VERIFICATION REPORT

CO2BIO P2-2

PROJECT ID

BCR-CO-635-14-005

ASOCIACIÓN DE NORMALIZACIÓN Y CERTIFICACIÓN, S.A. DE C.V. |

A BUREAU VERITAS COMPANY

VERIFICATION REPORT PROJECT ID	
Project Title	*CO2Bio P2-2*
Project ID	*BCR-CO-635-14-005*
Project holder	*FUNDACIÓN CATARUBEN*
Grouped project	*Do not apply*
Version number and date of the Project Document to which this report applies	*Version 2.3 May 10, 2025.*
Applied methodology (ies)	*AFOLU Sector Methodological Document:* *BCR0002_Quantification of GHG Emission Reductions. REDD+ Projects, version 3.1, 15 September 2022 and BCR0004_Quantification of GHG emission reductions. Activities that avoid Land Use change in continental wetlands, version 2.0, May 23, 2022.*
Project location	*Colombia, region Orinoquía:* *Departamento Arauca: Arauca, Cravo Norte, Puerto Rondón y Tame.* *Departamento Casanare: Hato, Corozal, Paz de Ariporo, Orocué, Pore, San Luis de Palenque, Trinidad y Yopal.*
Project starting date	*15/01/2018*

Quantification period of GHG emissions reductions/removals	*15/01/2018 to 14/01/2038*
Monitoring period	*Second referring to the period 01/01/ 2022-31/12/2024*
Total amount of GHG emission reductions/removals claimed during the monitoring period.	*Total reductions: 503,516.00 t CO2e* *Annual average: 167,839 t CO2e/year*
Contribution to Sustainable Development Goals	*SDG 6: Water and Sanitation* *SDG 13: Climate Action* *SDG 15: Life of Terrestrial Ecosystems*
Special category, related to co-benefits	*Orchid*
Version and date of issuing	*Version 3.0-17/10/2025*
Work carried out by	*Chief Verifier: Excalibur Acosta Miranda* *Verifier: Nancy Adriana Barrera Gómez* *Independent Reviewer: Janai Monserrat Hernández*
Approved by	*Joel Miguel Ramirez*

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1 Executive summary

The primary objective of this project is to reduce CO_2 emissions through activities that minimize deforestation and the transformation of wetlands on 120 private properties located in the departments of Arauca and Casanare. To achieve this goal, comprehensive actions are being implemented that address land use change and promote sustainable practices in forest and wetland ecosystems. A notable benefit is the conservation of the plain's ecosystem in the Orinoquía region, thanks to contributions from Fundación Cataruben, which include environmental and social safeguards inherent to the project.

The project accreditation period is 20 years, and this document refers to the second verification period, covering the years 2022-2024 (specifically from January 1, 2022, to December 31, 2024). The verification was carried out on site, with a visit by the ANCE team to Fundación Cataruben's facilities and the sampled properties in Yopal, Colombia, from May 26 to 30, 2025. This project falls within the AFOLU sector and focuses on reducing greenhouse gas (GHG) emissions through REDD+ strategies and sustainable wetland management. To calculate the estimated GHG reductions, the methodologies established in the AFOLU Sector Methodology Document are applied:

- *BCR0004: Quantification of emission reductions and GHG removal. Activities that avoid land use change in Continental Wetlands. Version 2.0, Jun 23/2022 Version 2.0, Jun 23/2022 /VI/*
- *BCR0002: Quantification of GHG emission reductions in REDD+ projects. Version 3.1, Sep 15/2022/V/.*

Both methodologies are relevant, given that the 120 properties are owned by private investors within the established boundaries. The scope of verification under the BioCarbon Standard includes project boundaries, physical infrastructure, activities, and processes, as well as GHG types and the reporting period. GHG statements consider material side effects, the baseline, and the project scenario, as detailed in the Verification Plan (FOROVV-P01.26) /Annex 5/.

ANCE carried out a documentary verification during seven working days prior to the physical inspection of the project, based on an approach focused on risk analysis in relation to possible errors, omissions, or misrepresentations by the organization.

Activities related to the documentary verification included a sampling plan, risk analysis of the sampled sources, a verification plan, and the reproduction of emissions calculations considering emission factors, as well as the review of evidence associated with the scope of the project.

During the review of the information, ANCE identified five findings, all of which were considered corrective actions (CAR). Following the review of the documentation and clarifications provided by the project owner, all findings were closed in a clear and transparent manner.

2 Objective, scope and verification criteria

The main objective of the verification audit was to evaluate the controls related to the information system and data linked to the CO_2 emission reductions associated to the project. This assessment was carried out by reviewing the information submitted during the documentation and on-site activities, with the purpose of:

- *Confirming that the project, its activities, methods, and procedures, as described in the CO2Bio P2-2 Monitoring Report /II/ and its corresponding annexes, comply with the criteria established in section 3.1 of this report.*
- *Verify that the information related to the 120 project properties, as well as the application, calculation, and support mentioned in the BCR methodologies: BCR0002 and BCR0004, as well as the level of activities implemented during the 2022-2024 monitoring period, contribution of applicable SDGs, associated safeguards, environmental and socioeconomic aspects.*
- *Ensure that the information on reported GHG emission reductions consistently demonstrates the veracity of those reductions.*
- *Ensure that the Monitoring Plan, including its implementation, data collection, methods, frequency, and consistency with the applicable methodology and program requirements, is carried out properly.*

In accordance with normative references established in the BCR Standard, the audit criteria are as follows:

ISO STANDARDS:

- *ISO 14064-2:2019 /CXXX/*
- *ISO 14064-3:2019 /CXXXI/*

BCR PROGRAM:

- *BIOCARBON CERT. 2023. BCR STANDARD. Version 3.2. September 23, 2023 /LXXII/.*

- *BCR0002_Quantification of GHG Emission Reductions. REDD+ Projects, Version 3.1, Sep 15/2022 /V/.*
- *BCR0004_Quantification of GHG emission reductions. Activities that avoid Land Use change in continental wetlands Version 2.0, Jun 23/2022 /VI/.*
- *BIOCARBON CERT. 2025. Validation and Verification Manual. GHG Projects. Version 3.0. June 13, 2025 /CIX/.*
- *Standard Operating Procedures (SOP), Version 2.0 | May 26, 2025 /CXXXIII/.*
- *Identification of a baseline scenario and demonstration of additionality, Version 1.0 | July 25, 2025 /LXX/.*
- *Avoidance of double counting (ADC), Version 3.0 | April 7, 2025 /XCIV/.*
- *Sustainable Development Safeguards SDSs Tool, Version 2.0, June 2025, Annex A and the Excel /CXXXIV/.*
- *Tool to demonstrate compliance with the REDD+ safeguards, Version 1.1 | January 26, 2023 /CXXXV/.*
- *Conservative approach and uncertainty management, Version 1.0| July 23, 2025 /CXXXVI/.*
- *Permanence and risk management Version 2.0 | June 3, 2025 /LXXI/.*
- *Monitoring, Reporting and Verification (MRV), Version 2.0 | June 23, 2025 /LXXIII/.*

LEGAL REGULATIONS:

- *Law 2294 of 2023. Issuing the National Development Plan 2022-2026 /CXXIX/.*
- *Updated NDC, 2020 /C/.*
- *Resolution 1447 of 2018 /CXXX/.*
- *Decree 926 of 2017 /CVII/.*
- *Social and Environmental Safeguards for REDD+ in Colombia, 2018 /CXII/.*
- *Resolution 529/XCVIII/ of 2020 and Resolution 471 of 2020 /XCIX/*
- *Political Constitution, Law 388 of 1997 /C/*

The scope of the project verification complies with BCR Standard, Version 3.2, September 15, 2022 /LXXII/, and is based on the criteria of ISO 14064-2:2019(es) and the standards, procedures, methodologies, and methodological tools of the BioCarbon Standard.

3 Verification process

3.1 Level of assurance and materiality

The activities carried out by the Greenhouse Gas Project Statement Validation/Verification Body focused on verifying the Monitoring Report associated with the "CO2Bio P2-2" Project, elaborated by Fundación Cataruben.

This process was carried out under a reasonable level of assurance (≥95%) and a materiality of 5%, complying with the requirements established in ISO 14064-3:2019 and ISO 14065:2013, as well as with the provisions of the BCR Project Validation and Verification Manual, version

4.0, in section 22.4.1, which addresses the level of assurance and materiality. The scope and extent of the project were also considered regarding the co-benefits and indicators related to the Sustainable Development Goals (SDGs).

a) *The assurance level for the verification of the Greenhouse Gas Project shall not be less than 95%.*
b) *A materiality threshold of 5% is established.*
c) *The potential impact on the integrity of the credits issued is considered.*
d) *The principles of conservatism and transparency established by the BCR Standard are applied.*
e) *The values assessed for the Reduction Activity are consistent with national reports and, for the REDD+ Activity, with the National Forest Reference Level (NFRL).*
f) *The quantification of mitigation results, compared to the validated baseline, is carried out in accordance with the provisions of current national regulations and/or the methodology applied, as appropriate.*

According to the above, the revalidation of baseline and the verification process were ensured through the assessment of the documentation and the visit in situ, and it was verified that there were no discrepancies or significant errors that would affect the calculation of emission reductions, in the sense of overestimating the calculation data or errors of omission of information.

3.2 Validation and verification activities

3.2.1 Planning

The verification plan for the "CO2Bio-P2-2" project was executed in accordance with the scope of version 3.2 of the BCR Standard /LXXII/, and with the provisions of ISO 14064-3:2019 /. This plan covers the boundaries of the project, which focuses on reducing emissions through activities that decrease deforestation and the conversion of natural wetlands on 120 private properties. Activities, physical infrastructure, processes, conservation activities, GHG SSR, and the reporting period were considered.

In the case of GHG statements that include emission reductions or increases in GHG removals, material side effects, the baseline, and project scenarios are considered. The evidence collection plan (sampling), risk analysis, audit team, assurance level, materiality, criteria, and verification activities are also included.

The verification plan was sent before the site visit. This document explicitly includes the assignment of competent personnel to carry out the activities and the preparation of the verification plan, specifying roles and responsibilities, the duration of the verification activities, specific requirements, as well as the level of assurance and materiality. For further details, see Annex 5.

Table 1. Project Boundary.

PROJECT BOUNDARY					
Property ID	**Property name**	**Property area (ha)**	**Component**	**REDD_V2**	**HUM_V2**
CO2P2-2-0033	Candelaria Uno	884.64	Wetland	0.00	858.72
CO2P2-2-0091	El Cairo	173.50	REDD	128	0.00
CO2P2-2-0077	El Remache 1	1,848.34	REDD + Wetland	431	289.27
CO2P2-2-0031	La Candelaria	3,114.04	REDD + Wetland	422.4	1,996.39
CO2P2-2-0054	La Esperanza	388.85	REDD	318.7	0.00
CO2P2-2-0026	La Macolla	134.62	REDD	134.5	0.00
CO2P2-2-0022	La Palmita	254.13	REDD + Wetland	12.5	225.83
CO2P2-2-0006	Lote 6	1,375.01	REDD + Wetland	723.6	177.12
CO2P2-2-0018	Lote Dos (San Felipe 2)	10,040.73	REDD	814.3	0.00
CO2P2-2-0001	Lote Numero uno – La Esperanza	473.00	Wetland	0.00	434.70
CO2P2-2-0052	Villa Blanca	89.39	REDD	89.4	0.00
CO2P2-2-0035	Altagracia	1,073.06	REDD + Wetland	39.1	910.13
CO2P2-2-0121	Altamira	202.19	REDD	31.9	0.00
CO2P2-2-0116	Babilonia	54.41	REDD	18.5	0.00
CO2P2-2-0108	Banco Fresco	446.00	Wetland	0.00	405.03
CO2P2-2-0030	Buenavista	285.23	REDD	14.5	0.00
CO2P2-2-0111	Buenavista I	694.20	Wetland	0.00	624.59
CO2P2-2-0053	Buenos Aires	364.51	REDD	108.4	0.00
CO2P2-2-0082	Buenos Aires	733.09	REDD + Wetland	7.5	703.24
CO2P2-2-0086	Campo Hermoso	596.29	REDD + Wetland	2.1	588.75
CO2P2-2-0088	Campo Lindo	803.99	REDD	17.2	0.00
CO2P2-2-0080	Cartagena	269.37	REDD + Wetland	230.9	2.17
CO2P2-2-0021	El Algarrobo	820.09	REDD + Wetland	49.2	384.39
CO2P2-2-0125	El Amparo	481.26	REDD + Wetland	75.7	284.25
CO2P2-2-0083	El Baul de los recuerdos	119.99	REDD + Wetland	3.1	25.48
CO2P2-2-0110	El Brillante	839.75	REDD + Wetland	44.4	614.04
CO2P2-2-0098	El Canal Lote Uno	535.05	REDD + Wetland	5.2	459.24
CO2P2-2-0063	El Cebu	219.20	REDD + Wetland	6.7	168.56
CO2P2-2-0032	El Cielo	1,048.90	REDD + Wetland	8.5	530.47
CO2P2-2-0097	El Control	683.04	Wetland	0.00	622.47
CO2P2-2-0050	El Corozo	1,070.78	REDD + Wetland	108.0	472.28
CO2P2-2-0016	El Delirio	112.73	REDD + Wetland	3.6	48.23
CO2P2-2-0047	El Espejo	632.75	REDD + Wetland	1.9	542.72
CO2P2-2-0065	El Garcero	360.00	REDD	23.1	0.00
CO2P2-2-0066	El Garcero	272.59	REDD + Wetland	95	145.99
CO2P2-2-0029	El Guamo	338.72	REDD + Wetland	11	278.06
CO2P2-2-0045	El Milagro	843.65	REDD + Wetland	41.8	755.42
CO2P2-2-0049	El Morichal de los deseos	472.01	Wetland	0.00	439.44
CO2P2-2-0070	El Morrocoy	310.86	REDD + Wetland	47.8	139.61
CO2P2-2-0057	El Palmar	493.52	REDD + Wetland	9.9	270.12
CO2P2-2-0099	El Porvenir	353.18	REDD + Wetland	30.5	209.60

PROJECT BOUNDARY					
Property ID	**Property name**	**Property area (ha)**	**Component**	**REDD_V2**	**HUM_V2**
CO2P2-2-0076	El Rincon	757.37	REDD + Wetland	155.9	428.96
CO2P2-2-0081	El Sinai	266.58	REDD	194.9	0.00
CO2P2-2-0011	El Tirrigal	2,955.44	REDD + Wetland	364.8	1,247.46
CO2P2-2-0002	El Tranquero	1,026.55	Wetland	0.00	371.86
CO2P2-2-0004	Finca Altagracia	1,070.80	REDD + Wetland	8.0	740.54
CO2P2-2-0115	Finca Cuernavaca	977.3	REDD + Wetland	23.3	374.17
CO2P2-2-0036	Finca El Conuco	940.56	REDD + Wetland	32.8	441.98
CO2P2-2-0092	Finca El Ponque 2	1,069.25	REDD + Wetland	36.6	164.36
CO2P2-2-0093	Finca El Ponque 3	1,070.45	Wetland	0.00	406.92
CO2P2-2-0042	Finca El Torreño Dos	546.73	REDD + Wetland	221.2	225.84
CO2P2-2-0118	Finca La Arenosa 3	844.67	REDD + Wetland	347.3	302.70
CO2P2-2-0119	Finca La Arenosa Dos	843.03	REDD	285.4	0.00
CO2P2-2-0075	Finca La Bonanza	1,001.19	Wetland	0.00	173.73
CO2P2-2-0023	Finca La Costeña	559.00	Wetland	0.00	559.00
CO2P2-2-0013	Finca La Esperanza	611.03	REDD + Wetland	21.9	562.63
CO2P2-2-0101	Finca La Fuente de Oro	646.61	REDD + Wetland	53.3	238.39
CO2P2-2-0072	Finca La Ponderosa	640.01	Wetland	0.00	167.59
CO2P2-2-0095	Finca La Ponderosa	193.37	REDD + Wetland	93.4	51.99
CO2P2-2-0040	Finca Las Delicias	258.89	REDD + Wetland	23.9	181.00
CO2P2-2-0008	Finca Las Pampas	546.70	REDD	46.2	0.00
CO2P2-2-0010	Finca Los Corazones	1,014.48	REDD + Wetland	42.4	930.34
CO2P2-2-0048	Finca Los Paraguitos	316.30	REDD + Wetland	110.07	110.82
CO2P2-2-0024	Finca Los Pionios	1,041.05	REDD + Wetland	50.3	774.20
CO2P2-2-0007	Finca Palmar	1,012.35	REDD + Wetland	79.1	827.22
CO2P2-2-0112	Finca San Juan Lote	200.59	REDD + Wetland	10.6	166.12
CO2P2-2-0089	Finca Santa Ana	1,072.06	REDD + Wetland	1.4	894.77
CO2P2-2-0100	Finca Santa Barbara	240.50	REDD + Wetland	1.3	236.23
CO2P2-2-0106	Finca Santa Barbara	1,000.40	REDD	36.7	0.00
CO2P2-2-0094	Finca Santa Martha	251.32	REDD + Wetland	23.4	82.45
CO2P2-2-0096	Finca Suro Verde	534.92	REDD + Wetland	41.00	446.12
CO2P2-2-0046	Finca Vendeval	327.67	REDD	199.9	0.00
CO2P2-2-0079	Finca Vida Tranquila	671.51	Wetland	0.00	671.30
CO2P2-2-0087	Finca Villa Tania	1,040.37	REDD + Wetland	24.00	989.85
CO2P2-2-0120	Franfol	146.02	REDD	37.7	0.00
CO2P2-2-0060	Guaratal 2	30.00	Wetland	0.00	30.00
CO2P2-2-0003	Hacienda El Rosal	1,026.55	REDD + Wetland	6.00	617.95
CO2P2-2-0105	La Bendición	491.93	REDD + Wetland	28.3	442.11
CO2P2-2-0038	La Clandria	1,058.29	REDD + Wetland	9.1	287.55
CO2P2-2-0043	La Cascabel	421.64	Wetland	0.00	287.55
CO2P2-2-0113	La Cucaracha	100.70	Wetland	0.00	99.18
CO2P2-2-0058	La Esperanza	842.78	REDD + Wetland	26.5	601.61
CO2P2-2-0027	La Florida	912.90	REDD + Wetland	9.9	678.19
CO2P2-2-0090	La Gloria	119.86	REDD + Wetland	15.8	62.26
CO2P2-2-0059	La Honda I	100.00	Wetland	0.00	94.58
CO2P2-2-0012	La Libertad	845.78	REDD + Wetland	36.3	736.87
CO2P2-2-0017	La Magola	1,062.63	REDD + Wetland	1.2	902.02
CO2P2-2-0041	La Maporoza	64.97	REDD	33.4	0.00

PROJECT BOUNDARY					
Property ID	**Property name**	**Property area (ha)**	**Component**	**REDD_V2**	**HUM_V2**
CO2P2-2-0069	La Revancha	1,071.82	REDD + Wetland	27.3	817.10
CO2P2-2-0074	La Yubereña	1,949.68	REDD + Wetland	110.5	1,641.58
CO2P2-2-0068	Lagunitas	842.85	Wetland	0.00	822.22
CO2P2-2-0020	Las Brisas	355.84	REDD	13.7	0.00
CO2P2-2-0051	Las Brisas	842.84	REDD + Wetland	123.5	190.27
CO2P2-2-0073	Las Brisas	2,584.00	REDD + Wetland	415.6	857.00
CO2P2-2-0014	Las Escidullas	486.77	REDD + Wetland	1.6	411.17
CO2P2-2-0114	Las Garzas	63.06	REDD	12.6	0.00
CO2P2-2-0025	Las Pampas	1,011.76	REDD	240.5	0.00
CO2P2-2-0039	Los Arrecifes	627.89	REDD + Wetland	6.9	571.53
CO2P2-2-0061	Los Esfuerzos	3,120.04	REDD + Wetland	28.7	2,506.29
CO2P2-2-0102	Los Siete Diamantes	41.05	REDD	12.1	0.00
CO2P2-2-0062	Lote 1	88.00	WETLAND	0.00	36.87
CO2P2-2-0064	Lote 2	117.00	WETLAND	0.00	103.54
CO2P2-2-0056	Lote 2 Ana Maria	463.69	REDD + Wetland	2	246.04
CO2P2-2-0067	Lote La Mosca	861.26	REDD + Wetland	43.4	740.75
CO2P2-2-0034	Lote Número Tres el Paraíso	100.00	WETLAND	0.00	100.00
CO2P2-2-0019	Mata de Samuro	701.41	REDD	72.7	0.00
CO2P2-2-0044	Miralindo	471.17	REDD + Wetland	36.3	418.30
CO2P2-2-0009	Miramar	166.03	REDD	33	0.00
CO2P2-2-0104	Moscu	279.76	REDD + Wetland	8.4	233.01
CO2P2-2-0015	Naranjal	842.21	REDD + Wetland	6.5	821.35
CO2P2-2-0078	No se sabe	377.68	REDD + Wetland	98.8	226.25
CO2P2-2-0005	Panamá	4,677.33	REDD + Wetland	160.3	4,057.65
CO2P2-2-0085	Puerto lindo	94.54	REDD + Wetland	7.2	59.44
CO2P2-2-0107	San Benito	150.01	REDD + Wetland	2.5	146.44
CO2P2-2-0037	San Esteban	3,460.85	REDD + Wetland	1,835.1	793.07
CO2P2-2-0055	San José	123.87	REDD + Wetland	15.4	70.20
CO2P2-2-0103	San Juan 2	170.81	REDD + Wetland	3.7	141.07
CO2P2-2-0028	Santo domingo Florideño	674.48	REDD	33	0.00
CO2P2-2-0109	Villa Fernanda	249.99	REDD + Wetland	2.1	125.66
CO2P2-2-0071	Villa Martha	471.20	Wetland	0.00	408.22

Types of GHGs included in the GHG statement:

SINK	INCLUDED	CAB JUSTIFICATION
Soil organic carbon - SOC or Total soil carbon - CTS	Yes	Consistent with the IPCC framework /XCIV/, the carbon content in this reservoir is not only a significant pool but is also highly susceptible to alterations from land-use change and natural cover loss.
Aboveground biomass - BA		
Belowground biomass - BS		
Leaf litter	No	Following IPCC guidelines /XCIV/, this reservoir is not a significant carbon pool for the strata in question.

PROJECT BOUNDARY						
Property ID	***Property name***		***Property area (ha)***	***Component***	***REDD_V2***	***HUM_V2***
Carbon reservoirs and GHG sources	*Sources reservoirs*		*GHG gas*	*Included*	*CAB justification*	
	Revalidated Baseline	*Biomass Burning (Woody Biomass Combustion)*	*CO_2*	*No*	*The combustion of woody biomass is recorded as a reduction in carbon stocks for CO_2 accounting /XCIV/.*	
			CH_4	*No*	*The potential emissions are deemed immaterial for baseline accounting, as they constitute less than 5% of the total emission volume /XCV/.*	
			N_2O	*No*	*Emissions from post-deforestation land uses are omitted under a conservative accounting protocol /XCIV/.*	
		Emissions from livestock farming	*CO_2*	*No*	*GHG emissions from land-use activities undertaken on deforested lands are conservatively excluded from the accounting, the methodology omits GHG emissions associated with land uses on deforested areas /V/ and /VI/. The CH_4 emission should be included if the presence of fires is identified during the monitoring period.*	
			CH_4	*Yes*		
			N_2O	*No*		
	Project	*Biomass Burning*	*CO_2*	*No*	*Consistent with methodological guidelines IVI and /VI/, CO_2 emissions from combusted woody biomass are not counted as energy emissions; they are conservatively accounted for as carbon stock losses /XCV/.*	
			CH_4	*Yes*	*Emissions of CH_4 and N_2O were no included in this monitoring period as no fire events occurred in the Project Area (AP). The PD section 3.2.3.1, Table 14 and Table 15, stipulates that these emission sources will be incorporated in future periods should significant fire events leading to forest and wetlands loss take place. In such a case, the affected area will be quantified, and the resulting CO_2 and CH_4 emissions will be included in the project's emission calculations for that monitoring period /V/ and /VI/.*	
			N_2O			
		Alteration of the water regime	*CH_4*	*Yes*	*The PD section 3.2.3.1, Table 14, stipulates that these emission sources will be incorporated in future periods should significant fire events leading to forest and wetlands loss take place. In*	

PROJECT BOUNDARY					
Property ID	**Property name**	**Property area (ha)**	**Component**	**REDD_V2**	**HUM_V2**

		N2O		*such a case, the affected area will be quantified, and the resulting CO_2 and CH_4 emissions will be included in the project's emission calculations for that monitoring period /V/ and /VI/.*

		Value	CAB Justification
Emission Factors	***REDD+***		
	Carbon emission factor for total biomass	*CBFeq (tCO2e/ha) =563,91* *BT (t/ha) =327,22*	*In compliance with Resolution 1447 of 2018, the project applies the emission factor defined for the Orinoco biome for the 2018-2022 period, as part of the National Reference Emission Level (NREF) reconstruction, which itself utilizes IPCC default values.* *For the present monitoring period, the Monitoring Report (MR) maintains the application of these same emission factors. Furthermore, these values are consistent with and have been retained from the Project Design Document (PDD), Version 2.2, regarding the revalidation process for PDD Version 2.3.*
	Soil carbon emission factor	*COSeq (tCO2e /ha) = 11,83* *COS (tC/ha) = 64,51*	
	Wetlands		
	Carbon emission factor for total biomass in stratum i	*Herb. CTeq (tCO2e/ha) = 21,28* *Disp. CTeq (tCO2e/ha) = 151,63*	*In compliance with Resolution 1447 of 2018 /XCVI/, the project applies the emission factor defined for the Orinoco biome for the 2018-2022 period, as part of the National Reference Emission Level (NREF) reconstruction /XCII/, which itself utilizes IPCC default values.* *For the present monitoring period, the Monitoring Report (MR) /II/ maintains the application of these same emission factors. Furthermore, these values are consistent with and have been retained from the Project Design Document (PDD), Version 2.2 /XCVII/, regarding the revalidation process for PDD Version 2.3 /III/.*
	Soil carbon emission factor for stratum i	*Herb. COSeq (tCO2e /ha) = 20,32* *Disp. COSeq (tCO2e /ha) = 20,99*	

Data provenance for baseline scenario and GHG project baseline:	*The establishment of the baseline, which utilizes a multi-year historical average (2012-2018) and annual historical deforestation data for the Reference Region (2018-2012), conforms with the BCR Standard v3.2 /LXXII/and methodologies BCR 0002 (v3.1) /V/ and BCR 0004 (v2.0) /VI/.*

Regarding the quantification of greenhouse gas (GHG) emissions, Table 2 presents the level of assurance envisaged for the audit. This level was determined based on the data provided by the project owner and establishes the framework for evaluating the accuracy of the information to be used for the quantification of GHG emissions. In Annex 3, all the cross-check documents are listed, allowing for clear and organized identification of each of the materials used in the validation process. This listing facilitates consultation and access to the information, ensuring that all relevant documents are available for review and analysis.

Table 2. Sampling to achieve the level of assurance.

Activity	*Properties*	*Field Audit by Sampling*	*Sampling Percentage %*
Wetland plots (5 measurement clusters)	*6*	*2*	*95**
REDD+ plots (5 measurement clusters)	*7*	*2*	
REDD +-WETLAND plots (5 measurement clusters)	*15*	*7*	
GHG Project Document	*Not applicable*	*100*	*100*
Monitoring Report	*Not applicable*	*100*	*100*
Interviews conducted in the field with stake holders	*Not applicable*	*11*	*95**
Emission Factors	*Not applicable*	*100*	*100*
GHG reduction estimation	*Not applicable*	*100*	*100*
Baseline, Leakage and Emission Reductions	*Not applicable*	*100*	*100*
Support and Annexes for the implementation of BCR Tools and Criteria.	*Not applicable*	*100*	*100*
	Level of assurance		*98,57%*

**The calculations and methodologies used to derive these estimates are thoroughly detailed in Section 3.2.2 of this document. This section provides a comprehensive breakdown of the underlying formulas, assumptions, and data inputs, ensuring full transparency and reproducibility for the results presented here.*

A level of assurance of no less than 95% was established, and it was ensured that material discrepancies did not exceed 5%, thus guaranteeing the accuracy and reliability of the results obtained, as can be seen below in section 3.3 of this document, as established in section 3.1 of this document.

Additionally, the risks that could occur during the audit process were evaluated, which was considered in defining the sampling plan in its different phases. These risks could result in errors in the estimation of carbon calculation, as shown in Table 6, section 3.2.2 Sampling.

Regarding the duration of the verification activities, ANCE provided a schedule of activities detailing the duration of each one:

Table 3. Schedule of activities.

Activity	Responsible	Duration (days)
Elaboration of internal No COI Matrix	ANCE	2
Request for GHG declaration and supporting information.	ANCE	2
Submission of supporting information	Cataruben	2
Documentary verification	ANCE	7
Development of Risk Analysis/Evidence Gathering Plan (sampling)	ANCE	3
Preparation and Submission of Verification/Verification/Validation Plan	ANCE	3
On-site Verification/Validation and Submission of Findings Report	ANCE – Cataruben	5
Delivery of Findings Report	ANCE	21
Client's attention to findings	Cataruben	20
Analysis of findings attention by CAB	ANCE	11
Preparation and submission of Consolidated Findings Report	ANCE	17
Validation/Verification of Findings Report	Cataruben	4
Elaboration and sending of draft Statement/Opinion and V/V Report	ANCE	4
Approval of the draft by the Client	Cataruben	3
BioCarbon Standard technical review	BCR	N.D.
Signature and delivery of Verification Statement/Opinion and Verification Report (digital)	ANCE	N.D.

Conclusion: This section details the verification planning for the "CO2Bio-P2-2" project, conducted under the BCR v3.2 and ISO 14064-3:2019 standards. The plan covers the project boundary, which includes 120 properties and REDD+ and wetland conservation activities aimed at reducing emissions from deforestation.

The plan defines the baseline and project scenarios, the carbon reservoirs considered (such as biomass and soil), and the GHG sources included or excluded, with justifications for each case. It also establishes the applicable emission factors, the level of assurance (≥95%), and materiality (≤5%), supported by a detailed sampling plan for field activities and documentary review. Finally, a schedule outlining the phases, responsible parties, and duration of verification activities is included.

3.2.2 Sampling

The CO2Bio P2-2 Verification Plan, /Annex 5/, was executed in accordance with the BCR Version 3.25, and the provisions of ISO 14064-3 /CXXXI/. This covers the limits of the project

that focuses about the conservation of the ecosystem and multiple properties belonging to the AFOLU sector, focusing on reducing greenhouse gas (GHG) emissions through REDD++ strategies and actions centered on the conservation and sustainable management of wetlands; as well as the physical infrastructure, activities, technologies, and processes, Greenhouse Gas Emission Sources, types of Greenhouse Gases (GHG) and the reporting period, the Evidence Collection Plan (sampling), risk analysis, audit team, level of assurance, materiality, validation and verification criteria and activities.

In accordance with the limits established for the project/section 3.2.1, Table 1, the 120 properties that make up the project were identified and recorded, detailing for each one its name, total area (ha), and the classification stratum (3 strata: Wetland, REDD+, and Wetland-REDD+). To define the sample, 28 properties were selected, corresponding to those with the most representative areas, from which the percentage associated with each was determined. The specific determination of the sample was made based on document /IV/, which facilitated the selection of the type of sampling described below:

Total population (N)

The sample size determination process was based on the application of robust statistical methods to ensure sample representativeness in the context of greenhouse gas project verification. Conservative parameters aligned with international verification standards were established, using a confidence level of 95% corresponding to a Z-value of 1.96 in the standard normal distribution. The population proportion was set at 0.5, representing the most conservative scenario where 50% of verified values are expected to show discrepancies. The required precision was set at 30%, a parameter commonly used in environmental project site verifications.

Table 4. Statistical description analysis for strata.

Strata	*Media (ha)*	*Standard Deviation:*	*Variance*
REDD + Wetland (65 properties)	*1,057.86*	*1,128.67*	*1,273,892,67*
REDD+ (28 properties)	*570.32*	*1,756.94*	*3,086,835*
Wetland (27 properties)	*567.91*	*522,57*	*273,079.56*
120 properties	*884.64*	*1,487.23*	*2,211,853.27*

The sample size determination was performed by applying the finite population formula for proportions, specifically designed for contexts where the population size is known and limited. The formula incorporates the established parameters of confidence level, conservative proportion, and required precision, adjusted by the finite population correction factor. The calculation for the total population of 120 properties indicated that a sample size of 10 properties would be sufficient to meet the established 95/30 parameters. However, considering the need to ensure adequate representation of all strata and strengthen statistical robustness, it was decided to increase the sample size to 28 properties.

$$\frac{Z^2 N \times p(1-p)}{(N-1) \times e^2 \times p^2 + Z^2 p(1-p)}$$

Equation 1

Parameters:

- *Confidence level: 95% → Z = 1.96*
- *Conservative proportion: p = 0.5*
- *Sampling effort: e = 0,15*
- *Total population = 120 properties*

With all the data defined, we proceed to substitute them into Equation 1, resulting in the following:

$$n = \frac{120 \times (1.96^2)\ x\ 0.5\ x\ (1-95\%)}{(120-1)\ x\ (0.15)^2\ +\ (1.96)^2\ x\ 0.5\ x\ (1-0.5)} = 28$$

The population of 120 properties was classified into three clearly defined strata according to project type: REDD + Wetland (65 properties, 54.17%), REDD (28 properties, 23.33%), and Wetland (27 properties, 22.50%). The allocation of the 28 properties was performed through proportional allocation, ensuring that each stratum is represented in the sample in the same proportion as in the total population. This stratified sampling strategy ensures that the specific characteristics of each project type are adequately captured in the verification process, improving estimation accuracy and result validity.

Table 5. Total population (N).

Stratum	*Population*	*N*
REDD+ Wetland	*65*	*15*
REDD+	*28*	*7*
Wetland	*27*	*6*
TOTAL	*120*	*28*

The sample size of 28 properties constitutes a robust and statistically valid solution for the greenhouse gas project verification process. The applied methodology, based on solid statistical principles and conservative parameters, guarantees compliance with the established requirements of a 95% confidence level and 5% materiality. The proportional stratification ensures the representativeness of all project types in the portfolio, while the selected sample size adequately balances statistical rigor with operational efficiency. The implementation of this sampling strategy will provide a reliable basis for the verification and validation of reported emission reductions, meeting the quality and reliability standards required for carbon projects.

Sample size to be calculated

The methodology used to calculate the sample size is based on inferential statistics, specifically Cochran's formula (1997) adjusted for finite populations. This formula is widely used to estimate proportions in surveys or studies when the total population size is known. The type of sampling applied corresponds to simple random sampling.

The equation used comes from the CDM-EB67-A06-GUID Guidelines, version 4.0, entitled "Sampling and Surveys for CDM Project Activities and Program of Activities," which provide the necessary sample size. Cochran details the sampling techniques and associated practical terms in this document. The equation used is as follows:

$$n = \frac{Z^2 N \times p(1-p)}{(N-1) \times e^2 \times p^2 + Z^2 p(1-p)}$$

Equation 1

It was restructured according to our needs, adjusting it to Excel for a more accurate calculation, thus deriving the following equation:

$$n = \frac{Z^2 \times p(1-p)}{e^2} \div (1 + \frac{Z^2 N \times p(1-p)}{e^2 \times N})$$

Equation 2

Where:

Table 6. Parameters - CDM Guideline.

Description	*Variables*	*Values*
Confidence level	*Z*	*1.96*
Conservative proportion	*P*	*0.5*
Sampling effort	*e*	*0.1*
It is the size of the total population.	*N*	*28*
It is the sample size to be calculated.	*n*	*X*

The value of Z comes from the standard normal distribution and corresponds to the critical value associated with a 95% confidence level, as established by the BCR. This implies a 5% probability outside the confidence interval, distributed in two tails with 2.5% at each extreme, which corresponds to a value of ±1.96 in the normal distribution.

- *The value of p was determined in accordance with the requirements established by the BCR.*
- *The value of e represents the margin of error proposed by us, considering the size of our population. By taking only the most representative properties, the population*

was reduced to 28 properties. Due to this smaller population size, it is possible to tolerate a larger margin of error, as the sample size is more easily adjusted.

- *N represents the total population size.*

With all the data defined, we proceed to substitute them into Equation 2, resulting in the following:

$$n = \frac{1.96^2 \times 0.5\,(1-0.5)}{0.1^2} \div \left(1 + \frac{1.96^2 \times 28 \times 0.5\,(1-0.5)}{0.1^2 \times 28}\right) = 11$$

The result was a total of 11 properties, which were selected for sampling based on their specific characteristics, such as area and classification as Wetland or REDD+. The aim was to obtain a representative sample that would provide more accurate and reliable data on the project area.

Table 7. Population and Stratified Sample Composition.

Stratum	***Component***	***Properties in Population (N=28)***	***% Population***	***Properties in Sample (n=11)***	***% Sample***
1	*Wetland*	*6*	*21%*	*2*	*18%*
2	*REDD+*	*7*	*25%*	*3*	*27%*
3	*Wetland and REDD+*	*15*	*54%*	*6*	*55%*
Total		*28*	*100%*	*11*	*100%*

The sample distribution (2-2-7) maintains proportional representation of the strata identified in the base population (6-7-15), ensuring complete coverage of all project component typologies. Additionally, each of the 11 sampled properties points and 5 measurement clusters, allowing for the capture of internal plot variability, reduction of measurement error through multiple observation points, and obtaining more precise and stable estimates for each unit of analysis.

The parameter Z=1.96 used in Cochran's formula statistically guarantees a 95% confidence level for the sample estimates. Compliance with the threshold is verified through:

- *Application of the finite population correction factor (N=28)*
- *Proportional stratification that reduces the variance of the estimators*

- *Implementation of clusters that increase the precision of measurements*

The combination of these elements ensures that the effective margin of error remains within the established 5% limit.

Table 8. Site visit list.

No	Property name	Property area	Component	REDD_V2	HUM_V2
1	Candelaria Uno	884.64	Wetland	0.00	858.72
2	Lote Número Tres el Paraíso	100.00	WETLAND	0.00	100.00
3	El Remache 1	1,848.34	REDD + Wetland	431	289.27
4	La Candelaria	3,114.04	REDD + Wetland	422.4	1,996.39
5	La Palmita	254.13	REDD + Wetland	12.5	225.83
6	Lote 6	1,375.01	REDD + Wetland	723.6	177.12
7	Finca Villa Tania	1,040.37	REDD + Wetland	24.00	989.85
8	San Benito	150.01	REDD + Wetland	2.5	146.44
9	El Cairo	173.50	REDD	128	0.00
10	La Macolla	134.62	REDD	134.5	0.00
11	Lote Dos	10,040.73	REDD	814.3	0.00

The implemented sampling plan, consisting of 11 stratified properties evaluated through 5 clusters each, constitutes a methodologically sound and statistically valid basis for verification. The sampling design meets the requirements of confidence level ≥95% and materiality ≤5% established in BCR v3.2 and ISO 14064-3, providing a faithful representation of the project population for verification purposes.

The risks that could occur during the audit process were evaluated, and these were considered when defining the sampling plan in its different phases. These risks could result in errors in the estimation of the carbon calculation, as shown in Table 9.

Table 9. Risk assessment in the audit process.

Risks	Probability	Impact	Risk assessment	Risk management measure
Inherent Risks				
Extensive and difficult-to-access verification areas	HIGH	HIGH	HIGH	100% review of procedures for SSR calculation, cartographic information processing, emission/removal quantification methods, and land title verification.

Risks	*Probability*	*Impact*	*Risk assessment*	*Risk management measure*
Low participation of relevant actors	*HIGH*	*HIGH*	*MEDIUM*	*Conduct in-person and/or virtual interviews with as many beneficiaries and local authorities as possible.*
Complex data management systems	*LOW*	*MEDIUM*	*MEDIUM*	*Review 100% of the related evidence from spreadsheets and processes to build the GDB, including information from IDEAM on forest and non-forest areas.*
Control risk				
Errors in methodological interpretation	*HIGH*	*HIGH*	*LOW*	*Review 100% of the processes for incorporating validation/verification criteria. Consult the BCR standard in case of doubts or deviations.*
Lack of knowledge among project team members	*HIGH*	*HIGH*	*LOW*	*Submit supporting documentation proving that personnel are qualified in accordance with ISO 14066, ISO 14065, and IAF MD 6.*
Insufficient information on land use rights	*HIGH*	*HIGH*	*LOW*	*Review all supporting documentation for the cadastral update process carried out by the Fundación Cataruben.*
Insufficient information on contribution to SDGs	*HIGH*	*HIGH*	*HIGH*	*Verify alignment of SDGs with targets and indicators associated with the scope of the project.*

Risks	Probability	Impact	Risk assessment	Risk management measure
Insufficient information on compliance with REDD+	HIGH	HIGH	HIGH	Verify that activities comply with the national interpretation of safeguards for Colombia.
Detection risk and Information and Communication Technologies (ICT)				
Probability of intentional misreporting in GHG reporting	HIGH	HIGH	MEDIUM	Verify measurement data against PH calculation spreadsheet. Check correct application of methodological equations.
Existence of some significant emissions that occur outside the normal course of the responsible party's economic activities, or that for other reasons can be considered unusual.	HIGH	HIGH	HIGH	On-site inspection and comparison of the project description with the actual state of implementation and the methodology applied reduce the risk of omitting any emission sources. In this case, verify livestock activity.
Communication failures (power, internet, signal).	HIGH	HIGH	MEDIUM	Have a backup mobile data plan, prior connectivity tests, and charged devices.
Loss of connectivity during interviews.	HIGH	HIGH	HIGH	Reschedule interviews in case of incidents.
Lack of ICT skills	HIGH	HIGH	HIGH	Agree in advance with interviewees on the most appropriate ICT tools.

Loss of confidentiality or data security	HIGH	HIGH	HIGH	Apply a policy of impartiality and limit processing to information in the public domain.

Through the various rounds of findings, the proponent made the relevant modifications and clarifications based on the observations issued by the audit team to achieve the agreed-upon level of security. Considering the evaluation and treatment of the non-conformities identified throughout the audit exercise, ANCE determines that:

- *The analysis procedures used in the sampling plan and the audit plan remain representative.*
- *The evidence collected is appropriate and sufficient to conclude the verification process.*

The sampling plan, through its established criteria, enabled the development of a validation and verification procedure. This procedure successfully identified the assertions with the highest risk of significant error and, at the same time, minimized the probability of inaccuracies occurring in the audit.

Table 10. Sampling Criteria.

Parameter or Requirement	OEC Assessment	Crosscheck
Compliance with Spatial Boundaries	The project's compliance with the applicability conditions of Methodology Documents BCR0002 /V/ and BCR0004 /VI/ was assessed. This evaluation included confirming that the project areas are not included in or do not overlap with the geographical boundaries of other existing projects or special areas. To ensure a comprehensive assessment, a cross-check was performed against national registries and/or available data from government or national registry systems.	/I//II//III//IV//V/VI//XVIII//XIX//XX//XXI//XXII//XXVII//XXIX//XLIII//XLIV//XLV//XLVI//XLVII//XLVIII//XLIX//L//LI//LII//LIII//LV//LIX//LXII//LXXII//LXXXVI//LXXXIII//LXXXIV//XCVII//C//CVII//CXXX//CXXXIII//CIV//CV//CIX/
Prevention of Double Counting	A search was conducted on other GHG platforms and standards to ensure the project does not overlap with or is not included in other projects, using the BCR TOOL TO AVOID DOUBLE COUNTING (ADC) /XCIV/.	/I//II/III//V//VI//XVI//XXII//XXVII//LI//LXXIV//LXXXVI//XCII//XCIV//CII//CXXXVII//CXXXVIII//CXXXIX//CXC//CXCI//CXCII//CXCIII//CXXX//CXXXIII//CIV//CV/
Carbon Ownership and Rights	A comprehensive review was conducted of all deeds and titles submitted by Fundación Cataruben that certify land ownership.	/I//II//III//IV//V/VI//XVIII//XIX//XX//XXI//XXII//XXVII//XXIX//XLIV//XLV//XLVI//XLVII//XLVIII//XLIX//L//LI//LII//LIII//LV//LIX//LXII//LXXII//LXXXVI//LXXXIII/

		/LXXXIV//XCVII//CII//C//CVII//CXXXIII//CXXX//CIV//CV/
Mitigation Quantification	*The implementation of BCR 0002, Version 3.1 /V/ and BCR 0004, Version 2.0 /VI/ were assessed to identify mitigation outcomes within the project area, verifying the consistency of the formulas and factors used.*	*/I//II//III/IV//V//VI//XIII//XIV//XV//XVII//XVIII//XIX//XX//XXI//XXII//XLII//XLIII//XLVII//XLVIII//XLIX//L//LII//LIV//LVI//LVIII//LXXII//LXXIII//LXXIV//XCIII//CXCIV//CXXXIII//CXXX//CII//CIV//CV/*
Risk Management and Permanence	*Project risk identification and permanence were analyzed through document review and interviews with involved stakeholders, in accordance with the BCR PERMANENCE AND RISK MANAGEMENT TOOL /LXXI/, section 14 of the BCR Standard V3.2 /LXXII/*	*/I//II//III//V//VI//X//XI//XII//XIII//XIV//XV//XVI//XXIV//XXV//XXVI//XXVII//XXIX//XXXIV//XXXV//XXXVI//XXXVIII//XXXIX//XL//XLI//XLIII//XLIV//XLV//XLVI//XLVII//LII//LXXII//CXXX/XCII//CVXII//CVXIII//CXXIV//CXXV//CXXVI//CXXXI//CXXXII//CXXXIII//CXXXVI//CIV//CV//CXXXII/*
Monitoring, Reporting and Verification (MRV)	*Compliance with the monitoring plan, information gathering activities, quality control management, and assignment of responsibilities were assessed according to the BCR MRV 2023 TOOL/LXXIII/.*	*/I//II//III//V//VI//IX//XIV//XV//XVII//XVIII//XVIII//XX//XXI//XXII//XLII//XLVII//XLVIII//XLIX//L//LI//LII//LIII//LIV//LV//LVI//LVII//LVIII//LIX//LX//LXI//LXXII//LXXIII//LXXIV//LXXVII//LXXX//LXXXVI//XCIII//XCVII//CII//CIV//CV//CIX//CX//CXXII//CXXX//CXXXI//CXXXVI/*
Legal Compliance and Document Management	*Compliance with environmental legal requirements and the implementation of procedures to ensure information quality and document control were verified.*	*/I//II//III//V//VI//XVI//XVII//XXII//XXIII//XXIV//XXVII//XXX//XXXI//XXXIII//XXXVI//XXXIX//XLII//XLIII//LX//LXV//LXVI//LXX//LXXI//LXXII//LXXIV//LXXV//LXXXI//LXXXIII//LXXXVI//XCVIII//XCIX//C//CII//CV//CVI//CVII//CX//CXXI//CXXIII//CXXIX//CXXX//CXXXI/*

Remote Evaluation:

The coordination of the interviews was the responsibility of the Fundación Cataruben, which managed the invitations, confirmed the participation of those involved, and monitored compliance with the established schedules. This centralization of logistics helped optimize communication between the parties and ensure clarity regarding the objectives of each interaction.

As a fundamental part of the remote audit strategy, the audit team designated the use of Microsoft Teams as the primary tool for conducting interviews, given its accessibility and functionality in remote environments. Each session had a maximum duration of one hour, ensuring an efficient and punctual focus on critical topics. This approach facilitated the

orderly execution of the verification activities, maintaining the methodological rigor required by the applicable standards.

Conclusion: The verification process for the CO2BIOP2-2 Project was executed through a dynamic and risk-based sampling plan, designed in accordance with the criteria of ISO 14064-3, ISO 14065:2020, and the BioCarbon Standard, with a 95% confidence level. This approach allowed the audit efforts to be directed towards areas with the highest risk of material error, prioritizing critical processes such as property rights, post-registration changes, methodological applicability, additionality, quantification of emission reductions, and compliance with socio-environmental safeguards.

