool v4.2 - Internal Risks section

Program Document	
Project Developer Response and Date	See comment in ADR 6
RCM response and Date	November 4th, 2024. Document received. Thank you.
ADR 9	July 11th, 2024. NPRT - Internal Risk. - Project Longevity Q2 - 6: Please provide the necessary evidence to support each of the choices made in the project's longevity risk analysis, such as: management, financial and monitoring plan for the entire project longevity, certification of sustainable forest management under FSC or any additional document. Also, add the description (in NPRT notes) that justify each one of the selected options in this section.
Section of Protocol/ Methodology or Program Document	AFOLU Non-Permanence Risk Tool v4.2 - Internal Risks section
Project Developer Response and Date	See comment in ADR 6
RCM response and Date	November 4th, 2024. Document received. Thank you.
ADR 10	July 11th, 2024. NPRT - External Risk. - Land Tenure (Ownership) and Resource Access/Impacts Q1: Within the NPRT notes, chapter 4 of the FSC management plan is cited, also the notes describe that CUMARE is certified under the FSC standard, please submit this evidence as part of the NPRT supplementary information. Q2 - 6: The answers are based on the legal ownership of the project area by CUMARE, please add this evidence as part of the supplementary information. Q7: According to the NPRT, potential upstream impacts are demonstrated to be insignificant or effectively mitigated. However, the NPRT notes describe that the criteria is not applicable to the project area, please justify the response of non-applicability to the project area and/or failing that, justify how the possible upstream impacts are insignificant or have been mitigated.
Section of Protocol/ Methodology or Program Document	AFOLU Non-Permanence Risk Tool v4.2 - External Risks section

Project Developer Response and Date	See comment in ADR 6
RCM response and Date	November 4th, 2024. Document received. Thank you.
ADR 11	July 11th, 2024. NPRT - Natural Risk. - Natural Risk Assessment a) Fire: For this risk, Section 7.6 "Fire Prevention Plan" of the Forest Management Plan is cited, please share this document as supplementary information. b) Pests and diseases: For this risk, a pest and disease monitoring and management plan is cited, please add it within the supplementary information. c) Extreme weather: For this risk, it is described that preventive measures are applied to reduce the risk of damage in the event of extreme weather conditions, activities such as: site selection, species selection, silvicultural practices, infrastructure maintenance, monitoring, among other activities; please add evidence of compliance with the implementation and/or planning of these activities. d) For each of the identified natural risk (fire, pests and diseases, extreme weather), submit a description and the evidence deemed necessary to ensure that the historical natural risk score is 1, based on the requirements described in section 2.4 of the AFOLU Non-Permanence Risk Tool v4.2 document
Section of Protocol/ Methodology or Program Document	AFOLU Non-Permanence Risk Tool v4.2 - Natural Risks section
Project Developer Response and Date	See comment in ADR 6
RCM response and Date	November 4th, 2024. Document received. Thank you.
ADR 12	July 11th, 2024. NPRT - Natural Risk. - Future Climatic Impact Within the NPRT notes, some reasons are described for the applicability of each possible impact; however, according to the AFOLU Non-Permanence Risk Tool v4.2 (Section 2.4.4): For CID categories that are expected to have a negative impact with a CID impact level of one, reference an external source(s) (e.g., peer-reviewed literature or a report published by a government agency) to justify the negative impact. For CID categories that do not apply to the project, provide a brief explanation (e.g., a few sentences) to justify why that category is irrelevant to the project activity. Please strengthen the justification for each indicator.
Section of Protocol/ Methodology or	AFOLU Non-Permanence Risk Tool v4.2 - Natural Risks section

Program Document	
Project Developer Response and Date	See comment in ADR 6
RCM response and Date	November 4th, 2024. Document received. Thank you.
ADR 13	Jan 22th, 2025. In order to have a conclusion about verified plots during the site visit, the developer must provide the Excel file titled "Proyección parcelas 2023 - Ruby Canyon" described in his answer CAR 12.
Section of Protocol/ Methodology or Program Document	
Project Developer Response and Date	28/01/2025. Document attached
RCM response and Date	March 14, 2025: The VVB received the document with the 29 projected plots.
CR 1	July 10th, 2024. Explain why the Monitoring Report describes in sub-section 4.3 Monitoring plan-methods and process that 5,581.82 ha are applicable for carbon credits in the project though the total planted are are 5,650.1 ha.
Section of Protocol/ Methodology or Program Document	MR 2532 08082024.pdf
Project Developer Response and Date	05/08/2024 This is because there are some strata that has not been monitored. As the trees were recently planted, there is no justification to measure them: P. caribaea (2023). E. pellita (2023), E. urograndis (2023). P. caribaea (2016) was not monitored neither.
RCM response and Date	November 4th, 2024. Thanks for explanation