The execution of the plan was flexible and was continuously adjusted based on conditions identified during the audit. Proactive risk management was addressed through comprehensive evidence reviews, in-person and virtual interviews, and on-site verifications, which substantially reduced the possibility of significant errors or omissions. Thanks to the implementation of corrective actions following the rounds of findings, it is concluded that the evidence obtained is sufficient and appropriate to support the verification conclusions. The applied approach ensured the robustness and reliability of the audit process.

3.2.3 Execution

The project verification was carried out through a comprehensive assessment, as detailed in the Verification Plan /Annex 5/. Key activities included a 100% review of the documents submitted. In this context, Annex 3 lists all the documents studied, which form part of the cross-verification process. This allows for a clear and organized identification of the evidence provided by Fundación Cataruben, as well as the secondary sources of information used to corroborate the accuracy of the data.

In addition, 11 sampling sites out of a total of 11 were inspected, these being the most representative, and interviews were conducted with stakeholders. In this case, no deviations from the planned audit were reported, except for two additional rounds to address findings.

Likewise, the project manager handled the data efficiently, ensuring that all evidence was properly stored, managed, and monitored throughout the process.

The following table provides an overview of the requirements established with respect to compliance with methodologies /V/ and /VI/, the ANCE assessment, and the cross-checking of information:

Table 11. Cross-check with applicable methodologies.

Subsection / Section	BCR0004	BCR0002	Project validation Cataruben Foundation
Project Scope	Definition of geographical boundaries and project activities. Validation through document review and field visits.	Establishment of project boundaries and REDD+ activities. Validation through document review and audits	As part of the project and intervention area delimitation, Cataruben compiled a set of evidence that included gathering consents and property titles for the land, formalizing agreements with the owners, and obtaining the corresponding permits from the Colombian government. In addition, the properties were characterized, generating technical information on water resources, biodiversity, land use and coverage, among other environmental aspects, using various tools that allowed for the establishment of a comprehensive reference framework for the delimitation of the area. Strategic activities included water management, biodiversity monitoring, tracking High Conservation Values, monitoring hot spots, and implementing sustainable production practices and conservation actions. /VII - XIII/
Baseline	Estimation of emissions and removals without project intervention. Validation with historical data and reference models.	Determination of the rate of deforestation without intervention. Validation through analysis of satellite images and historical data.	Within the provisions of document /III/, it is noted that the project is located in a region of the Orinoco in Colombia. It is highlighted that, during a period prior to the implementation of the project, there were various causes and agents responsible for deforestation, affecting both forest and wetland ecosystems, with historical records covering from 2010 to 2018. Likewise, the factors and actors involved in the deforestation processes within the project area are identified, considering a comprehensive perspective that includes territorial, sociocultural, economic, and historical aspects of the regional context.
Additionality	Assessment of barriers and analysis of alternatives.	Analysis of barriers and additional alternatives.	To demonstrate the additionality of the project, an analysis was conducted of alternative scenarios in which the proposed intervention is not

Subsection / Section	BCR0004	BCR0002	Project validation Cataruben Foundation
	Validation with approved additionality tools.	Validation in accordance with established additionality criteria	implemented. In these scenarios, practices that drive deforestation in the Orinoco region persist, especially in forest and wetland ecosystems, as evidenced by historical data collected between 2010 and 2018. Economic, legal, and structural barriers were also identified that limit the implementation of conservation activities without the financial and technical support provided by the project. These barriers include the lack of economic incentives for local communities, institutional weakness in environmental governance, and limited access to financing mechanisms for sustainable initiatives. In the absence of the project, these conditions would have favored the continuation of environmental degradation processes in the intervention area. This analysis is based on the Project Design Document (DDP) and considers the territorial, socioeconomic, and cultural context of the implementation area. Additionally, an emissions monitoring tool is incorporated that collects historical data prior to the start of the project, allowing for evidence of the evolution of changes in land use, including the loss of coverage in wetlands and forested areas. /III/ and /XIV-XVI/
Emissions and Removals Estimation	Calculation of emissions and removals attributable to the project. Validation with estimation models and field data.	Quantification of emission reductions from avoided deforestation. Validation using estimation models and monitoring data.	It was identified that a tool called "Monitoreo de Emisiones" /XVII/ is being used, which displays the project's annual emission reduction estimates for both wetlands and deforestation. Monitoring data is available for the period from 2022 to 2024, providing a summary of emissions.

Subsection / Section	***BCR0004***	***BCR0002***	***Project validation Cataruben Foundation***
Monitoring and Follow-up	*Regular collection of data on emissions and removals. Validation through external audits and review of reports.*	*Monitoring of REDD+ activities and avoided emissions. Validation through audits and review of monitoring reports.*	*The estimation of avoided emissions and removals of Greenhouse Gases (GHG) in the project is carried out through a technical approach that combines various tools and data sources, ensuring accuracy and traceability in the calculations.* *Emission Monitoring /XVII/ is used, which allows for the visualization of annual estimates of emission reductions both from avoided deforestation and the conservation of wetlands within the project area. This tool presents consolidated data for the 2022–2024 period, including a summary with the results of the verified reductions.* *The process is complemented using specialized systems such as AcaTAmA, which facilitates the spatial and temporal analysis of changes in vegetation cover. Information from the REDD+ and Wetlands Geodata Base is also integrated, providing georeferenced data and land-use classifications, as well as in situ observations that validate the actual field conditions and ensure consistency between satellite data and the physical environment. These can be seen in sections /XVIII – XXI/.*
Fugitive Emissions Management	*Identification and mitigation of emissions outside the project area. Validation with risk analysis and management plans.*	*Assessment of potential emission leaks. Validation through risk analysis and mitigation strategies.*	*Project monitoring and follow-up are carried out through a comprehensive and continuous approach, to ensure that conservation and mitigation activities are functioning in line with the established objectives. Monitoring covers both wetland and forest ecosystems and focuses on three key components: changes in forest area, environmental threats, and biodiversity.* *To manage this monitoring, a Reporting and Monitoring Plan is implemented, which establishes clear procedures for*

Subsection / Section	***BCR0004***	***BCR0002***	***Project validation Cataruben Foundation***
			the collection of periodic data and the measurement of specific indicators. This plan provides traceability for each project activity, enabling efficient follow-up both at a general level (for wetland and forest ecosystems) and at a specific level (in the case of REDD+ and wetlands). *Monitoring indicators include, among others, the avoided deforestation rate, the amount of carbon stored, the quality of wetland ecosystems, and biodiversity in protected areas. The data obtained are reported periodically through semi-annual or annual reports, which include field evidence, analysis results, and recommendations for follow-up activities.* *Monitoring and follow-up are audited both internally and externally to ensure transparency, independent verification, and compliance with the project's conservation objectives.*
Permanence	*Assessment of the permanence of emission reductions. Validation with risk analysis and long-term management plans.*	*Analysis of the permanence of emission reductions. Validation through risk assessment and conservation strategies.*	*The permanence of the emission reductions achieved by the project is guaranteed through continuous monitoring that evaluates the reduced emissions over time, ensuring that conservation interventions remain effective and are not reversed.* *Through emissions monitoring, a periodic assessment is conducted of the greenhouse gas (GHG) reductions generated by conservation activities in wetland and forest ecosystems. This monitoring is carried out annually, allowing the observation of trends in avoided emissions and carbon removals throughout the project's duration. The results of this monitoring provide a clear picture of how emissions have been reduced over time, making it possible to*

Subsection / Section	***BCR0004***	***BCR0002***	***Project validation Cataruben Foundation***
			identify any changes or fluctuations that may indicate a reversal of the benefits achieved. *Monitoring is conducted using specialized tools that analyze both changes in forest cover and wetland dynamics, which confirms that emission reductions are sustained and that conservation interventions continue to be effective. Furthermore, the results obtained from the annual measurements allow for the adjustment of project strategies if necessary, ensuring that emission reductions are not only initially achieved but also maintained over the years.* *This periodic monitoring approach also facilitates external verification by auditors and certifying bodies, who review the consistency of the data and the effectiveness of the interventions, ensuring that the project complies with international standards for the permanence of emission reductions.*
Causes and Agents of Land Use Change	*Identification of factors that induce land use changes. Validation with socioeconomic analyses and field studies.*	*Determination of causes of deforestation and degradation. Validation through socioeconomic studies and key stakeholder analysis.*	*As part of the activities to verify whether there are factors that may contribute to deforestation, degradation, or land-use change, tools such as the Sustainable Development Safeguards (SDS) Tool Assessment Questionnaire /XXXIII/ are used. This tool enables landowners to identify potential risks and impacts on their properties.* *The causes and agents of change are identified through socioeconomic studies and surveys, which help to understand community conditions and the pressures that may lead to land-use change. In addition, local stakeholders are identified, along with the activities that generate emissions, such as extensive livestock farming, unsustainable agriculture, illegal*

Subsection / Section	***BCR0004***	***BCR0002***	***Project validation Cataruben Foundation***
			logging, or the expansion of the agricultural frontier. *In this way, it is possible to recognize who or what is causing deforestation or degradation and thereby establish strategies to prevent and mitigate these impacts.*
Socio-Environmental Assessment	*Analysis of the project's social and environmental impacts. Validation through impact studies and consultations with stakeholders.*	*Assessment of social and environmental impacts. Validation through impact studies and consultations with local communities.*	*The CO2Bio P2-2 Monitoring and Reporting Plan /XXIV/ considers key aspects related to the conservation of high-value areas and the protection of important ecosystems. As part of this process, RCCS Management Reports /XXV–XXVI/ are also prepared, which include surveys and communication mechanisms with local communities, allowing for the collection of their perceptions and needs.* *The socio-environmental assessment is carried out to determine the impacts that the project may generate on both people and the environment. To this end, surveys are conducted with communities to understand their opinions and identify potential impacts; environmental impact studies are developed to measure the consequences on biodiversity and natural resources; and consultations with stakeholders are carried out, ensuring a participatory and transparent process.* *This set of actions facilitates the identification of risks and benefits associated with the project, while simultaneously strengthening the implementation of preventive, mitigation, and improvement measures in environmental and social management.*

Subsection / Section	***BCR0004***	***BCR0002***	***Project validation Cataruben Foundation***
Uncertainty Mana gement	*Identification and management of data uncertainty sources. Validation through statistical and methodological analysis.*	*Assessment of uncertainties in the estimates. Validation through statistical analysis and methodological review.*	*Within the project, it is recognized that monitoring and estimation processes may present margins of error that must be identified, evaluated, and managed transparently. To this end, the Emissions Monitoring Tool /XVII/ is used, through which data uncertainty sources are identified, primarily considering emission factors that may influence the results.* *These uncertainties are managed through statistical analyses that allow verification of the information's reliability, as well as through the inclusion of confidence intervals and error ranges in the carbon estimates. Additionally, a methodological review of the applied calculations is conducted, and results are compared with alternative sources or external references, ensuring the validity and consistency of the reported information.* *With this approach, the project guarantees that uncertainty is addressed systematically and documented, reinforcing the transparency and robustness of the results obtained.*

The ANCE audit team concludes that the GHG mitigation project proposed by Fundación Cataruben meets the established requirements, demonstrating integrity and effectiveness. The resolution of 100% of the identified findings, together with the evidence provided by the project proponent (Annexes 2 and 3), is essential to ensure the overall validity of the GHG statement.

Conclusion: The verification process for the "CO2Bio-P2-2" project was executed through a comprehensive assessment that included 100% document review and field inspections of all 11 representative sampling sites. The project demonstrated full compliance with BCR methodologies through systematic cross-verification of project boundaries, baseline establishment, and monitoring procedures.

The additionality analysis confirmed the project's necessity by identifying economic, legal and structural barriers that would prevent conservation activities without project intervention. Emissions monitoring utilized specialized tools including AcaTAmA for vegetation analysis and Geodata Base for land-use classification, ensuring accurate tracking of emission reductions from 2022-2024.

The project effectively addressed permanence through continuous monitoring and risk management, while socio-environmental safeguards were maintained via community surveys and impact assessments. All identified findings were successfully resolved, confirming the project's compliance with verification requirements and the overall validity of the GHG statement

3.2.3.1 On-site inspection

During the on-site verification process, carried out from May 26 to 30, 2025, the sampled properties linked to the project were visited, highlighting 11 of them as established in section 3.2.2. The following properties were considered: La Candelaria, Lote Dos (San Felipe 2), El Cairo, La Candelaria 1, El Remache 1, Lote 6, La Esperanza, San Fernando, La Macolla, Lote Número Tres (El Paraíso), and La Palmita. However, in the case of Lote 6 and La Esperanza, it was not possible to establish communication with the owners. Therefore, it was necessary to include the owners of San Benito and Villa Tania to complete the sampling and interviews.

On the first day, following the Verification Plan (Annex 5), a visit was conducted to the offices of Fundación Cataruben, where an overview of the project's scope was presented. Associated documents were also verified, including the Monitoring Report /II/, the Monitoring Plan and Report /XXIV/, which detail the activities implemented according to the applicable methodology's /V/ and /VI/. Each activity includes an indicator, its corresponding target, and the formula to measure and quantify progress.

During this stage, property titles and certifications of ownership /XXVII–XXIX/, contractual assignments, and signed agreements were reviewed. Compliance with safeguards, as well as environmental and socioeconomic aspects /XXXI–XXXIII/, was verified, and emissions monitoring was conducted. At the end of the day, the agenda for the on-site property visits was defined, with some adjustments due to difficulties in contacting certain owners and logistical considerations.

Based on Table 1 of section 3.2.1, the selected properties (identified in blue) and their classification according to the component to be visited—REDD, Wetland, or REDD+ Wetland—were identified. The following methodologies were applied for this purpose:

- *BCR0004: Quantification emission reductions and GHG removal. Activities that avoid land use change in Continental Wetlands.*
- *BCR0002: Quantification of GHG emission reductions in REDD+ projects.*

The following image shows, in general terms, the route followed by the ANCE verification team, designed to ensure that the selected properties were properly considered and representative.

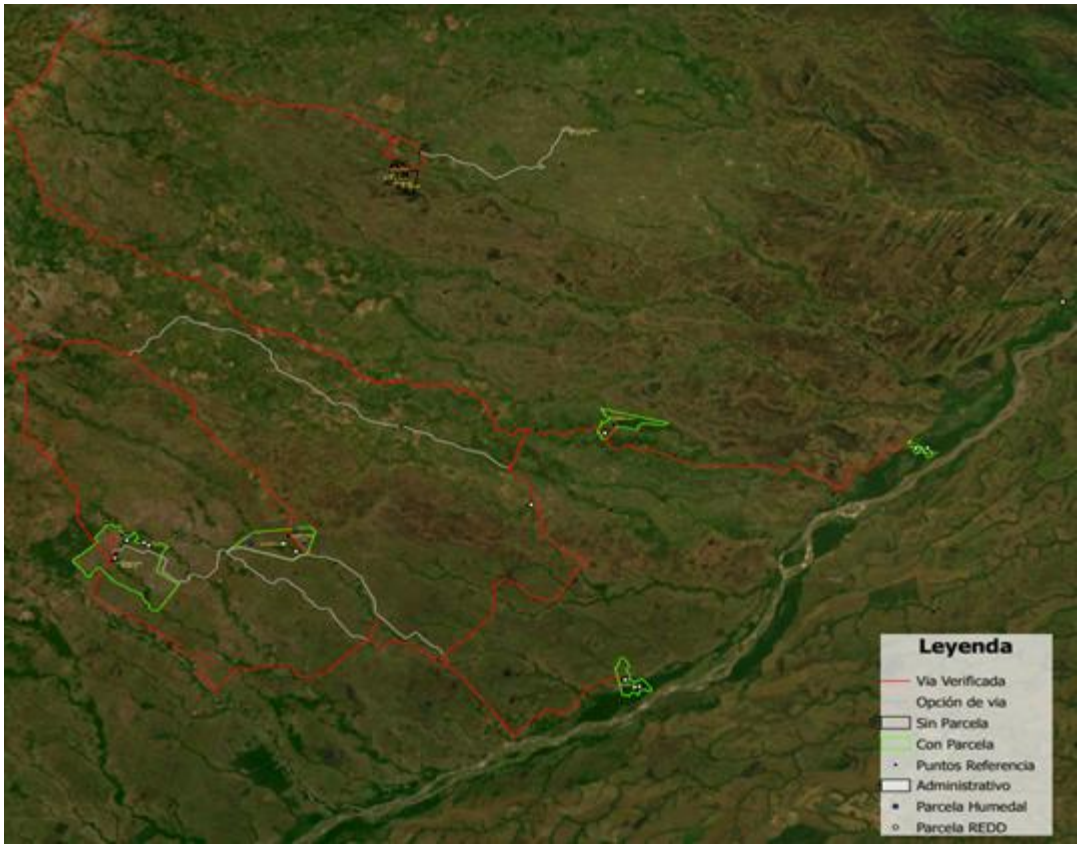

Figure 1. SEQ Figure \ARABIC 1 Route of properties for on-site verification
Source: Fundación Cataruben

The main objective of the on-site visit was to:

- *Verify that the geographic area reported in the Project, according to the Design Document, is consistent with its annexes (GIS data).*
- *Observe the current status of the project and the ongoing forest and wetland conservation activities.*
- *Conduct a risk-based review of the project area to cover its boundaries.*
- *Identify and corroborate any substantial discrepancies between the activities described in the monitoring plan and those carried out on-site.*
- *Confirm that, through the risk-based assessment, the project meets the BCR eligibility requirements and the applicability conditions of the selected methodology. Verify the data and parameters used for the ex-ante estimates and their proper validation to perform the ex-post calculations.*

The on-site inspection of the "CO2Bio-P2-2" project, conducted from May 26 to 30, 2025, successfully verified the status and implementation of conservation activities on the sampled properties. Although initial communication difficulties with some owners required planned substitutions, the audit team completed the review of key documentation, including property titles, contractual agreements, and monitoring reports.

During the field visits, consistency was confirmed between the project documentation—geographic boundaries, planned activities in the Design Document—and the conditions observed on the ground for the REDD+ and Wetlands components. The central objective of validating alignment with the BCR0002 and BCR0004 methodologies, and compliance with the BCR standard requirements, was successfully met without identifying substantial discrepancies between what was planned and what was executed

3.2.3.2 Interviews

During the on-site verification process, carried out between May 26 and 30, 2025, the sampled properties associated with the project were visited. During these visits, contact was sought with the property owners to understand their perception of the project, assess their level of engagement, and verify both the trainings provided by Fundación Cataruben and the actions implemented on each property related to the credits obtained.

However, as direct contact with all owners was not possible, the verification was supplemented with remote interviews conducted via Teams and Zoom on June 4, 6, and 13, which allowed the collection of their perspectives regarding the project.

During this process, various questions were formulated focusing on aspects such as ownership and related rights, previous land use, conservation and management activities, water management, biodiversity and co-benefits, projected leakage, anticipated deforestation and degradation, safeguards, monitoring, uncertainty, and permanence, among others.

The following table presents, in general terms, some of the most relevant aspects reported for each of the properties.

Table 12. Interviews with landowners and site administrators.

Interviewer / Property	*Modality*	*Aspects Consulted*	*Results and Conclusions*
Owner of the El Cairo estate/ James García Niño	*In-person*		• *They do not participate in tree logging; their focus is on protection and surveillance to prevent illegal deforestation.*

Interviewer / Property	*Modality*	*Aspects Consulted*	*Results and Conclusions*
		As part of the requirements and aspects evaluated during the interviews, both remotely and in person, various topics were addressed and multiple questions were asked, which were adjusted according to the person being interviewed. Among these questions, the following stood out: ➢ *The description of the legal ownership of the property and the presentation of documents supporting the ownership (titles, deeds, lease agreements);* ➢ *The identification of significant changes in vegetation cover, such as deforestation, reforestation, or drainage;*	• *Most of the forests are designated as wetlands, which reduces the risk of forest fires to nearly zero.* • *Fire-related activities are conducted away from forested areas, avoiding impacts on nearby lands.* • *They collaborate with specialized groups that monitor wildlife using cameras and sound recorders in the forest.* • *They conduct regular counts, surveillance, and biodiversity analyses.* • *They invest in sustainable technologies such as solar panels and a gas network, reducing wood consumption.* • *They protect nearby water bodies, ensuring the health of aquatic ecosystems.* • *They propose reforestation around the state by planting new trees.* • *They have actively participated in the project for three years, with ongoing training through courses and workshops.* • *They seek to expand knowledge to assess the forest extent and introduce new plant species to enrich the ecosystem.* *Conclusion: The observed actions demonstrate a strong commitment to conservation, biodiversity, and the sustainable use of natural resources.*
Owner of the El Cairo-Macoya state / Genobio Gubineo	*In-person*	➢ *The management or restoration activities implemented in recent years, such as planting of native species,*	• *There is a strong community tradition of caring for and preserving the forest, wildlife, flora, and water bodies.* • *They do not participate in tree logging and strive to maintain ecological balance to conserve natural resources.* • *During the summer, they implement preventive measures against forest*

Interviewer / Property	*Modality*	*Aspects Consulted*	*Results and Conclusions*
		flood control, and eco-compatible fencing. ➢ *The description of the annual flooding pattern, including start and end dates and any extraordinary variations;* ➢ *The observation of areas or times where water is excessively retained or drained;* ➢ *Participation in wildlife and flora censuses or monitoring efforts, as well as receiving support from biologists;* ➢ *The identification of pressures on biodiversity, such as hunting, illegal logging, or overgrazing; and* ➢ *Expectations regarding the socioeconomic benefits associated with the project, including carbon income,*	*fires, such as constant surveillance and firebreaks.* • *They have acquired equipment and resources to strengthen protection, including generators, livestock waterers, and electric fences.* • *They are evaluating the incorporation of solar panels as an alternative energy source.* • *They maintain active communication with Fundación Cataruben, with visits and periodic reviews to ensure proper project implementation.* • *They have a plan for marketing dairy products as an initiative toward self-sustainability and productive development compatible with environmental conservation.* *Conclusions:* *The observed actions demonstrate a continuous commitment to environmental conservation, forest safety, and the integration of sustainable productive practices.* *The combination of protection measures, technology, and productive planning reflects responsible and sustainable management of the property.*
Owner of the La Macolla state / Mary Sol Parada Vargas	*Remote (Zoom videoconference)*		• *The community has actively participated in the conservation project for several years, following traditional practices passed down through generations.* • *One of their properties was recognized as a Civil Society Natural Reserve, increasing the visibility of the area.* • *They receive technical support from Fundación Cataruben, including training, resource management advice,*

Interviewer / Property	*Modality*	*Aspects Consulted*	*Results and Conclusions*
		infrastructure, and training. *Additionally, information was gathered on significant changes in forest cover over the past decade, including forest degradation processes such as fires, selective logging, or fragmentation, along with their magnitude, location, and related records; economic activities exerting pressure on forests, including agriculture, livestock, mining, and logging; the potential displacement of illegal activities if logging were to stop on the property; changes in forest fragmentation; and threats that could reverse emissions reductions, such as fires or policy changes.* *During the in-situ activities, these and other essential requirements for REDD+ and forestry projects were analyzed, with emphasis on legal, technical, and social aspects.* *Ownership and legal rights were reviewed, including records and transfers related to*	*and continuous monitoring, even in areas with limited connectivity.* • *They are part of the "Eco-leaders" group, where they learn techniques such as composting, water harvesting, and forest conservation.* • *Thanks to carbon credits, they have implemented sustainable technology, including a 4,500-watt photovoltaic system that powers the entire state, including electric fences and pumping systems for sustainable livestock management.* • *Waterers for wildlife have been installed, and native species planted to strengthen vegetation cover.* • *During the dry season, they prevent forest fires using firebreaks, hiring machinery and trained personnel.* • *They explore the responsible use of oilseed trees and promote feeding livestock with local pastures.* • *Wildlife is monitored using sound recorders and photographic evidence, with data shared with Fundación Cataruben.* • *They differentiate their expenses: productive activities are accounted for separately, while conservation actions are funded through carbon credits.* *Conclusion:* *There is clear evidence of active commitment to environmental conservation, combining sustainability, biodiversity monitoring, and responsible productive management.* *The implementation of sustainable technologies and conservation techniques reinforces the effectiveness and continuity of the project's actions.*

Interviewer / Property	Modality	Aspects Consulted	Results and Conclusions
Owner of the La Palmita – San Benito state / Williton Benavides Ruiz	In-person	carbon credits; the historical land use and vegetation cover, supported by local records; conservation and management activities implemented, including criteria for interventions and management plans; the hydrological regime and flooding patterns, along with practices that may alter them; biodiversity and environmental pressures; historical context of deforestation and degradation, including actors and motivations; projection of future deforestation rates with and without the project, leakage risks, and socioeconomic drivers; knowledge and application of REDD+ safeguards; assessment of socioeconomic co-benefits and clear benefit-sharing mechanisms; technical quantification using carbon pools in aboveground biomass and soil, and uncertainty management; risk management through buffer pools and high-resolution satellite monitoring; and monitoring, uncertainty, and	• Before the project, the landowners used forest resources responsibly, utilizing wood without direct logging and purchasing external wood for fences and firewood; this use has decreased with the installation of gas connections. • Eucalyptus trees have been planted for reforestation, and the natural expansion of sangrito, a preserved native species, is allowed. • Guadua bamboo groves are preserved for building corrals and bridges, using local materials without harming the forest. • During the dry season, fires are prevented with firebreaks opened by a tractor, and all burning on-site has been suspended as an environmental policy. • Constant patrols are conducted to monitor the environment, protect wildlife, and prevent unauthorized access, with active efforts to conserve local species. • With carbon credits, they have acquired resources such as wire, wood, waterers, deep wells, and hired personnel; they have also planted fruit trees (citrus and soursop) for self-consumption. • They develop complementary productive activities: • They raise chickens, respecting forest boundaries. • They fish for "curito" in ponds for internal consumption. • Livestock farming is the main economic activity, feeding cattle with traditional pastures without altering the ecosystem.

Interviewer / Property	*Modality*	*Aspects Consulted*	*Results and Conclusions*
		community-based preventive measures *The participation of interviewees was also explored to assess perceptions regarding sustainable management, communication, project follow-up, responsiveness to inquiries, and the involvement of landowners, highlighting their role and identifying potential improvements in benefit-sharing.* *Questions were also asked regarding activities implemented on each property, the percentage of area allocated, changes since incorporation, training provided by Fundación Cataruben, and mechanisms for resolving doubts, payments related to carbon credits, and perceptions of the Project.* *Finally, concerning ecosystem restoration, detailed information was requested about priority areas and indicators for selecting*	• *They maintain continuous communication and participation with Fundación Cataruben through videoconferences, courses, and workshops to strengthen knowledge and skills in project implementation.* • *They identify an opportunity for improvement in expanding technical information on certificates, carbon credits, and property-level quantification methodology to strengthen sustainable land management.* *Conclusion:* *The actions reflect a comprehensive commitment to environmental conservation, sustainable resource management, and responsible production.* *The combination of sustainable practices, ongoing training, and efficient resource use ensures the effectiveness and continuity of conservation strategies.*
Owner of the San Fernando state / Jogny Guzman	*In-person*		• *Before the project, the landowners used firewood only for domestic purposes, with no commercial use.* • *With the project, a gas connection was installed, eliminating the use of firewood; wood is now sourced externally.* • *Carbon credits enabled improvements on the property, including the installation of solar panels, electric fences, windmills, and deep wells, supporting sustainable management.* • *New trees were planted to strengthen vegetation cover.* • *During the dry season, preventive fire measures are applied through firebreaks created with agricultural machinery.*

Interviewer / Property	*Modality*	*Aspects Consulted*	*Results and Conclusions*
		wetland and spring restoration sites. *Regarding methodological compliance, inquiries were made about methods for temporal and spatial delimitation, methodological deviations adapted to regional characteristics, and evidence supporting their validation.* *Regarding participation and benefits, inquiries were made about the contractual structure with landowners, mechanisms for economic distribution, and the sustainability of individual implementation per property.*	• *Fundación Catarubén installed automatic recorders for acoustic monitoring of wildlife, complemented with photography and periodic tracking.* • *Internal patrols are conducted, areas are fenced, and surveillance is maintained to prevent unauthorized access, ensuring security and conservation.* • *Communication about the project is continuous but informal, through the landowner who shares conservation updates.* • *Opportunity area: increase training provided by Fundación Cataruben, conduct more frequent follow-up visits, and improve technical communication regarding project benefits and implementation on the property.* *Conclusion:* *The actions demonstrate an active commitment to conservation, responsible resource management, and property protection.* *The implementation of technology and continuous monitoring reinforce the sustainability and effectiveness of conservation strategies.*
Owner of the La Candelaria state / José Ramon Torres	*In-person*		• *They have participated in the project since 2018, with a generational tradition of conservation in the area.* • *Before the project, they used local resources, but currently, they do not engage in tree logging or burning and conserve wildlife.* • *For fencing the property and other uses, they choose to buy wood rather than extract it from the forest.*

Interviewer / Property	*Modality*	*Aspects Consulted*	*Results and Conclusions*
			• *They conduct patrols that help prevent forest fires.* • *They use firebreaks to prevent the spread of fires on the property as a preventive measure.* • *They have received carbon credits, which have allowed them to acquire various supplies for maintaining conservation efforts.* *Conclusion:* *There is clear evidence of continuous commitment to forest and wildlife protection, integrating prevention measures, responsible resource management, and long-term sustainability.* *The actions reflect effective implementation of sustainable practices and environmental conservation on the property.*
Owner of the La Candelaria 1 state / José Ramon Torres	*Remote (Zoom videoconference)*		• *Before joining the project, the landowners already valued the conservation of forests and wetlands.* • *Electric fences were installed to demarcate forest areas, along with deep ponds powered by solar energy.* • *They joined the Cataruben project in 2018 to strengthen their conservation practices.* • *Constant surveillance is maintained to prevent intrusions and livestock encroachment.* • *During the dry season, firebreaks are created to reduce the risk of forest fires.* • *Illegal hunting is controlled through patrols to preserve wildlife.* • *Treated wood is used to reduce pressure on the forest and avoid direct logging.* • *Cataruben provides training on tree conservation, wetlands, native species, and regional products.*

Interviewer / Property	*Modality*	*Aspects Consulted*	*Results and Conclusions*
			• *Communication with the manager is continuous to coordinate conservation work with the team of workers.* • *Hunting is prohibited, but the presence of pumas causes livestock mortality and a decrease in capybara populations. The landowner has reported the issue to Cataruben and other institutions, but solutions have been ineffective.* • *Carbon credits have been key to expanding conservation actions and operational improvements.* • *The owners' primary motivation is environmental, not economic; they consider the support valuable but insufficient.* • *They suggest more timely distribution of credits to advance the transition to treated wood and enable new investments to protect forests and wetlands.* *Conclusions:* *The state reflects an active commitment to conservation, integrating surveillance, responsible resource management, and the use of sustainable technology.* *There are opportunities to optimize support and expand protection actions, ensuring the continuity and effectiveness of the project.*
Owner of the El Remache state/	*Remote (Zoom videoconference)*		• *Since joining the project in 2018, the landowner has actively participated in conservation initiatives on the property.* • *Although there was a culture of forest stewardship, occasional logging practices were carried out prior to the program, which have since been suspended.*

Interviewer / Property	*Modality*	*Aspects Consulted*	*Results and Conclusions*
			• *Conservation areas have now been formally delineated, and timber trees have been planted.* • *Staff have been incorporated to oversee the monitoring and protection of forests, wetlands, and wildlife, reinforcing conservation efforts.* • *Carbon credit provides both economic and environmental benefits; however, payments have been irregular, complicating financial planning and the implementation of improvements such as fencing and operational actions.* • *Improving the timeliness of payments is proposed to strengthen sustainable management strategies.* • *The main means of contact with Cataruben has been by phone.* • *A current issue is the impact of wild cats on livestock.* • *The landowner considers it important to install cameras or recorders to improve monitoring of these species, aiming to balance habitat conservation with livestock protection.* *Conclusions:* *The landowner demonstrates active commitment to conservation and sustainable management, integrating surveillance, responsible productive practices, and wildlife protection.* *The effectiveness of conservation strategies could be strengthened through timely credit payments, additional technological monitoring, and more consistent operational planning.*

Interviewer / Property	Modality	Aspects Consulted	Results and Conclusions
Owner of the San Felipe state /	Remote (Zoom videoconference)		• Most of the property's expenses have been covered through carbon credits, without the need for personal contributions to conservation. • There is a strong generational belief in the importance of forest preservation. • Between 5,000 and 10,000 trees have been planted, including eucalyptus, with the goal of improving forest quality and continuing annual reforestation. • They have staff responsible for the care of forests and wildlife. • The conservation area has been fenced off to prevent access by people seeking to exploit natural resources. • Cameras have been installed for wildlife monitoring and surveillance. • Firebreaks are maintained in vulnerable areas to prevent forest fires. • Communication with Cataruben has been excellent, with openness and willingness; they have participated in courses and workshops organized by the organization. • Livestock farming is their only economic activity. • They value Cataruben's support in property management and in projects aimed at strengthening forest conservation. • They have faced problems with pumas attacking native wildlife and livestock; although a fence was installed for protection, this measure has not been sufficient to control the situation. Conclusions: The landowner demonstrates a strong commitment to conservation through

Interviewer / Property	*Modality*	*Aspects Consulted*	*Results and Conclusions*
			reforestation, surveillance, and sustainable resource management. *The effectiveness of wildlife protection could be improved with additional strategies to control predators, ensuring the safety of animals and the continuity of conservation practices.*
Owner of the El Paraíso state / Eduardo Martínez/ Lidia Paredes	*Remote (Zoom videoconference)*		• *The property is designated as a Civil Society Natural Reserve and has been part of the Cataruben project since its recognition.* • *Active conservation of the forest and wildlife is carried out, combined with livestock activities to promote sustainability and care for native ecosystems.* • *Conservation is a practice inherited and valued by the landowners even before joining the project.* • *Collaboration with Cataruben has been both remote and on-site, with personalized training due to the property's difficult access.* • *Participants consider themselves a key part of the project, recognizing improvements in the conservation of forests, wetlands, and wildlife.* *Specific actions implemented:* • *Reforestation with native plants, preservation of natural pastures for livestock, harvesting rainwater, use of solar energy through panels, installation of firebreaks for fire prevention, and cultivation for self-consumption.* • *Universities and associations have joined efforts to support the monitoring and conservation of native species.*

Interviewer / Property	*Modality*	*Aspects Consulted*	*Results and Conclusions*
			• *Main challenge: the invasion of pumas displaced by rice cultivation, causing conflict with livestock.* • *Solutions are being sought with specialized associations to protect the pumas without affecting the estate's economy.* *Conclusions:* *The property demonstrates an active and sustained commitment to conservation, integrating sustainable management practices, wildlife protection, and responsible productive use.* *Coordination with Fundación Cataruben and other entities strengthens the effectiveness of conservation actions, although challenges related to predatory species require ongoing strategies to balance environmental protection and productive activity.*
Owner of the Villa Tania state /	*Remote (Zoom videoconference)*		• *Implementation plan based on sustainable productive practices, managed in coordination with government ministries.* • *Investments have been made to strengthen the family project and promote the efficient use of water resources, mainly in sugarcane cultivation.* • *Efforts to avoid monoculture and pollution, favoring the planting of native trees.* • *A designated person is responsible for managing the state and maintaining firebreaks.* • *60% of resources are allocated to maintenance and conservation activities.*

Interviewer / Property	*Modality*	*Aspects Consulted*	*Results and Conclusions*
			• *Reduction in the hunting of wild animals, with improved monitoring through camera traps.* • *Issues persist due to the logging of native trees and external human activities that affect conservation.* • *Priority has been given to improving the soil, making use of the property's water resources through an integrated approach.* • *A family beekeeping project is being developed that, in addition to seeking honey commercialization, promotes collaboration in environmental conservation.* • *Solar panels have been installed to promote the use of renewable energy on the farm.* • *Firebreaks are implemented to reduce the risk of forest fires.* *Conclusions:* *The actions implemented in the state reflect a comprehensive commitment to sustainability and environmental conservation, combining responsible productive practices, soil and water resource protection, reduced hunting, and the preservation of native species. The integration of clean technologies, such as solar panels, and the development of projects like family beekeeping, strengthen economic sustainability without compromising ecological balance. Fire prevention measures, wildlife monitoring, and the planting of native trees ensure the continuity of conservation efforts, although challenges remain due to logging and human activities that require ongoing oversight.*

Based on the interviews conducted, several key elements related to the implementation of the Fundación Cataruben project were identified. Each property presents its own

particularities; however, all share the same purpose: environmental conservation and continuous improvement for the preservation of ecosystems. These actions reflect an intergenerational legacy that promotes environmental protection, demonstrating compliance with the Safeguard of respect for traditional knowledge and the rights of communities.

Fundación Cataruben actively participates in this process, promoting the continuity of ancestral practices and encouraging the preservation of traditional activities, which in turn generate tangible benefits for both people and the environment.

During on-site interviews, compliance with important aspects of the Safeguard on transparency and effectiveness in forest governance structures was observed, reflected in the ongoing communication that landowners maintain with the Foundation through various channels. Despite the limitations some of them face, the organization provides the necessary means and tools to strengthen their capacities and ensure effective management of the properties. The Foundation also has a PQRS system (Petitions, Complaints, Claims, and Suggestions), through which participants' observations are channeled. This system enables timely responses, two-way communication, and continuous project improvement.

In addition, the Foundation offers training, courses, and hands-on activities aimed at strengthening local capacities. These actions demonstrate compliance with the Safeguard of full and effective participation.

The landowners' commitment to the conservation and maintenance of their properties was confirmed, in alignment with the Safeguard on conservation and benefits. Interviewees demonstrated a clear understanding of the importance of protecting natural areas, recognizing that their preservation represents a shared benefit for both local communities and the environment.

During the interviews, participants identified the main risks as those related to the occurrence of forest fires and the presence of invasive species, such as pumas, which could affect the ecological balance of the area. To mitigate these risks, landowners implement firebreaks and maintain a surveillance system using cameras and audio recorders, demonstrating compliance with the Safeguard focused on preventing reversal risks.

As part of the field verification, the ANCE audit team conducted site visits and interviews in accordance with the procedures outlined in the /XCIII/, which describes the steps to follow during on-site audits. Based on these guidelines, the team verified project activities, the existing infrastructure on the properties and eligible areas, as well as the identification of sampling points and the implementation of management and monitoring actions described by Fundación Cataruben.

Interviews were conducted with relevant staff and stakeholders to assess compliance with the Social and Environmental Safeguards and to verify fulfillment of applicable requirements.

Likewise, the risk-based approach was applied, in accordance with Section 9.1 "Risk-Based Approach" of /XCIII/, which emphasizes the importance of reviewing the project's history and that of the responsible entity. During the on-site verification, it was confirmed that the procedures implemented, and the level of participant commitment reflect effective risk management and the consolidation of conservation practices.

Conclusion: The interviews conducted with the owners of the 11 sampled properties confirm the effective implementation and commitment to the conservation project. There is widespread adherence to sustainable practices, including the elimination of logging, fire prevention with firebreaks and surveillance, and the implementation of clean technologies such as solar panels. The owners demonstrate a clear understanding of the conservation objectives and receive continuous support from the Cataruben Foundation through training and follow-up.

Common challenges were identified, including predation by wild felines and the need for more regularity in carbon credit payments. However, the reported actions reflect management aligned with the project's Safeguards, particularly in effective participation, transparency, and prevention of reversal risks. The on-site verification validates the consistency between the reported activities and those implemented in the field.

3.2.3.3 Findings

During the document review and on-site visit, five findings were identified, which were reported in the Findings Report (Annex 6), specifically in Section IV, Findings Register. All of these were considered as CARs (Corrective Action Requests) in the first round. However, following the analysis carried out by the Verification Team, a second and third follow-up round were established. These rounds are detailed in Annex 2, along with the evidence supporting the closure of each finding.

In the second round, various issues were detected related to the EFs used, as well as the versions corresponding to the BioCarbon Standard specifications, among other aspects. This prompted the addition of four new findings, of which two were classified as CARs and CLs (Clarification Requests). Finally, during the third verification round, Fundación Cataruben successfully closed all identified findings.

Of the nine total findings, it was determined that for three of them, the project developer must ensure in future verification periods that the execution and follow-up of corrective actions are traceable and measurable. Annex 2 includes a summary of all CLs, CARs, and FARs raised, along with the responses provided by the project proponent, any resulting document changes, and the conclusion confirming that all findings have been closed.

However, according to the review conducted based on previous validations or verifications, no pending action requests or other findings from prior periods were identified that need to be considered open.

During the verification process, two (2) Clarification Requests (CL) were identified as follows:

CL 08

This finding is related to an inconsistency in the reported values of soil organic carbon (SOC) in wetlands. Table 45 of /I/ indicated emission factors of 110.854 for the herbaceous stratum and 114.508 for the dispersed stratum, but these differ from those reported by national studies such as those from the Instituto Humboldt (2018) and IGAC (2021). Additionally, it was not clearly explained how it was verified that the sampling followed nationally validated methodologies nor the basis for selecting eligible areas, requiring clarification on methodology and sources.

In response, the project owner indicated that SOC is considered validated data and not monitored, according to section 14.2.1 of the report, complying with methodology / VI/, section 18.5, which allows applying validated emission factors to estimate emissions. The verification of these factors was carried out according to section 16.2.3 of / VI/, with sampling up to 100 cm depth, in contrast to the cited study, which only measured up to 30 cm and had results limited by soil type. The complete details of the validated emission factors are found in section 3.7.3.3 Emission Factors of /III/, documented in /III/ and /XCV/.

The ANCE evaluation considered the finding closed due to the clarity and detail of the information presented, where the project owner describes step-by-step the methodologies and results, supported by the most recent NFRL for the Orinoco biome as well as applicable methodologies.

CL 09

It mentions that during the review of the Monitoring report, it was detected that the reduction from 124 to 120 properties in the project lacks evidence of updating or reviewing the Project Document, as required by section 16.5.2.3 (f) of the BIOCARBON Standard. The absence of this documentation hinders the verification of regulatory compliance and the transparency of the changes, so the project is requested to submit the updated Project Document along with evidence of its review by BIOCARBON.

The project owner's response was based on official information from Cataruben, which mentions the post-registration changes through the upload of the new version /III/ with change control on the platform during the consultation period and BCR review. These changes include the disconnection of four implementation sites and are clearly reflected in the change control. For the VVB evaluation as part of the verification process, Folder 9, post-

registration changes, was included in the annexes of /I/, containing the new version of /III/ based on the latest template /XCV/, along with screenshots of the platform showing the selection of changes after registration, thus sending it within Folder 2. Appendix 9 Post-registration Changes and adding the document: /III/. However, in the third round, the CAB evaluated that the most recent version of /III/ 2.3 details the parameters modified after the post-registration changes, and Appendix 1 identifies three significant changes in the project design. Nevertheless, it is required that each modification be described more thoroughly and justified, step by step, including adjustments in emissions calculations and the impacts of the removal of four properties, to ensure transparency and traceability in the verification.

In response to this round, the project owner mentioned that during the 2022-2024 verification, four properties were removed from the CO2Bio P2-2 project, applying procedure /XCVII/, and the /III/ (section 5, Table 40) and /XCV/ (section 7, Table 15) documents were updated. The areas of the removed properties were excluded from the reference emission projections and the leakage belt, adjusting mitigation results for wetlands and forest areas, as reflected in annex /XVII/ and Tables 35 and 36 of /III/. Monitoring of the remaining areas is conducted from January 1, 2022, to December 31, 2024, using project form data and leakage areas, supported geographically by the REDD+ Geodatabases /V/ (Annex 8.1.3), Wetlands /VI/ (Annex 8.2.3), and the Shapefiles of areas with and without post-registration adjustments (Annex 8.5.3).

In response to the above, ANCE considered the finding closed after the project owner detailed the changes due to the exclusion of four properties, ensuring conservative and transparent reductions.

Corrective actions request (CARs)

These findings are established during verification and may be considered as non-compliance with criteria or as risks. As a result of the evaluation, seven (7) CARs were identified, which we will describe individually.

CAR 01

This mentions that during the review of the CO2Bio P2-2 project, it was identified that the risk analysis includes the possibility of fires but does not adequately evaluate the magnitude of the impact during the dry season, resulting in an incomplete risk assessment. In response, the project holder addressed the incomplete fire risk assessment during the dry season by applying /XXXIII/ and completing Annex 1, using historical MODIS and VIIRS records (2013-2024) and local climate data to recalculate the adjusted probability, estimate the affected area, and project the temporary biomass loss, maintaining the overall score at 1.29 within the Low Risk band and a 10% buffer. Additionally, /XCVI/ was implemented, including strategic firebreaks, community patrols, an early warning system on the FIRMS platform, and training of local brigades, linked to the actions of project G4. The results and control measures were incorporated into the revised versions of /III/, /I/, and Annex 1 of /XXXIII/,

ensuring traceability and compliance with AFOLU guidelines. Supporting documentation includes: /XXXIV/ considers the finding closed, aiming to optimize the fire risk assessment, adjust scores, implement mitigation measures, and update the project documentation

CAR 02

During the review of the CO2Bio P2-2 project, it was identified that although the risk analysis recognizes the threat of armed conflicts on the project properties, the classification of probability and impact does not adequately reflect the current situation, as during the visit some areas were inaccessible due to the presence of armed actors or public order risks.

In response, the project holder mentions that some properties in Arauca were inaccessible due to armed actors and public order situations, although outside the 2022-2024 monitoring period. To manage future risks, the project holder updated /LXXI/ and /XXXIV/, reevaluating the "armed conflict" risk and maintaining the weighted score at 1.29 within the low-risk category with a 10% buffer, documenting increased political vulnerability. Mitigation and monitoring measures were implemented, including an early warning system, coordination with the Military Forces and National Police, internal security protocols, and quarterly sessions with community leaders, recorded in the annual operational plans and the G-5 indicator of the safeguards matrix. The revised version of /III/, /I/, and /LXXI/ integrate restricted access maps, adaptive schedules, and evidence of institutional capacity, ensuring consistency with the territorial reality and strengthening the project's permanence.

The CAB mentions in the second round that detailed technical clarification is required regarding the weighting of political risk (1.29) in /XXXVI/, including methodologies, analysis, and supporting documentation, to ensure transparency and full verification.

The project holder updated the management and evaluation of political risk related to armed conflicts, supporting the assigned weighting of 1.29 through the tool "/XXXVI/" included in /XXIV/, in accordance with Safeguard F13: Environmental and Territorial Planning. This weighting is based on the BioCarbon Standard methodology, which considers five dimensions of risk, assigning 10% to the political component. Additionally, the information is complemented by the risk and permanence matrix documented in /XXXIV/, where the consolidated value of 1.29 is reflected. During the 2022–2024 period, no events related to armed conflict were recorded, so the risk remains low. Likewise, it was verified that procedure /XXXVII/ establishes preventive measures and security protocols for possible public order situations, reinforcing the project's adaptive management. Together, this documentation ensures traceability, transparency, and consistency of the political risk analysis within the CO2Bio P2-2 project management system.

The audit team mentions that the finding remains open during the third round, as the project holder must incorporate in documents /XXXVI/ and /XXXIV/ the classification of avoidable and unavoidable reversals (section 4.1), necessary to properly apply mitigation and compensation measures.

The project holder updated the Monitoring Report and documents /XXXVI/ and /XXXIV/, integrated into file /II/, to include the classification of avoidable and unavoidable reversals in accordance with section 4.1 of the Permanence and Risk Management tool. With these updates, the project holder states that the correct application of compensation mechanisms and traceability in the project's risk management are ensured.

The audit team considered that, based on the updated information in /XXXVI/ and /II/, which incorporates the classification of avoidable and unavoidable risks, the finding is considered closed. It is recommended to review this classification in future monitoring periods according to risk evolution.