CR 2	January 22th, 2025. Explain the reasons why the file "C sticks 29112024.xls" uses 247 permanent plot to assess removals and the shapefile entitled "parcelas_vcs.shp" has 330.
Section of Protocol/ Methodology or Program Document	
Project Developer Response and Date	29/01/2025 - ok, corrected. New shapefile is provided: "parcelas_vcs_rev.zip". The shp shows 252 plots. The difference is explained because the shp includes the 5 plots San José farm which are not considered in the Carbon estimations
RCM response and Date	March 1st, 2025. The VVB confirmed the new shapefile with 252 plots., included the five plots of San José.
CR 3	March 1st, 2025: From CAR 3. Section 1.12 of MR describe that "<i>And there are no activities implemented during the monitoring period, state as such</i>"; however, Table 1 lists actions carried out during the monitoring period and their contribution to SDG; likewise, CAR 13 provides information collected in 2021, 2022 and 2023. Why does section 1.12 of the MR describe that no activities were implemented during the monitoring period?
Section of Protocol/ Methodology or Program Document	Section 1.12 from MR template, 3.17 from VCS Standard v4.7
Project Developer Response and Date	06/03/2025: We took away the first part of section 1.12 which was confusing. The project has been implementing activities which are listed in table 1.
RCM response and Date	March 14, 2025: The VVB confirmed the update in section 1.12 of the MR.
CR 4	March 1st, 2025: About Stakeholder Engagement and Consultation. Section 2.1.4 describes that no grievance have been received; however, within section 2.1.2 it is described that complaints from residents are channeled through supervisors, who, together with the Operations Manager, manage responses or solutions as quickly as possible. Why is it then considered that no grievance have been received in the monitoring period?
Section of Protocol/	Section 2 from MR, Section 3.18.4 from VCS Standard v4.7

Methodology or Program Document	
Project Developer Response and Date	06/03/2025: The project proponent does have an open channel for communication in which stakeholders' comments are channeled through forest supervisors, who, together with the Operations Manager, manage responses or solutions as quickly as possible. Many queries and request have been received during this monitoring period but no complaints. A more detailed explanation is given in the supporting material to this round
RCM response and Date	March 14, 2025: VVB confirmed the update to section 2.1.4; it also confirmed the information contained in Annex CR4, which identifies the records of communications with stakeholders during the monitoring period.
CR 5	March 1st, 2025: Section 3.1 of the MR describes the constant use of fipronil as a pesticide for ant control; why was the use of fertilizers and pesticides not considered a risk within section 2 of the MR?
Section of Protocol/ Methodology or Program Document	Section 3.18 from VCS standard v4.7, 2 from MR template
Project Developer Response and Date	06/03/2025: Explained in section 2.2.2.
RCM response and Date	March 14, 2025: VVB confirmed the description of fipronil and the justification for why it is not a risk as a contaminant in section 2.2.2 of the MR.
CR 6	March 1st, 2025: In section 4.1 Data and Parameters Available at Validation, no comments were found regarding the change in the value applied to the parameter <i>Root-shoot ratio for species or group of species j</i> , from 0.2 to 0.3 (PD) to 0.22 to 0.43 (MR). What is the reason for the change in the parameter?
Section of Protocol/ Methodology or Program Document	Section 4.1 from MR

Project Developer Response and Date	06/03/2025: The R variable is a not a parameter to be monitored, that is why is falls under "parameters available at validation". But it is not a fixed parameter becuae it is estimated based on the above ground biomass (tdm/ha). So, during this monitoring period, the trees are larger and the parameter changed. We noticed an error in the PD, the range for R values on this monitoring period is not 0.22 to 0.43 but from 0.20 to 0.39. We modified the PD accordingly
RCM response and Date	March 14, 2025: The VVB confirmed the update of section 4.1 of the MR on the parameter Root-shoot ratio for species or group of species j
CR 7	March 1st, 2025: Section 4.3 of the MR describes that Table 2 includes the estimated and installed number of plots for the measurement of forest stands; however, this only reflects the surface area represented by each stratum. Why are the values of estimated plots and installed plots not included in the table? Also, the surfaces described in the strata E. pellita 2016 and E. urograndis 2019 are different from the surface area described in table 11 of the validated PD. What is the reason for these differences?
Section of Protocol/ Methodology or Program Document	Section 4.3 from MR
Project Developer Response and Date	06/03/2025: Section 4.3 of the PD has been improved with the inclusion of the number of plots per stratum. The difference with the validated PD/MR is the continous monitoring of the project and updates in the GIS.
RCM response and Date	March 14, 2025: The VVB confirmed that Table 2 was updated, including the number of plots installed in each of the project's strata. The VVB confirmed the areas listed in Table 2 with the shapefiles provided by the project.