CAR 03

In this finding, the presence of cattle within areas classified as forest in the CO2Bio P2-2 Project was observed, representing a risk to the ecosystem's integrity and the permanence of GHG reductions, as well as a possible source of unaccounted emissions (leakages).

The project holder confirmed an occasional entry of cattle into the El Remache Forest block (P2-2). They mention that the incident was corrected by removing the cattle, reinforcing fences, installing a temporary electric fence, and training local personnel. The affected area showed mild and reversible damage. The event was recorded in /XXXIV/ and evaluated with /XLII/, obtaining a score of 1.29 (low risk) with no impact on the buffer contribution (10%). Continuous training was implemented to prevent recurrence. It is considered an isolated and resolved event, without affecting GHG reductions for 2022–2024, complying with /XLII/ and REDD+ safeguards

The audit team acknowledges the project holder's actions to control cattle entry but requests technical clarifications regarding the inclusion of enteric fermentation emissions, the environmental and carbon assessment methodology, emissions monitoring for future events, and evidence of damage reversibility and effectiveness of measures to ensure transparency and confidently close the finding.

In response to the audit team, the project holder states that according to Methodology /CIV/, only CH_4 and N_2O emissions from forest fires are quantified; enteric fermentation emissions are not included. Therefore, occasional cattle presence generates emissions only if it causes deforestation or degradation, which would be accounted for as project emissions. The cattle entry was an isolated event that has been corrected through fence reinforcement, an electric fence, and a continuous training program. These measures will be maintained and evaluated in future monitoring periods to prevent deforestation or degradation. The incident does not compromise GHG reductions for 2022–2024 and strengthens the project's preventive management.

In the third round of the audit team assessment, it is noted that although methodology BCR0002 does not quantify emissions from enteric fermentation, additional information is

required to clarify the applicability of tools BCR0002 and BCR0004 in relation to GHG emissions and land-use change in the AFOLU sector. The CAB highlights the need for the proponent to identify and analyze the drivers and agents of land-use change, considering their economic and sociocultural significance, associated spatial patterns, and the impact on wetlands through multitemporal spatial analyses. This will allow for the design of mitigation measures and the delineation of the reference region. Therefore, the finding remains open until the required information is provided in accordance with the BCR methodologies.

The project proponent confirms that the occasional entry of livestock into forested areas was an isolated event that has been addressed through reinforcement of fencing, installation of electric fencing, and an ongoing training program, as documented in /XXXIV/ and /III/. According to methodologies BCR0002 and BCR0004, emissions from enteric fermentation are not included, and project emissions are only accounted for in the event of deforestation or forest degradation. The project boundaries, sources, sinks, and analysis periods were defined and validated in /III/, considering livestock as a driver of land cover change rather than a direct source of emissions. The implemented measures and continuous monitoring ensure the prevention of future impacts and demonstrate that the project has been validated, implemented, and monitored in a comprehensive and conservative manner.

Following the actions taken and the technical justification provided by the proponent regarding the applicability of the standard and methodologies in relation to the project boundaries, the finding is considered closed.

CAR 04

During the visit to the CO2Bio P2-2 project, dissatisfaction was identified among landowners and managers due to a lack of clarity regarding Verified Carbon Credit (VCC) payments and limited communication with some local stakeholders, mainly due to difficulties in using mobile devices.

In response, the project proponent confirms that a multichannel communication and accountability system has been implemented to provide information about Verified Carbon Credit (VCC) payments. This system is supported by the 2022–2024 Communications Plan Matrix, the Regional Beneficiary Service Center (CARBO), the PQRS/RCCS system, newsletters and participatory forums, as well as account statements and carbon certificate issuance reports (Folders: 2.1 Communication Channels; 2.2 RCCS/PQRS System; 2.4 Management Reports; 2.4.1 Account Statements; 2.4.2 Carbon Certificate Issuance Reports). To improve information access, printed account statements will be issued every six months, a direct hotline will be available for managers without smartphones, explanatory workshops will be held, and Annex 1 of /XXIV/ (Safeguard B) will be updated with satisfaction and response time indicators. These actions ensure that information regarding VCC is clear, accessible, and verifiable.

The ANCE audit team acknowledges that the project proponent has implemented /XXXIX/ and has multiple communication channels in place. However, it notes that limited mobile and internet coverage affects the accessibility and participation of landowners and managers. Furthermore, the follow-up of PQRS and training via email does not ensure full understanding or coverage, which is in violation of Safeguard B.2 regarding transparency and access to information. Although printed account statements are a positive step, clearer information is required on resource investments and progress (Safeguard B.3). It is also recommended to strengthen Safeguard B.5 through ongoing, contextualized, and accessible training, including clear information about payment dates. A review and adjustment of communication channels and training strategies was requested, along with submission of evidence and plans to ensure compliance with Safeguards B.2, B.3, and B.5.

In response, the proponent confirms that actions have been implemented to comply with safeguards B.2, B.3, and B.5 of the CO2Bio P2-2 project, adapting communication and training channels to the local context and connectivity limitations. For B.2 (Transparency and access to information), the CO2Bio P2-2 Communications Plan (2.1.1), the PQRS/RCCS System (procedures GIP-04 V3/V4, PQRSF report 2022–2024, PQRSF response 24-0237, 2023–2024 database), and the RENARE registry were used, ensuring clear and verifiable information. For B.3 (Accountability), newsletters, VCC issuance reports and account statements were used, along with participatory forums. For B.5 (Capacity building), training sessions were conducted and documented in reports and participation records. As part of continuous improvement, bimonthly printed account statements will be implemented with explanatory visits, a toll-free line and SMS messages, simplified modules in local workshops, updates to the safeguard matrix with satisfaction and response time indicators, and adjustments to the training schedule. All of the above is supported by the folders: 2.1 CO2Bio P2-2 Communications Plan; 2.2 RCCS/PQRS System; 2.3 RENARE Registry; 3.2.2 B3 Accountability; 3.2.4 B5 Capacity Building; and the document: /XXIV/. These actions ensure inclusive access to information, effective accountability, and capacity strengthening, meeting the requirements of the environmental and social safeguards

The finding is considered closed, supported by the CO2Bio P2-2 Communications Plan (/XXXIX/) and documentary evidence of safeguards, with new corrective actions implemented. It is recommended to ensure traceability and measurement of future actions, and to strengthen landowner participation and engagement to guarantee the permanence of the project.

CAR 05

During the review of the CO2Bio P2-2 project, it was observed that attendance at the Fundación Cataruben training sessions was very low (< 20 people) compared to the 120 properties involved in the project, indicating that the capacity-building objectives should be reconsidered in terms of quantity and representativeness.

In response, the proponent states that 74 ecosystem managers from 70 properties (58% of the total 120) participated in 10 training sessions and exchange meetings of the CO2Bio P2-2 project. Additionally, the Biodiversity, Carbon, and Water Forums of 2022 and 2023 gathered 839 and 436 participants respectively, expanding the scope of the capacity-building component.

Limited connectivity in rural areas was identified as a factor affecting continuous attendance. To improve access, strategies will be implemented such as virtual recordings, accessible educational materials (PDF, audio, video), and adapted in-person sessions, documented in /LXIII/.

The audit team acknowledges that the proponent has identified the limiting factor and has implemented relevant adaptive measures under the Participation Safeguard. However, the finding remains open due to the lack of documented evidence of representative participation, preliminary results of the applied strategies, and a follow-up plan. In addition, clarification is required on how the provisions of Safeguard D10 are being met in terms of participation and recognition of community structures, in accordance with Colombian legislation and international agreements.

In response to the finding regarding Safeguard D10 – Participation, the CO2Bio P2-2 project has implemented adaptive strategies to ensure the representative inclusion of the stakeholders involved. This is supported by procedure /XLI/, which includes synchronous and asynchronous training actions, attendance records, a virtual connection indicator (ICVE), and the delivery of summary materials to those who were unable to attend, as well as a Monitoring and Evaluation Plan – Participation in Capacity Building. Participation evidence is documented in /XL/, including attendance records, barrier diagnostics, and a training plan for upcoming cycles (2. Annexes / 2. Project Activities / 2.4. G.1 / 2.4.1.1 to 2.4.1.13).

The project maintains effective communication channels and feedback mechanisms through virtual mailboxes, WhatsApp, surveys, and meetings, reinforcing the participation of local stakeholders and organizations such as SIRAP Orinoquia and ASOCARBONO. A governance committee has been established where landowners elect representatives who work with Fundación Catarubén and Latam (2. Annexes / 3. Safeguard Compliance / 3.4. Safeguard D / 3.4.1.1 and 3.4.1.2; 3.2.3 B4 Governance Strategy / 3.2.3.1.1 and 3.2.3.1.2).

Formal agreements with landowners and documentation in Section 5 of the PdT and Section 7 of the Monitoring Report ensure transparency, protection of parties' rights, and voluntary participation, strengthening communication and relationships with stakeholders. This evidence demonstrates that the project complies with Safeguard D10, implementing representative and traceable participation mechanisms, with ongoing monitoring and continuous improvement.

ANCE audit team responds and considers that the finding regarding "Safeguard D10 – Participation" is closed, supported by the implementation of procedure /XLI/, document /XL/, and the documentation of training sessions and their annexes (2. Annexes / 2. Project Activities / 2.4. G.1 / 2.4.1.1 to 2.4.1.13). It is recommended that, in future verification periods, the implementation and monitoring of corrective actions be traceable and measurable.

CAR 06

During the review of the CO2Bio P2-2 project, the need for greater clarity was identified regarding the leakage belt (leakage area) according to BCR v4.0, including criteria for delimitation and updating areas of possible deforestation:

- *BCR0002: 250 m buffer, 27,005 ha.*
- *BCR0004: 600 m buffer, 63,916 ha according to eligibility criteria.*

It is required to detail the monitoring system with spatial and satellite data and to avoid double counting of emissions. Clear cartographic information and shapefiles showing the project's delimitation relative to indigenous territories and protected environmental areas are requested, including a second shapefile excluding four plots (124 plots total). This information ensures transparency, territorial adjustment, and safeguard compliance.

In response, the project proponent of CO2Bio P2-2 clarifies that the applicable version is BCR 3.2 and that the delimitation of the leakage area is carried out according to the criteria of /III/, approved by a VVB, and following the methodologies BCR0002 (section 14.5.1, REDD+ Geodatabase Annex 8.1.3 and dictionary 8.1.2) and BCR0004 (section 19.2, Wetlands Geodatabase Annex 8.2.3 and dictionary 8.2.2). These areas are monitored to quantify increases in deforestation, forest degradation, or wetland degradation, discounting the corresponding emissions. The project maintains robust geospatial databases that include project boundaries, leakage areas, other properties, indigenous reserves, and protected zones, with data dictionaries, and generates shapefiles that support territorial delimitation: Shapefile 1 (8.5.1 Collective Communities) shows no overlap with indigenous reserves, natural parks, integrated management districts, or Ramsar sites; Shapefile 2 (8.5.2 Vector with and without changes post-registration) evidences the reduction from 124 to 120 plots. This documentation ensures traceability, accuracy, and transparency of the delimitation, emissions monitoring, and interaction with indigenous territories and protected areas, complying with methodological criteria and the applicable regulatory framework.

After reviewing the delimitation of the leakage belt and verifying the BGF and shapefiles provided by the proponent, it is concluded that the leakage area, the reference area, and the project area do not overlap and comply with the BCR guidelines.

CAR 07

During the review of the project's Monitoring Report, it was detected that it does not comply with the guidelines of version 4.0 of the BCR Standard. The proponent was requested to

update the report to reflect the new criteria and requirements, including review of the baseline scenario and methodologies, data quality assurance, management of leakage and permanence risks, integration of required documentation in English, and adoption of any new applicable requirements for future periods. This update is essential to maintain the validity and certification of the project under the BioCarbon program and to ensure the credibility of the carbon credits generated.

The proponent clarified that the applicable version is /C/, since the site visit concluded before the entry into force of version 4.0 and new tools, which will be applied in the renewal of the quantification period. Procedure /XLI/ was implemented to ensure representative participation in training, combining synchronous and asynchronous sessions, sending summaries to absent participants, and continuous monitoring, complemented with feedback channels such as WhatsApp, email, and surveys.

Supporting documentation was provided: /XL/ and materials (2.4. G.1 / 2.4.1.1 to 2.4.1.13), Monitoring and Evaluation Plan – Participation, procedure /XLI/, means and participation mechanisms (3.4.1.1 and 3.4.1.2), and governance strategy and 2024 management reports (2.7 / 3.2.3.1.1 and 3.2.3.1.2).

The delimitation of leakage and project areas was carried out according to /III/, /CIV/, and BCR0004 v2.0, with monitoring through REDD+ and Wetlands geodatabases (Annexes 8.1.3 and 8.2.3) and shapefiles 1 and 2, ensuring no overlap with indigenous reserves, national parks, or Ramsar sites. Uncertainty management was conducted following applicable methodologies, with map accuracy >90% and validated emission factors (<10% uncertainty).

The finding is considered closed, as the verification was conducted under /C/ before the publication of version 4.0. For future verification periods, the proponent must update the documentation and tools to their latest versions (/LXXII/, /LXXIII/, /LXXI/, /XLII/, among others) to ensure compliance, traceability, and validity of the results.

Forward action request (FARs)

A Forward Action Request (FAR) is a request for future action issued when, during the verification or monitoring of a project, elements are identified that require follow-up or implementation in subsequent periods to ensure continuous compliance with standards or safeguards.

In this case, no FARs were identified. However, in CARs 02, 04, 05, and 07, considerations involving actions that must be carried out in the future are included, such as monitoring improvements, implementing additional measures, or adjustments to existing procedures. For this reason, these actions can be classified as FARs, ensuring they are taken into account for upcoming monitoring and verification periods.

Within Annex 2 of this document, a more detailed traceability of each finding can be consulted, including the response provided by the project proponent, resulting changes in project documents, and punctual follow-up of the corresponding actions.

Conclusion: During the verification process, a total of nine findings were identified and successfully addressed through a structured three-round review. The findings comprised two Clarification Requests (CLs) and seven Corrective Action Requests (CARs), covering critical areas such as emission factor justification, property count adjustments, risk management for fires and armed conflicts, livestock incursion, stakeholder communication, training participation, and methodological compliance.

All findings were satisfactorily closed after the project proponent provided detailed technical justifications, implemented corrective measures, and updated relevant documentation—including the Monitoring Report, risk assessments, and communication protocols. The resolution demonstrated robust adherence to BCR Standard methodologies and safeguards.

While no formal Forward Action Requests (FARs) were issued, specific CARs include recommendations for ongoing monitoring and procedural improvements in future verification periods. This ensures continuous alignment with evolving standards and enhances the project's long-term credibility and transparency.

3.3 Verification team

The following table presents the professional profiles of the verification team assigned to this project, in accordance with section 8.2-1 "Team Competence" of the VVM, version 3.0, June 2025.

Table 13. ANCE´s verification team.

Verification team		*Professional profile*
Lead auditor's	*Excalibur Ernesto Acosta Miranda*	*Academic Background: Environmental Engineer, graduated from the National Polytechnic Institute, Professional License Number: 9409081 /Anex 1/.* *Verifier/Validator in the following scopes: A total of 110 verification services has been conducted for various companies, primarily in the Industrial and Energy sectors. Additionally, 4 validation and verification services have been performed for GHG mitigation projects—2 in the energy sector and 2 in the waste sector. Accredited expertise encompasses the following sectors:* *1. Power Generation and Electric Power Transactions* *2. General Manufacturing (physical or chemical transformation of materials or substances into new products)*

<table>
<tr><th colspan="2">*Verification team*</th><th>*Professional profile*</th></tr>
<tr><td colspan="2"></td><td>3. Oil and Gas Exploration, Extraction, Production, and Refining
4. Pipeline Distribution, including Petrochemicals
5. Metals Production
6. Mining and Mineral Production
7. Chemical Production
8. Transportation
9. AFOLU.
10. Waste Handling and Disposal.

Certifications and Competencies (Annex 1):

1) Competency in ISO 14064-2:2019 (Greenhouse Gases - Part 2: Specification with guidance at the project level for quantification, monitoring, and reporting of emission reductions or removal enhancements).
2) Accreditation in ISO 14065:2020 (General principles and requirements for bodies validating and verifying environmental information).

These qualifications and experiences align with the technical and professional requirements detailed in Annex 1.

AFOLU Sector Projects and Inventories

<table>
<tr><th>Project Name</th><th>Date</th><th>Role</th><th>Standard/Methodology Used</th></tr>
<tr><td>Carbono Forestal Viveros de Montebelo</td><td>April 7 – 9, 2025</td><td>Lead Validator</td><td>Bio Carbon Standard</td></tr>
<tr><td>Grupo Porcícola Mexicano S.A. de C.V.</td><td>September 6, 2021</td><td>Verifier</td><td>National Emissions Inventory</td></tr>
<tr><td>Agropecuaria Tarasca S. de P.R de R.L Granja De La Cruz</td><td>July 12 – 13, 2023</td><td>Lead Verifier</td><td>National Emissions Inventory</td></tr>
<tr><td>Grupo Porcícola Mexicano S.A. de C.V.</td><td>August 19 – 22, 2024</td><td>Lead Verifier</td><td>National Emissions Inventory</td></tr>
</table>
</td></tr>
<tr><td colspan="3">*Activities*</td></tr>
</table>

Verification team		*Professional profile*
In accordance with the latest versions of ISO 14066, ISO 14064, and ISO 14065, as well as ANCE procedures, the lead auditor's responsibilities included: 1. *Acting as the official communication channel between ANCE and the Cataruben Foundation.* 2. *Performing a 100% review of the documentation submitted by the Cataruben Foundation.* 3. *Developing and elaborating the strategic plan for the conformity assessment process.* 4. *Conducting pertinent risk assessments and developing the corresponding mitigation plan.* 5. *Establishing and approve the evidence collection plan and the audit plan.* 6. *Conducting and carrying out field visits.* 7. *Executing the audit in accordance with the established verification plan.* 8. *Submitting the findings report to the holder, managing its review, and ensuring their timely closure.* 9. *Assessing changes made to the Greenhouse Gas (GHG) statements.* 10. *Preparing and drafting the joint validation and verification report.*		
Verifier auditor	*Nancy Adriana Barrera Gómez*	*Academic Background:* *Environmental Engineer, graduated from the National Polytechnic Institute, Professional License Number: 13289456 / Annex 1.* *Technical Experience:* *Lead Verifier for Greenhouse Gas (GHG) Inventories in sectors associated with IAF MD 14, including General Manufacturing, Mining and Mineral Production, Metal Production, Chemical Production, and Pulp, Paper, and Printing.* *A total of 40 verification services has been executed in accordance with ISO 14064-1:2018 and other relevant protocols.* *Certifications and Competencies (Annex 1):* *1) Certified in GHG Inventories for the AFOLU Sector (CAR) for inventory development.* *2) Competency in ISO 14064-2:2019 (Greenhouse Gases - Part 2: Specification with guidance at the project level for quantification, monitoring, and reporting of emission reductions or removal enhancements).* *3) Competency in ISO 14064-2:2019 (Greenhouse Gases - Part 3: Specification with guidance for the validation and verification of greenhouse gas statements*

Verification team		*Professional profile*
		4) Accreditation in ISO 14065:2020 (General principles and requirements for bodies validating and verifying environmental information). *5) Certified in the Mexico Forest Protocol for GHG project quantification and verification.* *6) These qualifications and experiences align with the technical and professional requirements detailed in Annex 1.* *AFOLU Sector Projects and Inventories*

Project Name	*Date*	*Role*	*Standard/Methodology Used*
Incauca S.A.S.	*March 03, 2025*	*Lead Verifier*	*14064-1*
Manuelita S.A.	*March 06, 2025*	*Lead Verifier*	*14064-1*
Mayagüez S.A.	*March 07, 2025*	*Lead Verifier*	*14064-1*
Grupo Porcícola Mexicano S.A. de C.V.	*August 19 – 22, 2024*	*Verifier*	*National Emissions Inventory*

Activities

In compliance with the latest ISO 14066, 14064, and 14065 standards and ANCE procedures, the verifier auditor was responsible for:

1. *Perform a comprehensive (100%) review of the documentation submitted by the Cataruben Foundation.*
2. *Collaborate in the development and elaboration of the strategic plan for the conformity assessment process, providing technical expertise as an AFOLU sector expert.*
3. *Participate in conducting pertinent risk assessments and in developing the corresponding mitigation plan, in the capacity of an AFOLU sector expert.*
4. *Contribute to the development of the evidence collection plan and the audit plan.*
5. *Accompany and supervise the execution of field visits.*
6. *Collaborate in the elaboration of the findings report and on the management of its review process.*
7. *Assess changes made to the Greenhouse Gas (GHG) statements.*
8. *Collaborate in the drafting and consolidation of the joint validation and verification report.*

Verification team		*Professional profile*
Independent technical review	*Janai Monserrat Hernández Contreras*	*Environmental engineer, graduated of Autonomous University of Mexico City, Professional License Number: 9763033* *Verifier/Validator In the following scopes:* *Responsible for the Verification Validation Body (VVB), performed the following activities: administration of commercial and operational staff, administration and coordination of verification and/or validation services, maintenance of management system, development and implementation of new projects, as well as the administration of the Agency's income and expenses.* *Lead verifier, independent reviewer and technical expert for the verification and validation of greenhouse gas (GHG) emissions reporting and mitigation projects in sectors such as industrial, energy, transportation, AFOLU, waste and trade and services; for programs such as the General Law on Climate Change in terms of RENE, ISO 14064-1. ISO 14064- 2, International Aviation Carbon Offsetting and Reduction Scheme - CORSIA, etc.* *Certifications and Competencies (Annex 1):* *1) Certified in GHG Inventories for the AFOLU Sector (CAR) for inventory development.* *2) Competency in ISO 14064-2:2019 (Greenhouse Gases - Part 2: Specification with guidance at the project level for quantification, monitoring, and reporting of emission reductions or removal enhancements).* *3) Competency in ISO 14064-2:2019 (Greenhouse Gases - Part 3: Specification with guidance for the validation and verification of greenhouse gas statements* *4) Accreditation in ISO 14065:2020 (General principles and requirements for bodies validating and verifying environmental information).* *5) Certified in the Mexico Forest Protocol for GHG project quantification and verification.* *These qualifications and experiences align with the technical and professional requirements detailed in Annex 1.* *AFOLU Sector Projects and Inventories:*

<table>
<tr><td>Verification team</td><td></td><td>Professional profile</td></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Project Name</th><th>Date</th><th>Role</th><th>Standard/Methodology Used</th></tr>
<tr><td>Carbono Forestal Viveros de Montebelo</td><td>April 7 – 9, 2025</td><td>Independent Reviewer</td><td>Bio Carbon Standard</td></tr>
<tr><td>Grupo Porcícola Mexicano S.A. de C.V.</td><td>September 6, 2021</td><td>Verifier</td><td>National Emissions Inventory</td></tr>
<tr><td>Manuelita S.A. 1</td><td>July 12 – 13, 2023</td><td>Lead Verifier</td><td>National Emissions Inventory</td></tr>
<tr><td>Incauca S.A.S. 1</td><td rowspan="2">August 19 – 22, 2024</td><td>Lead Verifier</td><td>National Emissions Inventory</td></tr>
<tr><td>Mayaguez S.A. 1</td><td>Lead Verifier</td><td>14064-1</td></tr>
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</td></tr>
<tr><td colspan="3">Activities</td></tr>
<tr><td colspan="3">The independent technical review´s duties, governed by the most recent editions of ISO 14066, ISO 14064, and ISO 14065, as well as ANCE's established procedures, encompassed the following:

1. Adequacy of the verification team's competencies
2. Proper design of the verification/validation activities
3. Completion of all planned verification/validation activities
4. Significant decisions made during the process
5. Sufficiency and appropriateness of evidence supporting the opinion
6. Consistency between collected evidence and the proposed opinion
7. The GHG statement and verification/validation opinion
8. Conformity with applicable standards, specifically verifying that:
a) Risk assessment, verification/validation plan, and evidence collection plan aligned with objectives, scope, and assurance level
b) A data investigation trail existed for emissions, removals, and material storage
c) Evidence collection activities addressed identified risks
d) Team decisions were supported by adequate evidence
e) New statements had been properly assessed
f) The GHG statement met applicable criteria
g) All significant issues had been identified, resolved, and documented</td></tr>
<tr><td>Approver</td><td>Joel Miguel Ramirez</td><td>Electric engineer, graduated from the National Polytechnic Institute, Professional License Number: 2731971.

Conformity Quality Manager in Association for Standardization and Certification (ANCE), with more than 25 years of experience in</td></tr>
</table>

Verification team		*Professional profile*
		evaluation of norms and standards related to industry, commerce and services, occupying different positions in the areas of product certification, quality assurance, management systems, infrastructure, management systems certification, inspection units and GHG validation / verification body. *Currently serve as manager of the Systems Certification Body and Validating / Verifying Body of ANCE.*
Activities		
The Conformity Quality Manager oversaw adherence to OVV procedures, validating that the methodologies were technically robust and the audit evidence was sufficient and appropriate. Following the technical and review phases, they assessed the report for consistency, completeness, and clarity, ensuring it accurately reflected the findings and conclusions		

ANCE is committed to compliance with the BCR Anti-Corruption Policy described in section 8.2. 4 of the BCR Standard Validation and Verification Manual, with the intention of strengthening compliance with this policy ANCE performed the corresponding risk analysis through the Risk Identification and Mitigation Matrix identified as Internal COI Analysis_Cataruben.xlsx (see Annex 6), with the intention of determining that there are no conflict of interest, impartiality and operational risks that prevent the execution of the verification process in an impartial manner. As a conclusion of the analysis ANCE has applied the following mitigation measures:

a) The CAB confirms with each member of the verification team before assigning him/her to a verification activity whether he/she is free of conflict of interest.
b) The CAB notifies the prospective client of the details of the designated verification team members and requests the recusal of any team member or independent reviewer if there is COI of interest.
c) The CAB shall designate a verification team that has no relationship/family relationship with the prospective client.
d) The designated verification team shall adhere to ANCE's policies and shall not accept personal benefits during the performance of verification services.
e) The CAB shall designate a verification team that does not have any kinship, consanguinity or extra-employment relationship with the potential client.

The competencies of the team can be found in Annex 1.

4 Validation findings

During the audit of the CO2Bio P2-2 project, the ANCE verification team identified certain issues that the GHG project proponent fully resolved over the course of three response rounds, as demonstrated below:

Corrective actions request (CARs)

The five findings identified during the first round were considered CARs. Among them was the determination regarding the existence of fires and their impact magnitude. To address this issue, the GHG project leader incorporated these considerations into the DDP /III/ and the monitoring reports /I, II/, and applied the tool /XXXIV/, recalculating the probability adjusted for the dry season, estimating the potentially affected area, and projecting temporary biomass loss. As a result, the Natural/Environmental Risk subcategory increased to 2.25/5; however, the overall weighted score remained at 1.29, within the low-risk category. Thanks to the improvements implemented in the risk assessment, this finding was considered closed.

Regarding the political risk associated with the presence of armed conflicts on project-associated properties, it was verified that the assigned classification of probability and impact did not adequately reflect the current situation, as it was not possible to access certain project areas during the site visit. In response, the project leader incorporated these considerations into the tool and its Annex 1, reclassifying this risk. Nevertheless, an additional clarification regarding the weighting assigned to political risk (value 1.29) was deemed necessary. Therefore, the project proponent demonstrated, through documents /XXXVI/ and /XXIV/, the risk assessment and provided additional evidence related to the management of political risk via the internal procedure /XXXVII/.

During the third round, the Project Holder (PH) was requested to detail the classification of avoidable and unavoidable risks in files /XXXVI/ and /XXXVIII/. Once this classification was completed, the finding was considered closed.

Regarding Finding 3 at the sampled points of the CO2Bio P2-2 project, the presence of livestock was observed within areas classified as forest. This situation represents a risk to the integrity of the ecosystem and the permanence of GHG reductions, as well as a potential source of unaccounted or poorly managed emissions (leakage). The project proponent clarified that this event occurred outside the 2022–2024 monitoring period; however, it was decided to reinforce training and surveillance. Furthermore, the tool /XXXVIII/ was re-evaluated, obtaining a final weighted score of 1.29 after analysis of the five risk categories. It was concluded that the livestock intrusion was an isolated event that does not compromise the reductions reported for 2022–2024 nor generate uncontrolled leakage. Consequently, and considering the justification provided regarding the quantification of emissions from enteric fermentation, this finding was considered closed.

For Findings 4 and 5, related to local stakeholder participation and the timely provision of information on benefits and VCC revenue distribution, as well as limited communication with these stakeholders, the project proponent strengthened understanding and access to financial information through printed account statements, a toll-free line for managers, explanatory models, and the update of safeguards. During an additional round, detailed clarification was requested regarding certain safeguards and the communication and compliance channels. Following the actions taken by the proponent and the implementation of activities supported in /XXXIX/, the findings were considered closed.

Regarding Finding 5, which required a CAR due to attendance and participation in training for stakeholders, the proponent implemented various strategies through multiple channels, distribution of materials, and technical visits to the properties. Another round was opened to demonstrate compliance with Safeguard D10, during which the proponent presented adaptive strategies to overcome barriers related to connectivity, distance, or availability, supported by documentation /XL/ and /XLI/. This finding was considered closed, although it is recommended to continue implementing and monitoring corrective actions in future verification periods.

Findings 6 through 9, which arose after the on-site visit, were related to leakage management, the application of the most updated version of the BCR Standard in the project report /I, II/, the emission factor used for SOC (Soil Organic Carbon), and post-registration changes to the project. Based on the evidence and justifications provided, all were considered closed during the third round of findings.

Finally, regarding all presented findings, they were considered closed in accordance with the Tool /XLII/, which ensures the integrity and credibility of the data reported in the monitoring, including activity data, emission factors, and other relevant parameters.

Forward Action Requests (FARs)

These findings are related to the implementation of future actions that ensure the integrity of the project and must be reviewed in upcoming verifications as applicable. It is established that at least four of these findings will require, in future periods, not only monitoring their traceability but also that the execution and follow-up of corrective actions be clearly traceable and measurable.

Finally, all deviations identified during the requirements audit process are described in greater detail in Annex 2.

Conclusion: The verification process identified several findings that were fully resolved by the project proponent across three response rounds. Corrective actions addressed key areas, including fire risk assessment, political risk management, livestock incursion prevention, stakeholder communication, and training participation. All findings were successfully closed

after the implementation of enhanced monitoring protocols, documentation updates, and procedural improvements.

While no formal Forward Action Requests were issued, four findings require ongoing monitoring in future verification periods to ensure the continued effectiveness of corrective measures. The project demonstrated robust responsiveness to audit observations, implementing comprehensive solutions that strengthened risk management frameworks and stakeholder engagement processes.

The satisfactory resolution of all findings, supported by detailed evidence and methodological justifications, confirms the project's compliance with verification requirements and maintains the integrity of reported GHG data

4.1.1 Methodology deviations

No deviations were found for the application of the methodology /V/, /VI/.

4.1.2 Changes after project registration

During the post-registration verification process, the evaluation team identified, through document review and on-site verification, the following permanent modifications to the original design, which are reflected in the monitoring reports and in a change annex. In total, modifications were made to the Greenhouse Gas (GHG) Project design, the main one being an update to the project area /I//II//III//V//VII//XXII//V//VI/ XXXVIII//XLIV//XLIV//XLV//XLVI//XLVII/ /XLVIII/.

The process to validate conformance with the BCR Standard was systematic and is documented as follows:

1. *Identification & Justification: The need for change was identified due to the landowners' formal withdrawal. Justification and legal documentation (unilateral termination agreements) were compiled//XLIV//X/I//II//III//V//VII//XXII//LV//XLVI//XLVII/ /XLVIII/.*
2. *Technical Implementation: The project's GIS team executed the change using approved procedures /L//LI/, updating the project boundary shapefiles and recalculating the project's total area.*
3. *Documentation & Reporting: All changes, their justifications, and impacts were transparently documented in the Monitoring Report for the 2022-2024 period and the updated Project Document, as required by the SOP /CXXXIII/.*

This update consisted of the withdrawal of properties, with a total of four plots being removed. The main reason was the receipt of unilateral letters due to a lack of response from the client. The verification team reviewed the updated geographic boundaries and the supporting documentation, which includes the unilateral letters with the property names and the documents evidencing their disassociation, to confirm that the active project areas continue to meet the eligibility criteria.

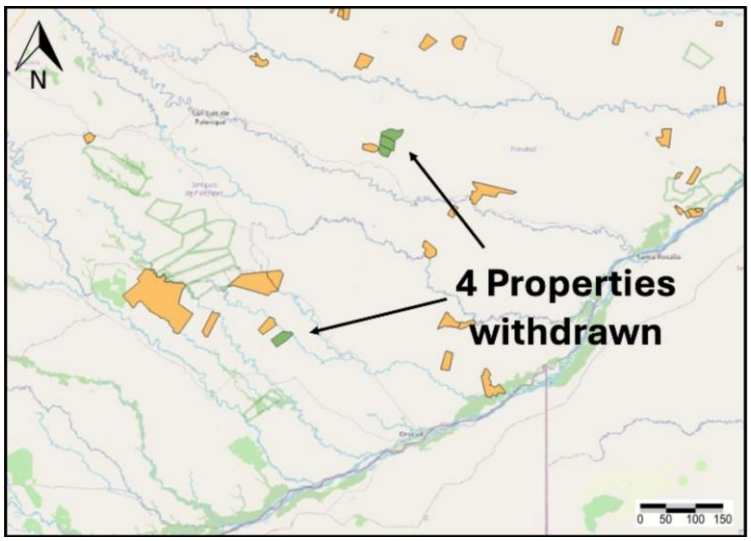
It was verified that the remaining areas:

- *Remain within the original intervention zone.*
- *Comply with forest eligibility criteria and do not present double-counting.*
- *Maintain valid land tenure and participation agreements.*

Regarding the impact of the changes, it was considered that, in the baseline scenario, the excluded areas represent a minimal percentage of the total and do not include critical zones, so the baseline model and the expected deforestation rates remain unchanged. Regarding additionality, the changes do not alter the conditions, as the active plots continue to meet the socioeconomic and threat criteria.

These modifications were made in accordance with the provisions of the BCR Standard version 3.2./LXXII/ In response, an updated version of the project was prepared, detailing the nature and scope of the deviations, as well as the procedure followed to implement the modifications, applying a conservative approach to the deduction of emissions, the emission factors used, and the total emissions removed. This ensures that the changes do not lead to an overestimation of quantified emissions, guaranteeing the integrity and consistency of the project.

Table 14. Changes to the post-registration project.

Component	***Description of deviations.***
Carbon Rights	 *During the monitoring period corresponding to 2022-2024, four properties were formally withdrawn. As a result of this withdrawal, the properties have been excluded from conservation and are no longer part of the emissions contribution and benefits associated with the project.*

	The exclusion has been reflected in the period corresponding to the 2022–2024 Monitoring Report, as documented through Termination Records /XLIV//XLVI/. *The audit team reviewed the procedures defined by the project for the closure of contracts, as documented in the file Procedimiento de Desvinculación de Predios a Proyectos de Mitigación de Cambio Climático.docx (5).pdf /XLIII/. Additionally, the specific supporting documents evidencing the termination of the contracts for four properties were examined: El Renacer Contract (Notificación Terminación Unilateral del contrato El Renacer.pdf) /XLVI/, the UNILATERAL TERMINATION AGREEMENT OF CONTRACT No. BH-P2-121 OF 2022 ENTERED INTO BETWEEN THE CATARUBEN FOUNDATION AND EDILBERTO CRUZ RODRIGUEZ (Unilateral Termination Agreement BH-P2-009 OF 2023 - Jesus Mejia Ruiz.docx) /XLV/, and the UNILATERAL TERMINATION AGREEMENT OF CONTRACT No. BH-P2-121 OF 2022 ENTERED INTO BETWEEN THE CATARUBEN FOUNDATION AND EDILBERTO CRUZ RODRIGUEZ (Unilateral Termination Agreement BH-P2-121 of 2022 - El Renacer.pdf).* *As a measure to prevent future withdrawals, the Project expects that with the implementation of the activities and the economic benefits perceived by the beneficiaries, they will not drop out. This expectation was reinforced by the 11 interviews with owners conducted by the audit team. To verify the fulfillment of these economic benefits, the payment records in the documents certificados de Pagos a Propietarios (Boletín Informativo.pdf.) /CXXIV/ and the Informe entrega de beneficios económicos CO2BIO P2-2.pdf /CXXV/ were also reviewed.*
Quantification of Greenhouse Gas emission reductions	*The reduction of the impacted areas affects emissions starting from January 1, 2022. Therefore, the emissions projection is referenced based on Tables 14 to 19, as well as the emissions calculation spreadsheet used.* *In the emissions calculation tool /XVII/, the reduction corresponding to the excluded areas is reflected within the projection, thereby preventing overestimation. This results in a 10.58% variation in the emissions projection.*
Impact on the Baseline Scenario	*The baseline scenario for the project remains unchanged. The project is developed across multiple sites with a common baseline scenario applicable to all. The withdrawal of four properties does not alter the identified underlying drivers of deforestation and forest degradation in the region, nor the business-as-usual land-use change patterns that define the baseline. The baseline emissions projection was updated from 01/01/2022 to exclude the withdrawn areas, ensuring accuracy /XVII/.*

Impact on Additionality	*The audit confirms that the post-registration change, consisting of the withdrawal of four properties, was conducted in full conformance with the BCR Standard v3.2 and relevant SOPs. The change was properly justified by the formal disassociation of landowners and meticulously executed following the project's internal Procedure for the Disengagement of Properties /XLIII/, as evidenced by the unilateral termination agreements /XLIV/, /XLV/, and /XLVI/. The assessment concludes that the project's baseline scenario, additionality demonstration, and monitoring plan remain valid and unchanged. The quantification of GHG emission reductions has been conservatively adjusted to reflect the reduced area, and potential risks to permanence and leakage have been adequately identified and are managed within the project's established frameworks. Consequently, the changes are deemed acceptable, and the project's mitigation results for the 2022-2024 monitoring period remain conservative and credible.*
Impact on Monitoring Plan and Quantified Mitigation Results	*The audit confirms that the structural framework and operational protocols of the monitoring plan remain fully intact and unmodified following the property withdrawals. All prescribed monitoring activities - including forest cover assessment, biodiversity tracking, and safeguards verification - continue to be implemented according to their original design parameters, now applied to the reconfigured project area /I//II//III//V//VII//XXII/.* *Regarding quantification outcomes, the reduction in project area has been properly accounted for in emission calculations. The baseline and project emissions have been systematically recalculated effective 01/01/2022, with the withdrawn areas explicitly excluded from all projections to prevent overestimation. This recalibration resulted in a conservative downward adjustment of total projected emission reductions, which has been thoroughly documented in the monitoring report and corresponding emissions spreadsheet as referenced in /XVII/. The implemented methodology ensures the maintained integrity and conservativeness of all reported mitigation outcomes.*
Implications for Permanence and Risk of Reversal	*The withdrawal of areas was assessed for its impact on permanence and the risk of reversal. The project's Risk Management Plan /XXXIV/ /XXXV// XXXVI// XXXVIII//LXXI/ was reviewed to ensure the integrity of the remaining emission reductions.* *Integrity of Reductions: The withdrawal was managed procedurally, and the corresponding carbon credits for the excluded areas will no longer be issued. This prevents any compromise to the integrity of the certified emission reductions from the continuing project area.*

	Risk of Reversal in Withdrawn Areas: A key consideration is the potential for increased reversal risk on the withdrawn properties themselves, as they are no longer bound by conservation agreements. The project has documented this risk. The leakage risk assessment (addressed in Section 5 below) and the project's ongoing monitoring of the leakage belt are the primary tools to manage any potential off-site reversal effects.
Assessment of Potential Leakage Risks	*The audit has verified that potential leakage risks associated with land-use change or deforestation in the withdrawn areas "El Renacer" and "Jesús Mejía Ruiz" have been explicitly assessed and adequately addressed /XXXIV/ /XXXV// XXXVI// XXXVIII//LXXI/. The project's leakage belt - the designated buffer zone for monitoring displaced emissions - has been properly updated to reflect the new project boundaries, ensuring continued comprehensive surveillance.* *The project's leakage management framework remains robust, employing methodologies /V/ and /VI/ for active quantification of leakage emissions. This is supported by formal procedures for delimiting leakage areas /LII/ and specialized tools for identification and evaluation /XCIII/, creating a system capable of detecting and accounting for any deforestation activity that may shift to the excluded properties or their immediate vicinity.* *While the withdrawn properties represent potential loci for leakage, the audit confirms that the project's enhanced monitoring and verification system, combined with the updated leakage belt, provides sufficient safeguards to identify, quantify, and deduct any such emissions from the total mitigation results. This systematic approach maintains the credibility and environmental integrity of the project's claims.*

Conclusion: The post-registration verification confirmed the formal withdrawal of four properties from the project area due to unilateral termination by owners //. The project proponent properly documented these changes through termination records and updated the monitoring reports and emissions calculations accordingly.

The verification team validated that the remaining project areas continue to meet all eligibility criteria, maintain valid land tenure agreements, and remain within the original intervention zone. The reduction in project area resulted in a 10.58% adjustment in emissions projections, which was conservatively applied in the calculations to prevent overestimation.

These modifications were implemented in compliance with BCR Standard v3.2 requirements, ensuring the project's integrity and the accuracy of reported emission reductions despite the structural changes.

4.1.3 Other GHG program

During the document review and interviews conducted during the on-site inspection, it was validated and verified that the project is not registered in any other program, including the following. To corroborate this information, an exhaustive search was conducted in all existing registries, confirming that the project has not been considered in any other greenhouse gas (GHG) program:

*BCR (Global CarbonTrace):** The project classified as BCR-CO-635-14- is unique in this registry and has not attempted to register in any other. It belongs to the Forest Conservation sector and is of the Agriculture, Forestry, and Other Land Use (AFOLU) type.*

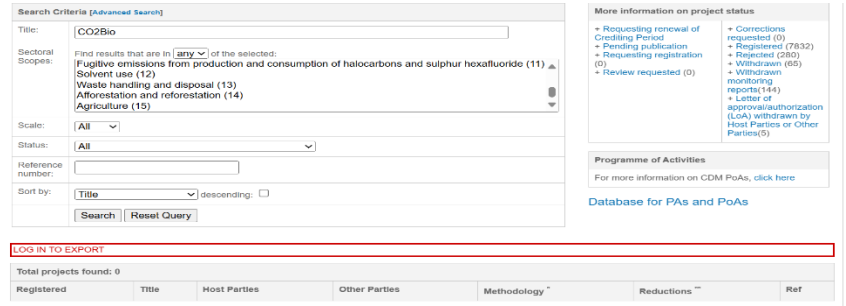
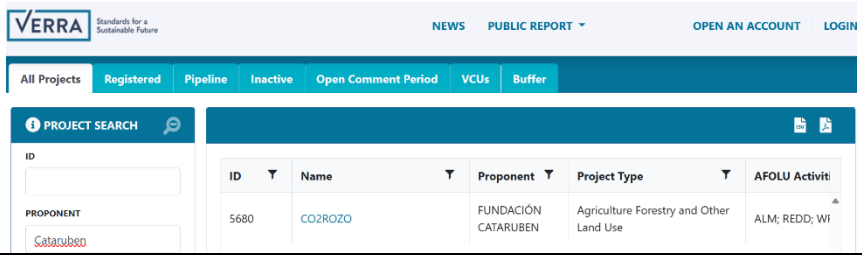
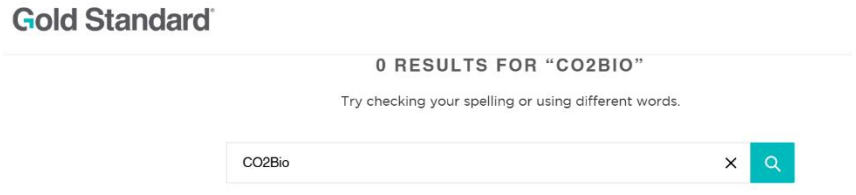
- *BCR (Global CarbonTrace): The project classify as BCR-CO-635-14- is unique in this registry and has not attempted to register in any other. It belongs to the Forest Conservation sector and the Agriculture, Forestry, and Other Land Use (AFOLU) type.*
- *Cercarbono (EcoRegistry): The project is not listed in this registry.*
- *CDM (CDM: Project Activities): The project is not listed in this registry.*
- *Verra (Verra Search Page): The project is not listed in this registry.*
- *Gold Standard (Gold Standard Marketplace): The project is not listed in this registry.*
- *CSA (Clean Projects Registry Listing |GHG Clean Projects): The project is not listed in this registry.*
- *Plan Vivo (https://www.planvivo.org/): The project is not listed in this registry.*

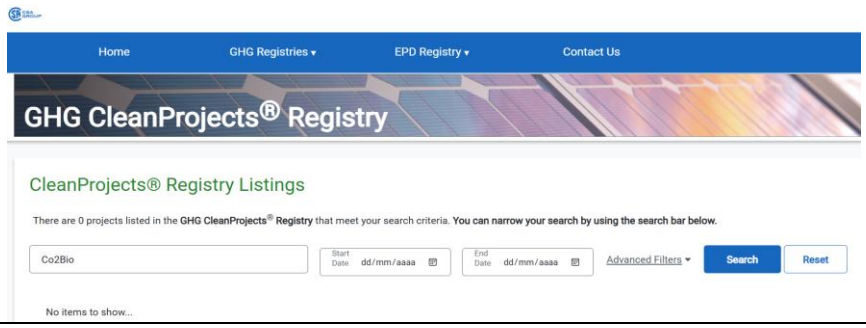
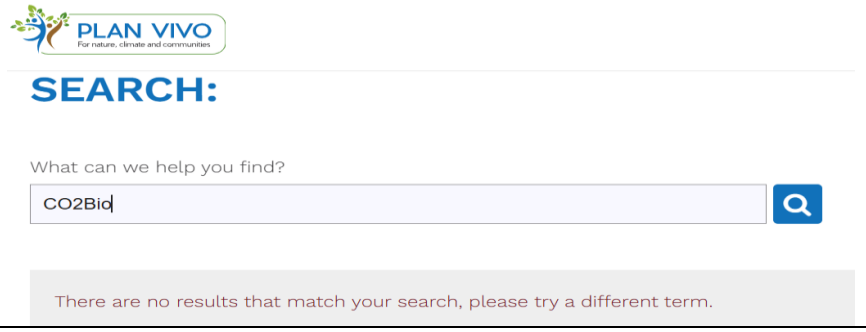
The following table shows evidence that the project has not been registered in any other program.

During interviews with the project proponents and as cited in Section 13 of the Project Design Document (PDD), it was reaffirmed that "The CO2Bio Project 2-2 does not apply to this section, as it does not originate from other greenhouse gas (GHG) programs, nor has it been previously registered under any similar program. As part of the project's design and implementation, a systematic and thorough search of carbon standards was conducted using public and private databases, confirming that none of the areas included in the project are part of another registry under any GHG program, whether national or international."

The following table shows evidence that the project has not been registered in any other program.

Table 15. Cross-referencing the Project in Other Programs to Prevent Double Counting.

Standard	Verified evidence
BCR – BioCarbon Standard /CXCIV/	
Cercarbono /CXXXVII/	
CDM – Clean Development Mechanism /CXCV/	
Verra /CXXXVIII/	
Gold Standard /CXCII/	

Standard	*Verified evidence*
CSA /CXCIII/	
Plan Vivo /CXCI/	

Compliance Analysis and Eligibility

The verification was carried out in accordance with the BCR Validation and Verification Manual, applying a gap analysis to ensure the project's integrity under the BCR Program:

a) *Previous Registration Withdrawal: Not applicable. The project is native to the BCR program and does not originate from another registry system; therefore, there is no previous registration to be withdrawn. This was evidenced through interviews with the Holder's technical team during the opening and closing meetings of the on-site audit. This was further corroborated by an extensive search in other standards, which found no existing registration in the project area, no projects under other standards developed by the same Holder, or any national-level programs, as there are currently no active state programs in the project area to date.*
b) *Exclusivity of Reductions/Removals: The assessment confirms that the reductions or removals generated by the project are not part of another project registered with BIOCARBON or any other GHG program. This fulfills BIOCARBON's eligibility criterion (b) /LXXII/.*
c) *Compliance with Regulatory Framework: The project complies with the requirements established in the Colombian national legal framework and with the operating rules and procedures established by BIOCARBON, as documented in the PDD and monitoring reports.*
d) *Eligibility for the BCR Program: The project evaluation confirms that it consistently meets all the applicability conditions of the methodologies BCR0002 (REDD+) /V/ and*

BCR0004 (Continental Wetlands Conservation) /VI/. The Project Holder has correctly justified and applied each requirement, which was verified by the auditor team through document review, geospatial analysis, and an on-site visit (interviewed stakeholders, section 3.2.3.2, Table 12). The following details on how each condition is maintained:

Methodology BCR0002 - REDD+ /V/

- *Forest Category: Maintained by verifying, using the IDEAM monitoring system /V//VI//LXXIII//LXXIV//LXXX//CXXVII /CII//XLVIII//XLII/, that the project area was and continues to be categorized as forest.*
- *Causes of Deforestation: Maintained by identifying specific and local causes (agricultural expansion, livestock farming, oil industry) that align with official national sources /V//VI//LXXIII//LXXIV//LXXX//CXXVII /CII/.*
- *Causes of Degradation: Maintained by including factors such as selective logging and forest fires in the analysis /V//VI//LXX//LXXXVI/ /CI//XCIV/.*
- *Additionality: Maintained by demonstrating, through the baseline analysis, that deforestation and degradation would continue in the absence of the project, and that the REDD+ activities are effective in preventing it /V//VI//LI//LXX//CII /XLVIII/XLII/.*
- *Carbon Pools: Maintained by confirming that the project activities will conserve and potentially increase carbon stocks in soil organic matter, litter, and deadwood/V//VI//LI//LXX//CII/.*
- *Greenhouse Gases (GHG): Maintained by establishing that emissions of GHGs other than CO_2 will be quantified in the event of forest fires /V//VI//LI//LXX//CII/.*

Methodology BCR0004 - Continental Wetlands Conservation /VI/

- *Wetland Category: Maintained by overlaying the project boundaries with national maps, confirming the correspondence with continental wetland ecosystems (Morichales, Saladillales, etc.) /V//VI//LXXIII//LXXIV//LXXX//CXXVII /CII/XLII/.*
- *Prevention of Land Use Change: Maintained through activities specifically designed to prevent the expansion of the agricultural frontier and the transformation of these ecosystems /V//VI//LXXIII//LXXIV//LXXX//CXXVII /CII/LI//L/.*
- *Biodiversity Conservation: Maintained through concrete actions such as the declaration of Civil Society Natural Reserves and other conservation figures that integrate preservation and sustainable use/V//VI/ /X//XII//XIV//LXVII//LXVIII/.*
- *Causes of Land Use Change: Maintained by correctly identifying agricultural and livestock expansion as the main drivers of change in the baseline /V//VI//LXXIII//LXXIV//LXXX//CXXVII /CII/.*

- *Hydrological Regime: Maintained by verifying on-site the absence of drainage or irrigation systems that alter the natural water flow in the wetlands. /V//VI//LVII/*
- *Soil Disturbance: Maintained by confirming that the planned activities do not cause soil disturbance and do not exceed the 10% surface area threshold /V//VI//LXXIII//LXXIV//LXXX//CXXVII /CII/.*

The project maintains the applicability conditions of both methodologies through robust justification in its design document (PD) and the implementation of effective conservation activities. The audit team corroborated this compliance through an exhaustive review and cross-referencing of information, concluding that there is total consistency between the methodological requirements and the project activity.

e) *Geospatial Overlap Analysis: As part of the project design, spatial information from nine (9) projects located within the influence area of CO2BIO P2-2 was obtained from the official websites of carbon standards (BCR, COLCX, CERCARBONO, VERRA, GOLD STANDARD). A spatial intersection analysis between this vector layer and the CO2BIO P2-2 project areas identified that there are no overlaps with the areas of any other registered carbon project.*

The evaluation of conformity with Section 25 of the BCR Standard (which deals with projects transferred from other programs) is straightforward: The CO2Bio Project 2-2 does not apply to this section. The project is native to the BCR standard and has not been transferred from any other GHG program. No attempts have been made to enroll in programs other than BCR, so it has also not been rejected by any other GHG program or standard.

Conclusion: It has been conclusively verified that the CO2Bio Project 2-2 (BCR-CO-635-14) is exclusive to the BCR program and is not, and has never been, registered with any other national or international carbon standard. This claim is supported by an exhaustive search of the public registries of all major programs, such as Verra and Gold Standard, and was corroborated through interviews with the project proponent.

The geospatial analysis confirms that there are no overlaps between the project areas and those of any other registered carbon project, thereby eliminating the risk of double counting. As a project native to BCR, the requirement for previous registration withdrawal is not applicable. The project fully complies with BCR's eligibility criteria, including the exclusivity of its GHG reductions and removals.

The evaluation of the BCR0002 (REDD+) /V/ and BCR0004 (Wetlands) /VI/ methodologies demonstrates that the project consistently maintains all its applicability conditions. This was verified through document review, geospatial analysis, and an on-site visit, confirming total consistency between the methodological requirements and the project activity. Therefore, the provisions for projects transferred from other programs do not apply in this case.

4.1.4 Grouped projects.

Through ANCE's evaluation of the project, it was noted that the project is not clustered; furthermore, it was established that since its validation, the project has not been considered as part of a clustered project.

5 Verification findings

During the audit of the CO2Bio P2-2 project, ANCE identified several findings, which the Project Holder fully resolved over three rounds of responses.

The first five findings, considered Corrective Action Requests (CARs), included an assessment of fire impact. To address this, the Project Leader incorporated adjustments in the Project Design Document (DdP) /III/, the monitoring report, and applied the tool /XXXIV/, resulting in an increase in the Natural/Environmental Risk subcategory, while keeping the overall risk at a low level, thereby allowing this finding to be closed.

Regarding the political risk linked to armed conflicts in project areas, this category was reviewed and reclassified following access difficulties during the site visit. Additional evidence was provided through /XXVI/ and internal procedures, closing this finding after a detailed classification of avoidable and unavoidable risks.

Finding 3 was related to the occasional presence of livestock in forested areas, posing a risk to ecosystem integrity and GHG reductions. This was clarified as an event occurring outside the 2022–2024 monitoring period, with reinforced training and surveillance measures, and an adjusted risk assessment, allowing this finding to be closed.

Findings 4 and 5 addressed local stakeholder participation and communication regarding benefits and revenue distribution, which was improved through printed account statements, helplines, explanatory models, and updated safeguards. Adaptive strategies were also implemented for training to overcome connectivity and accessibility barriers, closing these findings while recommending continued monitoring.

Findings 6 through 9, arising after the on-site visit, were related to leakage management, updates to the BCR standard in the report, applied emission factors, and post-registration changes. With the respective evidence provided, these findings were also closed in the third round.

Overall, all findings were considered closed in accordance with /XLII/, which ensures the integrity and credibility of the monitored data.

Additionally, Future Action Requirements (FARs) were identified, representing risks associated with the implementation of future measures to ensure the project's veracity. At least four of these FARs will require monitoring of their traceability, and the execution and

supervision of corrective actions must be measurable and documented in future verifications.

Deviations detected during the audit process are detailed in Annex 2.

5.1 Project and monitoring plan implementation

5.1.1 Project activity implementation

During strategic planning, the ANCE team focused on verifying the project activities and evaluating the evidence provided by the Project Holder. During this monitoring period, a detailed assessment was conducted of the project's implementation and operational status, in accordance with the validated project document, the monitoring plan, and applicable verification requirements. To identify potential discrepancies between actual implementation and the project description, all activities carried out were meticulously compared with those established in the original document, allowing for the detection and assessment of deviations and conclusions regarding the accuracy of project execution.

The information provided, including activity records, progress reports, monitoring data, and other relevant documents, was thoroughly reviewed. Cross-verification of this information was conducted through comparisons with independent sources and interviews with project personnel. These methodologies ensured that project actions were real, effective, measurable, verifiable, additional, transparent, and continuous.

According to Section 3.2 of /III/, the project boundary is established as comprising 124 properties (Figure 2); however, when cross-checking the information verified in Section 4.1.2 of this document, it is reported that during the 2022–2024 monitoring period, the departure of 4 properties was formalized, resulting in a modification of the total project area (Figure 3).

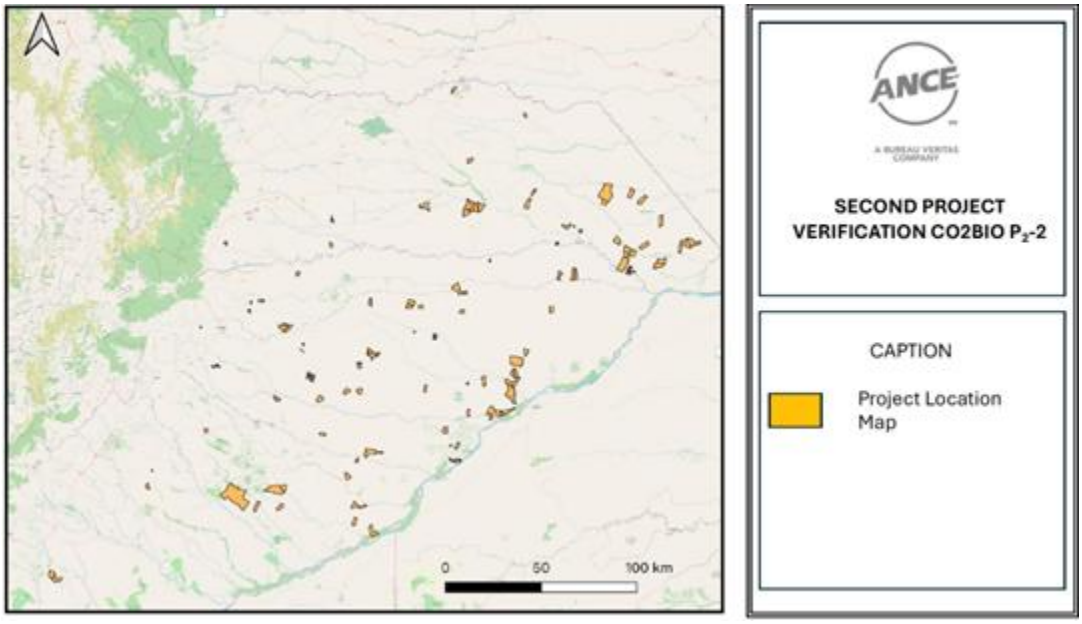


Figure 2.Initial project area (validated: 124 properties) /XLVII/
Source: Fundación Cataruben

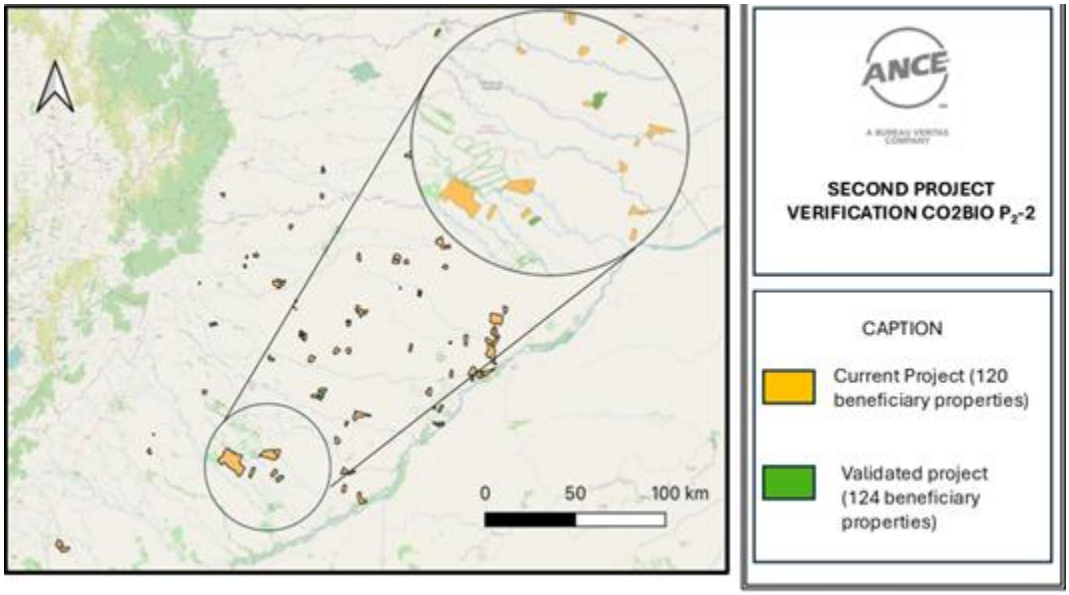


Figure 3. Current project area indicating withdrawn properties (green) – Post-registration changes /XLVIII/.
Source: Fundación Cataruben

For the calculation of emissions during the monitoring period, Project Holder considered that the baseline emissions projection is based on the project areas. The areas corresponding to withdrawn properties were subtracted from the projection of remaining areas. In this way,

and applying the principles of accuracy and conservatism, the baseline emissions were proportionally reduced; likewise, the leakage buffer was adjusted.

During the 2022–2024 monitoring period, net emissions reductions showed a variation of 10.58% compared to the initial estimate, mainly due to lower degradation and land-use conversion in the project and leakage areas, resulting in an additional reduction of GHG emissions.

It is also important to highlight that, during the document review, on-site verification of the sampled properties, and the interviews conducted, it was confirmed that the Project Holder has implemented the actions established in the monitoring plan for this period. However, as part of the process of addressing findings, additional actions were necessary to ensure follow-up not only on the completion of activities but also on the corresponding safeguards. Nevertheless, it is recognized that there is strong control over the monitoring and its frequency, which allows for ensuring the traceability of each activity through physical and digital evidence, as well as conducting a weighted evaluation of the expected compliance during the period /XXIV/.

In summary, it is concluded that the project activities comply with the established standards, demonstrating rigorous quality control and effective management that ensure alignment with the project's original objectives and requirements. No evidence of deforestation displacement was found, supporting the environmental integrity of the project. It is concluded that the project meets the technical criteria for carbon accounting, maintaining the required traceability and verifiability.

5.1.2 Monitoring plan implementation and monitoring report

During the verification period, the project reported a total reduction of 503,516.00 tCO2e, with a weighted annual average of 167,839 tCO2e/year. The methodology used for the preparation of the monitoring report is based on that established by the BCR for Wetlands /VI/ and for REDD+ /V/. Additionally, the project incorporated the tools established by the Standard to ensure quality in the quantification and management of emission reductions.

The criteria for this verification are detailed in section 2 of this document. The process was carried out with a level of assurance of no less than 95%, and the material discrepancy in the data supporting the GHG emission reduction estimate did not exceed 5%. The consistency between the baseline and the results was evaluated according to the validated baseline, following the methodology applied to the "CO2Bio P2-2" project. Compliance with the current legal framework in Colombia was also verified, as well as the adequacy of the indicators reflecting the project's contribution to the Sustainable Development Goals and the application of Safeguards.

As part of the verification process of the monitoring plan, document /I, II/ was reviewed, which in sections 15.2 and 16 presents a systematic documentation of the technical

procedures and data used to establish the baseline, following the approved methodological guidelines. Additionally, the methods to quantify the project's GHG emissions and potential detected leakages are detailed, ensuring transparency, consistency, and traceability to guarantee the reliability of the results.

Considering the implementation and supervision of each project activity, the following table presents an explanatory analysis which, in accordance with the applicable section, identifies the most relevant changes — if any — and establishes a comparison between the Project Document /XXII/ and the previously validated Monitoring Report version 2.2. This analysis highlights the adjustments and updates incorporated in Monitoring Report version 2.3 corresponding to the 2022–2024 period.

The review was carried out systematically by cross-referencing the three aforementioned documents, allowing the identification of both specific modifications and general trends in activity implementation. Aspects evaluated included alignment with established indicators, incorporation of new evidence, methodological evolution, and the degree of compliance achieved.

Table 16. Comparison between Monitoring Report, Version 2.2 (Validated) and Monitoring Report, Version 2.3 (Period 2022–2024).

Section	*DdP, Version 2.2 (Validated)*	*Monitoring Report, Version 2.2 (Validated)*	*Monitoring Report, Version 2.3 (Period 2022–2024)*
Scope and type of Project	*The Project is classified in the AFOLU sector, which includes GHG emissions reduction activities through REDD+ activities and activities focused on the Wetland ecosystem.*	*The Project is classified in the AFOLU sector, which includes GHG emission reduction activities through REDD+ activities and activities focused on the Wetland ecosystem.*	*The project belongs to the AFOLU sector and focuses on the reduction of greenhouse gas (GHG) emissions through REDD+ strategies and actions focused on the conservation and sustainable management of wetlands.*
In the comparison between the project scope and type, an analysis of the validated Project Document version 2.2 and the Monitoring Report version 2.3 corresponding to the 2022–2024 period shows that no significant changes have been recorded in either of these areas. Therefore, it is concluded that both the project scope and type remain unchanged during the evaluated period.			
General description of the project	*The Project reduces CO_2 emissions by developing activities that reduce deforestation of forests, as well as the transformation of natural Wetlands in 124 private properties located in the departments of Arauca and Casanare. To achieve this objective, the project supports actions that comprehensively*	*CO2Bio P2-2 is a climate change mitigation project that reduces CO_2 emissions by developing activities that reduce deforestation and transformation of natural Wetlands in 124 private properties located in the departments of Arauca and Casanare, the environmental, social and*	*The Project reduces CO_2 emissions by developing activities that reduce deforestation of forests, as well as the transformation of natural Wetlands in 120 private properties located in the departments of Arauca and Casanare. To achieve this objective, the project supports actions that comprehensively address the landscape, considering land use change and the implementation of more sustainable practices in forest and wetland ecosystems*

<table>
<tr><th>Section</th><th>DdP, Version 2.2 (Validated)</th><th>Monitoring Report, Version 2.2 (Validated)</th><th colspan="3">Monitoring Report, Version 2.3 (Period 2022–2024)</th></tr>
<tr><td></td><td>address the landscape, considering land use change and the implementation of more sustainable practices in forest and wetland ecosystems.</td><td>economic impact of the Project is directed to 102,863 total hectares.</td><td colspan="3"></td></tr>
<tr><td colspan="6">Regarding the general description of the project, it was identified that, in the comparison between the validated Project Document version 2.2 and the Monitoring Report version 2.3 (Section 13.2 – Changes after registration), the formal withdrawal of 4 plots was documented. This change was based on the risk analysis conducted during the due diligence process related to carbon ownership, in which high-level risks were identified for the ecosystem managers. As a result, the withdrawal of these plots led to a modification of the project's total area; the properties were excluded from conservation activities and ceased to contribute to the emission reduction benefits originally contemplated. The termination was carried out following the established technical procedure /XCVII/ and was supported by the submission of documentary evidence confirming the unilateral termination of the corresponding contracts /XLIV/ & /XLV/.</td></tr>
<tr><td rowspan="3">Project activities REDD+ - BRC 002</td><td rowspan="2">Strengthen knowledge for the sustainable management of ecosystems and biodiversity conservation through virtual and/or in-person training.</td><td rowspan="2">Conduct training on ecosystem services and conservation of strategic ecosystems.</td><td rowspan="2">30 %</td><td>G1. Training and skills development for men and women involved in the project in technical-environmental, social, and administrative-financial areas, with the aim of strengthening their capacities and improving decision-making aligned with the project's objectives.</td><td>G.1.1: 41 %

G.2.1: 57 %</td></tr>
<tr><td>A1. Development and Implementation of a Water Management Program.</td><td>A.1.1: 20%</td></tr>
<tr><td colspan="5">In the comparison between the validated versions of the Project Document (/XXII/) and the Monitoring Report (MR v2.3), several specific differences were identified. The most relevant pertains to the definition of the activities included in the monitoring within the project scope. Each activity is associated with a specific indicator that allows for the evaluation of the level of compliance achieved.

To address the component "Conduct training on ecosystem services and conservation of strategic ecosystems," activities such as G.1.1 were carried out, which measures the number of people impacted by capacity building in technical-environmental, social, and administrative-financial areas, and G.2.1, which records the number of training sessions conducted.

As evidence of these actions, there is a documentation folder that includes detailed reports and support materials from the capacity building process. Among the supporting documents are training videos on sustainable productive practices, alternative water solutions, water resource management, REDD+ safeguards, tax obligations, among other topics. Attendance lists, such as the one contained in file /CI/. Presentations related to the monitoring of fires, wetlands, and ecosystem services.

Additionally, the report /LXIII/ is available, detailing the topics covered and contributions linked to the Sustainable Development Goals (SDGs). Participation in biodiversity forums and the launch of the "Eco-leaders" program, aimed at strengthening responsible leadership among community actors and the</td></tr>
</table>

Section	*DdP, Version 2.2 (Validated)*	*Monitoring Report, Version 2.2 (Validated)*		*Monitoring Report, Version 2.3 (Period 2022–2024)*	
	Foundation's staff, are also documented. These actions contribute to the development of skills and capacities in both men and women, providing practical knowledge applicable on their properties and strengthening commitment to the conservation of strategic ecosystems.				
	Promote forest governance in the project area.	*Promote the implementation of governance strategies.*	*25%*	*G2. Deployment of the governance strategy in the territory, promoting participatory decision-making for the sustainable management of strategic ecosystems.*	*G.2.1: 45%*
	Promoting sustainable forest management	*Conduct training on sustainable forest management*	*20%*	*G3. Continuous monitoring of changes in forest cover as a proportion of the total area within the project boundaries.*	*G.3.1. 22.20 %*
	Promote the delimitation and/or signaling of conservation areas.	*Promote the delimitation and/or signaling of conservation areas.*	*25%*		
	In the comparison between the validated versions of the Project Document (/XXII/) and the Monitoring Report (MR v2.3), several specific differences were identified. The most significant corresponds to the definition of the activities included in the monitoring within the project scope. Each activity is associated with a specific indicator that allows evaluation of the level of compliance achieved. *In particular, indicator G.3.1: Proportion of forest within the project, linked to SDG 15, reflects the monitoring of activity 2.6.1 G.3: Continuous monitoring of changes in forest cover as a proportion of the total area within the project boundaries, documented in file /XIV/. The objective of this activity is to quantify the proportion of the area covered by natural forest and its spatial distribution. For this purpose, data corresponding to the monitoring period year were used, allowing the elaboration and interpretation of satellite images. From these images, a natural forest cover map was generated, useful for monitoring eligible areas and detecting possible leakages through classification techniques.* *As a result, a comparison was made between the periods 2018 and 2024 to evaluate whether there was an increase in the conservation of natural forest cover in the areas linked to the project. This analysis shows progress in the forest restoration processes promoted by the initiative. Regarding the losses detected, these are mainly attributed to natural or climatic phenomena. During the monitoring period corresponding to 2024, a net gain of 1.8% in forest cover was reported, representing a positive result in terms of conservation and ecosystem recovery.*				
	Promote and improve agricultural production, livestock (on existing land) and tourism, through the	*Promote and improve agricultural production, livestock (on*	*31.25%*	*G5. Promote the adoption of sustainable productive actions and practices at the state and local levels, with the aim of preserving carbon stocks and*	*G.5.1: 51.26%*

Section	*DdP, Version 2.2 (Validated)*	*Monitoring Report, Version 2.2 (Validated)*		*Monitoring Report, Version 2.3 (Period 2022–2024)*	
	implementation of good sustainable practices.	*existing land) and tourism, through the implementation of goods sustainable practices.*		*protecting biodiversity in strategic ecosystems*	
	In the comparison between the validated versions of the Project Document (/XXII/) and the Monitoring Report (MR v2.3), several specific differences were identified. The most relevant corresponds to the definition of activities subject to monitoring within the project's scope. Each activity is associated with a specific indicator that allows evaluation of the level of achievement reached. *For indicator G.5.1: Properties implementing sustainable productive practices (SPP), actions and strategies for ecosystem conservation, the documented procedure in /LXXVI/ was reviewed. This report describes the short- and medium-term actions aimed at coordinating Property Implementation Plans on various properties linked to the project.* *The actions are grouped into two main approaches: Ecosystem Conservation and Sustainable Productive Practices.* *Both approaches seek to reduce pressure on strategic ecosystems and contribute to achieving the project's objectives. 18 conservation activities were prioritized, including: installation of electric fences, planting native species, use of solar panels, reforestation, wildlife monitoring, installation of watering and drinking troughs, composting, live fences, declaration of natural reserves, firebreak strategies, and surveillance, among others.* *Among the most frequent activities were:* *- Firebreak strategies (66%), installation of watering troughs (42%), delimitation of conservation areas (25%), planting of native species (35%), reforestation (19%), live fences (13%), and nursery creation (6%). These actions contribute to the conservation and restoration of ecosystems, promote natural regeneration, and support carbon capture. Other notable measures to reduce the ecological footprint include the use of solar panels (50%), eco-efficient stoves (12%), waste separation (19%), and electric fences (44%). Regarding sustainable productive activities aimed at diversifying income and promoting alternatives compatible with conservation, the following were identified: sustainable livestock farming (63%), tree planting in pastures (28%), ecotourism (5%), livestock vaccination (81%), and small species production (61%).* *Together, these actions demonstrate significant progress in the implementation of sustainable practices, achieving 51.26% compliance with the indicator during the second evaluated period.*				
	Generate alerts of changes due to deforestation and/or transformation of ecosystems in the project area and its surroundings.	*Conduct satellite monitoring of hot spots*	*25%*	*G4. Active monitoring of environmental threats, such as fires, in the project area, as well as the identification of potential alerts for timely management.*	*G.4.1: 22.2%*

Section	DdP, Version 2.2 (Validated)	Monitoring Report, Version 2.2 (Validated)		Monitoring Report, Version 2.3 (Period 2022–2024)	
Project activities Wetlands – BCR 004	*Strengthening knowledge in wetland conservation and sustainability to prevent the expansion of the agricultural frontier*	*Train personnel in wetland conservation and sustainability issues.*	*28.83%*	*G1. Training and skills development for men and women involved in the project in the technical-environmental, social, and administrative-financial areas, with the purpose of strengthening their capacities and improving decision-making aligned with the project's objectives.*	*G.1.1: 41%*
					G.1.2:57%
		Conduct training on wetland conservation and sustainability issues.	*20%*	*A1. Development and Implementation of a Water Management Program*	*A.1.1.: 20 %*
	In the comparison between the validated versions of the Project Document (/XXII/) and the Monitoring Report (MR v2.3), several specific differences were identified. The most relevant corresponds to the definition of activities subject to monitoring within the project's scope. Each activity is linked to a specific indicator that allows evaluation of the level of achievement reached. *In the case of indicator A.1.1: Percentage of CO2BIO initiative properties with diagnosis, design, implementation, and monitoring of water management, compliance evidence is supported by document /VII/. This program aims to promote the efficient use of water and the conservation of water resources and is aligned with SDG 6. Its social and environmental approach is designed to generate a positive and lasting impact on the properties linked to the project, focusing on access to drinking water, efficient use, and preservation of aquatic ecosystems. As part of the long-term process within the project's scope, characterization of each linked property was carried out through surveys answered by the owners, with results recorded in /VII/. Based on this information, the Efficient Water Use and Savings Program (PUEAA) is being developed. However, to date, the percentage of compliance with the indicator is mainly attributed to the diagnosis and design phases.* *Additionally, raising awareness among stakeholders through training and informational materials is considered essential. The program also includes activities such as the implementation of water capture and storage systems, technologies for saving water, water quality monitoring, and restoration of aquatic ecosystems, among other actions aimed at strengthening water management on the linked properties.*				

Section	DdP, Version 2.2 (Validated)	Monitoring Report, Version 2.2 (Validated)		Monitoring Report, Version 2.3 (Period 2022–2024)	
	Characterization and implementation of sustainable production and conservation practices.	Manage the implementation of sustainable production and conservation practices.	25%	G4. Active monitoring of environmental threats, such as fires, in the project area, as well as the identification of potential alerts for timely management.	G.4.1: 22.2%
				G5. Promote the adoption of sustainable productive actions and practices at the property and local levels, with the aim of preserving carbon reserves and protecting biodiversity in strategic ecosystems.	G.5.1: 51.26%
	Several specific differences were identified. The most relevant corresponds to the definition of activities subject to monitoring within the project's scope. Each activity is associated with a specific indicator that allows evaluating the level of compliance achieved. In the case of indicator G.4.1: Monitoring of thermal anomalies/fires in vegetation cover, linked to SDG 15, various procedures have been established for tracking environmental threats. Notably, report /XIII/ presents the results of heat spot detection in the project areas, aiming to prevent and avoid fires. For this purpose, satellite monitoring is used through MODIS and VIIRS thermal sensors, which allow data integration, early alert generation, and event severity analysis. This technology enables continuous surveillance in vulnerable zones and the timely implementation of mitigation measures. During the period of highest incidence, 740 heat spots were identified in the monitored areas. However, no fire-related losses were recorded within the project area. Likewise, zones with the highest recurrence of thermal events were classified as critical areas, allowing efforts to be focused on prevention and response.				
	Strengthening of governance structures in the territory	Promote the implementation of governance strategies	25%	G2. Deployment of the governance strategy in the territory, promoting participatory decision-making for the sustainable management of strategic ecosystems.	G.2.1: 45%
	In the comparison made between the validated versions of the Project Document (/XXII/) and the Monitoring Report (MR v2.3), several specific differences were identified. The most significant corresponds to the definition of activities subject to monitoring within the project's scope. Each activity is associated with a specific indicator that allows evaluating the level of compliance achieved. In particular, for indicator G.2.1: Progress of the governance board, the monitoring is documented in file /CII/. This report aims to establish a participatory process that ensures that decisions related to project				

<table>
<tr><th>Section</th><th>DdP, Version 2.2 (Validated)</th><th>Monitoring Report, Version 2.2 (Validated)</th><th colspan="3">Monitoring Report, Version 2.3 (Period 2022–2024)</th></tr>
<tr><td></td><td colspan="5">management are understood and evaluated by the involved stakeholders, fostering trust relationships among the project owner, the linked property owners, the ecosystem managers, and their allies.

The governance board was created with the purpose of planning, implementing, and evaluating strategies aimed at mitigating climate change and conserving strategic ecosystems on the private properties linked to the project. It is composed of:

• 5 representatives of the ecosystem managers, distributed by sector of interest.
• 3 representatives of the allies (LATAM).
• 3 representatives of the Foundation.

As part of the informed participation process, a CARPO (Regional Beneficiary Support Center) was implemented, whose objective is to provide personalized assistance to the project beneficiaries in managing requests, complaints, petitions, and suggestions (PQRS). During the monitoring period, activities to disseminate the governance strategy were carried out, including the production of informational videos. It is worth highlighting that among the ecosystem managers there is female representation, which reinforces the project's commitment to gender equity in decision-making processes.</td></tr>
<tr><td rowspan="2"></td><td rowspan="2">Recognition of conservation areas and figures for the sustainable management of biodiversity.</td><td rowspan="2">Property declared under a conservation category</td><td rowspan="2">58.33%</td><td>B1. Participatory biodiversity monitoring</td><td>B.1.1: 51.26 %</td></tr>
<tr><td>B2. Monitoring of AVCs</td><td>B.2.1: 53%</td></tr>
<tr><td colspan="6">In the comparison between the validated versions of the Project Document (/XXII/) and the Monitoring Report (MR v2.3), key differences were identified, especially in the definition of the activities subject to monitoring within the project, each associated with specific indicators to assess compliance. In particular, indicator B.1.1, related to Participatory Biodiversity Monitoring, is supported by two main documents: /LXVII/ and /VIII/.

The methodology describes a workflow that includes the random selection of plots for monitoring stations in forest and wetland, virtual training on the use of preconfigured devices, and a sound recording period at regular intervals (1 minute every 29 minutes). The devices are then returned for analysis with the BirdNet application, which generates species lists cross-referenced with regional databases, with results delivered to each manager by plot.

The results report documents the characterization of biodiversity in the project area, recording 584 species from different taxonomic groups: plants, mammals, birds, amphibians, and reptiles. Notable findings include trees from the Fabaceae and Connaraceae families in the vegetation cover, a low number of amphibian records indicating the need for increased sampling, and a high diversity of birds with 248 species distributed across 57 families and 191 genera. The overall progress of participatory monitoring is 21%, reflecting significant initial progress in the implementation of this strategy for the ecosystems present in the plain and other areas of the project.

This participatory bioacoustic approach is essential for identifying and protecting High Conservation Values by collecting detailed information on indicators, threatened, or ecologically relevant species, contributing to environmental management based on scientific data and community participation.

Participatory bioacoustic biodiversity monitoring is fundamental for the identification, protection, and management of High Conservation Values (HCVs), as it provides detailed information on the presence and activity of indicator, threatened, or ecologically relevant species. This process allows the definition of areas with high biological diversity and is reflected in the fulfillment of indicator B.2.1 Monitoring of HCVs through /X/, aligned with SDG 15 and with conservation co-benefits.</td></tr>
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<table>
<tr><th>Section</th><th>DdP, Version 2.2 (Validated)</th><th>Monitoring Report, Version 2.2 (Validated)</th><th colspan="2">Monitoring Report, Version 2.3 (Period 2022–2024)</th></tr>
<tr><td colspan="5">

The HCVs selected for the project are six:

- *HCV 1: Areas with high biological diversity values, assessed through variables related to species richness, protected areas (RUNAP), and continental, coastal, and marine ecosystems. The main input was species distribution models from the Main Ecological Structure of the Colombian Orinoquía Project (2020).*
- *HCV 2: Areas with ecosystems in good conservation status at the landscape level, assessed using land cover and land use layers from MapBiomas Colombia and other geospatial sources. This includes an analysis of 5.8 million hectares predominantly composed of agricultural/pasture mosaics, floodplain forests, and glaciers.*
- *HCV 3: Classification of ecosystems within CO2Bio P2-2 properties based on percentage and level of threat, establishing high, medium, and low priority categories.*
- *HCV 4: Areas providing ecosystem services, analyzed using forest/non-forest indicators, land cover and land use, as well as hydrological factors such as water regulation and flood volumes.*
- *HCV 5: Areas that meet basic needs of local communities, focused on access to essential resources such as drinking water, food, and traditional livelihoods, especially in Arauca and Casanare.*
- *HCV 6: Areas of cultural, spiritual, or historical importance to local communities, especially Indigenous and rural populations, reflecting traditional identity.*

These HCVs are assessed through a strategic formula that prioritizes HCVs 1 and 2 due to their determining role in ecosystem composition and condition, with HCVs 3 and 4 serving as general parameters of susceptibility and environmental response to the project.

The global monitoring progress is 28%, indicating that significant improvements have been achieved in key aspects of the ecosystem, although the project still holds notable potential to further strengthen impact mitigation and ecosystem resilience.
In conclusion, participatory bioacoustic monitoring and the comprehensive evaluation of HCVs provide a solid and strategic scientific foundation to guide conservation actions, ensuring efficient management and protection of biodiversity in the project area.

</td></tr>
<tr><td rowspan="4">*Quantification of GHG emissions reductions*</td><td>*Projected Remaining Forest Area*</td><td>*10,412.4 ha*</td><td rowspan="4">*Does not apply*</td><td>*Projected Remaining Forest Area*</td><td>*10,181.0 ha*</td></tr>
<tr><td>*Projected Remaining Forest Leakage Area*</td><td>*5,061.0 ha*</td><td>*Projected Remaining Forest Leakage Area*</td><td>*4,718.0 ha*</td></tr>
<tr><td>*Projected Remaining Wetland Area*</td><td>*49,214.5 ha*</td><td>*Projected Remaining Wetland Area*</td><td>*47,668.9 ha*</td></tr>
<tr><td>*Projected Remaining Wetland*</td><td>*33,935.9 ha*</td><td>*Projected Remaining Wetland Leakage Area*</td><td>*32,472.9 ha*</td></tr>
</table>

Section	*DdP, Version 2.2 (Validated)*		*Monitoring Report, Version 2.2 (Validated)*	*Monitoring Report, Version 2.3 (Period 2022–2024)*	
	Leakage Area				
Regarding the general description of the project, it was identified that, in the comparison between version 2.2 of the validated Project Document (/XXII/) and version 2.3 of the monitoring report (section 13.2 on post-registration changes), a reduction in area was formalized, which impacts the quantification of emissions as of 01/01/2022. Consequently, the reference emissions projection was updated. These changes are generally illustrated in the previous section of the version 2.3 monitoring report; however, the submitted calculations were verified and validated, and were supported by document /XVII/.					
Compliance with applicable legislation	*This monitoring process is carried out through a /LXXXIII/ that is updated according to the procedure established in the document management system called /LXXXV/ Requirements and others that ensures timely and adequate compliance with laws and regulations in constant evolution.*		*Applicable legislation covers a wide variety of areas, including social, environmental, economic and cultural aspects, among others. These regulations are constantly updated to reflect ongoing changes and the need to keep them up to date. In this context, a rigorous control of the /LXXXIII/ was implemented, following the procedure stipulated in the document management system called /LXXXV/*	*This process is managed through the Procedure for Managing Legal and Other Requirements (2. Annex / /LXXXV/, /LXXXIII/), which allows recording and evaluating the current regulations applicable to each project activity.*	
The information from the Project Document (/XXII/) and the Monitoring Record (MR), both version 2.2, was compared with the version 2.3 monitoring report corresponding to the 2022–2024 period, determining that there are no differences regarding compliance with the requirement "Compliance with applicable legislation." The documents reference /LXXXV/, applicable to Fundación Cataruben in accordance with its activities and services. Although this procedure is not specific to the CO2Bio P2-2 project, it clearly establishes the steps to identify, access, update, monitor, verify, and maintain compliance with legal requirements as appropriate, including the ongoing review of the legal matrix and verification of compliance. Additionally, the procedure provides links to the relevant legal bodies. *Document /LXXXIII/ details the regulations applicable to each project activity, classified by category (national or international), validity, and specific application to the project's activities and scope, including compatibility with the corresponding legal frameworks. Although no specific period is established for the continuous update of this matrix, a change log has been maintained since its creation, ensuring traceability and monitoring of modifications, supported by the comprehensive procedure mentioned above.* *In summary, legal management is aligned and properly documented through a comprehensive procedure that ensures continuous identification, updating, and compliance with regulations, supporting the project's legal conformity during the evaluated period.*					
Carbon ownership and rights	*For the implementation of the project, the process of analysis of the documentation provided by the interested parties or*		*Once this process has been completed, the parties involved in carbon mitigation projects sign contracts and agreements*	*Each conservation contract was signed exclusively with legally recognized owners. During the 2022-2024 monitoring period, no tenure conflicts or claims by third parties*	

Section	*DdP, Version 2.2 (Validated)*	*Monitoring Report, Version 2.2 (Validated)*	*Monitoring Report, Version 2.3 (Period 2022–2024)*	
	applicants to be part of the project begins, in order to identify who has the best right to the project. *From this analysis it was possible to establish for CO2Bio P2-2 that 124 properties complied with the necessary documents to determine the type of tenure, classified as owners, possessors and/or holders of the same, which were enrolled formally with the organization accepting the commitment to develop climate change mitigation activities in each of their properties.*	*detailing who is entitled to the carbon credits generated by the project, how the income will be distributed and who will be responsible for reporting the emission reductions, some of the documents analyzed are Certificates of Tradition and Freedom, Certificates of Good Possession, Sales, Public Deeds, Property Taxes, among others.*	*have been identified on the properties linked to the project.* *Currently, the project continues with 120 linked properties, of which 108 are owned, 10 are possessed and 3 are held (landholders)* *Within the due diligence process of the ecosystem managers, three high-risk cases were identified for the project. Additionally, in one case, communication with the manager was not achieved, despite attempts. Therefore, the contracts linking these properties to the project are in the formal process of termination. Consequently, this monitoring period does not present mitigation results for these areas.*	
A comparison was conducted regarding the ownership and legal status of the properties associated with the project. According to versions 2.2 of the Project Document (/XXII/) and the Monitoring Record (MR), 124 properties were considered within the scope of the project. However, for the year 2022, due to risk identification considerations, Fundación Cataruben decided to withdraw 4 properties from the project's scope, leaving a total of 120 officially associated properties. Fundación Cataruben ensures, through /XXIX/ and /XXVII/, that the landowners possess all legal rights supporting their ownership, thereby guaranteeing permanence throughout the duration of the project.				
Adaptation to climate change	*6.2 Improve the conditions for the conservation of biodiversity and its ecosystem services in the areas of influence, outside the Project boundaries (natural coverage in areas of special environmental interest, biological corridors, water management in watersheds, among others).* *6.3 Implements activities that generate sustainable and low-carbon productive landscapes.* *6.4 Designs and implements adaptation*	*According to section 5 of the Monitoring Report, Version 2.2, they describe the same components as the /XXII/ version 2.2, according with the compliance with the Climate Change Adaptation Items.*	*Considers one or more of the activities proposed in Colombia's National Climate Change Policy.*	*G.3, G.5, G.1, A.1*

Section	*DdP, Version 2.2 (Validated)*	*Monitoring Report, Version 2.2 (Validated)*	*Monitoring Report, Version 2.3 (Period 2022–2024)*	
	strategies based on an ecosystemic approach. *6.5 Strengthens the local capacities of institutions and/or communities to make informed decisions that allow them to anticipate negative effects derived from climate change (recognition of vulnerability conditions); as well as to take advantage of opportunities derived from the foreseen or evidenced changes.* *6.6 For activities in the AFOLU sector:* *a) Agricultural and forestry production systems are better adapted to improve competitiveness.* *b) Comprehensive actions that help the efficient use of land.* *c) Actions directly related to climate change adaptation measures.*		*Improve the conservation conditions of biodiversity and its ecosystem services in the areas of Influence, outside the project boundaries (e.g. natural coverage in areas of special environmental interest, biological corridors, water management in watersheds, among others).*	*G.3, G.4, G.5, B.1, B.2, A.1*
			Implement activities that contribute to sustainable low-carbon productive landscapes.	*G.1, G.2, G.5, B.1, A.1*
			Design and implement adaptation strategies based on an ecosystem approach.	*G.1., G.5, A.1*
According to section 6 of the Monitoring Report, Version 2.3, corresponding to the 2022–2024 period, Fundación Cataruben not only explained the criteria and demonstrated compliance with each of the components within the project scope, but also clearly defined the specific activities in which the project's adaptation actions are carried out. This is also reflected in matrix /XXIV/, which generally complements not only the applicable IDs for each activity, but also establishes, for each one, an indicator with its name, the overall target set at 100%, the method intended to monitor progress associated with each indicator, the corresponding methodology, the monitoring frequency, and the Sustainable Development Goals (SDGs) to which each implemented activity contributes. Similarly, the component is identified as part of a co-benefit and the applicable safeguard for each activity is indicated. Unlike previously validated documents, this version explicitly states the result achieved during the reporting period and provides a percentage reflecting overall compliance for each activity. Each of these activities is supported by a document validating the reported evaluation. *In conclusion, the changes between versions are considered significant, as continuous improvement has been evidenced throughout the periods in the management and monitoring of components related to climate change, as well as in the implemented activities and the progress achieved.*				

Conclusion: the compliance in the implementation of the project's activities—comparing the validated Project Document (/XXII/) and the Monitoring Report for the 2022–2024

period (MR v2.3)—shows a progressively more complex and comprehensive management approach, with clear advancements over time. The activities described in the documents were carefully cross-checked and verified through interviews with ecosystem managers, complemented by on-site visits that confirmed the execution of concrete actions such as the installation of electric fences, planting of native species, use of solar panels, and the installation of drinkers and watering points. The adoption of firebreak strategies by landowners was also confirmed, along with the implementation of eco-efficient technologies.

Additionally, it was verified that some sampled properties have sustainable productive projects aimed at diversifying income sources, aligned with conservation objectives. These results reflect improvements in both documentation and practice, demonstrating a strong commitment from managers and landowners to the project and its environmental goals. This comprehensive evaluation—based on documented evidence, in situ interviews, and direct observation—supports the conclusion that the project has made favorable progress in the implementation of validated activities, strengthening its contribution to the conservation and sustainable management of the ecosystems involved.

5.1.2.1 Data and parameters

5.1.2.1.1 Data and parameters determined at registration and not monitored during the monitoring period, including default values and factors

As part of the determination and analysis process, the data and parameters established at the time of registration, which were not monitored during the quantification period, were considered. This includes predetermined values and factors, which are shown below:

Table 17. Unmonitored parameters.

Data/Parameter	***Description***	***Value***	***Justification / Compliance***
Total biomass in forest (t/ha)	*Vegetation biomass are contained in forest ecosystems (Orinoco Biome).*	*327.22*	*The total forest biomass value of 327.22 Mg/ha is supported by the study conducted by the Ministry of Environment and Sustainable Development – IDEAM (2019), which reports an approximate biomass of 328.2 ± 11.7 Mg/ha for tropical rainforest in Colombia. This estimate is based on measurements of aboveground and belowground biomass, excluding non-tree individuals, and uses technical factors to convert biomass into carbon content and CO2 equivalent.*

Data/Parameter	Description	Value	Justification / Compliance
Soil Organic Carbon in forests (tC/ha)	Cumulative soil carbon content in forest ecosystems	64.51	The SOC value of 64.51 comes from the evaluated proposal of Colombia's National Emission Reference Level (NFRL), submitted to the United Nations Framework Convention on Climate Change (UNFCCC) for the 2023–2027 period. This value is considered conservative and represents the national context for estimating greenhouse gas emissions resulting from deforestation and forest degradation.
Total biomass in wetlands (t/ha)	Plant biomass contained in wetland ecosystems. It is estimated from the sum of aboveground biomass (BA) and belowground biomass (BS).	Herbaceous stratum = 0,56 Dispersed stratum = 75,803	It is calculated through direct measurement of the aboveground and belowground biomass of the present vegetation components, applying specific BCR 004/ methodologies. This calculation includes the sum of the estimated biomass of the herbaceous layer and the scattered layer, obtained based on field measurements and biomass equations appropriate for wetlands. The methodology provides accuracy and representativeness, allowing for a reliable reflection of the ecosystem's environmental and climatic dynamics.
Soil organic carbon in wetlands (t/ha)	Carbon content of soils in wetland coverages	Estrato Herbáceo = 110,854 Estrato Disperso = 114,508	They are obtained through direct analyses of soil samples that quantify the total organic carbon content. These analyses consider variables such as vegetation cover, soil texture, and sampling depth, using validated methodologies that include digital soil mapping and precise chemical techniques to determine carbon concentration and accumulation at different depths. These estimates are supported by studies and protocols from the Ministry of Environment and Sustainable Development – IDEAM,

Data/Parameter	Description	Value	Justification / Compliance
			which apply standardized methods for continental wetlands, thus ensuring the accuracy and representativeness of the data obtained.

The data sources and parameters, established at the time of registration and not subject to monitoring during the quantification period, were verified using secondary information by the ANCE verification team.

5.1.2.1.2 Data and parameters monitored

The audit team has comprehensively evaluated the CO2Bio P2-2 Project Monitoring Report against the requirements of the BCR MRV Tool /XLII/. The evaluation was structured around the following components:

- *Project Boundary: Verified through GIS analysis of shapefiles with and without post-registration adjustments /XLVII/, /XLVIII/, cross-referenced with the PDD /III/, confirming that changes follow established procedures /L/, /LI/.*
- *Project Activities: Implementation was reviewed using conservation reports /X/, restoration reports /XII/, operational monitoring /IX/, and farm-level plans /LXXV/.*
- *Quality Control: Audited compliance with GIS procedures /L/, deforestation quantification /LIII/, and wetland monitoring /LIV/.*
- *Parameter Verification: Comprehensive verification of all parameters was performed through sampling, traceability, and cross-checks.*

Table 18. Monitored parameters and their control.