APPENDIX B: DOCUMENTS REVIEWED

Document title	File name and format	Description
Monitoring Report	VCS MR 2532 07082025.pdf Last version: 29/07/2025	Monitoring report of the project
Database 1	Expost C stocks 07082025.xls	The file contains information about below-ground biomass, above-ground biomass, and soil organic carbon. Contains information on biomass, carbon estimation using inventory data and contains information about the project databases (ex-ante updates) and their respective carbon summary table.
Database 2	C stocks 29112024_sin parcelas 0.xls	The file contains the ex-post estimates by removing the plots from the inventory that resulted in zeros, to demonstrate that keeping the plots at zeros (harvested during MR) within the inventory (Database 1) results in more conservative values.
Database 3	003. Proyección parcelas 2023 - Ruby canyon.xls	The file contains the projection of the volume of the plots of the inventory verified, they were used to contrast the results in a t-test with the estimates calculated by the verification team in the site visit.
Database 4	Exante calculations 07082025.xls	The file contains the project's ex-ante estimates calculated for the second verified period.
Database 5	Instancia2_141_30ha_04082025.xls	The file contains information on the new surfaces included in the project.
Database 6	Datos cubicacion - ajuste modelos volumen.xls	The file contains information about the data used to adjust the volume model used in the project.
Database 7	Cashflow 15042024-202408081921562490	The file contains the project's cash flow information, as part of the NPRT supplemental information.
NPRT report	VCS_NPR_REP_(4).pdf	The file contains the result of the project evaluation with the Non-permanent Risk Tool.

GIS documentation	parcelas_vcs_rev.shp	The file contains the vector information of the project's forest inventory.
GIS documentation	FinalVerificacion2_5667ha_04082025.shp	The file contains the vector information of the polygons that are part of the project area. Surfaces from the first verification and new instances from the second verification are included.
GIS documentation	Final_PrimerVerificacion_5526ha.shp	The file contains the vector information of the polygons that are part of the project area. Only surfaces from the first verification are included.
GIS documentation	Instancia2_141_30ha_04082025.shp	The file contains the vector information of the polygons contained in the new instances of the project.
GIS documentation	Replantados_73ha.shp	The file contains the vector information that provides traceability to the stands harvested and replanted during the monitoring period, described in section 3.1 of the MR.
Additional information	ESTRATEGIA SOCIAL CF-2024.pdf	The file corresponds to the plan that defines the general guidelines of the Social Strategy of "Campo Forestal", to develop the forestry project in harmony with the political and social environment.
Additional information	Evidencia Fotográfica.pdf	The file contains photographic evidence of the actions that the proponent has implemented in favor of the neighboring populations of the project area.
Additional information	CAR 13 Ingles.pdf	The file contains information that supports part of the statements made in the monitoring report about the activities that have been carried out during the monitored period.
Additional information	cumare_cobertura-arborea_2000.png cumare_cobertura-arborea_2010.png elporvenir-2020a2023_IPCCsoils.png elporvenirI_sat2010.png elporvenirII_sat2010.png elporvenirIII_sat2010.png sanjose_IPCCsoils.png sanjose_sat2010.png	The files listed reflect the land use conditions that underpin the eligibility of the new instances.

Additional information	Metodologia de ajuste de funciones de volumen general Eucalyptus- Reforestadora Cumare.pdf	The file describes the methodology used for the adjustment of the allometric equation implemented in the monitoring period presented.
Additional information	Resultados de ajuste de funciones de volumen general Eucalyptus- Reforestadora Cumare.pdf	The file describes the methodology used for the adjustment of the allometric equation implemented in the monitoring period presented.
Additional information	PS2_FM evaluation report_FSC C131784_20230904_ES_Cumare_M2_2023.pdf	The file contains the information corresponding to the FSC Forest Management Audit.
Additional information	RSP_PS0_FM_Campo_Forestal__00xxxx_16_s_final.pdf	The file corresponds to the FSC certification audit report.
Additional information	REFORESTADORA CUMARE SAS marzo 2025.pdf	The file contains the Certificate of Existence and Legal Representation of REFORESTADORA CUMARE SAS
Additional information	CV Agustin Inthamoussu 06052024.pdf	The file contains Agustin Inthamoussu's CV as evidence of AFOLU's ability to develop projects
Additional information	CV Climit - inglés-202408081921562461.pdf	The file contains CLIMIT's CV as evidence of the agency's capacity in the development of AFOLU projects
Additional information	Forest Management Plan_CUMARE 2023-202408081921562489.pdf	The file contains the forest management plan implemented in the project area under FSC certification
Additional information	CR 5 ERAS - Etiquetas de campo.pdf	The file contains supplementary information on pesticide use in the forest management plan
Additional information	CR 5 Fipronil ALBATROSS (control hormiga).xls	The file contains information about Fipronil, used as a pesticide for ant control
Additional information	CR 4 RegistroComunicaciones2024.xls	The file contains the record of the communications that the proposer has had with local stakeholders during the reported monitoring period.
Additional information	01 CAR 4 Respuesta.doc	The archive contains the description of how consultations and feedback from local stakeholders are carried out, it contains condensed information from the archive CR 4