Parameter	Value/ Reference	Equipment/ Accuracy	Frequency	Correctness Analysis
Project Boundary	Shapefiles /XLVII/, /XLVIII/	GIS, Accuracy <5m	Initial and changes	Spatial analysis confirms precise alignment with registered polygons. All adjustments follow documented procedures /L/ and maintain geographical integrity. Cross-check with official cartography /XCIX/ shows full compliance with cadastral standards. Accurate. Boundary management system ensures ongoing precision and regulatory compliance.
Forest Cover	Loss 2021-2024 /CXXVII/	AcATaMa, Sentinel <10m	Annual	Methodology employs validated supervised classification with confusion matrix accuracy >85% /LVI/. Field validation /LVII/ confirms classification reliability. Independent verification with IDEAM data /LX/ shows consistent trend alignment. Reliable. Multi-layered validation confirms deforestation detection accuracy.
Carbon - Forests	BCR Values /V/	Not applicable	Initial	Default values application follows methodological hierarchy. Conservative approach verified through comparison with national reference levels /CII/ and IPCC guidelines /CIV/. Values represent lower-bound estimates ensuring no over-crediting. Conservative. Methodologically appropriate and precautionary.

Parameter	Value/ Reference	Equipment/ Accuracy	Frequency	Correctness Analysis
Carbon - Wetlands	BCR Values /VI/	Not applicable	Initial	Wetland carbon stocks use approved default factors with demonstrated applicability to project region. Cross-referenced with local scientific studies /LXI/ confirming conservative estimation approach. Soil carbon pools are maintained at default levels. Conservative. Comply with wetland methodology requirements
Heat Points (Fires)	Data /LXXXIX/	FIRMS NASA	Daily	Automated detection system provides comprehensive coverage. Ground truthing through patrol reports /XI/, /XIII/ confirms fire event accuracy. Spatial analysis validates heat point localization within project boundaries. Reliable. Integrated system ensures complete fire monitoring coverage. Comprehensive. Multi-source verification confirms biodiversity data quality.
Biodiversity	Lists /VIII/	Bioacoustic recorders	Quarterly	Participatory methodology /LXVII/ employs standardized protocols with expert verification. Species identification cross-checked with HCV assessments /X/ and invasive species monitoring /XC/. Data completeness verified through seasonal sampling.

Parameter	Value/ Reference	Equipment/ Accuracy	Frequency	Correctness Analysis
Wetlands - Extent	Shapefiles /XLVII/	10m imagery	Annual	BNB classification model /XIX/ validated with field data /LVII/ showing >90% accuracy. Regular updating process maintains current wetland boundaries. National mapping correlation /LXXXVI/ confirms ecosystem classification accuracy. Precise. Technically advanced methodology with robust validation.
Conservation Activities	Reports /X/, /XII/	Field records	Continuous	Activity implementation tracked through standardized reporting formats. Physical progress verified against annual work plans. Photographic evidence and site inspections confirm activity execution quality. Verifiable. Comprehensive documentation supports activity claims.
Operational Monitoring	Database /IX/	Standardized forms	Monthly	Systematic data collection using validated formats. Internal consistency checks performed monthly. Management report integration /LXXXIV/ ensures operational alignment with conservation objectives. Systematic. Structured approach ensures data completeness

Parameter	Value/ Reference	Equipment/ Accuracy	Frequency	Correctness Analysis
HCV	Report /X/	Field assessment	Annual	Assessment follows international HCV frameworks with expert input. Species correlation /VIII/ and ecosystem mapping confirm HCV identification. Stakeholder consultation is integrated into evaluation process. Robust. Methodologically sound with multi-stakeholder validation.
Fires	Reports /XI/, /XIII/	Visual inspection	Seasonal	Patrol-based monitoring complements remote detection. Incident reports include photographic evidence and damage assessments. Response actions documented and evaluated for effectiveness. Comprehensive. Integrated approach covers prevention and response.
Restoration	Report /XII/	Field measurements	Semi-annual	Survival rates monitored through permanent plots. Growth measurements follow standardized protocols. Implementation quality verified against technical specifications. Adaptive management based on monitoring results. Quantitative. Evidence-based approach supports restoration success.
Grievance Mechanism	Reports /XXV/, /XXVI/	Management system	Continuous	PQRS procedure /LXIV/ implementation verified through case tracking. Resolution timelines and stakeholder satisfaction monitored. Attendance records /CXV/ confirm participatory process functionality. Effective. Transparent system with documented resolution outcomes.

Parameter	Value/ Reference	Equipment/ Accuracy	Frequency	Correctness Analysis
Water Management	Report /VII/	Quality monitoring	Quarterly	Monitoring follows regulatory requirements with laboratory analysis. Parameter selection based on wetland ecosystem needs. Permit compliance /LXXXII/ verified through regulatory cross-check. Regulatory. Complies with environmental standards.
Social Benefits	Reports /CXXIV/, /CXXV/	Accounting records	Annual	Financial tracking system ensures transparent benefit distribution. Contractual compliance /XXVIII/, /XXIX/ verified through documentation review. Community feedback confirms benefit receipt and impact. Transparent. Accountable system with verifiable outcomes
Invasive Species	Listings /XC/	Field inventories	Annual	Scientific protocols ensure accurate species identification. Distribution mapping supports management planning. Integration with HCV assessment /X/ provides ecosystem context for invasive impact. Scientific. Methodologically rigorous with management application.
Carbon - Soils	BCR Values /VI/	Not applicable	Initial	Conservative default values applied consistently. Methodology compliance verified through factor appropriateness review. Local study correlation /LXI/ confirms value conservativeness. Methodological. Approach aligns with wetland carbon accounting requirements.

Parameter	Value/ Reference	Equipment/ Accuracy	Frequency	Correctness Analysis
Risk Management	Matrix /XXXVI/	Field assessment	Annual	Structured risk assessment methodology applied. Probability and impact analysis follows standardized procedure /LXXI/. Management response tracking shows adaptive implementation. Proactive. Systematic identification and treatment of risks
SDGs	Report /XXX/	Indicators	Annual	Indicator alignment with UN SDG framework verified. Monitoring covers environmental, social and economic dimensions. Safeguard integration /CXIV/ ensures comprehensive sustainability assessment. Aligned. Comprehensive framework addresses multiple sustainability aspects.

Based on the information provided regarding the monitored data and parameters in the project, the following conclusions can be drawn concerning the Project Holder's compliance with the application of the BCR Monitoring, Reporting, and Verification (MRV) tool:

- *The monitored parameters, such as the verification of eligible forest areas and post-registration changes, as well as wetland monitoring, are based on robust methodologies that include satellite image interpretation using tools like ArcGIS and QGIS, as well as platforms such as Google Earth Engine. The thematic accuracy is ensured through the AcATaMa protocol, which guarantees an accuracy level of approximately 94–98% /XLIX/, /L–LIV/.*
- *The reading frequencies are annual, and the calculation methods are based on rigorous guides and procedures, such as the Guide for Verification of Viable Areas /LXII/, AcATaMa instructions, and general procedures for carbon monitoring in wetlands. Quality control processes include confusion matrices and model validations with field data, which enhance the reliability of the measurements /LV–LXI/.*

Together, these practices demonstrate a robust implementation of the MRV in accordance with the BioCarbon Standard, ensuring accurate, transparent, and reliable data for the management and reporting of the project's greenhouse gas emissions.

The comprehensive audit of all monitored parameters demonstrates robust compliance with the BCR MRV framework /XLII/. Each parameter exhibits complete traceability from original measurement to final reporting, with documented evidence supporting all data transformations. Project Holder has consistently applied rigorous QA/QC procedures across all monitoring activities, ensuring data integrity and methodological soundness. Multiple verification layers, including cross-checks with independent external sources such as IDEAM data /LX/ and national mapping resources /LXXXVI/, confirm parameter accuracy and reliability. The conservative approach embedded in emission factors and estimation methods ensures that credit calculations are on the side of caution, preventing over-estimation of climate benefits. The system demonstrates full compliance with both REDD+ /V/ and wetland conservation /VI/ methodologies, maintaining all applicability conditions throughout the monitoring period.

Conclusion: The audit verification confirms that all parameters documented in the Monitoring Report fully comply with BCR MRV /XLII/ requirements. The integrated monitoring system implemented by Fundación Cataruben demonstrates robustness, transparency, and complete verifiability, generating reliable and conservative data for accurate GHG quantification. No significant deviations or non-conformities were identified in the monitoring of any evaluated parameter. The system's comprehensive coverage, methodological soundness, and quality assurance processes provide high confidence in the reported emission reductions and removal enhancements. The project maintains full eligibility under the BCR program and demonstrates exemplary implementation of monitoring requirements.

5.1.2.2 Environmental and social effects of the project activities

The evaluation of the monitoring of the environmental and social effects of the project activities was carried out in accordance with the guidelines established in /XXXIII/. During the 2022–2024 period, a thorough assessment of environmental impacts was conducted, considering not only the efficiency in the use of land and water resources but also the protection of biodiversity, ecosystem conservation, and the project's contribution to climate change mitigation.

For this purpose, an analysis matrix /XXXI/ was designed to document and record the identified environmental impacts. The results indicated that no negative impacts were detected on natural resources, biodiversity, or the climate, which is attributed to the project design prioritizing ecosystem and biodiversity conservation. The activities are based on sustainable practices and are complemented by training sessions for managers to strengthen environmental awareness /LXIII/. Furthermore, all actions are aimed at environmental protection and greenhouse gas emission reductions, reflecting a responsible approach toward the environment.

Regarding socioeconomic aspects, no high-level negative impacts were identified. The project has mitigated social risks through a sustainable design that incorporates community

participation, gender-focused training, and policies ensuring individual and collective rights. Continuous evaluation is planned for the next monitoring period. Records demonstrate that there are no conflicts with local communities, minimizing potential disputes and ensuring compliance with social equity and community participation criteria established by the sustainable development safeguards /LXIV, LXV/.

Social and environmental management was corroborated by ANCE, which reviewed the relevant documentation and verified the absence of claims, ensuring a peaceful and favorable operational environment for the project. Verification was conducted through document review, field interviews, and cross-checking of complementary information, guaranteeing the validity and transparency of the monitoring process.

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

During the on-site inspection of the properties and the documentary review, a solid and rigorous approach to quality management related to greenhouse gas (GHG) reduction activities was evidenced. The project holder successfully demonstrated the development and implementation of robust procedures to ensure quality control at all stages of the process, using matrices that define monitoring methodologies, monitoring frequency, overall compliance, and supporting documentation for results. These procedures incorporate various tools, including manuals, specific guides, and standardized formats for data collection and analysis, designed and adapted to meet the project's needs and comply with BCR standards and methodologies /V/ and /VI/. The effective application of these procedures not only ensures the accuracy of collected data but also contributes to the transparency and credibility of the GHG reduction project.

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

The evaluation of the methods established for the periodic calculation of greenhouse gas (GHG) reductions or removals and leakage demonstrates that the project employs robust and well-tested procedures that ensure the accuracy and representativeness of the results. For GHG reductions or removals, methodologies based on satellite image interpretation and geospatial tools such as ArcGIS, QGIS, and Google Earth Engine are used, enabling detailed annual monitoring of forests and wetlands under the project's influence. These monitoring activities are supported by validated protocols, including the AcATaMa guide, which ensures high thematic accuracy (94–98%) and validations through confusion matrices and field data, minimizing errors and ensuring information consistency.

Regarding leakage, the method includes the continuous generation and validation of forest and wetland cover maps to identify changes in areas outside the project that could affect environmental integrity. Periodic assessments and comparisons across monitoring stages allow for the detection and quantification of such leakages, incorporating adjustments into the total net reduction calculations.

The quality of the calculations is ensured through quality control procedures defined in manuals and specific guidelines, guaranteeing that the collected data are verified, validated, and audited in accordance with international standards and the BioCarbon Standard requirements.

Conclusion: it is determined that the Project Holder adequately applies the methods for the periodic calculation of GHG reductions or removals and leakage management, ensuring reliable and transparent results, in line with the BioCarbon Standard Tool /XLII/. This conclusion is based on a thorough review of the documentation, the technical evidence provided, and the on-site validation of the adopted processes.

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

The project holder has several detailed procedures that not only describe step by step the process for obtaining information using Geographic Information System (GIS) tools, as documented in /LIV/, but also clearly establish the responsibilities associated with the generation and management of information, including the creation of shapefiles.

These procedures define both the specific activities that each responsible party must carry out and the expected outputs and approximate timelines for their completion. Although individual roles or responsibilities are not explicitly described, during the on-site visit the team in charge of the geospatial area was identified, and their handling of quality controls over the obtained topologies, the adjustments applied, and the final product —a Geodatabase— was verified in accordance with procedure /LIX/.

In addition, procedure /LVIII/ is employed, which is essential for validating land cover through remote sensing. This methodology establishes a detailed process for the validation of the Corine Land Cover (CLC), including data download, classification, and final delivery, ensuring the quality and accuracy of the results obtained.

Together, these procedures reflect a robust and technical approach to monitoring and reporting, ensuring the integrity and quality of the data used for the quantification of greenhouse gas reductions or removals.

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

As part of the evaluation to determine the monitoring of environmental and social effects resulting from the activities of the CO2Bio P2-2 project, the use of tool /XXXIII/ was verified. This tool allows the identification of risks and opportunities related to human health, the environment, and social well-being. This analysis was complemented by the review of /XXIV/, which enabled validation of the coherence between what was planned and what was executed. Likewise, it was cross-referenced with the documents: /XXIV/ and /XXX/.

The cross-verification of these documents confirmed that the project complies with: REDD+ safeguards, sustainable development safeguards (SDS), and the indicators contributing to the SDGs. Below is a table with the cross-verification of the documents and the evidence supporting the results obtained during the 2022–2024 period.

Table 19. Contribution of the SDGs in the project.

Applicable Project Activity	*Environmental Effect*	*Social Effect*
G1. Training and skills development for men and women involved in the project in technical-environmental, social, and administrative-financial areas, with the purpose of strengthening their capacities and improving decision-making aligned with the project's objectives.	*Although the environmental effect does not present itself specifically, it can be considered intrinsic to the technical-environmental component of the project, as it addresses issues related to water resource management and the structuring of property implementation plans. These actions are directly linked to the planning and sustainable management of the participating properties. While the tool /XCIX/ establishes that the evaluation must analyze the possible effects on biodiversity and ecosystems within the project boundaries, supported by reliable and up-to-date references on topics such as land use, water, biodiversity, ecosystems, and climate change, these aspects are addressed in a general manner through training processes and knowledge acquisition by the involved stakeholders, with a view to their future application in the territory according to the scope of the Project.*	*The report /LXIII/ documents the training activities carried out between 2022 and 2024, detailing the topics covered, the recorded participation, and their contribution to achieving the project's objectives. The training sessions included technical subjects such as carbon management, biodiversity conservation, sustainable water use, environmental regulations, fiscal aspects, and governance, all aligned with REDD+ safeguards, the SDGs, and best practices for conservation projects.* *During this period, the planned targets were exceeded: ten virtual trainings, two forums, and the Ecolíderes program were conducted, addressing technical, social, productive, and financial topics. A total of 74 people were trained across the three key components (technical-environmental, social, and administrative-financial), with participation per session ranging from 3 to 29 ecosystem managers. This represents an 82% achievement of the target for the period and 41% accumulated of the total projected. Regarding the number of training sessions, an accumulated compliance of 57% was reached against the total planned*

Applicable Project Activity	Environmental Effect	Social Effect
This activity strengthens the technical, legal, and administrative governance capacities of the stakeholders involved, enabling decision-making that is well-founded, documented, and based on rigorous analyses. In this regard, it directly contributes to the fulfillment of Safeguard B5. Likewise, it supports the implementation of Safeguard E12 by promoting the provision and equitable access to ecosystem services, which are essential for human well-being and environmental sustainability. From a cross-cutting perspective, the activity generates significant co-benefits by fostering positive impacts on the communities linked to the project, strengthening their resilience and adaptive capacities. Finally, it aligns with the Sustainable Development Goals (SDGs), particularly SDG 13 (Climate Action) and SDG 15 (Life on Land Ecosystems), by contributing to the conservation of natural resources and to climate change mitigation and adaptation.		
G2. Deployment of the governance strategy in the territory, promoting participatory decision-making for the sustainable management of strategic ecosystems.	Not Applicable	The report /CII/ documents the consolidation of the Governance Table as part of the project's territorial strategy, aiming to ensure that actions are carried out under principles of informed participation and sustainability. The Advisory Committee was also formalized, responsible for specific and critical decisions related to the project. To promote participatory decision-making, the Regional Beneficiary Service Center (CARPO) was implemented, offering personalized assistance to beneficiaries through physical, digital, and telephone channels. Additionally, platforms such as CQTX were developed for real-time monitoring of project progress, and COMPENSAVE, focused on the buying and selling of carbon credits. As a result of this process, applications were received to join the Governance Table, including representatives from the tourism sector (4), forestry (7), livestock (6), agriculture (1), and women (2),

Applicable Project Activity	*Environmental Effect*	*Social Effect*
		reflecting a commitment to equitable and multisectoral representation.
This activity contributes to the fulfillment of Safeguard B4 by recognizing and strengthening existing forest governance structures. Additionally, it is identified as a co-benefit associated with gender equity, by promoting the active participation of women in decision-making spaces. *Comprehensively, these actions generate a positive social effect by encouraging community participation, strengthening local governance, improving access to information, and promoting the inclusion of diverse sectors. They also contribute to the empowerment of local stakeholders and to institutional strengthening in the territory.*		
G3. Continuous monitoring of changes in forest area as a proportion of the total area within the project zones.	*The report /XIV/ documents the progress in the conservation and recovery of forest cover in the 99 project areas during the period 2018–2024.* *Among the main results are:* • *The Percentage of Area with Natural Forest (PSBN) showed an increase of 0.02% in 2024, indicating a positive trend in forest cover conservation.* • *The Forest Gain Area (AGB) indicator reported an increase of 1.8%, equivalent to 12.83 hectares of natural forest recovered compared to 2018.* *This set of results reflects a positive environmental effect, demonstrating the effectiveness of the conservation and restoration actions implemented. The recovery of forest cover directly contributes*	*From a social perspective, continuous monitoring strengthens transparency and accountability by providing verifiable information about the project's impact. Additionally, it empowers local communities by enabling them to actively participate in the oversight and sustainable management of their natural resources.*

Applicable Project Activity	*Environmental Effect*	*Social Effect*
	to climate change mitigation, biodiversity preservation, and the regulation of ecosystem services.	
This activity directly contributes to the fulfillment of Safeguard G15 (Emission Displacement) by establishing a system for monitoring and evaluating environmental and social impacts that allows for the identification and mitigation of potential unwanted effects outside the project area. Likewise, it complies with Safeguard E11 by supporting forest conservation through the implementation of specific measures aimed at preserving biodiversity and maintaining ecosystem services. *Complementarily, it aligns with SDG 15 (Life on Land Ecosystems), particularly with indicator 15.1.1, by demonstrating an increase in the proportion of forest area relative to the total intervened territory. Cross-cutting, this action generates a co-benefit in biodiversity conservation by protecting key habitats and strengthening the ecological resilience of the landscape.*		
G4. Active monitoring of environmental threats, such as fires, within the project area, as well as the identification of possible alerts for timely management.	*The report /XIII/ documents the use of satellite monitoring through thermal sensors such as MODIS and VIIRS, which allow the detection of heat anomalies associated with forest fires. This system facilitates the early identification of heat sources, the delimitation of affected areas, and the estimation of impacted biomass, thereby improving emergency response capacity and the planning of mitigation measures.* *During the period 2022–2024, 706 thermal anomalies were recorded within the project areas. Temporal analysis identified that the months from December to April (corresponding to the dry season) concentrate the highest incidence of these events. Of the 120 properties analyzed, 75 presented at least one thermal anomaly, highlighting the importance of maintaining continuous surveillance in these critical zones.* *This monitoring not only strengthens the response capacity to fires but also allows for the*	*The implementation of satellite monitoring and early detection of heat sources generates a positive social effect by strengthening the community's response capacity to environmental emergencies, such as forest fires. This system not only helps reduce risks to the health and safety of local communities but also protects rural livelihoods, whose economy depends directly on natural resources. Additionally, it strengthens local governance by promoting more informed, participatory, and preventive territorial management in the face of environmental threats*

Applicable Project Activity	Environmental Effect	Social Effect
	evaluation of the effectiveness of the conservation strategies implemented, providing key information for adaptive management of the territory.	
This activity contributes to the fulfillment of Safeguard G15 by establishing an environmental monitoring system that helps prevent and mitigate negative impacts due to emission displacement, and to Safeguard E11 by protecting forest ecosystems and associated ecosystem services. Additionally, it aligns with SDG 15 (Life on Land Ecosystems), specifically with indicator 15.1.1, by supporting the conservation of forest cover as a proportion of the territory. Cross-cutting, this action generates a co-benefit in biodiversity conservation by reducing ecosystem exposure to fires and preserving critical habitats, thereby strengthening the ecological resilience of the landscape.		
G5. Promote the adoption of sustainable productive actions and practices at the property and local levels, with the aim of preserving carbon stocks and protecting biodiversity in strategic ecosystems.	The report /LXXVI/ presents the progress of the CO2Bio P2-2 project in implementing sustainable strategies at the property level. Following the application of socioeconomic, environmental, and productive characterization surveys on 23 properties (complementing those conducted in the first period), Property Implementation Plans were agreed upon with 106 properties, representing 87.6% of the total linked to the project. During this period, key actions were carried out such as fire prevention through firebreak strategies (66%), installation of livestock watering troughs (42%), and delimitation of conservation areas (25%). In the ecological restoration component, native species planting (35%), reforestation (19%), live fences (13%), and nurseries (6%) were promoted. More than 50% of the properties adopted solar panels, complemented by eco-efficient stoves (12%), wood banks (8%), composting (15%), and proper solid waste management (19%).	The implementation of these actions has generated significant social effects in the communities linked to the project, highlighting the improvement of rural livelihoods through productive diversification and the strengthening of local capacities. Likewise, the adoption of clean and sustainable technologies, along with the active participation of managers in the planning and implementation of practices, has promoted more collaborative management. These interventions have contributed to reducing social vulnerabilities, strengthening community governance, and consolidating a culture of environmental co-responsibility, which is key for the long-term sustainability and permanence of the project itself.

Applicable Project Activity	Environmental Effect	Social Effect
	Regarding sustainable production, practices such as sustainable livestock farming (53%), pasture rotation (44%), production of small livestock species (51%), and staple crop cultivation (corn, cassava, and plantain) in over 50% of the properties were implemented as a food sovereignty strategy. Entrepreneurial activities such as beekeeping (8%) and ecotourism (4%) were also promoted. These actions have contributed to reducing pressure on strategic ecosystems, improving local livelihoods, and strengthening the socio-environmental resilience of the territory.	
This activity significantly contributes to the fulfillment of Safeguard D10 by conserving strategic ecosystems through actions such as reforestation, delimitation of conservation areas, and ecological restoration. Likewise, it addresses Safeguard C6 by improving local livelihoods through sustainable productive practices, economic diversification, and strengthening food sovereignty. It also aligns with Safeguard C7 by strengthening the technical, environmental, and organizational capacities of local actors through the agreement of property plans and the adoption of clean technologies. Cross-cutting, this activity generates a co-benefit in biodiversity conservation by protecting habitats and promoting sustainable land use. Additionally, it is directly linked to SDG 15 (Life on Land Ecosystems), particularly target 15.2, by fostering the sustainable management of forests and the restoration of degraded areas.		
B1. Participatory biodiversity monitoring & B2. Monitoring of the AVCs	The report /X/ presents the results of participatory bioacoustic biodiversity monitoring, through which 248 bird species were recorded, distributed across 57 families and 191 genera, within the project properties. This analysis allows for understanding the conservation status of the avifauna and its ecological role in local ecosystems. Notable families include Tyrannidae (53 species), key in insect control; Thraupidae (22), important in seed	Not Applicable.

Applicable Project Activity	*Environmental Effect*	*Social Effect*
	dispersal; and Accipitridae (9), as population regulators. Other relevant families include Furnariidae, Thamnophilidae, Psittacidae, among others, all with specific ecological functions. Additionally, species from the family Threskiornithidae act as bioindicators of wetland health. *This monitoring has been fundamental for the identification of High Conservation Value Areas (HCVAs), by providing detailed information on indicator species, threatened species, or those of ecological importance.* *As a result, a 21% progress was achieved in the biodiversity indicator, demonstrating the effectiveness of the methodology and the commitment of the stakeholders involved.*	
This activity directly contributes to the fulfillment of Safeguard E11 by protecting biodiversity and associated ecosystem services; and to Safeguard G15 by establishing a robust environmental monitoring system for emission displacement. Additionally, it generates a co-benefit in biodiversity conservation by identifying indicator species, threatened species, or those of ecological importance, and promoting their protection. This action also aligns with SDG 15 (Life on Land Ecosystems), particularly targets 15.1 and 15.5, by contributing to the conservation of biological diversity and the reduction of natural habitat loss.		
A1. Development and Implementation of a Water Management Program	*The report /VII/ includes an initial diagnosis to characterize water use on private properties through interviews and participatory workshops that gather qualitative information on current practices, perceptions of availability, and resource quality. Its main objective is to promote the efficient use of water in domestic and productive activities, reducing consumption and improving quality through practices that minimize contamination. To contribute to the*	*The attributable social effects are reflected in increased community awareness about the value of water as a limited resource, which promotes responsible and sustainable usage practices. Likewise, this also contributes to improving quality of life through more equitable access to potable water and sanitation, reducing health and environmental risks.*

Applicable Project Activity	Environmental Effect	Social Effect
	fulfillment of SDG 6, strategies such as training sessions, informational materials, consumption diagnostics, saving technologies, collection systems, and continuous monitoring—including water emergency plans—will be implemented. So far, the overall progress of the project is estimated at 20%, considering the diagnosis and design stage.	
This activity directly contributes to the fulfillment of Sustainable Development Goal (SDG) 6, specifically indicator 6.4, which aims to increase water use efficiency across all sectors and ensure the sustainability of water resources. By implementing consumption diagnostics, saving technologies, collection systems, and quality monitoring, more rational and equitable water management is promoted. Additionally, by involving communities in participatory processes and training, social and environmental safeguards are strengthened, ensuring that actions are not only technically effective but also culturally appropriate and socially accepted.		

Conclusion: The document /LXXIII/ presents a detailed analysis of the environmental and social effects of the CO2Bio P2-2 project, based on the criteria of /C/. The evaluation covers multiple dimensions, including land use, biodiversity, water, climate change, labor conditions, gender equity, governance, and regulatory compliance. In environmental terms, it is confirmed that the project does not generate deforestation or ecosystem degradation. On the contrary, it promotes the conservation of forests and wetlands, contributing to soil stability, water regulation, and carbon sequestration. No risks of soil, water, or air contamination were identified, nor excessive use of natural resources. Additionally, the implementation of a water management program and continuous monitoring of forest cover and heat points stand out as key preventive measures.

Regarding biodiversity, the project avoids habitat fragmentation and protects threatened species through conservation actions and participatory monitoring, actively involving local communities. These actions strengthen ecological resilience and foster adaptive territory management.

From the social dimension, respect for labor rights, gender equity, and community participation is guaranteed. Clear policies against discrimination, forced labor, and corruption have been implemented, supported by internal regulations, safety committees, and codes of ethics. The establishment of the Governance Table and the equitable participation of women in decision-making processes reinforce transparency and inclusion.

In summary, the project demonstrates a comprehensive sustainability approach, with solid mechanisms for monitoring, prevention, and participation, ensuring compliance with environmental and social safeguards while generating tangible benefits for biodiversity and local communities.

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

The monitoring process to demonstrate the project's co-benefits is based on a structured and voluntary framework that encompasses three key domains: biodiversity conservation, community development, and gender equity, following the criteria and indicators defined in document /LXV/. The project seeks recognition under the Exceptional Biodiversity Conservation: Orchid Category, which highlights AFOLU initiatives focused on the protection and restoration of biodiversity values of national or global significance.

For this category, monitoring is centered on the protection of critical habitats, prevention of invasive species, conservation of High Conservation Value (HCV) areas, and demonstrated ecological improvements. The supporting evidence is detailed in /LXVI/, which includes specific indicators such as G3, B1, B2 and their subcomponents (HCV1 to HCV4). These are reported every two years through reports supported by documentary data and testimonies from participating landowners. In addition, a participatory acoustic and bioacoustic monitoring system was implemented to identify the diversity of fauna within the project area. /X, LXVII, LXVIII/.

In the field of community development, the project ensures transparency, access to information, and capacity building for informed decision-making, while also fostering a positive economic impact for ecosystem managers. This is verified through indicators G1 and G3, which assess the implementation of training activities and the increase in income, respectively. During the verification period, ten virtual training sessions were conducted, and field visits confirmed the generation of additional income and improvements in local commercialization by landowners.

About gender equity, the project has implemented measures to ensure the active participation and leadership of women in the sustainable management and administration of their lands, in alignment with indicator G1, specific to this area. Currently, approximately 59 women leaders actively participate in decision-making, as confirmed during field interviews, demonstrating a strong commitment and effective empowerment.

Conclusion: the monitoring plan implemented complies with the established requirements, demonstrating a comprehensive and adequate follow-up of the criteria and indicators for measuring co-benefits in conservation, community development, and gender equity. The combination of documentary evidence, participatory monitoring, and field interviews confirms the effectiveness and relevance of the monitoring system, ensuring transparency, traceability, and the reliable measurement of the additional benefits generated by the project.

5.2 Quantification of GHG emission reductions and removals

The evaluation of the management procedures and quality control for the GHG quantification of the CO2Bio P2-2 project was conducted through a detailed review of the Monitoring Report /III/, which constitutes the implementation of the monitoring plan. This process specifically verified the correct application of the criteria established in section 3.2.1 Planning of the Project Design Document /III/, particularly regarding the Types of GHGs included in the GHG statement and Carbon reservoirs and GHG sources, which formed the basis for decisions on the inclusion and exclusion of carbon pools and emission sources. The evaluation confirmed that this planning was consistently implemented in the quantification equations located in sections 5.2.4.1.1 Baseline Emissions in Continental Wetlands, 5.2.4.1.2 Baseline emissions in forests, 5.2.4.2 GHG project emissions, and 4.2.4.1.1 Emissions from forest deforestation in the leakage area of the Project Design Document /III/.

The verification process included a review of key elements of the calculations detailed in the aforementioned equations, using the Emissions Monitoring /XVII/ spreadsheet as the primary reference. Input data and Emission Factors were verified, which, as planned in section 3.2.1, were specific and adjusted to local conditions, being consistent with those reported in the Forest Reference Level for Colombia /XCII/. Regarding leakage, the evaluation verified in section 4.2.4.1.1 the conservative management of emissions, which is consistent with the pre-defined gas and source exclusions in the planning and with the procedures established in the Guide for quantifying historical annual deforestation /LIII/.

Exhaustive cross-checks were performed between the initial planning (section 3.2.1 of /III/), the applied equations (5.2.4.1.1, 5.2.4.1.2, 5.2.4.2, 4.2.4.1.1 of /III/), the calculations in the /XVII/ spreadsheet, and the methodological requirements established in BCR0002 /V/ and BCR0004 /VI/, as well as with the BCR Standard v3.2 /LXXII/. This triangulation ensured that every aspect of the quantification, from the selection of sources and pools to the use of emission factors in the formulas, was aligned with the defined protocols.

Regarding the Emission Factors applied in these equations, it was confirmed that they are the same as those initially validated and planned, maintaining consistency with the Project Design Document version 2.2 /XXII/ and, crucially, that they comply with Resolution 1447 of 2018 /XCVI/ and are consistent with the National Reference Emission Level /XCII/, making them the most applicable and officially recognized for the project's context and monitoring period.

Conservativeness and uncertainty were explicitly assessed. The principle of conservativeness, planned in section 3.2.1, was verified in the application of the equations through decisions such as the exclusion of specific emissions, justified based on methodologies /V/ and /VI/ and the Avoiding Double Counting /XCIV/ guidelines. Meanwhile, uncertainty was quantified for the Emission Factors used in the calculations, verifying that they have an estimated uncertainty of less than 10%, as established in the Validation and Verification Manual /CIX/.

As a concise conclusion, and based on the evidence reviewed and the cross-checks performed between the planning (3.2.1 of /III/) and the implementation in the quantification equations (5.2.4.1.1, 5.2.4.1.2, 5.2.4.2, 4.2.4.1.1 of /III/) with the supporting documents /XVII/, /V/, /VI/, and /LXXII/, it is confirmed that the quantification of GHG emission reductions and removals for the CO2Bio P2-2 project is correct and consistent with its monitoring plan, the applicable methodologies, and verification standards.

5.2.1 Baseline or reference scenario

To revalidate the baseline scenario identified in the latest version of /III/ of the CO2Bio P2-2 project, a documentary review was conducted of sections 3.3.1 Baseline scenario and 3.7.3 GHG baseline emissions. The objective was to assess the coherence and consistency of the similarity analysis performed by the project developers with the requirements established in methodologies /V, VI/, and the BCR Validation and Verification Manual across both versions.

The analysis confirmed that the description of the characteristics and steps outlined for establishing the baseline scenario did not present significant changes when comparing version 2.2 of the validated /III/ with the latest version 2.3. Likewise, it was verified that the description of land tenure systems and policies remained consistent, ensuring that the analysis continued to accurately and comprehensively capture the conditions of access for the agents driving deforestation, degradation, and land-use change processes. This consistency between versions guarantees the integrity and robustness of the previously established baseline scenario.

On the other hand, it is confirmed that the quantification of baseline emissions was carried out consistently with the procedures described in /III/, through the use of previously validated emission factors, which eliminated any methodological discrepancies across the different analysis periods. For the calculation, an annual historical deforestation rate of 2.03% was applied coherently and consistently, derived from the average of the reference region, and a national circumstances adjustment factor (%CN) was incorporated for each year, with values such as 53.55% for 2022 and 25.90% for 2023, which is consistent with the conditions of the NFRL /XCII/.

During the assessment, the following information was considered, and the following was verified:

1. ***Scope of the Reference Region:** It was verified that the continuous reference region includes the entire project area. This delineation was confirmed through the analysis of the cartographic (GIS) files provided by the project proponent /XLVII – XLVIII/, which were cross-checked with the description contained in /III/ Section 3.3.1 Baseline scenario.*

2. ***Accessibility of Drivers and Engines of Deforestation/Degradation:** During the baseline revalidation, it was confirmed that the conditions and pressures described in*

version //XXII// remain unchanged in /III/. Deforestation drivers, such as agricultural expansion, retain their ability to access and exert pressure on the project area, as initially established. This outcome is based on the fact that the reduction of the area (from 124 to 120 plots) does not affect the socioeconomic conditions, land tenure, or regional context between the reference area and the project, as described in section 3.3.1.2 of /III/. The most likely land-use alternatives—such as agriculture, livestock, hydrocarbon extraction, illicit crops, and non-certified projects—remain valid and representative.

3. ***Interest in the Project Area:*** *It was corroborated that the project area continues to be of interest to the identified agents of change. During the revalidation of the baseline scenario, it was determined that the conditions described in /XXII/ remain unchanged in /III/. The project proponent satisfactorily demonstrated that anthropogenic pressures—such as extensive livestock farming and agriculture—present in the reference region remain analogous and represent a real and credible threat to the integrity of the project area if conservation activities are not implemented.*

   The reduction in the project area does not affect the validity of this analysis, as the socioeconomic, environmental, and anthropogenic pressure characteristics remain consistent between both versions of the document. Therefore, it is confirmed that the key assumptions of the baseline scenario remain valid and have not been altered by the adjustments made in the /III/ update.

4. ***Land Tenure Characterization:*** *The audit team reviewed /XXVII–XXIX/, where, for each property, the required documentation was examined (Certificate of Tradition and Freedom, Public Deeds, Adjudication Resolutions, Judicial Rulings, Certificate of Regular Possession, Cadastral Certificate, Property Tax Clearance, and Purchase Agreements), verifying their compliance with Colombian property laws /LXIX/.*

   Based on this review, it was established that the legitimate titleholders of the properties are also the exclusive owners of the Verified Carbon Credits (VCCs). It was confirmed that participation was formalized through contracts defining obligations, eligible areas, and project duration, including a clause requiring the Ecosystem Manager to demonstrate and maintain ownership and effective governance throughout the execution of the project.

   Exclusion of Restricted Access Areas: During the revalidation process, the project proponent confirmed that the baseline is similar to the initial validation and that the scenarios considered have not changed. Accordingly, areas under national protection (National System of Protected Areas – SINAP) remain excluded.

   Additionally, during the revalidation of the baseline scenario for the CO2Bio P2-2 project, it was established that /III/ maintained the consistency of emission factors, activity data, greenhouse gas (GHG) emission projection variables, and other relevant

parameters. Procedures were ensured to maintain data quality in accordance with the most recent version of ISO 14064-2 and the requirements of the applied methodologies /V/ and /VI/. Furthermore, uncertainty analysis was considered using conservative assumptions, ensuring that any variability in the data and methods was adequately managed. The methods and parameters were selected to minimize uncertainty and provide conservative and reliable estimates, which are within the limits established by the applied methodologies /V/ and /VI/.

During the baseline revalidation process, the audit team was able to confirm the following:

a) *Assumptions, methods, parameters, data sources, and factors:*
   i. *The audit team verified, through the review of /XXII/ and /III/ (Section 3.3.1 "Baseline Scenario"), that the assumptions and justifications provided by the project proponent regarding the likely baseline scenarios are technically adequate and properly supported. After the comparative analysis, it was concluded that there were no changes between the two versions; the baseline scenarios, their underlying rationale, and the applied methodology remain consistent.*
   ii. *The audit team reviewed the methods established for quantifying GHG emissions in the Continental Wetlands and Forest strata, as described in Section 3.7.4 of /III/ and supported by the calculations in file /XVII/. After a thorough evaluation, it was confirmed that the applied procedures comply with the equations and requirements of the methodology, as detailed in Sections 5.2.1.1 and 5.2.1.2 of this report.*
   The parameters, equations, and calculations provided by Fundación Cataruben /XVII/ were examined, fully reproducing the ex-ante GHG emission reduction quantification procedure for the established period. The results, presented in Sections 5.2.1.1 and 5.2.1.2 of this document, did not show any material discrepancies affecting their integrity. Therefore, it was determined that the calculations are clearly structured and correctly represented in the attached spreadsheets, concluding that the estimated ex-ante amount of net GHG emission reductions is accurate and realistic.
   iii. *The parameters, data sources, and factors applied in the emissions quantification are properly justified and supported by adequate evidence, as detailed in Section 5.1.2.1.2 (Data and parameters monitored) of this report. The sources used by the Project Proponent include information from the NFRL /XCII/ and official GIS data (SMByC, REF//), ensuring traceability and reliability.*
   The audit team evaluated the Colombian NFRL emission factors, historical activity data in the Reference Region, deforestation projections in the Project Area, projected GHG emissions, and estimated reductions, in accordance with Section 3.7.4 (GHG project emissions) of /III/. After reviewing and reproducing the calculations, it was determined that the parameters used for the baseline revalidation are correct, credible, and consistent with emission factors and

activity data from national inventories. The carbon pools and emission factors were considered justified based on appropriate national references.
Additionally, it was verified that the data quality control procedures implemented, as described in Section 16.1.6 (Quality Control and Quality Assurance Procedures) of /III/, ensure the integrity and robustness of the information used in the quantification.

a) *Compliance with Uncertainty Management and Methodological Consistency: In accordance with Section 13.1.3 of the Monitoring Report (Uncertainty Management) and Section 3.5 of /III/, which is consistent with version 2.2 in the aspects evaluated in this paragraph, it was verified that the project proponent applies robust mechanisms to manage uncertainty. These include the use of emission factors and parameters based on the NFRL (2018–2022), as well as the adoption of a conservative cartographic process through the use of official maps from the Forest and Carbon Monitoring System (SMByC).*
The conservative approach ensures that projections and calculations avoid overestimating emission reductions, aligning with the principles of accuracy and transparency. A detailed account of these strategies is provided in Section 5.2.2 (Conservative Approach and Uncertainty Management) of this report.
In addition, it was assessed that the project complies with applicable regulations and has implemented periodic monitoring of legal compliance as part of its development. Therefore, the project is considered to meet legal requirements, as detailed in Section 5.9 (Compliance with Laws, Statutes, and Other Regulatory Frameworks) of this report.

b) *Baseline Consistency and Credibility of Estimates: The audit team verified that the procedures associated with the baseline scenario maintain full consistency with emission factors, activity data, GHG emission projection variables, and relevant parameters. The REDD+ project baseline fully complies with the requirements established by the applied methodology, as outlined in /III/ and the associated calculations. Following this analysis, it was concluded that the ex-ante estimation results presented in /III/ are credible, consistent, and accurate, thereby supporting the methodological integrity of the project.*

c) *Baseline Consistency and Credibility of Estimates: Following verification, the audit team confirms that the REDD+ project baseline scenario fully complies with the requirements of the applied methodology. The procedures employed demonstrate full consistency with:*
   - *Emission factors*
   - *Activity data*
   - *GHG emission projection variables*
   - *Relevant methodological parameters*

The ex-ante estimation results presented in /III/ are considered technically credible, consistent, and accurate, after validating their alignment with the calculations and methodological rationale. This conclusion supports the methodological integrity and technical robustness of the project design.

d) *Data Quality and Methodological Compliance: The audit team confirmed the implementation of procedures to ensure data quality in accordance with ISO 14064-2 and the requirements of methodologies /V and /VI/. To determine the project baseline scenario, paragraph (c) "Changes in carbon stocks within the project boundaries, identifying the most likely land use at the project start as established in BCR 0002 Methodology Version 3.1" was selected. The following steps were applied to identify the baseline scenario:*

- *Step 0. Preliminary assessment based on the project activity start date: The CO2Bio P2-2 project officially began its conservation activities on January 15, 2018, with the objective of preventing deforestation and land-use change in Continental Wetlands, contributing to the reduction of GHG emissions.*
- *Step 1. Identification of alternative scenarios: To determine the baseline scenario, the most likely land-use alternatives in the absence of the project were identified, in accordance with methodologies /V and /VI/. These include: expansion of the agricultural frontier (extensive livestock, crop cultivation, illicit crops, and land use suitable for agriculture), hydrocarbon extraction, non-certified projects (e.g., PES schemes and environmental offsets, among others), nature-based tourism, and the implementation of projects for the utilization of Non-Timber Forest Products and Green Businesses.*
- *Sub-step 1a. Identification of likely alternatives: The most probable and coherent alternative was found to be the expansion and continuation of agricultural activities—extensive livestock and crop cultivation, particularly rice—followed by pressure from hydrocarbon activities. This conclusion is supported by: (1) historical and economic trends showing sustained population growth and continuous expansion of the agricultural-livestock frontier; (2) the national and regional regulatory framework that actively promotes these activities; and (3) the dominant economic viability of these practices in the region, despite their environmental impacts. This scenario carries a high risk of deforestation, which validates the additionality of the CO2Bio P2-2 conservation project by demonstrating that its implementation prevents emissions that would have occurred in the absence of the project. This was corroborated by the analysis conducted by the Orinoquia Emission Reduction Program – PRE Biocarbono /XCI/.*
- *Sub-step 1b. Consistency with laws: It was concluded that agricultural expansion and the continuation of previous land use are aligned with the national and departmental legal and political framework, which prioritizes productive development (Political Constitution, Law 388 of 1997 /XC/, National and Departmental Development Plans). Although environmental policies exist, the pressure on economic development makes this alternative the legally most viable and probable option. Other alternatives (non-certified projects, tourism) are also consistent with the regulatory framework but are considered less likely due to knowledge, financing, and implementation barriers. This conclusion is corroborated by the analysis conducted by the Orinoquia Emission Reduction Program – PRE Biocarbono /XCI/.*

In conclusion, during the audit process, the project proponent confirmed that the baseline scenario configuration in /III/ remains unchanged compared to the validation. The land-use scenarios considered most likely in the absence of the project (the continuation of agricultural activities, primarily crops and pasture for livestock) remain valid and relevant. The identification of the most likely land use, documented in Section 3.3.1 of /III/, was found to be aligned with the guidelines established in Methodologies /V and /VI/ and the guidance document /LXX/.

Consequently, it is concluded that the baseline scenario of the CO2Bio P2-2 project fully complies with all applicable criteria established by the methodologies and verification manual cited in Section 2 of this document. The documentary evidence presented is robust, relevant, and properly supported, demonstrating the validity and technical robustness of the defined baseline.

5.2.2 *Conservative approach and uncertainty management*

The GHG Project Holder applied a systematic and multifaceted approach to manage uncertainty in the quantification and mitigation results, addressing both spatial data (maps) and emission factors, in accordance with the procedures documented in /III/ and /I, II/.

The project proponent confirmed and documented the application of statistical tools aligned with BCR requirements for uncertainty assessment, using specific formulas:

For Emission Factors: Formula 15 from the CDM tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities" /IV/ was rigorously applied, as documented in /III/:

$$\mu\Delta C = tVAL * \sqrt{[\ \Sigma\ (\ (IN\_i)^2 * S\_i^2 / n\_i\ )\ ]} / b\_TREE$$

Results: The application of this tool yielded the following quantified uncertainties /III/:

- *Continental Wetlands: Total Biomass = 16.38%; Soil Organic Carbon (SOC) = 19.58%.*
- *Forests: Total Biomass = 7.98%.*

The uncertainty assessment was comprehensively extended to cover all critical parameters:

1) *Spatial Data (Maps and Conversion Rates):*
   a) *Historical Maps (2012, 2018): For the baseline periods, the project used official national land cover maps from IDEAM's Forest and Carbon Monitoring System (SMByC). These maps are generated in compliance with IGAC Resolution 471 of 2020 /XCIX/, which mandates a minimum accuracy of 95%, and were therefore deemed not to require additional uncertainty analysis /III/.*
   b) *Monitoring Maps (2021): The land cover map for 2021 was developed using Landsat 8 imagery (30m resolution) and validated against higher-resolution Sentinel-2 (10m)*

and WorldView 2/3 imagery. Using the AcATaMa v23.4 tool for quality control, an accuracy of 98% was achieved, far exceeding the methodological requirement of 90% /III/.

c) Monitoring Maps (2024):
   1) Forest/Non-Forest Map: A 2024 map was created using a supervised Random Forest classification in Google Earth Engine (Landsat 8 imagery). Validation with 225 independent points against Sentinel-2 imagery via the AcATaMa v24.12c plugin yielded an overall accuracy of 96% /XVIII/, /XIX/, /XX/.
   2) Land Cover Map (for Wetlands): The 2024 land cover map, based on the Corine Land Cover methodology and Sentinel-2 imagery, was validated using a confusion matrix with 164 random sampling points /LV/. This process determined a 94% accuracy /LV/, /LVII/.

2) Emission Factors and Biomass:
   a) As documented above, the uncertainty for emission factors was formally calculated for both forest and wetland pools using the prescribed CDM tool /III/.
3) Soil Data:
   a) The uncertainty for Soil Organic Carbon (SOC) in Continental Wetlands was specifically assessed, resulting in a value of 19.58% /III/.

The project proponent applied conservative assumptions to mitigate residual uncertainty, particularly where it exceeded the 10% threshold, in compliance with methodologies /V/ and /VI/.

- For Continental Wetlands (Biomass and SOC): Since the uncertainties for both total biomass (16.38%) and SOC (19.58%) exceeded the 10% threshold (but remained within the 20% methodology limit), a conservative approach was applied. According to BCR0004, Section 15 /VI/, the lower-bound value of the 95% confidence interval was used for the emission factors instead of the mean value /III/. This directly reduces the carbon credits claimed, ensuring the estimates are robust and not overstated.
- For Forests (Biomass): The calculated uncertainty of 7.98% was below the 10% threshold established in BCR0002 /V/. Therefore, no conservative adjustment was required, and the mean biomass value was accepted for calculations, as it already met the precision standard /III/.

Conclusion:

The CO2Bio P2-2 project has implemented a comprehensive, robust, and conservative framework for managing uncertainty. This conclusion is based on the following evidence:

1. Spatial Data Excellence: The project consistently uses and generates high-accuracy cartographic products (94% - 98%), exceeding the 90% minimum requirement /V, VI/, through the use of official data /XCIX/, high-resolution validation imagery (Sentinel-2, WorldView), and standardized tools like AcATaMa /XLIX/.

2. *Statistical Rigor for Emission Factors: Uncertainty for key carbon pools is quantified using a statistically sound and replicable method (CDM Formula 15 /IV/), which transparently incorporates variance, sample size, and confidence levels /III/.*
3. *The project embedded conservatism directly into its calculations by applying lower-bound values from the 95% confidence interval for all emission factors where the quantified uncertainty was significant (i.e., exceeding 10%). This proactive approach was systematically applied, for instance, to Wetlands emission factors—which were derived from the Colombian NFRL (2018–2022) and had uncertainties below 20%—ensuring that mitigation results were never overstated. For Forest emission factors, where the uncertainty, calculated using the standardized CDM-A/R Formula 15, was already below the 10% threshold, the use of the mean value was deemed sufficiently conservative, demonstrating a risk-averse and rigorous methodology overall.*

Following the revalidation, no significant changes were identified in uncertainty management between versions /XXII/ and /III/. The procedures, data sources, and conservativeness criteria remain consistent, reinforcing the stability of the estimates. The audit team concludes that the uncertainty management is comprehensive, conservative, and compliant with the BCR Standard and applicable methodologies /V and /VI/, with no significant variations between versions.

The application of the BCR Uncertainty Tool (via CDM Formula 15 /IV/), the comprehensive extension of the assessment to all relevant parameters (spatial data, biomass, soil carbon), and the systematic application of conservative assumptions (specifically the use of the lower confidence interval for wetlands, according to /VI/) demonstrate that the CO2Bio P2-2 project's uncertainty management procedures, documented in /III/ and /I, II/, are fully compliant with the requirements of BCR Standard v3.2 §11.1 /LXXII/.

5.2.3 Leakage and non-permanence

The assessment of the leakage and non-permanence risk management for the CO2Bio P2-2 project is based on an exhaustive verification process, whose technical robustness and methodological consistency have been validated through a cross-check with the supporting documentation. The delimitation of the leakage area or "leakage belt" was not arbitrary but was based on a rigorous spatial analysis documented in the internal procedure GOG-03 (/LII/), which used historical data on forest loss from Global Forest Watch (2010-2018) and maps of natural cover transformation from Corine Land Cover (2012-2018), whose interpretation guidelines are detailed in /LIX/. This analysis, aligned with the BCR0002 (/V/) and BCR0004 (/VI/) methodologies, considered key criteria such as the mobility of deforestation agents and the relationship with degradation drivers, resulting in the establishment of two specific belts: one of 250 meters for REDD+ activities (27,005 ha) and another of 600 meters for wetlands (63,916 ha), whose consistency was favorably contrasted with official information such as the Orinoquia Program (PRE Biocarbono) (/XCVII/).

Once the area was defined, the emissions quantification process was audited, confirming the correct application of the equations stipulated in the BCR0002 (/V/) and BCR0004 (/VI/) methodologies. For the monitored period (2022-2024), reported in the Monitoring Reports (/I/, /II/), an average annual deforestation of 51.67 ha was recorded in the REDD+ leakage belt, generating gross emissions of 29,746.35 tCO2e. However, the conservative net calculation resulted in 15,065 tCO2e annually attributable to the project. Crucially, for wetlands, it was verified that the project applied a conservative approach by setting net emissions to zero when the equation result was negative, thereby ensuring no overestimation of the project's reductions.

The credibility of these calculations was reinforced through cross-checks and an attribution analysis. Methodological consistency was confirmed by cross-referencing the equations and parameters from the reports (/I/, /II/) with the requirements of /V/ and /VI/, with no deviations found. A crucial finding was the investigation of the loss of 334 ha of forest in the area of influence (2010-2024), documented in /I/ and /II/. The audit, contrasting with official reports, confirmed that this loss was attributable to regional agricultural expansion and hydrological dynamics, and not to displacement caused by the project. This conclusion was supported by triangulation with qualitative evidence, such as the record of 174 thermal anomalies (2022-2024) (/LXXXIX/) and the results of participatory surveys (/XVI/) indicating that 37% of local stakeholders observed vegetation changes outside their properties.

The audit team reviewed Sections 3.2.1.1.1 Wetlands Leakage Area, 3.2.1.2.3 REDD+ Leakage Area, and 3.6 Leakage and Non-Permanence of /III/, along with Section 13.1.2 Leakage and Non-Permanence Risk of /I, II/, cross-checking the information with official sources such as the Orinoquia Emission Reduction Program (PRE Biocarbono) /XCI/ and the IDEAM Monitoring, Reporting, and Verification (MRV) systems /XCII/. It was confirmed that the leakage area delimitation was carried out through a spatial proximity analysis of nearest neighbors, designed to identify deforestation/transformation hotspots based on:

- *Cumulative forest loss and conversion of natural vegetation cover.*
- *Relationship with environmental and degradation drivers.*
- *Distance to REDD+ project areas.*

This process considered the project's geographic boundaries and historical baseline deforestation, following the criteria of methodologies /V, VI/:

- *Inclusion of all forested areas within the mobility range of deforestation agents.*
- *Exclusion of areas with restricted access for these agents.*
- *The delimitation methodology used data from:*
- *Forest loss (2010–2018): Global Forest Change/Global Forest Watch.*
- *Natural vegetation cover transformation (2012–2018): Corine Land Cover maps.*

The quantification process for leakage emissions considered both the geographic boundaries of the influence area or "leakage belt" (defined as a 250-meter zone around the project perimeter) and the historical baseline deforestation rate established for that area. The methodology for determining GHG emissions from the leakage area is based on the equations and procedures described in Section 5.2.4.1 of this report. These equations allow for calculating the net increase in emissions attributable to the potential displacement of deforestation-causing activities from within the project to its area of influence.

Additionally, in /I, II/, a progressive loss of 334 ha of forest cover between 2010–2024 was identified, attributable to agricultural expansion and hydrological dynamics, not project activities. A total of 174 thermal anomalies (2022–2024) unrelated to forest loss were recorded, and participatory surveys conducted with project beneficiaries revealed that 37% of local stakeholders observed vegetation changes outside their properties, highlighting strategies such as fire control and conservation agreements.

The non-permanence assessment presented in /I, II/ is consistent with the latest version of /III/ and with the guidelines defined by /LXXI/. The audit team verified that these actions are achievable, coherent, and adequate to manage the risks, reinforcing the robustness of the project design. The delimitation methodology used data from:

- *Forest loss (2010–2018): Global Forest Change/Global Forest Watch.*
- *Natural vegetation cover transformation (2012–2018): Corine Land Cover maps.*

No significant differences were found between the methodology described in /XXII/ and /III/ (post-registration adjustments), which confirms the stability of the technical approach. It is concluded that deforestation and degradation in the Orinoquia are driven by a synergistic combination of direct causes (expansion of the agricultural frontier) and specific agents (grassland conversion, industrial crops, illicit crops, transport infrastructure, and timber extraction, among others), operating within a context of underlying causes such as irregular land tenure and economic pressure. This profile, described in /III/ and /I, II/, aligns with official literature available from studies conducted in the same geographic region where the CO2Bio P2-2 project is located /LXXXVII/.

In conclusion, the audit process confirms that leakage and non-permanence management in the CO2Bio P2-2 project is robust, technically sound, and consistently aligned with the applicable methodological standards /V, VI/ and official national information. The leakage area delimitation was conducted through a rigorous spatial analysis, using forest loss and cover transformation data from recognized sources (Global Forest Watch, Corine Land Cover), and considering key criteria such as the mobility of deforestation agents and their relationship with degradation drivers.

Although a loss of forest cover was identified in the influence area (334 ha between 2010–2024), this was correctly attributed to regional dynamics (agricultural expansion and hydrological factors) and not to project-induced displacement, demonstrating that the

leakage belt monitoring mechanism functions effectively. The record of thermal anomalies unrelated to forest loss and the results of participatory surveys reinforce the conclusion that the risk of GHG leakage is being managed proactively and effectively through local strategies such as conservation agreements and fire control.

The reversal risk assessment is consistent with tool /LXXI/, and the low overall risk score (1.29) justifies the minimal contribution to the buffer (10%). The methodological stability between versions of /III/, the consistency with official reports (Biocarbono, IDEAM), and the accurate identification of regional deforestation drivers support the robustness of the project design and its capacity to ensure the long-term permanence of emission reductions.

Finally, the non-permanence assessment verified that the project used the BCR "Permanence and Risk Management" Tool (/LXXI/), concluding that the described actions—such as fire management plans (/LXXVIII/), conservation agreements, and governance strategies (/CXVII/)—are achievable, coherent, and adequate to manage the risks. The low-risk score (1.29) justifies the minimal contribution to the buffer (10%). In conclusion, the audit process confirms that the management of leakage and non-permanence is robust, technically sound, and consistently aligned with the applicable methodological standards and national official information, supporting the project's capacity to ensure the long-term permanence of emission reductions.

5.2.4 Mitigation result

The audit team verified compliance with the methodological procedures and the accuracy of the results reported in /III/ and /I, II/ of the CO2Bio P2-2 project. Through independent reproduction of the ex-post calculations and analysis of the reference spreadsheets, full consistency of the data, parameters, and equations with what is established in /III/ and /I, II/ was confirmed. Additionally, a thorough review was conducted to rule out errors that could affect the accuracy of the reported emission reductions.

The verification process included: identifying appropriate methods and equations; verifying geodatabases in QGIS; validating procedures for estimating the historical deforestation rate; checking secondary data sources and emission factors; reviewing the conservativeness of the units; and auditing the full implementation of methods in the spreadsheets. Project and leakage area deforestation projections, as well as the correct presentation of results, were also verified.

It was verified that the project fully complies with methodologies /V, VI/, and that the eligible areas conform to the national definition of forest in Colombia (areas larger than 1 ha, canopy cover greater than 30%, and tree height over 5 meters), as confirmed through official SMByC cartography and GIS analysis. The documentation is considered reliable and sufficient for both ex-ante and ex-post quantification.

Conclusion: ANCE confirms that the ex-post quantification of net GHG emission reductions is accurate and that the project meets all requirements of the BCR Standard and applicable methodologies. The rigorous and systematic approach adopted ensures the reliability of the results and reinforces the project's legitimacy in contributing to climate change mitigation.

5.2.4.1 GHG baseline emissions

5.2.4.1.1 Baseline Emissions in Continental Wetlands

The audit team reviewed the consistency of the equations detailed in this section and the calculations applied in the quantification of GHG emissions and reductions for Wetlands, confirming their strict alignment with the requirements of methodology /VI/. The step-by-step calculations, which include the application of emission factors, land-use change projections, and leakage estimation, are documented in Wetlands /XVII/.

This documentation supports the traceability, transparency, and integrity of the reported results, where the following equations are applied:

$$EA_{lb}=CSCN_{lb}\,x\left(CBF_{eq}+COS_{eq}\right)$$

Donde:

EAlb	*Annual emission in the baseline scenario; tCO2e/ha/year*
CSCNlb	*Historical changes in the baseline scenario; ha/year*
CBFeq	*Equivalent carbon dioxide contained in the total biomass; tCO2e/ha*
COSeq	*Carbon dioxide equivalent contained in soils; tCO2e/ha*

To quantify annual emissions in the project scenario, the following equation is applied:

$$EAp=CSCNp\times(CBFeq+COSeq)$$

Where:

EAP	*Annual broadcast on stage with project; tCO2e/ha/year*
CSCNP	*Change in land use in the scenario with project; ha/year*
CBFeq	*Equivalent carbon dioxide contained in the total biomass; tCO2e/ha*
COSeq	*Carbon dioxide equivalent is contained in soils; tCO2e/ha*

To quantify annual emissions in the leakage area, it was verified how the GHG project applied the following Equation:

$$EA_{F}=CSCN_{F}\,x\left(CBF_{eq}+COS_{eq}\right)$$

Where:

EAP	Annual emission in the leak area; tCO2e/ha/year
CSCNP	Change in land use in the leak area; ha/year
CBFeq	Equivalent carbon dioxide contained in the total biomass; tCO2e/ha
COSeq	Carbon dioxide equivalent contained in soils; tCO2e/ha

Table 20. Projected GHG emission reductions, avoiding land use change in wetland ecosystems, for the period 2018-2038.

Year	GHG emission reductions/removals in the baseline scenario (tCO2e)	GHG emission reductions/removals in the project scenario (tCO2e)	GHG emissions attributable to leakages (tCO2e)	Estimated Net GHG Reduction/Removals (tCO2e)
2.018	41.411,53	5.383,50	3.070,53	32.958
2.019	42.985,68	5.588,14	3.065,22	34.332
2.020	42.760,65	5.558,88	2.933,01	34.269
2.021	42.536,92	5.529,80	2.807,04	34.200
2.022	41.175,19	5.352,77	2.583,24	33.239
2.023	40.959,17	5.324,69	2.472,73	33.162
2.024	40.744,41	5.296,77	2.367,37	33.080
2.025	40.530,89	5.269,02	2.266,90	32.995
2.026	40.318,61	5.241,42	2.171,05	32.906
2.027	40.107,56	5.213,98	2.079,60	32.814
2.028	39.897,74	5.186,71	1.992,31	32.719
2.029	39.689,13	5.159,59	1.908,98	32.621
2.030	39.481,72	5.132,62	1.829,40	32.520
2.031	39.275,52	5.105,82	1.753,39	32.416
2.032	39.070,50	5.079,16	1.680,76	32.311
2.033	38.866,67	5.052,67	1.611,36	32.203
2.034	38.664,01	5.026,32	1.545,02	32.093
2.035	38.462,52	5.000,13	1.481,59	31.981
2.036	38.262,19	4.974,08	1.420,94	31.867
2.037	38.063,01	4.948,19	1.362,92	31.752
2.038	1.377,54	179,08	51,52	1.147
Total	**804.641,14**	**104.603,35**	**42.347,02**	**657.693**
Estimated annual average	**38.316,24**	**4.981,11**	**2.016,52**	**31.319**

Source: Fundación Cataruben, 2025.

The calculation of emissions due to changes in natural land cover in the wetlands in the project area during the monitoring period was performed using the following equations:

$$CSCNP = \left(\frac{1}{t_{2-}t_1}\right) x\ (A_1\ - A_2)$$

Where:

$CSCNP$	*Change in the area with natural vegetation cover in the project area; ha/yr.*
t_1	*Year of beginning of monitoring period*
t_2	*Year final of monitoring period*
A_1	*Area in natural vegetation cover in the project area at the beginning of the monitoring period; ha*
A_2	*Area in natural vegetation cover in the project area at the end of the monitoring period; ha.*

$$EA_P = CSCN_P \times (CBF_{eq} + cos_{eq})$$

Where:

EA_P	*Annual emission in project area; tCO /ha/year$_{2e}$*
$CSCN_P$	*Change in the area with natural vegetation cover in the area of the project; ha/year*
CBF_{eq}	*Carbon dioxide equivalent contained in total biomass; tCO /ha$_{2e}$*
COS_{eq}	*Carbon dioxide equivalent contained in soils; tCO /ha$_{2e}$*

During the monitoring period between 2022 and 2024, the transformation of Wetlands was verified, and the associated greenhouse gas (GHG) emissions were calculated in the spreadsheet / XVII/.

Table 21. Baseline emissions from land use change in Wetlands, in the period 2022-2024.

Stratum	***Year***	***CSCNp (ha)***	***CTeq (tCO2e/ha)***	***Annual baseline emissions (tCO2e/year)***
Herbáceo	*2022*	*1630,4*	*21,28*	*34.693,67*
Disperso		*42,7*	*151,63*	*6.481,52*
Herbáceo	*2023*	*1623,0*	*21,28*	*34.537,44*
Disperso		*42,4*	*151,63*	*6.421,73*
Herbáceo	*2024*	*1615,7*	*21,28*	*34.381,91*
Disperso		*42,0*	*151,63*	*6.362,49*

Source: Fundación Cataruben, 2025

The conversion of this area resulted in annual emissions of 122,878.77 tons of Carbon Dioxide Equivalent (tCO_2e/year). The results indicate that the transformation of wetlands,

predominantly herbaceous strata, is a significant source of GHG emissions, generating an annual average of more than 122,000 tons of CO_2 equivalent during the monitoring period.

- Herbaceous Stratum: A land use change of 4,869.1 hectares (ha) was recorded.
- Scattered Stratum: A land use change of 127.1 hectares (ha) was recorded.
- Total Affected Area: The total area of transformed wetland amounts to 4,996.2 ha.

5.2.4.1.2 Baseline emissions in forests

The audit team reviewed the consistency of the equations detailed in this section and the calculations applied in quantifying GHG emissions and reductions for Forest Deforestation confirmed their strict alignment with the requirements of the BCR0002 methodology. The step-by-step calculations, which include the application of emission factors, projections to avoid deforestation, and estimation of leaks, REDD+ /XVII/.

This documentation supports the traceability, transparency, and integrity of the reported results, where the following equations are applied:

Emissions from deforestation:

$$EAlb = \_ANDlb \_x \_CTeq$$

Where:

EAlb	*Annual emission in the baseline scenario; tCO2/ha*
ANDlb	*Annual historical deforestation in the baseline scenario; ha*
CTeq	*Total equivalent carbon dioxide; tCO2e/ha*

Annual emissions in the project scenario:

$$EAREDD+\_project,\_\_year = \_ANDREDD+\_proy \_x \_CTeq$$

Where:

EAREDD+_project,_ _year	*Annual broadcast on stage with project; tCO2/ha*
ANDREDD+_proy	*Annual projected deforestation with project; ha*
CTeq	*Total equivalent carbon dioxide; tCO2e/ha*

Annual emissions in the leakage area:

$$EA_{f,\_year} = \_AND_{f} \_x \_CT_{eq}$$

Where:

$EA_{f,\_year}$	Annual emission in the leak area; tCO_2/ha
AND_f	Annual projected deforestation in the leak area; ha
CT_{eq}	Total equivalent carbon dioxide; tCO_{2e}/ha

Table 22. Projected GHG emission reductions from avoided deforestation for the period 2018–2038.

Year	GHG emission reductions/removals in the baseline scenario (tCO2e)	GHG emission reductions/removals in the project scenario (tCO2e)	GHG emissions attributable to leakages (tCO2e)	Estimated Net GHG Reduction/Removals (tCO2e)
2018	155.075,36	15.507,54	15.476,50	124.091
2019	170.180,67	17.018,07	16.149,39	137.013
2020	177.087,32	17.708,73	16.149,39	143.229
2021	182.732,19	18.273,22	16.149,39	148.310
2022	182.838,53	18.283,85	16.149,39	148.405
2023	149.448,60	14.944,86	16.149,39	118.354
2024	153.715,79	15.371,58	16.149,39	122.195
2025	118.031,29	11.803,13	16.149,391	90.079
2026	117.719,998	11.772,00	16.149,39	89.799
2027	117.480,97	11.748,10	16.149,39	89.583
2028	117.242,57	11.724,26	16.149,39	89.369
2029	117.004,66	11.700,47	16.149,39	89.155
2030	116.767,23	11.676,72	16.149,39	88.941
2031	116.530,28	11.653,03	16.149,39	88.728
2032	116.293,81	11.629,38	16.149,39	88.515
2033	116.057,82	11.605,78	16.149,39	88.303
2034	115.822,31	11.582,23	16.149,39	88.091
2035	115.587,28	11.558,73	16.149,39	87.879
2036	115.352,73	11.535,27	16.149,39	87.668
2037	115.118,65	11.511,86	16.149,39	87.457
2038	4.786,88	478,69	672,89	3.63
Total	2.690.874,90	269.087,49	322.987,88	2.098.799
Estimated annual average	128.136,90	12.813,69	15.380,38	99.943

Source: Fundación Cataruben, 2025.

For the monitoring period, the following equation used by the project to calculate activity data based on historical changes in forest area in the reference region was reviewed for consistency.

$$CSByear=(1t2-t1)\ x\ (A1-A2)$$

Where:

CSB_{year}	Annual change in the area covered by forest in the reference region; ha
t_1	Year of beginning of reference period; year
t_2	Year-end of reporting period; year
A_1	Area of forest in the reference region, at the initial time; ha
A_2	Area of forest in the reference region at the final point in time; ha

To quantify emissions from deforestation in the reference scenario, the project used the following equation from methodology /V/, which allows the use of previously validated emission factors for monitoring period.

$$EA_{lb} = DA_{lb} \times CT_{eq}$$

Where:

EA_{lb}	Annual emission in the baseline scenario; tCO_2 /ha
DA_{lb}	Annual historical deforestation in the baseline scenario; ha
CT_{eq}	Total carbon dioxide equivalent; tCO_2e /ha

Changes in the forest area of the eligible areas were estimated considering the historical deforestation trend in the reference region. During the review of the information presented in /XVII/, it was verified that, after adjusting the boundaries of the eligible areas in the analysis period, the projection of $CSB_{proyecto,\,año}$ was recalculated based on the new resulting project area.

It was also verified that the deforestation rate of 2.03% used to estimate the annual change in forest areas in the reference scenario was calculated based on the historical average recorded for the area. Finally, it was confirmed that the adjustment applied to the BSC, according to national conditions and NFRL values, was made in accordance with the provisions of methodology /V/.

Table 23. Baseline emissions from forest deforestation during the monitoring period.

Year	Adjustment for national circumstances (%CN)	CSCNlb + %CNN (ha)	CTeq (tCO_2e/ha)	GHG emissions in the baseline scenario (tCO_2e/year)
2022	53,55%	317,57	575,74	182.732
2023	25,90%	259,58		182.839
2024	29,90%	266,99		149.449

Source: Fundación Cataruben, 2025

Conclusion:

The audit team has satisfactorily verified the quantification of GHG emissions associated with the baseline scenario for both components of the project: Continental Wetlands and Forest Deforestation. The review was conducted through a detailed analysis of the equations applied, the input data, the parameters used, and the calculations performed, which were found to be strictly aligned with the requirements established in methodologies /V and VI/, respectively. The traceability, transparency, and integrity of the reported results are supported by documentation, including detailed spreadsheets and cross-references.

The equations applied for the quantification of emissions in the baseline, project, and leakage scenarios are technically consistent and were correctly applied. The equations applied for the quantification of emissions in the baseline, project, and leakage scenarios are technically consistent and were applied correctly.

The projected results of net GHG emission reductions for the period 2018-2038, both for wetlands and avoided deforestation, have been verified and are considered reliable. Overall, the global estimate meets the criteria of the REDD+ Methodology Document and the Biocarbon Standard, confirming the robustness and credibility of the baseline defined for the CO2Bio P2-2 project.

5.2.4.2 GHG project emissions

Emissions from forest deforestation

During the monitoring period (2022-2024), verification confirmed that the CO2Bio P2-2 project's emissions estimate complies with the requirements set out in methodologies /V/ (section 14.5) and /VI/ section 16.5). To this end, the project only monitored activity data, applying the validated and current emission factors, according to the revalidation contained in /III/ for baseline calculations. Based on the results of GHG emission reductions in the baseline scenario and deforestation monitoring in the project scenario, ex-post calculations were developed for the analysis period.

Table 24. Emissions from forest deforestation.

Year	***CSBproy,year (ha/year)***	***CTeq (tCO2e/ha)***	***Project GHG Emissions (tCO2e)***
2022	*34,63*	*575,74*	*19.939,66*
2023	*34.63*		*19.939,66*
2024	*34.63*		*19.939,66*

Source: Fundación Cataruben, 2025

For the period 2022-2024, an average annual loss of forest cover of 34.63 ha/year was recorded in the project areas, corresponding to 19,939.66 tCO2e per year. It was established

that this behavior is mainly attributable to natural causes that compromise forest cover, such as the flood return periods identified during monitoring. The calculations made are consistent with the methods established in methodology /V/ and /III/ and have been corroborated using the equations implemented in the corresponding spreadsheet / XVII/.

Emissions from land use change in Wetlands

During the monitoring period (2022-2023), it was verified that the record of 5.5 hectares of land use change in the herbaceous stratum, as well as the corresponding emission of 117.75 tCO2e/year, were correctly calculated in accordance with the established methodology. The detailed calculations, which confirm the accuracy of these figures, are documented in/ XVII/.

Table 25. Emissions from land use change in Wetlands.

Stratum	Year	CSCNp (ha)	CTeq (tCO2e/ha)	Project GHG Emissions (tCO2e)
Herbaceous	2022	5,5	21,28	117,75
Dispersed		0,0	151,63	0,00
Herbaceous	2023	5,5	21,28	117,75
Dispersed		0,0	151,63	0,00
Herbaceous	2024	5,5	21,28	117,75
Dispersed		0,0	151,63	0,00

Source: Fundación Cataruben, 2025

The quantification of emissions avoided due to deforestation and degradation during the monitoring period was determined through the verification and exhaustive recalculation of the equations contained in /III/ and /I, II/, respectively. Following this review, the established equation relating baseline emissions, project emissions, and leakage emissions was applied, expressed as follows:

$$RE = (t_2 - t_1) x (EA_{lb,year} - EA_{proj,year} - EA_{f,year})$$

Where:

RE	Net reduction of GHG emissions; tCO2e
t_2_	Year-end of monitoring period; year
t_1_	Year of beginning of monitoring period; year
$EA_{lb,\_year}$	Annual emission in the baseline scenario; tCO2e
$EA_{proj,\_year}$	Annual emission in the project area for the period monitored; tCO2e
$EA_{f,\_year}$	Annual emission in the leakage area for the monitored period; tCO2e

Table 26. GHG emissions for the period 2022-2024.

Verification	Year	GHG emissions in the baseline scenario (tCO2e)	Project GHG Emissions (tCO2e)	GHG emissions attributable to leakage	Net GHG reduction (tCO2e)
Second	01/01/2022 - 31/12/2022	224.013	20.056	15.065	188.892
	01/01/2023 - 31/12/2023	190.407	20.056	15.065	155.286
	01/01/2024 - 31/12/2024	194.459	20.056	15.065	159.338
TOTAL		**608.879**	**60.168**	**45.195**	**503.516**
Annual average		202.960	20.056	15.065	167.839

Source: Fundación Cataruben, 2025

After reviewing the equations and results presented in the Calculation Sheet /XVII/, the quantification of emission reductions during the second monitoring period was verified and corroborated, recording a total reduction of 503,537.0 tCO_2e (Table 19), of which 380,978.0 tCO_2e is attributed to avoided deforestation in forest areas and 122,559.0 tCO_2e corresponds to avoided conversion in wetlands.

These results were validated through the strict application of the established methodology, verification of emission factors, and consistency of monitored activity data, confirming the accuracy and robustness of the reported estimates.

Conclusion:

The comprehensive analysis of emissions from the CO2Bio P2-2 project during the 2022-2024 monitoring period confirms compliance with the methodological requirements of standards /V/ (section 14.5) and /VI/ (section 16.5). The verification included a detailed review of the equations of the methodologies described in /III/ and /I, II/, applying validated emission factors and consistent activity data. The results show a total net reduction of 503,516 tCO_2e, distributed as follows:

- *75.66% (380,978 tCO_2e) corresponds to avoided deforestation in forest areas*
- *24.34% (122,559 tCO_2e) is attributable to avoided conversion in wetlands.*

Project emissions were consistently calculated at 20,056 tCO_2e per year from forest deforestation and 117.75 tCO_2e per year from land use change in wetlands. In addition, emissions from leakage of 15,065 tCO_2e per year in adjacent areas were accounted for.

All ex-post calculations were validated by cross-checking with the reference spreadsheets /XVII/ confirming the traceability, methodological consistency, and accuracy of the reported

estimates. The project thus demonstrates its measurable contribution to climate change mitigation through the verified reduction of emissions from avoided deforestation and degradation.

5.2.4.3 GHG leakage

It was verified that, for the /V/ methodology, a leakage belt was defined with a buffer of 250 meters from the property boundary, covering an area of 27,005 hectares. Within this belt, all forest cover areas were quantified for the temporal boundaries of the baseline and the monitoring period. This definition and procedure are consistent with the information presented in Sections 3.7.5 GHG Leakages of the DdP /III/ and 16.3 of the RM /I, II/.

It was also found that, for methodology /VI/, a leakage belt was delimited with a buffer of 600 meters from the property boundary, covering an area of 63,916 hectares. Within this perimeter, all natural vegetation coverages that meet the eligibility criteria established in point 10.3 of the methodology were quantified for the same time limits. This approach is consistent with the requirements detailed in Sections 3.7.5 GHG Leakages of the DdP and 16.3 of the MR /I, II/.

The verification confirmed that the delimitation of the leakage areas and the criteria applied for quantification are correctly aligned with what is reported in the corresponding sections of the project document.

4.2.4.1.1 Emissions from forest deforestation in the leakage area.

The reported information /XVII/ was verified to be consistent with the step-by-step calculations. For the period 2022-2024, an average annual forest deforestation of 51.67 ha was recorded in the leakage area, representing 29,746.35 tCO2e emitted annually.

When we compared these records with the baseline emissions scenario, we verified that they do not represent a significant increase in GHG emissions as a result of the implementation of the project's REDD+ activities, as documented in Table 20 of the report.

Table 27. Monitoring of emissions from forest deforestation in the leakage area for the period 2022-2024.

Year	***CSB f,year (ha/year)***	***CTeq (tCO2e/ha)***	***GHG emissions in the leakage area (tCO2e)***	***GHG emissions in the leakage area in baseline (tCO2e)***	***GHG emissions attributable to leakage due to project activities (tCO2e)***
2022	*51,67*	*575,74*	*29.746,35*	*14.681,27*	*15.065*
2023	*51,67*		*29.746,35*	*14.681,27*	*15.065*
2024	*51,67*		*29.746,35*	*14.681,27*	*15.065*

Source: Fundación Cataruben, 2025

4.2.4.1.2 Emissions from wetland transformation in the leakage area

The information from the monitoring of emissions from wetland transformation in the leakage area for the period 2022-2024 was verified to be consistent with the equations in the methodology /VI/ section 16.3.5. For the monitoring period, changes in wetland land use were recorded, exclusively in the herbaceous stratum, with 45 ha transformed annually. However, when comparing these values with those of the baseline, they do not represent an

Table 28. Monitoring of emissions from wetland transformation in the leakage area for the period 2022-2024.

Stratum	Year	CSCNf (ha/year)	GHG emissions in the leakage area (tCO2e)	GHG emissions in the leakage area in baseline (tCO2e)	GHG emissions attributable to leakage due to project activities (tCO2e)
Herbaceous	2022	45	21,28	22.808,19	-21.843,51
Dispersed		0	151,63	3.024,23	-3.024,23
Herbaceous	2023	45	21,28	21.939,11	-20.974,44
Dispersed		0	151,63	2.788,18	-2.788,18
Herbaceous	2024	45	21,28	21.103,16	-20.138,48
Dispersed		0	151,63	2.570,55	-2.570,55

Source: Fundación Cataruben, 2025

In conclusion, and as a result of the audit process, the integrity of the emissions data in the leakage area for the period 2022-2024 was verified. The reported calculations demonstrated full consistency with the monitoring spreadsheets and methodological protocols of /V and VI/. It was confirmed that the recorded deforestation (51.67 ha/year) did not represent a significant increase compared to the baseline scenario, with emissions attributable to marginal leaks (15,065 tCO2e/year). Concerning the transformation of wetlands, the conservative treatment of negative values as zero was validated, concluding the absence of net emissions for this concept. ANCE corroborates that the implementation of the REDD+ project did not generate significant carbon leakage, supporting the robustness of the reported emissions accounting.

5.2.4.4 Ex-ante vs Ex-post Comparison of GHG emission reductions/removals.

The review of GHG emission reduction calculations for the period 2022-2024 confirms that the actual net reductions recorded (503,516 tCO_2e) exceeded the ex-ante estimates (455,355 tCO_2e) by 10.58%. This positive variation is attributed to a lower incidence of degradation and land use change events in both the leakage area and the project area, resulting in lower emissions than projected in the baseline scenario.

Table 29. Comparison of Estimated and Reported GHG Emission Reductions During the Monitoring Period (2022–2024).

	Estimated GHG emission reductions or removals (tCO2e)	**Net GHG emission reductions or removals (tCO2e)**
Emission reductions 2022 / removals (tCO_2)	181.644	188.892
Emission reductions 2023 / removals (tCO_2)	118.354	155.286
Emission reductions 2024 / removals (tCO_2)	155.357	159.338
TOTAL	455.355	503.516

Source: Fundación Cataruben, 2025

The year-on-year analysis shows different variances: +3.99% for 2022 (188,892 tCO_2e actual vs. 181,644 estimated), +31.21% for 2023 (155,286 tCO_2e actual vs. 118,354 estimated) and +2.57% for 2024 (159,338 tCO_2e actual vs. 155,357 estimated). All calculations have been validated as consistent with applicable monitoring protocols and methodologies.

It is concluded that the project has shown superior performance to that initially projected in terms of emissions reduction, complying with the criteria of conservatism in carbon accounting and validating the effectiveness of the REDD+ activities implemented. The results confirm the strength of the project's monitoring and reporting system.

5.3 Sustainable development safeguards (SDSs).

Through document review and corroboration with secondary sources, the consistency of the activities and procedures proposed by the mitigation project for the implementation of the BCR tool was validated.

In accordance with section 15 of /LXXII/, the /LXXIII/ tool establishes the requirements and standards that projects must follow to examine and address risks related to:

- Resource efficiency and pollution prevention and management, including land use.
- Water.
- Protection of biodiversity and ecosystems.
- Climate change.
- Labor rights and working conditions.
- Gender equality and women's empowerment.
- Land acquisition, use restrictions, displacement, and involuntary resettlement.
- Respect for human rights and inclusive stakeholder participation
- Protection of the cultural heritage of indigenous peoples and local communities.
- Community health and safety.

- *Corruption; and*
- *Economic impact, including transparent benefit-sharing mechanisms.*

In compliance with the above, the project proponent (PH) incorporates into the SDS analysis, with reference to section 8 of /III/, the purpose and objective of the project CO2Bio P2-2, focused on the pillars of conservation, restoration, sustainable production, and generation of economic benefits, with the aim of generating positive environmental and socioeconomic impacts.

To verify the results, the holder uses the tool described in /XXXIII, where the following findings were made according to the classifications:

***Land use:** Regarding resource efficiency and pollution prevention and management, it was determined that the project will not cause soil degradation or erosion leading to loss of productivity. CO2Bio P2-2 activities focus on the conservation and sustainable management of forests and wetlands, with the main objective of reducing deforestation and ecosystem degradation, directly contributing to the prevention of soil erosion and degradation processes. This will maintain soil cover and prevent the conversion of wetlands, as monitored in evidence/LXXIV/.*

Regarding the harmful excess of nutrients due to the use of fertilizers or pesticides, the project does not encourage their use, as it is focused on conservation and sustainable management, prioritizing the protection of biodiversity and the balance of nutrient cycles. In addition, it promotes conservation and sustainable production practices at the estate and local levels that contribute to the preservation of carbon stocks, as documented in /LXXV and LXXVI/.

In regard to the efficient use of resources such as energy, water, and raw materials, the activities do not generate a significant environmental footprint. A water management program and continuous monitoring of forest cover and environmental threats have also been implemented to reinforce the commitment to efficient use and protection of the ecosystem, supported by /G3 Continuous monitoring of changes in forest area/, /XIII/, /LXXVII/ and /LXXVIII/.

No changes towards intensive monocultures that cause soil degradation or biodiversity loss are reported, as the focus is on conservation, promoting ecological resilience and strengthening the technical, social, and organizational capacities of stakeholders /LXIII/.

***Water:** With regard to possible impacts that increase water scarcity or depletion, the project promotes efficient water use through the implementation of the "Water Management Program," contributing to SDG 6 through indicators that evaluate water use over time. This initiative seeks to optimize the resource and ensure its availability for future generations /VII/.*

Ecosystems and biodiversity: *The project does not cause habitat destruction or fragmentation that affects biodiversity. On the contrary, it focuses its activities on the conservation of forests and wetlands, promoting connectivity and biodiversity protection. To this end, it implements participatory biodiversity monitoring with the active involvement of local communities in the observation and recording of species /VII/. In addition, it has a robust environmental monitoring system that collects systematic information on flora and fauna to support decision-making and adaptive adjustments /LXXIX/.*

Climate change: *The project is designed to mitigate the main causes of deforestation, forest degradation, and land use change through sustainable strategies and practices that prevent the loss of forest cover, contributing to the reduction of greenhouse gas emissions, supported by emissions monitoring /XVII/.*

Working conditions: *The project protects the safety of its participants through a health and safety management system led by COPASST, which identifies and controls occupational risks to promote a safe environment, based on current regulations. The Fundación Cataruben guarantees freedom of association and the right to collective bargaining, in line with ILO Conventions 87 and 98 and the Colombian Substantive Labor Code. In addition, it will develop a Human Rights Policy that rejects violations of labor and association rights. With its Gender Equality, Diversity, and Inclusion Policy, it promotes equal opportunities and continuous training, establishing weekly spaces to strengthen technical and organizational skills, ensuring equal participation in key meetings and events. The documents CCL Regulations support these commitments, COPASST Regulations, GEN-26 Gender Equality, Diversity, and Inclusion Policy, COLAFT Anti-Corruption and Money Laundering Policy, and Resolution on the Admissibility of Prior Consultation ST-1666 of 2023.*

Gender equality and women's empowerment: *The Fundación Cataruben promotes inclusive processes without gender discrimination in accordance with its Equity Policy and ILO Convention 111. It encourages the equal participation of women in leadership roles and includes both men and women in decision-making and equal access to benefits and resources /Gender Equity, Diversity, and Inclusion Policy/.*

Land acquisition, restrictions, and displacement: *No project activities or initiatives were identified that involve conflicts related to land acquisition, restrictions, displacement, or involuntary resettlement. In addition, the project respects the rights of indigenous peoples and their cultural heritage, as it is carried out on private property without interfering with their territories, which was confirmed through consultation with the Ministry of the Interior, which issued the respective resolution.*

Corruption: *The project complies with COLAFT policy, demonstrating that no allocated funds have been misappropriated. Fundación Cataruben implements strict controls to prevent risks of corruption and money laundering, ensuring the proper use of resources /COLAFT Anti-Corruption and Money Laundering Policy/.*

Considering the environmental and socioeconomic aspects noted, and based on XXXIII, it is concluded that the project shows no signs of significant negative impacts. Its focus on conservation and protection of ecosystems and biodiversity minimizes environmental risks, while actions to ensure community participation, gender equality, and respect for collective and individual rights ensure the mitigation of socioeconomic risks. The project has demonstrated, through verifiable evidence and references, compliance with the criteria established in the /XXXIII/ tool.

Fundación Cataruben defines clear criteria to measure the project's impact, aligned with three Sustainable Development Goals (SDGs):

- *Conservation of forests and biodiversity (SDG 15)*
- *Sustainable management of water resources (SDG 6)*
- *Climate change mitigation (SDG 13)*

For each criterion, measurable indicators have been established, such as the surface area of conserved land, the number of training sessions conducted, the tracking of economic benefits to landowners, and the record of conservation and monitoring activities, as mentioned in the project safeguards.

Based on these SDGs, the project defines specific criteria, which can be seen in the safeguards, such as:

- *Surface area under conservation and monitoring*
- *Records of payment and equitable distribution of benefits*
- *Sustainable management of water resources in the intervention areas*

It is important to highlight that Cataruben conducts systematic monitoring and measurement of the SDGs through /XXX/, which integrates specific objectives, indicators, and activities to constantly evaluate progress. Additionally, the monitoring is complemented by using the SDG Tool (/XXIII/), where a detailed analysis is performed explaining how the project addresses the fulfillment of the SDGs within the framework of its activities and safeguards.

Each SDG maintains constant and effective monitoring. For SDG 6, a diagnosis, design, implementation, and monitoring of a Plan for the Efficient Use and Saving of Water (PUEAA, by its Spanish acronym) allows them to execute activities for improving the use of water for human consumption and managing wastewater. Similarly, they maintain an indicator which is the change in water use efficiency over time. In general, they implement a water management program that helps them contribute to the application of this SDG, with actions focused on watershed conservation, restoration of aquatic ecosystems, and strengthening community capacities for water management.

In the case of SDG 13, Climate Action, they quantify reduced emissions and/or increased CO2e removals, using total greenhouse gas emissions per year as an indicator. An evidential document is produced where they quantify the reduced emissions and/or increased CO2e removals. The REDD+ activities contribute to climate change mitigation by reducing emissions from avoided deforestation, conserving carbon sinks, and through satellite monitoring of forest cover.

For SDG 15, Life on Land, their indicators include forest area as a proportion of total land area and the proportion of important sites for terrestrial and freshwater biodiversity. The project maintains the protection of forests and biodiversity using cartography, GIS analysis, and participatory monitoring, alongside training and governance strategies that strengthen local management.

The SDG Tool allows these contributions to be evidenced both quantitatively and qualitatively, verifying that the project's activities are aligned with the sustainable development goals and generate measurable environmental, social, and economic benefits.

In conclusion, based on the analysis conducted using the /XXIII/ tool and the review of documentary evidence, it is concluded that the Fundación Cataruben's REDD+ project satisfactorily meets the established criteria and indicators for the prioritized SDGs (6, 13, and 15).

The evaluation process demonstrates coherence between the project's objectives and the global sustainability goals, reflecting comprehensive management that promotes the conservation of natural resources, climate change mitigation, and biodiversity protection, while simultaneously fostering community participation and strengthening local capacities.

Therefore, the application of the SDG Tool is considered effective for demonstrating the project's contributions to the Sustainable Development Goals, ensuring transparency, traceability, and a comprehensive assessment of the positive impact generated.

Conclusion: Based on the comprehensive review of documentation and evidence, it is concluded that the CO2Bio P2-2 project demonstrates full compliance with the Sustainable Development Safeguards (SDSs). The assessment, conducted using the designated tool /XXXIII/, verified that the project's conservation-focused activities effectively mitigate environmental and socio-economic risks across all critical areas, including land use, water resources, biodiversity, climate change, labor rights, gender equality, and governance.

The project's core objectives are aligned with and directly contribute to Sustainable Development Goals 6 (Water Management), 13 (Climate Action), and 15 (Life on Land). This alignment is demonstrated through measurable indicators, such as monitored forest area, quantified GHG emission reductions, efficient water use, and equitable benefit-sharing, all systematically tracked via the project's monitoring plan /XXX/ and the SDG Tool /XXIII/.

The evaluation finds no evidence of significant negative impacts. Instead, the project generates substantial positive outcomes by promoting ecosystem conservation, strengthening local capacities, ensuring transparent governance, and fostering inclusive community participation. Therefore, the project successfully fulfills all requirements of the BCR Sustainable Development Safeguards.

5.4 Project contribution whit the Sustainable Development Goals (SDGs)

The process of assessing compliance with the criteria and indicators to determine how project activities contribute to the Sustainable Development Goals (SDGs) is based on a detailed analysis of the Monitoring Report, specifically section 4, which explains the project's contribution to the applicable SDGs, highlighting in particular SDG 6 (Clean water and sanitation), 13 (Climate Action), and 15 (Life on Land).

During the 2022-2024 monitoring period, the project owner implemented specific actions to contribute to these goals, following the plan and report entitled "4.5 SDG Monitoring Plan and Report (CO2Bio P2-2)." This document details each SDG:

- *The objective and the indicator applied.*
- *The activities to be implemented.*
- *The requirements and responsible parties.*
- *Evidence of compliance with the official BCR tool (SDS Tool).*
- *The baseline, target, unit of measurement, frequency, and reporting.*

*Regarding **SDG 6**, and with the aim of contributing to its fulfillment, indicator 6.4.1 is applied, which measures the change in water use efficiency over time. In this context, the Fundación Cataruben has developed an Efficient Water Use and Conservation Plan (PUEAA) aimed at improving the quality and sustainability of water resources. Through surveys conducted on the properties linked to the project, a diagnosis was carried out to identify current practices and specific needs. This information was key to designing training programs that promote efficient methods of water use and conservation, thus promoting water sustainability.*

The diagnosis revealed that the greatest demand for water comes from agricultural consumption, followed by human consumption and, to a lesser extent, animal husbandry. It also showed that 78% of the water used for agricultural activities comes from deep wells, which represents a significant challenge in terms of sustainable management. For the disposal of domestic wastewater, approximately 72% of households use septic tanks, although 6% still discharge directly into open fields, posing health and environmental risks.

In alignment with the SDS Tool, the project is in the process of developing a comprehensive water management program that includes diagnosis, specific plans, training, and monitoring, a stage that is still in its initial phase. Currently, only 4% of the plan established during the reporting period has been completed, as implementation continues to be

developed. However, preliminary analysis of the needs and planned activities demonstrates a commitment to sustainable development goals in accordance with the official BIOCARBON tool, evidencing adequate adherence to the criteria established for the comprehensive sustainability of the project.

The process for assessing compliance with the criteria and indicators established by the project to determine how applicable activities contribute to the Sustainable Development Goals (SDGs) is based on a detailed review of documentation and monitoring of specific activities. Official project documents, such as /XVII/ and /XXIII/, are used to verify compliance with the indicators defined in the Sustainable Development Goals (SDG) tool available, ensuring the use of its most up-to-date version.

In specific reference to SDG 13, the Fundación Cataruben has developed a detailed calculation tool that establishes compliance with indicator 13.2.2 Total greenhouse gas emissions per year. Document /XVII/ records baseline emissions, emissions calculated for the project scenario, emissions attributable to leaks, and the estimated net reduction of greenhouse gases in Wetlands, in accordance with methodology /VI/. It also considers deforestation components according to methodology /V/. The monitoring conducted for the second verification period shows a reduction compared to the baseline, resulting from a modification in the project design due to the withdrawal of four properties. This analysis maintains consistency and transparency, as well as a conservative approach in accordance with the provisions of the Standard.

In document /XXIII/, the first activity considered is the quantification of greenhouse gas emissions and reductions associated with the project, which allows for the evaluation of the real and measurable contribution to the SDGs.

In summary, the assessment confirms that the project has implemented activities with clear contributions to the SDGs, complying with the criteria and indicators defined in the SDG tool and demonstrating adherence to the required sustainability standards.

In the context of SDG 15, two relevant indicators are considered: (15.1.1) Forest area as a proportion of total land area, and (15.1.2) Proportion of important sites for terrestrial and freshwater biodiversity that are part of protected areas, broken down by ecosystem type.

For indicator 15.1.1, the main activity consists of analyzing forest cover using satellite images, taking the baseline for the initial year as a reference, and evaluating performance during the monitoring period. This analysis is documented in /LXXX/, which identifies the project sites, their components, and coordinates, as well as the forest gain recorded during the period analyzed.

For indicator 15.1.2, the delimitation and marking of strategic ecosystems and protected areas is promoted by identifying properties covered by REDD+ and Wetlands, which are considered areas of high importance for biodiversity and its conservation. The evaluation

and compliance with this indicator are based on document /LXXXI/, which details the properties, the area covered, their status in the National Registry of Protected Areas (RUNAP), and their inclusion in Key Biodiversity Areas (KBA), indicating the year of creation. Furthermore, some properties are in the process of generating a resolution, the documentation for which can be found in folder /LXXXII/.

In relation to tool /XXIII/, the initial activity considered is the monitoring of High Conservation Values (HCVs), which contributes to the monitoring and assurance of the project's environmental compliance.

In summary, the assessment confirms that the project is currently implementing activities aimed at effectively contributing to SDG 15, with clear and documented evidence supporting compliance with the indicators and criteria established in the SDG tool, thus ensuring a significant contribution to the conservation and sustainability of terrestrial ecosystems.