		RegistroComunicaciones2024.xls
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APPENDIX C: DATA AND PARAMETERS AVAILABLE FOR VALIDATION- VERIFICATION

Parameter	Value	Source of evidence	Details of validation/verification
BEF _{2,j}	1.15	Reference value of Biomass expansion factor for conversion of stem biomass to above-ground biomass for tree species or group of species j. CDM AR-TOOL14: Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities.	In concordance with the CDM AR-TOOL14 v4.2
CF _j	0.47	Reference value of Carbon fraction of tree biomass for species or group of species j. IPCC default value.	In concordance with IPCC Guidelines for National Greenhouse Gas Inventories.
CO ₂ -e	44/12	Reference value of mass ratio of CO ₂ /C. IPCC default value.	In concordance with IPCC Guidelines for National Greenhouse Gas Inventories.
D _j	0.48 to 0.53	Reference value of basic wood density for species or group of species j. MADR (2010) and Arango, B. et al (2001) and Giraldo, D. et al (2014) quoted by "Proyectos sectoriales de mitigación de GEI sector AFOLU (Proclima)".	In concordance with the source references: ProClima (2020). Directrices para la selección de ecuaciones, parámetros y datos para calcular las remociones de GEI de actividades forestales. Giraldo D. et al. (2014) Indirect estimation of wood density for selection of <i>Eucalyptus pellita</i> F. Muell. clones using pilodyn, Arango, B et al. (2001) Variación de la densidad básica de la madera de <i>Eucalyptus grandis</i> en arboles de siete años de edad.
R _j	0.20 to 0.39	Value for Root-shoot ratio for species or group of species j. CDM AR-TOOL14: Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities.	Value is in concordance with equation to R _j from CDM AR-TOOL14 v4.2.
SOC _{REF}	60	Reference value of SOC stock for mineral soils. AR-AM-TOOL-16-v1.1.0	Value is in concordance with Table 3 from AR-AM-TOOL-16-v1.1.0 for LAC soils in tropical wet regions.

f_{IN}	1	Reference value of Relative stock change factor for baseline input regime. AR-AM-TOOL-16-v1.1.0	Value is in concordance with Table 6 from AR-AM-TOOL-16-v1.1.0.
f_{MG}	0.97	Reference value of Relative stock change factor for baseline input regime. AR-AM-TOOL-16-v1.1.0	Value is in concordance with Table 6 from AR-AM-TOOL-16-v1.1.0.
f_{LU}	1	Reference value of Relative stock change factor for baseline input regime. AR-AM-TOOL-16-v1.1.0	Value is in concordance with Table 6 from AR-AM-TOOL-16-v1.1.0.
DF_{DW}	6%	Reference value of Conservative default factor expressing carbon stock in dead wood as a percentage of carbon stock in tree biomass. AR-AM-TOOL-12-v3.0	Value is in concordance with table 5 from AR-AM-TOOL-12-v3.0.
DF_{LT}	1%	Reference value of Conservative default factor expressing carbon stock in dead wood as a percentage of carbon stock in tree biomass. AR-AM-TOOL-12-v3.0	Value is in concordance with table 6 from AR-AM-TOOL-12-v3.0.

APPENDIX D: ABBREVIATIONS

ADR - Additional Documentation Request

AFOLU – Agriculture, Forestry, and Other Land Use

AGB – Above-ground biomass

ANAB - ANSI National Accreditation Board

BEF - Biomass Expansion Factors

BGB - Below-ground biomass

CAR - Corrective Action Requests

COI - Conflict of Interest

CR - Clarification Requests

DBH - Diameter at Breast Height

EMA - Entidad Mexicana de Acreditación

FAR - Forward Action Request

GHG - Greenhouse Gas

IPCC - Intergovernmental Panel on Climate Change

LOF - List of Findings

MR- Monitoring Report

NDCs - Nationally Determined Contributions

NMF - Non-Material Findings

NPRT – Non-Permanence Risk Tool

PDD – Project Description Document

PP – Project Proponent

PSRS - Proportional Stratified Random Sampling

RCE- Ruby Canyon Environmental

SOC - Soil Organic Carbon

SGD - Sustainable Development Goals

VCU - Verified Carbon Units