5.5 Climate change adaptation

Regarding section 11.8 of the BCR Standard, which establishes the project proponent's obligation to demonstrate its contribution to climate change mitigation, the proponent implements clear and verifiable actions related to climate change adaptation, derived directly from the Project's activities. This is evidenced by the information obtained from the RM /I, II/, which confirms compliance with specific criteria of the standard, as shown below:

To evaluate the project's contribution to climate change adaptation, the criteria established in the CO2Bio P2-2 Monitoring Plan and Report /CVIII/ were reviewed. These criteria are aligned with the principles of the BCR Standard (/V/, /VI/) and with the host country's National Climate Change Adaptation Strategy (/CIX/).

Table 30. Climate Change adaptation.

CO2Bio P2-2 Monitoring Plan and Report	*Correspondence with the BCR Standard – Adaptation Module*	*Alignment with the National Climate Change Adaptation Strategy (PNACC)*
Capacity Building	*BCR0002 – Strengthens community resilience through technical, social, and administrative training, promoting local autonomy in the face of climate change.*	*Drives the development of adaptive capacities and the strengthening of vulnerable communities.*
Participatory Governance	*BCR0004 – Promotes inclusive governance and participatory*	*Promotes social participation, institutional coordination, and*

CO2Bio P2-2 Monitoring Plan and Report	Correspondence with the BCR Standard – Adaptation Module	Alignment with the National Climate Change Adaptation Strategy (PNACC)
	decision-making in the adaptive management of the territory.	shared responsibility in climate management.
Forest Monitoring	BCR0002 – Contributes to the maintenance of forest cover, reducing environmental vulnerability and strengthening ecosystem resilience.	Contributes to the monitoring of natural resources and ecosystem services that are priorities for adaptation.
Environmental Risk Management	BCR0002 – Implements measures to prevent, mitigate, and respond to climate risks such as fires and droughts, strengthening response capacity.	Linked to comprehensive risk management and the reduction of vulnerabilities to extreme climate events.
Sustainable Productive Practices	BCR0002 – Promotes resilient productive activities that maintain ecological functionality and ecosystem services.	Aligned with the transition towards sustainable and climate-resilient productive systems.
Participatory Biodiversity Monitoring	BCR0004 – Actively involves local communities in monitoring biodiversity and adaptation indicators.	Reinforces the integration of local knowledge into territorial monitoring and adaptation processes.
High Conservation Value (HCV) Monitoring	BCR0002 – Ensures the conservation of strategic ecosystems and their capacity to provide adaptation services.	Promotes the conservation of priority ecosystems and ecological connectivity under climate scenarios.
Water Management	BCR0002 – Improves water availability and sustainable use, reducing vulnerability to droughts.	

The reviewed associated indicators (/CVIII/) included the number of individuals trained and capacitated in the three components—technical-environmental, social, and administrative-financial—as well as the number of training sessions executed per component. The progress of the governance board was also assessed, along with the proportion of forested area within the project boundary, and the monitoring of thermal anomalies, fires, and vegetation cover. Furthermore, the percentage of properties implementing sustainable productive practices and conservation strategies was considered, along with the progress of properties in the stages of participatory monitoring—from the baseline to follow-up and the dissemination of results—the outcomes of the monitoring of Conservation Value Areas (CVA), and the percentage of properties with diagnosis, design, implementation, and monitoring of water management.

The compliance assessment was based on the review of multiple information sources. These included the Project's Water Management Program (/VII/), which describes activities aimed at reducing climate vulnerability and aligned with SDG 6; the Participatory Bioacoustic Biodiversity Monitoring Methodology (/LXVII/), used to assess ecosystem changes in local biodiversity; the High Conservation Values Monitoring Report (/X/), which integrates cartographic inputs and GIS layers; the Trainings Report (/XL/), documenting capacity-building actions, attendance lists, and photographic evidence; the Governance Strategy Progress Report (/CII/), presenting the progress of participatory processes and institutional coordination; the Forest Cover Monitoring Report (/CVII/), which quantifies the proportion of forested area and its distribution by property; as well as the REDD+ Hotspots Monitoring Report (/XIII/) and the Practical guide for comprehensive rural fire management (/XCVI/), which demonstrate preventive actions against fires and thermal threats. Finally, the Productive Practices and Conservation Actions Report (/LXXVI/) was included, documenting the adoption of sustainable measures on the linked properties.

The evaluation process followed by the CAB was conducted in accordance with the guidelines of /LXXII/ and /XCIV/ and included three main stages. The first consisted of a document review, through which the consistency between project reports, records, and the indicator matrix was verified. The second stage involved semi-structured interviews with beneficiaries and the Cataruben technical team, to confirm the implementation of adaptation measures. Finally, an on-site verification was carried out, where adaptive practices were directly observed on the visited properties, and photographic and observational evidence was collected.

Based on the review of criteria, indicators, documentary evidence, and field observations, it is concluded that the project meets the climate change adaptation requirements established in /LXXII/, particularly criteria /V/ and /VI/. The project demonstrates a significant contribution to environmental and community resilience, primarily through the restoration of degraded areas, the promotion of sustainable productive practices, and improved water resource management. This conclusion is supported by traceable and verifiable evidence from the reviewed documents, the interviews conducted, and the field verification carried out by the CAB.

Conclusion: The project implements a rigorous system of criteria and indicators that strongly demonstrates its actions and contributions to climate change adaptation, in full compliance with the BCR Standard and aligned with Colombia's national and international policies. Thorough evaluation and monitoring, exhaustive documentary support, and quantified progress demonstrate effective environmental management committed to climate objectives.

5.6 Co-benefits

As part of the analysis conducted by the ANCE verification team, the guidelines established in the tool /Special Categories – Exceptional Benefits Label, version 1.0/ were evaluated. Section 8.0 defines the necessary components to demonstrate compliance with this categorization, which recognizes AFOLU projects that actively contribute to the protection and recovery of biodiversity values of national or global importance.

As part of the verification process, the ANCE team assessed the project's alignment with the requirements for the "Orchid" category, as defined in the BioCarbon Registry (BCR) Standard /LXXII/. The project's demonstration of compliance is anchored in its Co-benefits Monitoring Plan (Document /LXVI/), which outlines specific indicators, procedures, and verification mechanisms for each domain.

This voluntary label is structured around three key domains: Biodiversity Conservation, Community Development, and Gender Equity.

In the case of the CO2Bio P2-2 project, key areas were identified that demonstrate measurable and verifiable results in biodiversity, such as:

- *Protection of critical habitats for threatened or endemic species.*
- *Prevention and monitoring of invasive species.*
- *Conservation of areas formally identified as High Conservation Value (HCV).*
- *Demonstrated ecological improvements over time.*

To verify compliance with these criteria, the document /LXVI/ was reviewed. This document establishes the monitoring procedures implemented by the project. This plan includes specific biodiversity indicators, mechanisms for periodic assessment, and evidence of ecological improvements, allowing for a structured and verifiable demonstration of the additional benefits generated, as shown in the following table:

Table 31. Co-benefits.

Criterion	Monitoring Indicator	Procedure Assessment	Justification
CO2Bio P2-2 conservation activities must be aligned with species protection and habitat conservation.	Indicator G3: Forest portion in the project. Evidence /XIV/: Demonstrated ecological improvements: a 0.02% increase in Natural Forest area and a 1.8% forest gain (12.83 ha) from 2018-2024.	The report /XIV/ documents the progress in the conservation and recovery of forest cover in the 99 project areas during the period 2018–2024. Among the main results are: The Percentage of Area with Natural Forest (PSBN) showed an increase of 0.02% in 2024, indicating a positive trend in forest cover conservation. The Forest Gain Area (AGB) indicator reported an increase of 1.8%, equivalent to 12.83 hectares of natural forest recovered compared to 2018. This set of results reflects a positive environmental effect, demonstrating the effectiveness of the conservation and restoration actions implemented. The recovery of forest cover directly contributes to climate change mitigation, biodiversity preservation, and the regulation of ecosystem services.	The obtained results, such as the increase in the percentage of natural forest area and the indicator of forest area gained over time, demonstrate that the project fulfills the purpose of the indicator related to the forest portion linked to the intervention area. Furthermore, it meets the criterion of habitat protection and conservation. This additional benefit is directly linked to the protection of critical habitats, aligning with Sustainable Development Goal (SDG) Target 15.2, which promotes the sustainable management of all types of forests, halting deforestation, restoring degraded lands, and increasing afforestation and reforestation globally. Furthermore, the project meets the requirement associated with the Orchid category by demonstrating a positive trend in habitat condition over time, evidencing progress in its conservation and restoration. FULLY MET. The project shows a positive trend in habitat condition over time, using quantifiable land cover data to prove effective conservation actions.
	B1. Percentage of CO2Bio initiative properties with progress in the implemented monitoring stages. Evidence /XC/: Documentation of "List of invasive fauna and flora species" and "Vulnerable and	The report /X/ presents the results of participatory bioacoustic biodiversity monitoring, through which 248 bird species were recorded, distributed across 57 families and 191 genera, within the project properties. This analysis allows for understanding the conservation status of the	The monitoring and identification of species within the properties, including the most representative ones and their threat category (plants, mammals, birds, and amphibians), demonstrates compliance with the indicators related to progress in the monitoring stage and the identification of High

Criterion	Monitoring Indicator	Procedure Assessment	Justification
	invasive species" indicates a monitoring program for invasive species, implying prevention measures are in place. & Indicator B2: Report on HCV Area indicators. Evidence /X/: Bioacoustic monitoring recorded 248 bird species. Data used to identify High Conservation Value Areas (HCVAs). 21% progress in biodiversity indicator.	avifauna and its ecological role in local ecosystems. Notable families include Tyrannidae (53 species), key in insect control; Thraupidae (22), important in seed dispersal; and Accipitridae (9), as population regulators. Other relevant families include Furnariidae, Thamnophilidae, Psittacidae, among others, all with specific ecological functions. Additionally, species from the family Threskiornithidae act as bioindicators of wetland health. This monitoring has been fundamental for the identification of High Conservation Value Areas (HCVAs), by providing detailed information on indicator species, threatened species, or those of ecological importance. As a result, 21% progress was achieved in the biodiversity indicator, demonstrating the effectiveness of the methodology and the commitment of the stakeholders involved.	Conservation Value Areas (HCVAs). This supports the fulfillment of the species protection and habitat conservation criterion. This additional benefit is directly linked to SDG Target 15.1, which promotes the conservation, restoration, and sustainable use of terrestrial and inland freshwater ecosystems, particularly forests, wetlands, mountains, and drylands, in line with international agreements. In this context, the project meets the criteria of: • Inclusion of formally designated HCV areas, with documented management measures. • Biodiversity indicators in the Monitoring Plan, with positive results in at least one completed verification cycle. Furthermore, the project meets the requirement associated with the Orchid category by identifying formally designated High Conservation Value (HCV) areas, with their classification regarding ecosystem importance, which reinforces compliance with the criteria established by the tool. FULLY MET. The project shows a positive trend in habitat condition over time, using quantifiable land cover data to prove effective conservation actions.
Benefits to Communities	Indicator G1: Trainings, workshops, and forums to foster participation. Evidence (/LXIII/): 10	The report /LXIII/ documents the training activities carried out between 2022 and 2024, detailing the topics covered, the recorded participation, and their contribution to achieving	The 82% fulfillment of the planned training during the evaluated period demonstrates significant progress in the indicator related to training activities, forums, and

Criterion	Monitoring Indicator	Procedure Assessment	Justification
	virtual trainings, 2 forums, and the "Ecolíderes" program conducted. 82% of the participation targets were achieved.	the project's objectives. The training sessions included technical subjects such as carbon management, biodiversity conservation, sustainable water use, environmental regulations, fiscal aspects, and governance, all aligned with REDD+ safeguards, the SDGs, and best practices for conservation projects. During this period, the planned targets were exceeded: ten virtual trainings, two forums, and the Ecolíderes program were conducted, addressing technical, social, productive, and financial topics. A total of 74 people were trained across the three key components (technical-environmental, social, and administrative-financial), with participation per session ranging from 3 to 29 ecosystem managers. This represents an 82% achievement of the target for the period and 41% accumulated of the total projected. Regarding the number of training sessions, an accumulated compliance of 57% was reached against the total planned	meetings aimed at fostering the active participation of the managers. Furthermore, it meets the criterion of generating community benefits through capacity building for informed decision-making. This additional benefit is directly linked to SDG Target 13.3, which promotes the improvement of education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning. Furthermore, the project meets the requirement associated with the Orchid category by integrating scientific and traditional ecological knowledge into biodiversity planning and monitoring. FULLY MET. The project has a structured capacity-building program that exceeded its targets, demonstrating effective empowerment and participation of Ecosystem Managers
	Indicator G3: Increase in economic income of Ecosystem Managers. Evidence (/LXXVI/): Widespread adoption of sustainable income streams: sustainable livestock (63%), tree planting (28%), beekeeping (8%), and ecotourism (4%).	The report /LXXVI/ presents the progress of the CO2Bio P2-2 project in implementing sustainable strategies at the property level. Regarding sustainable productive activities aimed at diversifying income and promoting alternatives compatible with conservation, the following were identified: sustainable livestock farming (63%), tree planting in pastures (28%), livestock vaccination (81%),	The obtained results, such as the implementation of sustainable productive activities within the properties and the development of new business niches considered as enterprises, demonstrate compliance with the indicator related to increased economic income for the managers. This additional benefit is directly linked to SDG Target 15.a, which seeks to mobilize and significantly increase

Criterion	Monitoring Indicator	Procedure Assessment	Justification
		and small species production (61%). Entrepreneurial activities such as beekeeping (8%) and ecotourism (4%) were also promoted. These actions have contributed to reducing pressure on strategic ecosystems, improving local livelihoods, and strengthening the socio-environmental resilience of the territory.	financial resources from all sources to conserve and sustainably use biodiversity and ecosystems. Furthermore, the project meets the requirements of the Orchid category by integrating biodiversity indicators in its Monitoring Plan—such as habitat condition—with positive results verified in at least one completed assessment cycle. MET. The implementation of diverse, sustainable productive activities provides a clear pathway for income diversification and reduction of pressure on natural resources.
Gender Equity	Indicator G1: Women in leadership roles within CO2Bio. Evidence (Reports /2.4.1/ & GESTION ASISTENCIA): Of 29 participating Ecosystem Managers in 2024, 16 were women (55%). Women also hold land titles.	The report /2.4.1 Informes capacitaciones.pdf/ establishes the number of people who attended the trainings, from which those associated with women are identified. In relation to men, it can be said that attendance is equitable for both genders. However, there is also an Excel file / GESTION ASISTENCIA GESTORES ECOSISTEMA – ECOLÍDERES.pdf/, which establishes the role of women regarding property ownership. During the cycle of sessions held in 2024, synchronous participation of 29 ecosystem managers linked to the CO2BIO P2-2 project was recorded, of which 16 were women and 13 men.	The obtained results, such as the active participation of women in both trainings and property ownership, demonstrate compliance with the indicator related to holding leadership positions within the project, promoting their participation in key decision-making roles. This additional benefit is directly linked to SDG Target 5.5, which seeks to ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life. Furthermore, the project meets the requirements of the Orchid category in the Gender Equity component by integrating concrete actions that promote inclusion and female empowerment within the project context.

Criterion	Monitoring Indicator	Procedure Assessment	Justification
			FULLY MET. The project demonstrates gender-balanced participation and promotes female leadership in land management and decision-making, exceeding mere numerical representation.

Conclusion: The CO2Bio P2-2 project has successfully demonstrated measurable and verifiable additional benefits across all three domains, fully meeting the criteria for the Orchid Category. The project's monitoring implementation is fully consistent with its approved Co-benefits Monitoring Plan /LXVI/. The verification team reviewed numerous documents (e.g., /X/, /XIV/, /LXIII/, /LXXVI/) that correspond directly to the plan's indicators, confirming that data collection, analysis, and reporting were executed as designed:

1. *Biodiversity Conservation: The project provides robust evidence through quantifiable increases in forest cover and sophisticated species monitoring, proving effective actions to halt biodiversity loss and conserve HCV areas.*
2. *Community Development: The project has strengthened local capacities through extensive training and has established sustainable economic alternatives that contribute to improved livelihoods.*
3. *Gender Equity: The project ensures equitable participation and leadership opportunities for women, integrating gender equality into its core operations.*

The co-benefits generated are directly aligned with specific Sustainable Development Goals (SDGs), including SDG 15 (Life on Land), SDG 13 (Climate Action), SDG 5 (Gender Equality), and SDG 15.a (Mobilizing resources for biodiversity).

5.7 REDD+ safeguards

As part of the periodic monitoring activities and a maintenance strategy, a specific tool was designed to evaluate and track compliance with the safeguards. This tool demonstrates adherence to the safeguards, reflecting the actions implemented that are aligned with each of the relevant policy objectives and targets, as well as with various national programs, conventions, and/or international agreements.

Additionally, the tool considers the requirements necessary to demonstrate compliance with the BIOCARBON (BCR) standard, also integrating the elements established in the national interpretation of the safeguards, as documented in /XXIII/.

Compliance with the safeguards is closely linked to various aspects of the project, such as adherence to current national regulations, execution of planned activities, and generation of

co-benefits, among others. The evidence supporting compliance with these aspects also contributes to demonstrating comprehensive adherence to the safeguards.

The following details are the mechanisms and procedures implemented to ensure this compliance for each of the safeguards.

Safeguard A

<table>
<tr><td colspan="2">A. In line with national forest programs and international agreements: Ensures that REDD+ projects are developed in coherence with national legislation, forest policies, and international agreements, promoting legality and environmental sustainability.

The assessment of compliance with this safeguard was carried out using the /XXXIII/, based on the criteria and indicators established for Safeguard A (/XXIV/), considering the national interpretation of REDD+ safeguards in Colombia defined by the Ministry of Environment and Sustainable Development (MADS) (/CX/).

To reach the conclusion, technical documents of the project, the /LXXXIV/, /LXXXIII/, and the monitoring reports issued by the Fundación Cataruben were reviewed, which demonstrate the project's alignment with national forest programs and international agreements.</td></tr>
<tr><td>A1. Alignment with national legislation</td><td>According to the evidence provided and reviewed, the Fundación Cataruben conducted an analysis outlining how the project aligns with national regulations and international agreements. This analysis covers each of the project's activities in wetlands and under the REDD+ approach, and includes a review of national policies, plans, and programs, as well as international treaties and agreements related to the actions implemented. (/LXXXIII/)</td></tr>
<tr><td colspan="2">The Fundación Cataruben affirms that the project is aligned with national legislation and international agreements, complying with the principles and objectives established by national forest programs and the UNFCCC guidelines adopted at COP 16 in Cancún. These actions ensure that all implemented activities are carried out within a solid legal framework and in accordance with international standards, promoting legality, transparency, and project sustainability.</td></tr>
</table>

Safeguard B:

B. Transparency and effectiveness of forest governance structures: Ensures transparent, participatory, and effective forest governance structures, with access to information, accountability, and strengthening of local capacities.

The assessment of compliance with this safeguard was carried out through the application of /XXXIII/, using the criteria and indicators associated with Safeguard B (/XXIV/), and in alignment with the national interpretation of Colombia's REDD+ Safeguards as defined by the Ministry of Environment and Sustainable Development (MADS) (/CX/).	
B2. Transparency and access to information	*According to the evidence reviewed, the measures implemented to comply with this safeguard have been identified. These include /XXXIX/, which consists of an enhanced matrix with various dissemination methods and channels used to ensure the effective distribution of project information. Likewise, the Foundation has /XXVI/, from which a report is generated presenting a general analysis of the cases received and the actions implemented in response to them.* *Additionally, documentary evidence is available regarding the registration of the initiative in RENARE, which supports the formality and traceability of the actions carried out within the framework of the project.*
B3. Accountability	*The Foundation has management reports related to the project's development and progress, which present a general summary of the activities carried out and how the benefits derived from the ERs are reflected in the participating properties.* *Likewise, there is documentary evidence of the payments made to landowners (/CXI/), including the corresponding account statements for each of the properties linked to the project (/XXIX/), which supports transparency and traceability in the distribution of economic benefits.*
B4. Recognition of governance structures	*Cataruben considers the governance strategy as a key mechanism to foster active and transparent collaboration among the actors involved in the project. In this regard, the organization implements a participatory governance strategy (/CII/), through which joint decision-making and the strengthening of local capacities are promoted. (/XL/)* *As part of this strategy, Cataruben prepares a Governance Board Management Report (/CII/), which presents a detailed analysis and summary*

	of the topics discussed, agreements reached, and actions implemented. This platform allows for constant communication with the communities and participants, ensuring accountability, informed participation, and the sustainability of decisions made within the framework of the project.
B5. Capacity building	*Among its evidence, the Fundación Cataruben has training reports (/XL/) for the project, aimed at strengthening the capacities of ecosystem managers in the technical-environmental, social, and administrative-financial components.* *Likewise, a folder is maintained with the documentation and evidence (/XL/) corresponding to each of the training sessions conducted during the project's development, allowing for verification of traceability and follow-up of the training activities carried out.*
The assessment of compliance with Safeguard B was based on document review (management reports, communication plans, payment records, PQRS reports, and training evidence), as well as verification of the functioning of participatory governance mechanisms. *Based on this review, it is concluded that the project fully complies with Safeguard B, demonstrating transparency, accountability, capacity building, and active participation of local actors, thereby ensuring effective governance consistent with the international REDD+ principles.*	

Safeguard C

C. Respect for traditional knowledge and community rights: Ensures respect for the traditional knowledge and rights of local and indigenous communities in the planning and implementation of REDD+ projects. *The assessment of this safeguard was carried out using /XXXIII/, based on the criteria and indicators associated with Safeguard C (/XXIV/), also considering the national interpretation of Colombia's REDD+ Safeguards as defined by the Ministry of Environment and Sustainable Development (MADS) (/CX/).* *The review included documentary verification, examination of participation evidence, and records of compliance with consent mechanisms and benefit-sharing.*

C6. Free, Prior and Informed Consent (FPIC)	*Evidence generated within the framework of the initiative was compiled, including attendance records, photographs, documents, and administrative supports, as well as recordings of the training sessions and supplementary materials used during the sessions.* *Additionally, evaluation and feedback reports, checklists for compliance with objectives, and evidence of participant follow-up are included, which allow demonstrating the traceability, effectiveness, and reach of the training and capacity-building actions implemented by the project.*
C7. Respect for Traditional Knowledge	*Evidence generated within the framework of the initiative was compiled, including attendance records, photographs, documents, and administrative supports, as well as recordings of the training sessions and supplementary materials used during the sessions.* *Additionally, evaluation and feedback reports, checklists for objective compliance, and evidence of participant follow-up are incorporated, allowing for the demonstration of traceability, effectiveness, and reach of the training and capacity-building actions implemented by the project*
C8. Benefit Sharing	*It was identified that the Foundation produces a report presenting a detailed evaluation of the management of the carbon certificate inventory, as well as their commercialization and the distribution of economic benefits to the project's ecosystem managers.* *Additionally, a monitoring report (/CXII/) is maintained, systematically documenting the delivery of economic benefits to each property, ensuring traceability, transparency, and control in the distribution of resources.*
C9. Territorial Rights	*Legal evidence provided by the Fundación Cataruben is available, which supports land tenure and guarantees the proper distribution of economic benefits. In this context, special reference is made to the Certificates of Tradition and Freedom (/XXVII/), which verify the*

	legitimacy of the owners and their right to receive the benefits derived from the project.
The assessment of this safeguard was based on the documentary review of participation records, FPIC reports, benefit distribution matrices, and legal documentation of the properties. Based on the application of /XXXIII/ and the evidence provided, it is concluded that the Fundación Cataruben complies with Safeguard C, ensuring respect for territorial rights, equity in benefit distribution, inclusion of traditional knowledge, and the application of free, prior, and informed consent from the participating communities.	

Safeguard D

D. Full and effective participation: Ensures the full and effective participation of all stakeholders in the planning, implementation, and monitoring of REDD+ projects. The assessment of this safeguard was carried out using /XXXIII/, based on the criteria and indicators associated with Safeguard D (/XXIV/), and considering the national interpretation of Colombia's REDD+ Safeguards as defined by the Ministry of Environment and Sustainable Development (MADS) (/CX/). The review included the analysis of documentary evidence, monitoring reports, communication mechanisms, and participation records of communities and involved stakeholders.	
D10. Participation	Cataruben presents a compilation of the different means used to demonstrate transparency, access to information, and the full and effective participation of all project participants. To this end, the Communication Plan (/XXXIX/) is implemented, which includes various channels and dissemination methods, as well as detailed records of all training sessions conducted (/XL/), including attendance lists, photographs, recordings, and supplementary materials. Additionally, the Foundation has monitoring and evaluation reports, action traceability matrices, and PQRS (Petitions, Complaints, Claims, and Suggestions) management mechanisms, which provide evidence of active participation, the scope of the actions implemented, and accountability towards the project stakeholders
The assessment of this safeguard was based on the review of technical documents, monitoring reports, participation records, and the functioning of the PQRS mechanism.	

Based on the indicators from /XXXIII/, it is concluded that the Fundación Cataruben complies with Safeguard D, ensuring the full and effective participation of all actors involved in the REDD+ project. *Through the Communication Plan, training records, monitoring reports, traceability matrices, and PQRS mechanisms, transparency in management, access to information, and informed decision-making are evidenced, thereby complying with UNFCCC guidelines and strengthening the project's participatory governance.*

Safeguard E

E. Conservation and benefits: Ensures that REDD+ projects contribute to the conservation of ecosystems and the generation of environmental, social, and economic benefits for participating communities. *The assessment of this safeguard was carried out using /XXXIII/, considering the criteria and indicators associated with Safeguard E (/XXIV/), and respecting the national interpretation of Colombia's REDD+ Safeguards, in accordance with the guidelines of the Ministry of Environment and Sustainable Development (MADS) (/CX/).* *The evaluation process was based on the documentary review of technical reports, satellite mapping, training records, and environmental certifications, in order to verify compliance with the indicators established in the tool.*	
E11. Forest and Biodiversity Conservation	*The Fundación Cataruben maintains two key indicators for Safeguard E: High Conservation Values (HCV) and No Deforestation (/X/).* *For this purpose, cartography is developed using satellite imagery and geospatial data, complemented by GIS analyses that allow monitoring and evidencing the permanence of forests and the protection of ecosystems.* *The results of these analyses are included in /XIV/ and communicated to stakeholders, ensuring transparency, traceability, and verification of the conservation actions implemented. This approach enables the identification of potential threats, evaluation of the effectiveness of protection measures, and guarantees the sustainability of environmental and social benefits.*
E12. Provision of Environmental Goods and Services	*The main action consists of training the community (/XL/) to support the improvement of biodiversity conservation conditions within the project area. Simultaneously, consultations are held with the competent environmental authority to ensure that the project has not*

	committed any violations and is not subject to environmental investigations. These actions are documented through a report detailing the training sessions provided (/XL/), including dates, topics, participants, and outcomes, as well as official certifications of No Environmental Violations, which verify the legality and compliance of the project. This set of measures ensures informed participation, the strengthening of local capacities, and regulatory compliance, contributing to the sustainability and legitimacy of the project.
Based on the documentary review and verification of environmental certifications, it was determined that the Fundación Cataruben fully complies with Safeguard E. The use of conservation indicators (/X/), satellite mapping, GIS analysis, technical reports, and No Environmental Violations certifications allows for the transparent verification, monitoring, and communication of the project's results. This demonstrates that the project contributes to the conservation of forest ecosystems, biodiversity, and the generation of environmental, social, and economic benefits for the participating communities, in accordance with UNFCCC guidelines and the national interpretation of the REDD+ Safeguards.	

Safeguard F

F. Preventing risks of reversal: Seeks to prevent risks of reversal, ensuring the permanence of the project's benefits and the ongoing protection of ecosystems. The assessment of this safeguard was carried out using /XXXIII/, considering the criteria and indicators associated with Safeguard F (/XXIV/), and in accordance with the national interpretation of REDD+ Safeguards in Colombia established by MADS (/CX/). The review included the analysis of the project's technical documentation, risk management plans, monitoring reports, and integration with the Legal Compatibility Matrix.	
F13. Territorial Environmental Planning	The Fundación Cataruben carries out a comprehensive analysis and an action plan to mitigate potential risks of reversal and ensure the permanence of the project's benefits. For this purpose, /XXXVI/ reports are prepared, identifying potential threats and defining preventive and corrective measures. Additionally, /XXXIV/ is used to assess the probability and magnitude of risks associated
F14. Sectoral Planning	

	with natural disturbances or changes in land tenure and management within the project area. *This information is integrated with /LXXXIII/, ensuring that all actions are supported by a solid legal framework and comply with current regulations.* *The Foundation integrates sectoral planning and national regulations to identify, evaluate, and mitigate risks of loss or reversal, guaranteeing the sustainability of ecosystems and the continuity of the project's outcomes, using the aforementioned documents.*
The evaluation of Safeguard F was based on the review of risk management documents, the Legal Compatibility Matrix, and the analyses of "BCR Risk and Permanence." *Based on these criteria and indicators from /XXXIII/, it is concluded that the Fundación Cataruben fully complies with Safeguard F, ensuring the prevention of risks of reversal and the permanence of the environmental, social, and economic benefits of the REDD+ project, in line with UNFCCC guidelines and Colombia's national interpretation.*	

Safeguard G

G. Avoidance of emission displacement: Ensures that REDD+ projects do not cause the displacement of emissions to other areas or sectors, safeguarding the environmental integrity of the results. *The evaluation of this safeguard was carried out using the /XXXIII/ tool, considering the criteria and indicators associated with Safeguard G (/XXIV/), and respecting the national interpretation of REDD+ Safeguards in Colombia established by MADS (/CX/).* *The evaluation process included the review of technical reports, leakage matrices, satellite images, and thermal anomaly analyses, with the aim of identifying, assessing, and mitigating any possible emission displacement.*	
G15. Forest control and monitoring to prevent emission displacement	*The Fundación Cataruben conducts a comprehensive analysis of leakages and their causes, compiling documentary and technical evidence that supports the identification of leakages, including detailed reports with conclusions and recommendations on actions to be implemented for their minimization.* *Additionally, a /LXXXIII/ is produced, recording findings, magnitude, potential impacts, and proposed corrective measures.* *This information is complemented with visual supports such as satellite images, thermal anomaly analyses, and other relevant data,*

	which enable effective monitoring and control of any deviations that could affect the project's results.
The evaluation of Safeguard G was based on the review of technical documents, leakage matrices, visual support, and risk analyses, following the criteria and indicators of /XXXIII/. *Based on this review, it is concluded that the Fundación Cataruben fully complies with Safeguard G, ensuring the identification, analysis, and mitigation of emission leakages, as well as the environmental integrity and sustainability of the project's benefits, in line with the UNFCCC guidelines and Colombia's national interpretation.*	

After reviewing the documentation and evidence of the project implemented by the Fundación Cataruben, it is concluded that the project fully complies with the safeguards established by the UNFCCC at COP 16 in Cancun. The evaluation was carried out using /XXXIII/, applying its criteria and indicators for each safeguard, and considering Colombia's national interpretation defined by MADS (/CX/). The process included the review of technical documents, reports, traceability matrices, training records, minutes, legal certifications, satellite mapping, GIS analyses, and risk and benefit management reports.

The project ensures respect for national and international regulations, the full and effective participation of involved stakeholders, and the protection of biodiversity and forest permanence. It also guarantees the sustainable management of water resources and ecosystem conservation, contributing to climate change mitigation and strengthening environmental resilience, which directly supports SDGs 6, 13, and 15 (/XXX/). The training of ecosystem managers and local communities strengthens technical, environmental, and administrative capacities, ensuring the sustainability of results and the continuity of environmental and social benefits.

The review demonstrates that the Fundación Cataruben has consistently implemented all necessary measures to comply with safeguard guidelines, ensuring environmental protection, forest permanence, water resource management, and climate change mitigation, as well as the sustainability of economic and social benefits for the involved communities. This contributes comprehensively to SDGs 6, 13, and 15. (/XXIV/, /XXX/).

Conclusion: Based on a comprehensive assessment of the provided documentation and evidence, it is concluded that the CO2Bio P2-2 project demonstrates full adherence to the UNFCCC REDD+ safeguards established at COP 16 in Cancún. The evaluation was conducted using the project's specific monitoring tool /XXXIII/, which operationalizes the criteria and indicators for each safeguard /XXIV/, in alignment with the national interpretation for Colombia defined by the Ministry of Environment and Sustainable Development (MADS) /CX/.

The verification process, which included a thorough review of technical reports, management plans, legal certifications, participation records, and geospatial analyses, confirms that the project has established robust and effective mechanisms to uphold all

safeguard principles. Specifically, the project is coherent with national forest programs and international agreements /LXXXIII/, and has implemented transparent governance structures, evidenced by its communication plan /XXXIX/, PQRSF system /XXVI/, and accountable benefit-sharing system /CXI/, /XXIX/. Furthermore, the project ensures respect for traditional knowledge and community rights through Free, Prior, and Informed Consent (FPIC) processes, capacity-building trainings /XL/, and a transparent benefit distribution framework /CXII/, supported by legal land tenure documents /XXVII/.

The project's actions contribute directly to the conservation of natural ecosystems and the generation of co-benefits, as demonstrated by its monitoring of High Conservation Values (HCV) and no-deforestation commitments /X/, /XIV/. Finally, the systematic management of risks, including the analysis and mitigation of potential leakage /XCIII/ and reversal risks through dedicated tools /XXXIV/, /XXXVI/, ensures the permanence of emission reductions and safeguards the project's environmental integrity.

5.8 Double counting avoidance

As part of the verification process to determine the existence of double counting, and considering paragraph 26.1 of the BCR Standard, the tool for Avoiding Double Counting is defined as the accounting of greenhouse gas (GHG) mitigation results in metric tons of CO2 equivalent (tCO2e) in the following scenarios:

a) One ton of CO2e is accounted for more than once to demonstrate compliance with the same GHG mitigation objective.
b) One ton of CO2e is accounted for to demonstrate compliance with GHG mitigation objectives.
c) One ton of CO2e is accounted for more than once to obtain remuneration, benefits, or incentives.
d) One ton of CO2e is verified, certified, or credited, and is assigned more than one serial number for a single mitigation result.

To avoid double counting, the project proponent presented the following evidence in compliance with numeral 3, contained in the Monitoring Report, making specific reference to paragraph 1.4.1, which establishes the execution of an information sweep across various standards. During this process, nine projects were identified within the area of influence of the CO2Bio P2-2 project. This information was consolidated into a geospatial vector, using REDD and Wetlands data as the base layer of the shapefile. By comparing this vector with that of the project, it was verified that there is no overlap with other projects that could influence it.

Additionally, as part of the process carried out by ANCE and in accordance with the provisions of the tool /LXXXIV/, paragraph 9.1.4 regarding double verification in GHG registry systems, due diligence was performed to confirm that the project is not registered under any other program. Similarly, in line with paragraph 9.1.5, it was confirmed through

Figure 4 that no additional benefits were obtained, as no overlap with other projects was detected in the area where CO2Bio P2-2 is implemented.

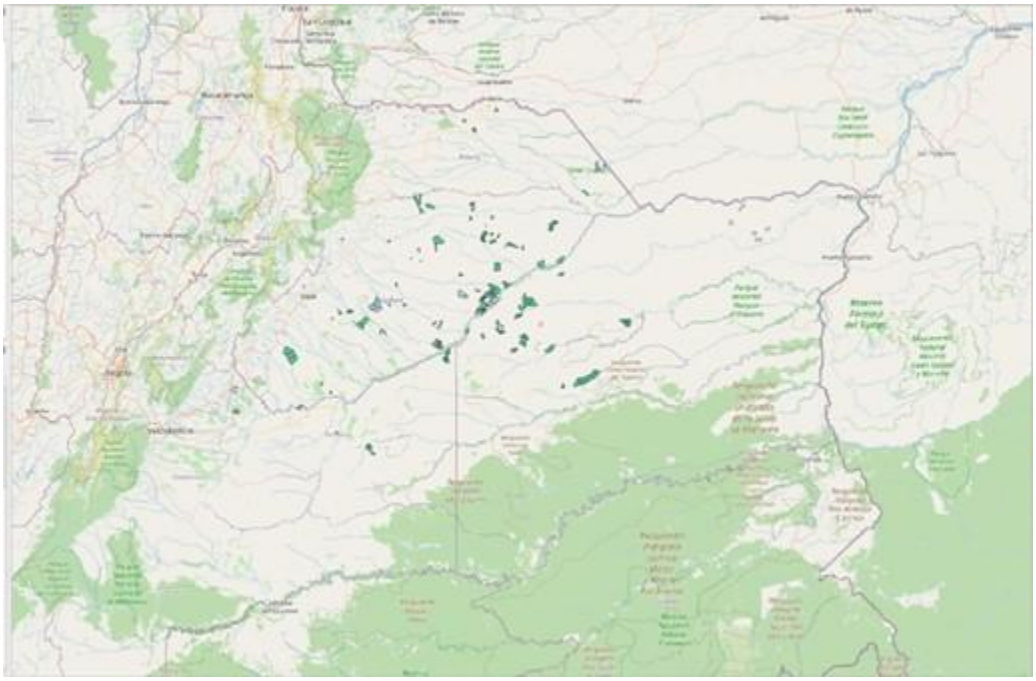


Figure 4. Project area showing no overlap with other projects.

Finally, regarding the verification process corresponding to paragraph 5.2 on emissions quantification, it was determined that no other accounting entries were identified that could be reflected under paragraphs a)–c). Likewise, in accordance with paragraph 4.2.1 on subsequent changes to the project proponent, modifications to emissions and removals from the 2021 period were implemented, ensuring compliance with the principles of consistency and transparency, which guarantees the integrity of climate actions and accreditation programs /V//VI/.

Additionally, and in fulfillment of the requirements established for the verification of double counting avoidance, an exhaustive process was executed, including the following components:

1. Verification of Uniqueness at Project and Result Levels:

A thorough search was conducted in the public registries of all major carbon standards, confirming that the CO2Bio P2-2 project (BCR-CO-635-14) is exclusive to the BCR program and is not, and has never been, registered in any other national or international program. This verification was supported by direct queries to the platforms of:

- *BCR (Global CarbonTrace) /CXCIV/: It was corroborated that the project classified as BCR-CO-635-14 is unique in this registry.*
- *Cercarbono (EcoRegistry) /CXXXVII/: It was confirmed that the project is not listed in this registry.*
- *Verra (Verra Registry) /CXXXVIII/: No project registration was found.*
- *Gold Standard (Marketplace) /CXCII/: No project registration was found.*
- *ColCX Registry /CXXXIX/: No project registration was found.*
- *American Carbon Registry (ACR) /CXCIII/: No project registration was found.*
- *Plan Vivo (Markit) /CXCI/: No project registration was found.*
- *Clean Development Mechanism (CDM) /CXCV/: No project registration was found.*

This documentary evidence, supported by interview minutes with the project proponent and the review of section 13 of the Project Design Document (PDD) /III/, confirms that the project is native to BCR and that there are no prior or parallel registrations in other programs and in section 4.1.3 of this document.

2. Cartographic and Geospatial Analysis to Prevent Overlaps:

To guarantee the absence of area-level overlaps, a detailed geospatial analysis was performed. Spatial information from nine (9) projects located within the influence area of the CO2BIO P2-2 project was collected from the official portals of the mentioned carbon standards. This data was consolidated into a vector file and stored in the REDD and Wetlands Geodatabase (2. Annex / 8. Geospatial / 8.1. REDD / 8.1.3. Geodatabase REDD / Carbon Projects Double Accounting).

Subsequently, a spatial intersection was executed between this vector file and the polygons of the CO2BIO P2-2 project areas. The analysis, which included the application of topology rules and intersection procedures, confirmed that there are no overlaps between the properties and areas of the CO2Bio P2-2 project and the boundaries of any other registered carbon project. This result, represented cartographically in Figure 34 of the project, demonstrates compliance with the requirements for spatial uniqueness and eliminates the risk of double counting due to geographical overlap.

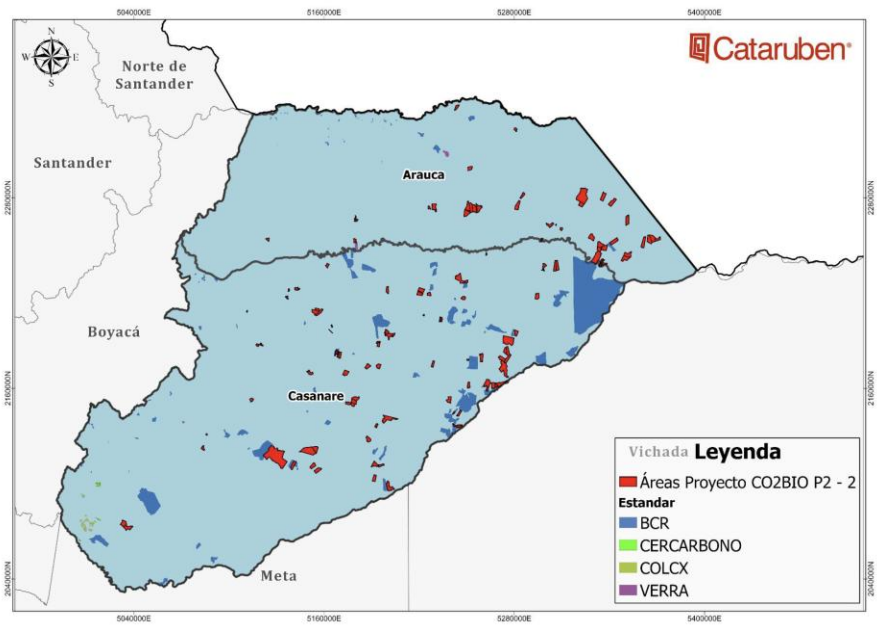


Figure 5. Carbon Projects in the region of the CO2BIO P2-2 project
Source: Fundación Cataruben, 2025

3. Application of the BCR Avoiding Double Counting (ADC) Tool:

The project is aligned with the requirements and mechanisms established by the BioCarbon Standard, applied in accordance with the provisions of the BCR "Avoiding Double Counting (ADC)" Tool /XCIV/. As part of this framework, the project implemented the registration procedure in the National Registry for the Reduction of Greenhouse Gas Emissions (RENARE), pursuant to Article 10 of Resolution 1447 of 2018 /CVI/. However, it is important to note that, as of the date of this verification, the RENARE platform is inactive due to maintenance, preventing access for queries or updates. Faced with this situation, the project adopted an alternative monitoring approach, tracking initiatives registered in other available platforms, as documented in section 15.2 of its documentation.

Conclusion: It has been conclusively verified that the CO2Bio P2-2 Project complies with the BCR Standard's prohibition against double counting, issuance, and retirement in more than one program. Uniqueness is confirmed both at the result level (project not registered in any other program) and at the area level (no geographical overlaps with other registered projects). The combined evidence from registry queries, cartographic analysis, and the application of the ADC tool supports this conclusion, ensuring the environmental integrity and exclusivity of the GHG reductions and removals generated by the project.

This conclusion is also supported by paragraph 4.1.3 of this document, which identifies the same verification process carried out across the pages of various standards, indicating compliance with paragraph d) of the BCR Standard, which establishes that the project has

not been verified, certified, or accredited with more than one serial number for a single mitigation result.

Finally, regarding the verification process corresponding to paragraph 5.2 on emissions quantification, it was determined that no other accounting entries were identified that could be reflected under paragraphs a)–c). Likewise, in accordance with paragraph 4.2.1 on subsequent changes to the project proponent implemented modifications to emissions and removals from the 2021 period, ensuring compliance with the principles of consistency and transparency, which guarantees the integrity of climate actions and accreditation programs.

5.9 Compliance with Laws, Statutes and Other Regulatory Frameworks

The Project Holder, Fundación Cataruben, has established and maintains a comprehensive documented procedure for managing and controlling all applicable legislation and regulations, in full accordance with section 10.7 of the BCR Standard Version 3.2. This procedure is systematically outlined in document /LXXXV/ (Management Report 2024 CO2Bio Governance Table.pdf and G2- Governance Strategy.pdf), which serves as the foundational framework for legal compliance management across all organizational activities.

1. *Document Management System Implementation*

The implemented procedure establishes a robust document management system that comprehensively addresses all aspects of legal compliance through the following detailed mechanisms:

- *Systematic Identification and Access*
- *The procedure mandates continuous identification and monitoring of legal requirements through multiple channels*
- *Implementation of legal information service subscriptions (email and advisory services) to ensure immediate access to regulatory updates*
- *Maintenance of a comprehensive legal norms database with direct links to official government sites and regulatory portals*
- *Establishment of a quarterly review cycle (every 15 calendar days at quarter-end) for verifying current legal requirements*

2. *Structured Documentation and Registration*
   - *The system maintains a continuously updated Legal Requirements Matrix, documented in file /LXXXIII/ (Legal Compatibility Matrix.xlsx)*
   - *The matrix employs a sophisticated classification system categorizing regulations by:*
   - *Jurisdictional level (national/international)*
   - *Regulatory status and validity*
   - *Specific applicability to project activities*

- *Implementation timeline and review requirements*

3. *Responsibility and Accountability Framework*
   - *Clear assignment of responsibility for identifying, updating, and applying legal requirements to respective technical process owners*
   - *Designation of a legal leader responsible for incorporating regulatory updates*
   - *Establishment of a management consultation process to guarantee applicability of requirements*
   - *Assignment of dedicated personnel for identifying inconsistencies and due diligence errors, with mandatory correction protocols*

Periodic Compliance Review Mechanism

The procedure incorporates a multi-layered approach to periodic compliance review, ensuring comprehensive oversight:

a) *Verification Frequency and Methodology*
   - *Bimonthly Review: Random audit of 20 legal standards and/or requirements associated with clients and allies*
   - *Annual Comprehensive Review: Examination of an additional 20 randomly selected legal standards coupled with complete update of all applicable legal requirements*
   - *Continuous Monitoring: Daily tracking of regulatory changes through subscribed services and official publications*

b) *Communication and Reporting Protocol*
   - *Systematic communication of identified requirements to all relevant stakeholders through verified channels*
   - *Maintenance of detailed compliance evaluation records demonstrating thorough assessment*
   - *Regular reporting through management reviews and stakeholder meetings*
   - *Documentation of all compliance activities in the legal requirements matrix*

c) *Corrective Action and Improvement System*
   - *Mandatory generation of improvement action plans upon detection of compliance deficiencies*
   - *Requirement for short-term execution of corrective measures*
   - *Implementation of long-term compliance assurance mechanisms*
   - *Continuous monitoring of action plan implementation and effectiveness*

Legal Compatibility Matrix as Evidence of Compliance

In accordance with paragraph 11.7 of the BCR Standard, the project proponent has developed and maintained a robust Legal Compatibility Matrix (LCM) /LXXXIII/ that demonstrates the project's compliance with all relevant local, regional, and national laws, statutes, and regulatory frameworks. This matrix, last updated on June 10, 2024, provides exhaustive documentary evidence through:

1. *Comprehensive Legal Coverage: The matrix thoroughly details how each project activity aligns with applicable national and international legal frameworks, including but not limited to:*

a) Training and Governance Activities (G.1, G.2)

- *Law 165 of 1994 (UNFCCC) & Paris Agreement (Law 1844 of 2017): Direct alignment through capacity-building activities that strengthen local conservation capabilities for forests and wetlands, specifically fulfilling emission reduction objectives through carbon sink protection /CXCVI/*
- *Law 1931 of 2018 (Climate Change Management): Full compliance with Articles 26 and 27 through participatory governance and training strategies that promote sustainable natural resource use and conservation incentives /CCCXVI/*
- *CONPES 4080 of 2022 (Gender Equity): Integration of gender equity approach in governance strategy, actively promoting women's participation and leadership in decision-making processes /CCCXIV/*
- *FAO VGGT Principles: Compatibility demonstrated through responsible governance practices fostering transparency, community participation, and equity in land tenure /CCCXVI/*
- *Law 99 of 1993 & Law 115 of 1994: Legitimization of training and environmental education as core components of community environmental management and technical capacity building /CCCI/*

b) Forest and Biodiversity Monitoring (G.3, G.4, B.1, B.2)

- *CONPES 3700 of 2011: Crucial contribution through continuous forest area monitoring (G.3) that directly supports climate change mitigation objectives via carbon sink protection /CCCXIII/*
- *Decree 1791 of 1996 (Forest Utilization): Demonstrated compatibility through forest conservation practices framed within regulated sustainable management, preventing uncontrolled deforestation /CCCVII/*
- *Convention on Biological Diversity (Law 165 of 1994) & National Biodiversity Policy (PNGIBSE): Comprehensive compliance through participatory biodiversity monitoring (B.1) and High Conservation Value Areas (B.2) management, fulfilling mandates for in-situ biodiversity identification, monitoring, and conservation /CXCVI/*
- *Law 1523 of 2012 (Risk Management): Alignment through active threat monitoring (G.4) and IDEAM alert utilization, establishing protective risk management framework for conservation areas /CCCV/*
- *CITES (Law 17 of 1981) & Resolution 1125 of 2015: Compatibility demonstrated through monitoring of threatened species and methodological approaches meeting biodiversity conservation requirements /CCC/*

c) Sustainable Practices and Water Management (G.5, A.1)

- *Decree 1076 of 2015 (Environmental Sector) & Resolution 1283 of 2016 (Wetlands): Direct alignment through sustainable productive practices (G.5) and Water Management Program (A.1) promoting ecosystem conservation and wetland protection /CCCVII/*
- *Ramsar Convention (Law 357 of 1997) & UNCCD (Law 461 of 1998): Contribution to wetland conservation and rational use, supporting objectives of combating land degradation /CCCXI/*
- *Law 373 of 1997 (Efficient Water Use) & Decrees 3930/2010 and 2245/2017*: Compatibility through Water Management Program promoting efficient use, water buffer zone delineation, and integrated resource management /CCCVIII/*
- *Resolution 2115 of 2007 (Water Quality): Indirect support for water quality standards through water source protection and aquatic ecosystem conservation/CCCX/*

d) Co-benefits and Gender Mainstreaming

Law 1257 of 2008 (Gender Equity): Exceeding environmental compliance through active integration of gender equity co-benefits, promoting women's full participation, leadership, and gender-focused training /CCCIV/

The matrix serves as the central instrument of the legal compliance system, providing rigorous control and update mechanisms for all legal requirements, detailed breakdown of each project activity's compliance status end direct linkages between project activities and applicable legal provisions

Conclusion: The Legal Compatibility Matrix /LXXXIII/ provides an additional layer of robust and detailed evidence that validates and expands the initial compliance analysis. It demonstrates concretely and specifically how each activity of the CO2Bio P2-2 project not only avoids regulatory violations but actively contributes to fulfilling the objectives of a comprehensive national and international legal framework covering environmental, climate, social, and gender matters.

The project's documented system /LXXXV/, supported by the Legal Compatibility Matrix /LXXXIII/, establishes a comprehensive framework that:

- *Systematically identifies and provides ongoing access to relevant legislation*
- *Implement a rigorous procedure for periodic compliance review*
- *Demonstrates specific compatibility with all applicable regulatory requirements*
- *Ensures continuous monitoring and updating of legal obligations*

The ANCE team, through review of this matrix along with supplementary evidence (including field visits and interviews), concludes with a high degree of certainty that the project proponent has implemented an effective legal compliance management system. The

evidence demonstrates that the project does not cause any net harm but generates positive impacts aligned with public policies and Colombia's international commitments, thereby fully meeting the requirements of the BCR Standard for legal compliance management.

5.10 Carbon ownership and rights

As a fundamental part of the project implementation, a thorough review process was carried out on the documentation submitted by the interested actors and applicants wishing to participate, in accordance with the provisions established in section 5 of /III/. The Fundación Cataruben meticulously examined contracts, public deeds, and Certificates of Tradition and Freedom in order to validate the legitimate possession and legal viability of the properties involved.

This analysis allowed for the establishment of land ownership and a detailed assessment of tenure and associated rights. As a result, it was determined that, for CO2Bio P2-2, a total of 124 properties initially had the necessary documentation, classifying the participants as owners, possessors, or holders. These individuals were formally registered within the organization and committed to carrying out climate change mitigation activities on their lands. The corresponding information is referenced in /XXVII-XXIX/, where the Certificates of Tradition and Freedom demonstrating legitimate ownership are detailed.

During verification visits, it was confirmed that the sampled properties correspond exclusively to private lands, according to the analysis carried out by the project proponent and the provisions established in section 7 of the RM. In this context, the carbon rights remain directly linked to the rights of use and enjoyment of the land, according to the contracts signed between the proponent and the owners. Since the project belongs to the AFOLU sector, carbon rights are intrinsically tied to land tenure, and all conservation contracts were signed with legally recognized owners.

As part of the verification, property titles and Certificates of Tradition /XXVII/ issued by the Orocue Public Instruments Office were reviewed, which detail the property's history, address, owners, purchase data, and other relevant information. Each certificate bears the registrar's signature, an indispensable requirement for its validity. In the verification sample, 11 properties were reviewed, confirming that all have valid certificates and that the areas correspond to the participants. /XXVII/

The contracts include clauses that ensure the authenticity of ownership, which require notarial certification and endorsement to guarantee that the properties belong to those who will receive the carbon credits. Likewise, they establish the responsibilities of the ecosystem manager and the project holder, including the commercialization of the certificates and the distribution of economic benefits. /XXIX/

In Clause Four of document /XXIX/, it is established that the project holder has the obligation to manage the certification and registration of the project, as well as the issuance

and commercialization of carbon certificates. They must also transfer the economic benefits generated to the ecosystem manager, in accordance with Clauses Thirteenth and Fourteenth, thus ensuring the proportional distribution of benefits among the parties.

The Fundación Cataruben maintains substantiated evidence of the payments made to the project manager, which is available in folder 3.2.2 B3 – Accountability. This includes account statements, payment receipts, and supporting documentation that back the fulfillment of the contract stipulations, in accordance with Safeguard B3: Accountability. Among the manager's obligations are to ensure the permanence of the registered eligible area, conserving the project area, providing evidence of traceability, and guaranteeing the exclusivity of the area. The latter is defined in Clause Eight "Exclusivity of the Area," which establishes that the registered area may not participate in other mitigation projects nor be allocated to biotic compensation activities.

The contracts /XXIX/ also include terms related to duration, assignment, voluntary withdrawal, and property specifications in case of possible contingencies, as well as the consequences of non-compliance.

Currently, the project includes 120 properties: 108 belong to individual owners, 10 to co-owners, and 3 to landowners. This information was confirmed during the documentary review (/XXVII/). A change of ownership in one property was identified, which was managed by the Fundación Cataruben through direct contact, follow-up, and formalization of the contract transfer with the new owner, ensuring the continuity of the project (/XLIV-XLVI/).

For cases of disassociation, the Fundación Cataruben contemplates in Clause Twenty-Seven of the contract (/XLIV/, /XLV/, /XLVI/) the causes for termination, which include: breach of term or purpose, mutual agreement, impossibility of continuation, bad faith, omissions or inaccuracies in information, documentary fraud, and involuntary withdrawal, among others. When sufficient grounds exist, unilateral termination records for the properties are issued, specifying the reasons for disassociation. They are notified to the legal manager and leader, as well as to the ecosystem manager. Cataruben retains documentary evidence supporting each disassociation process. In specific cases of the properties El Renacer, El Cairo, La Libertad, and El Zaman, the Foundation holds the unilateral termination records and complementary documentation that support the disassociation in accordance with the established procedures. (/XLIV/, /XLV/)

Finally, it was confirmed that the project area does not include territories belonging to local ethnic or traditional communities. Likewise, during on-site visits, it was verified that the individuals identified as owners match those indicated in the contracts and Certificates of Tradition and Freedom.

Conclusion: The CO2Bio P2-2 project demonstrates the implementation of a comprehensive and robust system for managing land tenure and carbon rights, which is fundamental to its long-term integrity and permanence. This system is supported by a meticulous due diligence

process that included the verification of the legal documentation of the properties through Certificates of Tradition and Freedom /XXVII/, ensuring that all participants were legitimately recognized owners, possessors, or holders.

The legally binding contracts /XXIX/ clearly establish the links between land tenure and carbon rights, defining the obligations of each party, the mechanisms for distributing economic benefits, and the exclusivity clauses to guarantee the project's additionality. Furthermore, the project has documented effective protocols for managing contingencies, such as changes in ownership and disassociations, through the procedures established in /XLIV-XLVI/, ensuring the stability of the registered area.

It was verified that the project area consists exclusively of private lands and does not include territories of ethnic or traditional communities, which mitigates significant social risks. Finally, the maintenance of substantiated financial evidence, available in folder 3.2.2 B3 – Accountability, supports transparency and accountability in the distribution of benefits, in compliance with the contractual clauses /XXIX/.

Collectively, this governance framework, backed by a complete and verifiable documentary chain of custody that ranges from property titles to termination records, provides a solid foundation for the environmental, financial, and legal credibility of the emission reductions generated by the project.

5.11 Risk management

To evaluate the consultation process with the project's participating stakeholders, the documentation provided by the Fundación Cataruben was reviewed, referring to Safeguard D10 – Participation. Among the reviewed documents are: /XXVI/, meeting minutes, attendance lists, informational material used during consultations, events, bulletins, and follow-up reports on these activities. (/XXV/).

Within the manual (/CVI/), the procedure to receive, attend to, direct, and immediately close Non-Conformities (NC) is detailed, as well as the follow-up for closure, among other activities that facilitate the proper management and monitoring of PQRSF. The Fundación Cataruben monitors these requests through an application called Monday, which allows visualization of the entire record and activities carried out during the PQRSF management process, thus ensuring transparent and documented control of each case.

The analysis was conducted in accordance with the requirements established in /XCIV/. According to said manual, the mechanisms implemented by the project owner to guarantee inclusive, transparent, and documented participation of stakeholders throughout all project stages were evaluated.

The Fundación Cataruben, through its participation mechanism, allows involved actors to express concerns, complaints, or suggestions regarding the development of project activities. Likewise, a system is maintained to attend to each of these requests, as described in (/XXV/).

During the reviewed period, 12 PQRSF were received, of which 7 correspond to 2023 and 5 to 2024. In general, these instruments allowed identifying opportunities for improvement in technical, legal, economic, and communication aspects.

A more detailed analysis shows that, in 2023, predominant complaints focused on lack of communication, delays in certifications, and inadequate expectation management. In 2024, there was a greater balance among requests, complaints, and claims, the latter mainly related to economic issues and problems with fiscal reports.

Among the actions implemented by the Fundación Cataruben, according to the PQRSF Report, the following stand out:

- *Strengthening of direct communication channels, including calls and personalized follow-up via WhatsApp.*
- *Implementation of certified responses with supporting documents (invoices, credit notes, fiscal review certificates) to avoid accounting errors and inaccurate reports.*
- *Prioritization of attention to properties with repeated complaints and critical requests.*
- *Promotion of system use through communication campaigns and improvements in internal management to expedite responses.*
- *Training of the team in PQRS management and user support.*
- *Strengthening of reception and response channels, including digital options for greater access.*

These mechanisms are considered key tools for improving communication, building trust, and ensuring compliance with the principles of transparency.

During the on-site verification, some interviews with property owners revealed that certain payment issues persist. However, the Fundación Cataruben's report includes recommendations, such as maintaining proactive and truthful communication, avoiding creating expectations with unconfirmed dates, which confirms the project's commitment to the continuous improvement of its participation and attention to stakeholders.

In conclusion, based on the information reviewed, it is concluded that the public consultation process and participation of local stakeholders comply with the requirements established by /XCIV/. The project demonstrates transparency, traceability in the management of comments, and a commitment to continuous improvement, ensuring the proper participation of interested parties and compliance with applicable social and environmental safeguards.

Table 32. Risk management.

Indicator	Risk Weighting (1–5)	Justification
Legal/Tenure Risk Evaluation: The legal and tenure risk assessment analyzes the security and clarity of land and carbon rights within the project area. Unresolved claims, informal titles, or legal disputes may compromise long-term control over the land and the permanence of greenhouse gas (GHG) mitigation outcomes.		
Is land ownership clearly documented and uncontested?	The Project Proponent assigns a score of 1 (low risk).	The classification of legal risk as low is supported by the existence and verification of legal documents, specifically /XXIX/ and /XXVII/. These certificates, issued by the Public Instruments Registry Office of Orocué, were reviewed as part of the validation process. Each Certificate of Title includes a property registration number and explicitly states the legal status of the property, clearly indicating its status as an active folio. Additionally, the certificates feature an updated print date, ensuring their validity at the time of review. During the verification process, the names of the registered owners listed on the certificates were cross-checked, confirming their legitimacy and legal connection to the properties associated with the project. This documentation provides solid evidence of legal security over land tenure, allowing the conclusion that the legal risk related to ownership and control of the project area is low.
Are carbon rights explicitly recognized under national or subnational law?	The Project Proponent assigns a score of 1 (low risk).	The classification of legal risk as low is based on the analysis of the Colombian regulatory framework, which, although it does not explicitly recognize carbon rights as an autonomous legal figure, does establish principles and provisions that support the ownership of environmental benefits derived from projects such as CO2Bio P2-2. Firstly, Article 58 of the Political Constitution of Colombia guarantees private property and states that it fulfills a social and ecological function. This allows for the interpretation that environmental benefits—such as those derived from carbon

Indicator	*Risk Weighting (1–5)*	*Justification*
		sequestration—can be considered part of the legitimate exercise of property rights over the land. Additionally, Law 1931 of 2018, which sets guidelines for climate change management, acknowledges the importance of voluntary actions to mitigate greenhouse gas emissions. This law allows for the verification and certification of voluntary reductions, as well as the issuance of tradable quotas per ton of reduced or removed CO_2 equivalent, registered in the National Emissions Reduction Registry. *While this legislation does not specifically define carbon rights as individual property, it does provide a legal framework that supports the additionality of projects that generate climate benefits, such as CO2Bio P2-2. This means that the emission reductions generated by the project are not considered legal obligations, which reinforces their voluntary and additional nature.*
Have all landholders provided documented consent to the project	*The Project Proponent assigns a score of 1 (low risk).*	*The classification of legal risk as low is supported by the existence and signing of contracts documented in file /XXIX/, signed with each of the ecosystem stewards. These contracts include a set of guidelines and clauses that regulate participation in the project, establishing not only the formal relationship but also mutual obligations, responsibilities, the enrollment process, payment conditions, as well as the generation and distribution of the benefits derived from the project.* *Each contract has been signed by the parties involved, implying express and voluntary acceptance of the established terms. This legal documentation provides clear evidence of the legitimacy of the relationship between the project and the stewards, strengthening legal security and significantly reducing the legal risk associated with project implementation.*

Indicator	Risk Weighting (1–5)	Justification
Natural/Environmental Risk Evaluation: This category analyzes the vulnerability of the project area to natural disturbances that could cause unintended emissions or reversals, such as wildfires, storms, floods, droughts, or pests. The assessment considers both the ecosystem's exposure and the existence of proactive mitigation strategies, such as fire management plans, ecological barriers, and early warning systems.		
Is the project area exposed to recurring natural disturbances (e.g., fires, storms, pests)?	*The Project Proponent assigns a score of 2 (low risk).*	*The classification of the risk as low is supported by the risk monitoring and management matrix documented in /XXXVI/. This matrix identifies and classifies non-permanence risks of the project, considering variables such as:* • *Number of fires of natural and anthropogenic origin.* • *Number of eligible hectares affected by windstorms.* • *Impacts from pests and diseases.* • *Impacts from flooding.* *Each of these events is classified in the matrix as either avoidable or unavoidable, allowing for a differentiated approach to risk management. Regarding risk assessment and management, several preventive measures have been defined, including: the implementation of firebreaks for wildfire control, early detection and monitoring through technological platforms, execution of emergency plans, training, education, and awareness programs for communities to strengthen their response capacity to natural events, regular monitoring of pests and diseases, and mapping of vulnerable areas to prioritize preventive actions.* *These strategies reflect a comprehensive and proactive approach to risk management, aimed at minimizing threats that could compromise the permanence of the project's environmental benefits.*
Has the project conducted a baseline assessment of	*The Project Proponent*	*The classification of environmental risk as low is supported by the fact that, although the project*

Indicator	*Risk Weighting (1–5)*	*Justification*
environmental vulnerability?	*assigns a score of 2 (low risk).*	*proponent does not carry out a specific baseline assessment of the area's environmental vulnerability, this is because the guidelines of the BCR Standard and the methodologies applied (/V/ and /VI/) do not explicitly require such an assessment as part of the process.* *Nevertheless, environmental risk has been addressed through a practical approach focused on continuous monitoring and the implementation of preventive strategies, as previously detailed. These actions include early threat detection, the establishment of firebreaks, community training, mapping of vulnerable areas, and regular monitoring of pests and diseases.* *This approach demonstrates that, even in the absence of a formal environmental vulnerability assessment, the project incorporates effective mechanisms to identify, mitigate, and respond to potential risks. This supports the classification of environmental risk as low in terms of environmental impact and non-permanence.*
Are natural risk mitigation strategies (e.g., firebreaks, biodiversity buffers) in place and maintained?	*The Project Proponent assigns a score of 1 (low risk).*	*The classification of the risk as low is supported by matrix /XXXVI/, in which potential natural risks that could affect the permanence of the project are identified, quantified, and evaluated. These strategies have been implemented and maintained over time, which were verified during interviews with landowners and corroborated through site visits to the properties involved in the project. This evidence confirms that the project has effective mechanisms in place to manage natural risks, justifying its classification as low.*
Financial/Operational Risk Evaluation: This category evaluates whether the project has the financial resources, human capacity, and institutional structure to implement activities over the long term.		

Indicator	Risk Weighting (1–5)	Justification
Is long-term project financing secured beyond the first verification period?	The Project Proponent assigns a score of 2 (low risk).	The risk classification as low is supported by a financial model structured from the beginning of the project /CV/, which considers key variables such as inflation, initial investment, carbon inventory, operational costs, sales projections, and financial evaluation, among other aspects. Additionally, the project's financing is secured through collaboration among Ecosystem Managers, with LATAM Airlines being the entity responsible for purchasing carbon credits (CCV) in all verification cycles, ensuring the long-term economic sustainability of the project.
Does the project have a clear financial management and contingency plan?	The Project Proponent assigns a score of 1 (low risk).	The classification of the risk as low is supported by a solid financial model /CV/ structured from the beginning of the project, which incorporates key variables such as inflation, initial investment, carbon inventory, operating costs, sales projections, and financial evaluation, among other factors. This comprehensive approach ensures the long-term financial sustainability of the project, securing its viability and resilience against possible economic fluctuations
Are there qualified staff and operational infrastructure to implement key activities?	The Project Proponent assigns a score of 2.5 (medium risk).	The classification of the risk as medium is supported by the technical and operational capacity of Fundación Cataruben, which has a team of professionals and specialists with extensive experience in projects within the AFOLU sector (Agriculture, Forestry, and Other Land Use). This team leads and executes the technical, social, and environmental actions of the project. This strength was confirmed during the visit to the Foundation's offices, where the full team, their work areas, and roles were introduced. Additionally, during the document verification process, their experience, knowledge, and mastery of the project were reaffirmed, evidenced by the

Indicator	Risk Weighting (1–5)	Justification
		clarity with which they responded to questions and explained the scope of the activities.
Governance/Political Risk Evaluation: This category considers the risk that political instability, weak institutions, or sudden regulatory changes could negatively affect the implementation or continuation of the project.		
Is the project located in a jurisdiction with stable policy support for carbon projects?	The Project Owner rates it as 2 (medium risk).	The classification of the risk as medium is supported by the verification of compliance with the scope established in the applicable regulations. Although there is no specific political backing for carbon projects, Colombia has a comprehensive legal framework aligned with environmental and climate change issues. This framework is evidenced in matrix /LXXXIII/, which demonstrates that the project complies with national policies and conservation objectives, thereby ensuring its legal and strategic alignment with the country's environmental priorities.
¿Are there clear enforcement mechanisms for environmental and land-use regulations?	The Project Owner rates it as 2 (medium risk).	The classification of the risk as medium is supported by the use of the contracts included in file /XXIX/. These documents generally establish compliance with the laws and regulations applicable to the project. In particular, clause nine states that the project owner acknowledges the ecosystem manager's rights over the property, making it clear that the contract does not affect land ownership or tenure, and does not imply any sales relationship linked to the project. This contractual provision helps mitigate risks related to the legal tenure of the territory, ensuring that the project activities are carried out within a clear legal framework that respects the rights of the landowners, without compromising the permanence or integrity of the mitigation outcomes
Community/Stakeholder Engagement Risk Evaluation: This category evaluates the project's relationship with local communities and stakeholders, including indigenous peoples, local		

Indicator	Risk Weighting (1–5)	Justification
communities, and other land users. Lack of stakeholder participation, opposition from affected groups, or unresolved claims may cause project interruption or loss of carbon stocks.		
Were local communities consulted in the design of the project?	The Project Proponent assigns a score of 1 (low risk).	The classification of the risk as low is initially supported by version 2.2 of the Project Design Document (/XXII/), validated in file /XXII/. In section 10, it is established that Fundación Cataruben carried out a consultation process related to the project implementation, in accordance with clause 16 of the BCR Standard version 3.2. This process included notification to stakeholders, territorial representatives, government entities, and non-governmental organizations. As a result, comments were received, although none were classified as formal complaints. Additionally, the Monitoring Plan version 2.3, corresponding to the 2022–2024 period, was subjected to public consultation through the official platform Global Carbon Trace Registry for a period of 30 days. No observations requiring attention from the project owner were received during that time. This consultation process is complemented by /LXIV/, which allows for receiving, addressing, and monitoring grievances, comments, and requests from stakeholders, thereby strengthening transparency and community participation
¿Are there ongoing mechanisms for stakeholder participation and grievance redress?	The Project Proponent assigns a score of 1 (low risk).	The classification of the risk as low is initially supported by the implementation of procedure /LXIV/, which establishes a formal mechanism for receiving, addressing, and following up on all grievances and comments related to the project. This procedure is complemented by report /XXV/, which documents the results obtained, the handling of requests, and their current status. During 2023, the main concerns were related to delays in the certification process, while in 2024,

Indicator	Risk Weighting (1–5)	Justification
		complaints were linked to economic aspects and the use of more formal communication channels. In response, measures were implemented to strengthen the communication channels, including phone calls and personalized follow-ups, prioritizing those plots with recurring requests. Evidence of these actions and the updated follow-up status can be found in file /XXVI/.
Does the project have documented support from key local actors or organizations?	The Project Proponent assigns a score of 1 (low risk).	The classification of the risk as low is supported by report /XXV/, which documents the results obtained regarding doubts, concerns, and observations presented by stakeholders. This report demonstrates that the project has formal and continuous mechanisms for participation, response, and follow-up, backed by documentary evidence. Additionally, the Monitoring Register (RM) version 2.3 /II/, and /XLI/ establish a structured approach for the participation of key actors. This procedure includes five consecutive phases: planning, execution, monitoring, improvement, and validation, which helps strengthen local capacities and ensure effective and transparent participation in project development. In conclusion, the project has documented support from key local actors, demonstrated through reports, procedures, and records that evidence their active, continuous, and structured participation in the implementation and monitoring of the project.
What are the implications of the removed properties or project changes on permanence and the risk of reversal?	Does not apply	Although the removal of four plots was considered a permanent change in the project, this was due to the identification of atypical and specific situations unrelated to the management by Fundación Cataruben. Likewise, it is established that the project proponent has procedure /LXIV/, through which all complaints and comments related to the project are received, addressed, and followed up.

Indicator	Risk Weighting (1–5)	Justification
		This procedure allows understanding the perceptions of the community and stakeholders, setting response times and priority levels according to the type of request, as well as activating internal or external alerts when necessary. However, the importance of implementing additional measures is recognized to enable the proponent to anticipate these types of impacts, thereby strengthening the project's permanence and mitigating the risk of reversal.

The classification of the risk as low is confirmed through the detailed analysis of the five risk categories evaluated using the tool /LXXI/.

The obtained weightings were as follows:

- Legal/Tenure Risk: 1.00 (0.35%)
- Natural/Environmental Risk: 1.67 (0.2505%)
- Financial/Operational Risk: 1.83 (0.2745%)
- Governance/Political Risk: 1.66 (0.1660%)
- Community/Stakeholder Risk: 1.00 (0.25%)

The weighted sum yields an average risk score of 1.29, placing the project in the lowest risk category according to the standard guidelines, which establish that scores equal to or less than 2.5 require a 10% contribution to the buffer pool.

Additionally, it is confirmed that the 20% buffer reserve (composed of 10% from the project and 10% from the general reserve) is maintained in accordance with section 13.1 of the standard, which states that during each verification period a 10% discount is applied to the Verified Carbon Credits (VCC) generated by the project.

Conclusion: the analysis demonstrates that the project activities remain permanent and that the mitigation results are conservatively protected, thanks to a robust technical, legal, and operational structure, the effective application of risk management measures, and the support provided by the established buffer. The project meets the necessary requirements to ensure the long-term permanence of its environmental benefits.

5.12 Stakeholder engagement and consultation

The project implements a systematic stakeholder participation and consultation process, aiming to ensure the inclusion of key actors and the integration of their perspectives in the design, execution, and monitoring of activities.

Stakeholders include local communities, landowners, environmental authorities, civil society organizations, and governmental entities involved in territorial management and climate change. To facilitate their participation, various mechanisms have been established, such as community meetings, training workshops, surveys, and interviews, as well as the implementation of the RCCS system (Petitions, Complaints, Claims, Suggestions, and Compliments) /XXV - XXVI/, which serves as a formal and transparent communication channel.

Through these actions, information is collected on the perceptions, needs, and concerns of the different actors, contributing to the identification of socio-environmental risks and strengthening the project's legitimacy. Continuous feedback is ensured through management reports and periodic consultations, promoting transparency and the development of collaborative agreements.

Within the framework of interviews conducted with landowners, it was identified that, while they expressed concerns regarding delays in benefit payments, they also recognized the existence of fluid and positive communication with Fundación Cataruben. This highlights the importance of maintaining effective dialogue channels that reinforce trust and participation in the project's development.

5.12.1 Public Consultation

In strict compliance with Section 16.2 on Public Consultation, a comment solicitation was conducted through the BioCarbon Standard website. During the 30-calendar-day period

from June 16 to July 16, 2023, no evidence was found on the Global Carbon Trance page indicating the receipt of any comments to date.

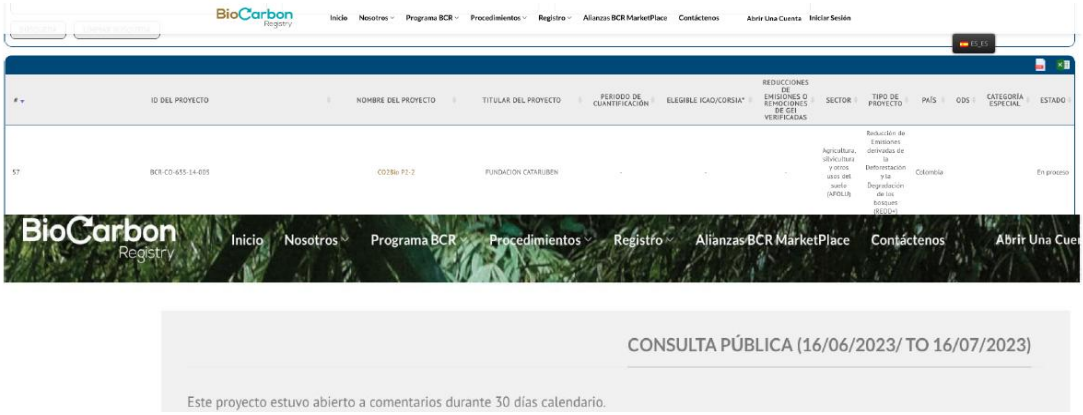


Figure 6. Public consultation
Source: Fundación Cataruben

Therefore, it is concluded that the project complied with the established procedures for public consultation and that no comments were received during the designated period, from June 16 to July 16, 2023, as verified on the Global Carbon Trance website.

According to the information provided, the project was published on the official Global Carbon Trace Registry platform for public consultation between July 21 and August 20, 2025, meeting the minimum 30-day requirement established by the BCR Standard v3.2. The review of the online registry and supporting documents indicates that no public comments were received during this period.

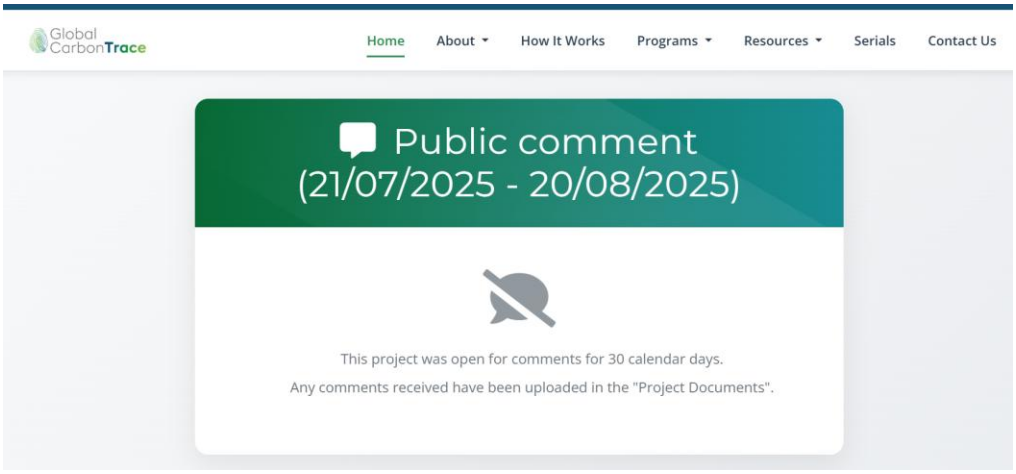


Figure 7. Public consultation 2025

However, the project maintains active communication channels through the system RCCS/ PQRS and participation in SIRAP-Orinoquia, ensuring ongoing dialogue and proper attention to potential concerns or suggestions.

6 Internal quality control

ANCE reviewed the monitoring documentation described in the DdP/III/, evaluating its conformity with the procedures established in the monitoring plan and the validated monitoring report, and verified that there are no discrepancies that could lead to an overestimation of GHG emission reductions.

ANCE confirmed that there are no significant material discrepancies between the monitoring report (/I, II/) and /III/ and the methodologies applied (/V and VI/), so no overestimation occurs in the reported reductions. The project holder monitors the required parameters to determine reductions according to the monitoring plan and applicable methodology. It is noteworthy that the proponent made a permanent modification by removing 4 plots from the initially validated 124, which ensures consistency in the reported emissions.

The reported parameters, including their source, monitoring frequency, and review criteria indicated in the DdP, were verified and considered correct. The procedures of the required management system, as well as the responsibilities and authority for monitoring activities, were consistent with what is established in the DdP /III/. The ANCE verification team satisfactorily assessed the knowledge of the personnel associated with the project activities.

Finally, ANCE's quality management process includes an independent internal review of the validation and verification process, ensuring compliance with the scope, program standards, and proper collection and management of evidence for the preparation of the final report.

7 Verification opinion

As the designated Conformity Assessment Body (CAB), ANCE was commissioned by Fundacion Cataruben to conduct a verification of the GHG emissions reductions for the Co2Bio P2-2 project. The project's declared activities are located in the Orinoquía region of Colombia, spanning the Departments of Arauca (municipalities of Arauca, Cravo Norte, Puerto Rondón, and Tame) and Casanare (municipalities of Hato Corozal, Paz de Ariporo, Orocué, Pore, San Luis de Palenque, Trinidad, and Yopal). Its development aligns with the guidelines of international standards ISO 14064-2:2019 and ISO 14064-3:2019, and it adheres to the specific requirements of the GEI BioCarbon Standard.

ANCE conducted a review of all the supporting documentation used by Fundacion Cataruben for the elaboration of the project and performed a field visit together with Fundación

Cataruben. Through interviews and a review of primary information sources, ANCE confirmed the organizational and reporting limits, activity data, emission factors and global warming potentials used, as well as the methodological assumptions and exclusions made.

ANCE established the objectives, scope, and verification criteria in the commercial proposal and legal agreement BH-P2-016 from 2022 and in the approved audit plan for the verification of Co2Bio P2-2 project. The objectives, scope and verification criteria are described below:

Objective:

- *Confirming that the project, its activities, methods, and procedures, as described in the CO2Bio P2-2 Monitoring Report /II/ and its corresponding annexes, comply with the criteria established in section 3.1 of this report.*
- *Verify that the information related to the 120 project properties, as well as the application, calculation, and support mentioned in the BCR methodologies: BCR0002 and BCR0004, as well as the level of activities implemented during the 2022-2024 monitoring period, contribution of applicable SDGs, associated safeguards, environmental and socioeconomic aspects.*
- *Ensure that the information on reported GHG emission reductions consistently demonstrates the veracity of those reductions.*
- *Ensure that the Monitoring Plan, including its implementation, data collection, methods, frequency, and consistency with the applicable methodology and program requirements, is carried out properly.*

Scope:

The scope of the project verification complies with BCR Standard, Version 3.2, September 15, 2022 /LXXII/, and is based on the criteria of ISO 14064-2:2019(es) and the standards, procedures, methodologies, and methodological tools of the BioCarbon Standard.

Criteria:

ISO STANDARDS:

- *ISO 14064-2:2019 /CXXX/*
- *ISO 14064-3:2019 /CXXXI/*

BCR PROGRAM:

- *BIOCARBON CERT. 2023. BCR STANDARD. Version 3.2. September 23, 2023 /LXXII/.*
- *BCR0002_Quantification of GHG Emission Reductions. REDD+ Projects, Version 3.1, Sep 15/2022 /V/.*
- *BCR0004_Quantification of GHG emission reductions. Activities that avoid Land Use change in continental wetlands Version 2.0, Jun 23/2022 /VI/.*

- *BIOCARBON CERT. 2025. Validation and Verification Manual. GHG Projects. Version 3.0. June 13, 2025 /CIX/.*
- *Standard Operating Procedures (SOP), Version 2.0 | May 26, 2025 /CXXXIII/.*
- *Identification of a baseline scenario and demonstration of additionality, Version 1.0 | July 25, 2025 /LXX/.*
- *Avoidance of double counting (ADC), Version 3.0 | April 7, 2025 /XCIV/.*
- *Sustainable Development Safeguards SDSs Tool, Version 2.0, June 2025, Annex A and the Excel /CXXXIV/.*
- *Tool to demonstrate compliance with the REDD+ safeguards, Version 1.1 | January 26, 2023 /CXXXV/.*
- *Conservative approach and uncertainty management, Version 1.0| July 23, 2025 /CXXXVI/.*
- *Permanence and risk management Version 2.0 | June 3, 2025 /LXXI/.*
- *Monitoring, Reporting and Verification (MRV), Version 2.0 | June 23, 2025 /LXXIII/.*

LEGAL REGULATIONS:

- *Law 2294 of 2023. Issuing the National Development Plan 2022-2026 /CXXIX/.*
- *Updated NDC, 2020 /C/.*
- *Resolution 1447 of 2018 /CXXX/.*
- *Decree 926 of 2017 /CVII/.*
- *Social and Environmental Safeguards for REDD+ in Colombia, 2018 /CXII/.*
- *Resolution 529/XCVIII/ of 2020 and Resolution 471 of 2020 /XCIX/*
- *Political Constitution, Law 388 of 1997 /C/*

ANCE confirms that the data and information supporting the GHG statement are historical in nature. The 95% assurance level in the audit signifies that the auditor has a high degree of confidence in the accuracy of the findings and that the results accurately reflect the status of the project; however, there remains a 5% risk of potential inaccuracies or undetected errors. The verification activities are structured to deliver a high level of assurance, albeit not absolute.

ANCE identified that, according to the review of the evidence provided by Fundacion Cataruben and during the field visit, from the beginning of the initiative, the Co2Bio P2-2 project has generated contributions to the Sustainable Development Goals (SDGs: 6 Water and Sanitation, 13 Climate action and 15: Terrestrial Ecosystem Life) applicable for the components (Quantification of GHG Emission Reductions) according to the relevant criteria and indicators.

ANCE based on the results of the activities developed, declares for all intended users that the Co2Bio P2-2 project of Fundacion Cataruben in 01/01/2022 - 31/12/2024, complies with the principles established by ISO 14064-2:2019, ISO 14064-3:2019 and the GHG Biocarbon Standard, is within the level of material assurance and importance, and is free from material

errors. This statement is issued and addressed to BioCarbon Standard and other interested parties.

ANCE identified that, according to the review of the evidence provided by Fundacion Cataruben and during the field visit, from the beginning of the initiative, the Co2Bio P2-2 project has applied to co-benefits (Orchid) applicable for the components (Quantification of GHG Emission Reductions) according to the relevant criteria and indicators.

8 Verification statement

Project's name	*Co2Bio P2-2*
BCR Project ID	*BCR-CO-635-14-005*
Legal Agreement No	*BH-P2-016*
Project proponent	*Fudacion Cataruben*
Project proponent contact information	*Daniel Eduardo Ospina* *Líder Proyecto* *co2bio@cataruben.org* *Tel. 3204690315 / 3203108839* *Carrera 20 # 36 - 04 Yopal – Casanare*
Project owner	*Fundacion Ctaruben*
Project Owner Contact Information	*María Fernanda Wilches* *Gerente General* *co2bio@cataruben.org* *Tel. 3204690315 / 3203108839* *Carrera 20 # 36 - 04 Yopal – Casanare*
Project participants	*The initiative involves 120 property owners, with corresponding property details listed in Table 1 of section 3.2.1 (Planning).*
Version RM	*Versión 2.3*

Project Type	*Agriculture, Forestry and Other Land Uses (AFOLU)*
Grouped project	*NA*
Applied methodology	*AFOLU Sector Methodological Document / BCR0004 Quantification of GHG Emission Reduction and Removal - Activities that Avoid Land Use Change in Continental Wetlands. Version 2.0 June 23, 2022.* *AFOLU Sector Methodological Document BCR0002 Quantification of GHG Emission Reductions from REDD+ Projects. Version 3.1. September 15, 2022.*
Project location (City, Country)	*Colombia, región Orinoquía:* *Departamento Arauca: Arauca, Cravo Norte, Puerto Rondón y Tame.* *Departamento Casanare: Hato Corozal, Paz de Ariporo, Orocué, Pore, San Luis de Palenque, Trinidad y Yopal.*
GHG reductions quantification period	*01/01/2022 - 31/12/2024.*
Level of assurance	*95%*
Material discrepancy	*5%*
Estimated total and average annual amount of GHG emissions reduction	*Total reductions: 503.516,0 tCO2e (Monitoring Report)*
Sustainable Development Goals	*SDG 6: Water and Sanitation* *SDG 13: Climate Action* *SDG 15: Life of Terrestrial Ecosystems*

Special category, related to co-benefits	*Orchid*
Date of issue	*20/10/2025*

9 Facts discovered after verification

If the client or the relevant GHG program discovers additional information after the verification opinion has been issued by ANCE, the following actions must be taken:

1. Notify the lead auditor of the new information presented regarding the previously assigned verification.

2. The lead auditor will review the newly discovered facts to determine whether they were adequately disclosed in the documentation provided by the project or in the verification opinion, and whether any review and/or adjustment of the applicable records is required.

3. Communicate new information to the client.

4. Communicate the new information to stakeholders (programs, standards, and/or regulatory bodies, as applicable).

This review may involve a partial or full repetition of the verification audit, including on-site visits if deemed appropriate. In such cases, the client will be duly informed of the conditions and the personnel involved in the activities.

If the additional facts could affect the objectivity of the initial audit team, a change in technical personnel will be considered. In accordance with the requirements and guidelines of the respective GHG program, an updated verification report will be prepared, detailing the specific reasons for the update.

Annex 1. Competence of team members and technical reviewers

Excalibur Ernesto Acosta Miranda *holds a bachelor's degree in environmental engineering from the Instituto Politécnico Nacional, Unidad Profesional Interdisciplinaria de Biotecnología, Mexico. Since 2019, he has worked as a verifier of GHG emission inventories in the Industry, Energy, Waste, Transportation, and Commerce and Services sectors. He has served as a lead verifier in major reporting programs such as the National Emissions Registry in Mexico and the Carbon Disclosure Project, with over 10 services executed. In the validation and verification of mitigation projects, he has participated in the voluntary programs of CERCARBONO and BioCarbon Standard in the AFOLU, Energy, and Waste sectors.*

ANCE

La Asociación de Normalización y Certificación, A.C.

Otorga la presente constancia a:

ACOSTA MIRANDA EXCALIBUR ERNESTO

Por su participación en el curso:

ISO 14064-2: 2019 Gases de Efecto Invernadero Parte 2: Especificación con orientación, a nivel de proyecto, para la cuantificación, el seguimiento y el informe de la reducción de emisiones o el aumento en las remociones de gases de efecto invernadero

Ing. Roberto Daniel Sosa Granados
Duracion: 16 hrs.
28 y 29 de mayo 2020

www.ance.org.mx

SOLUCIONES GLOBALES DISPONIBLES LOCALMENTE

ANCE

La Asociación de Normalización y Certificación, A.C.

Otorga la presente constancia a:

ACOSTA MIRANDA EXCALIBUR ERNESTO

Por su participación en el curso:

ISO 14064-3:2019 Gases de Efecto Invernadero parte 3: Especificación con orientación para la validación y verificación de declaraciones sobre gases de efecto invernadero

Ing. Roberto Daniel Sosa Granados
Duracion: 27 hrs.
13 al 15 de mayo 2020

www.ance.org.mx

SOLUCIONES GLOBALES

FORMATO DC-3
CONSTANCIA DE COMPETENCIAS O DE HABILIDADES LABORALES

DATOS DEL TRABAJADOR

Nombre (Anotar apellido paterno, apellido materno y nombre (s))
ACOSTA MIRANDA EXCALIBUR ERNESTO

Clave Única de Registro de Población: AOME910102HDFCRX12
Ocupación específica (Catálogo Nacional de Ocupaciones): 0.2 Administración

Puesto:
EJECUTIVO DE EVALUACIÓN DE LA CONFORMIDAD OVV

DATOS DE LA EMPRESA

Nombre o razón social (En caso de persona física, anotar apellido paterno, apellido materno y nombre(s))
ASOCIACIÓN DE NORMALIZACIÓN Y CERTIFICACIÓN, A.C.

Registro Federal de Contribuyentes con homoclave (SHCP)
ANC-921211-IT8

DATOS DEL PROGRAMA DE CAPACITACIÓN, ADIESTRAMIENTO Y PRODUCTIVIDAD

NOMBRE DEL CURSO: Desarrollo de Capacidades para la Cuantificación de Emisiones de GEI a nivel sectorial, Sector Agrícola, Silvicultura y otros usos de la tierra

Duración en horas: 24
Periodo de ejecución: De Año 2019 Mes 05 Día 06 a Año 2019 Mes 05 Día 08

Área temática del curso
1000 Producción General

Nombre del agente capacitador o STPS
Alianza Sustentable

Los datos se asientan en esta constancia bajo protesta de decir verdad, apercibidos de la responsabilidad en que incurre todo aquel que no se conduce con verdad.

Instructor Asesor — Nombre y Firma
Patrón o representante legal — Nombre y Firma
Representante de la Parte Trabajadora — Nombre y Firma

INSTRUCCIONES
- Llenar a máquina o con letra de molde.
- Deberá entregarse al trabajador dentro de los veinte días hábiles siguientes al término de su curso de capacitación aprobado.
- Las áreas y subáreas ocupacionales del Catálogo Nacional de Ocupaciones se encuentran disponibles en el reverso de este formato y en la página www.stps.gob.mx
- Los temas temáticos de los cursos se encuentran disponibles en el reverso de este formato y en la página www.stps.gob.mx
- Cursos impartidos por el área competente de la Secretaría del Trabajo y Previsión Social.
- Para empresas con menos de 51 trabajadores. Para empresas con más de 50 trabajadores firmará el representante del patrón ante la Comisión mixta de capacitación, adiestramiento y productividad.
- Solo para empresas con más de 50 trabajadores.)

* Datos no obligatorios.

DC-3 JUNIO/2012

CERTIFICADO DE APROBACIÓN

OTORGADO A:

Excalibur Ernesto Acosta Miranda

IDMEX1243962245

APROBÓ VIRTUALMENTE EL CURSO

NORMA ISO/IEC 17029
EVALUACIÓN DE LA CONFORMIDAD: PRINCIPIOS Y REQUISITOS GENERALES PARA LOS ORGANISMOS DE VALIDACIÓN Y VERIFICACIÓN
DESDE EL 05-06-23 HASTA 08-06-23
INTENSIDAD: 9 HORAS

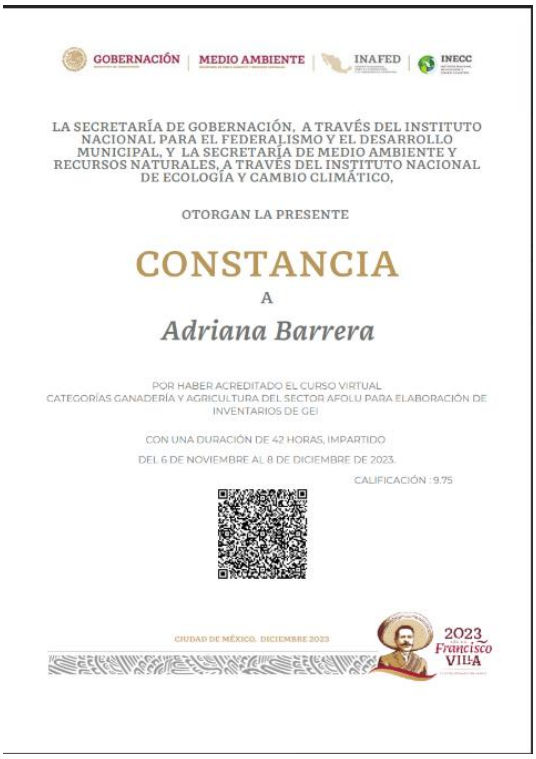
FIRMADO A LOS 20 DÍAS DEL MES DE JUNIO DE 2023

Aparna Dhawan
Sr Counsellor and Head QS, CII-IQ

Ramón Madriñán
Presidente Ejecutivo
ASOCEC

ASOCEC CERTIFICADO APROBACIÓN

Nancy Adriana Barrara Gomez *is an Environmental Engineer, graduated from the National Polytechnic Institute, holding Professional License Number 13289456. She is a Lead Verifier for GHG Inventories in sectors associated with IAF MD 14, including General Manufacturing, Mining and Mineral Production, Metal Production, Chemical Production, and Pulp, Paper, and Printing. With extensive experience in emissions verification, she has executed a total of 21 services in compliance with the criteria of ISO 14064-1:2018 and other relevant protocols.*



GOBERNACIÓN | MEDIO AMBIENTE | INAFED | INECC

LA SECRETARÍA DE GOBERNACIÓN, A TRAVÉS DEL INSTITUTO NACIONAL PARA EL FEDERALISMO Y EL DESARROLLO MUNICIPAL, Y LA SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES, A TRAVÉS DEL INSTITUTO NACIONAL DE ECOLOGÍA Y CAMBIO CLIMÁTICO,

OTORGAN LA PRESENTE

CONSTANCIA

A

Adriana Barrera

POR HABER ACREDITADO EL CURSO VIRTUAL CATEGORÍAS GANADERÍA Y AGRICULTURA DEL SECTOR AFOLU PARA ELABORACIÓN DE INVENTARIOS DE GEI

CON UNA DURACIÓN DE 42 HORAS, IMPARTIDO DEL 6 DE NOVIEMBRE AL 8 DE DICIEMBRE DE 2023.

CALIFICACIÓN : 9.75

CIUDAD DE MÉXICO, DICIEMBRE 2023

2023 Francisco VILLA

ANCE — SOLUCIONES GLOBALES DISPONIBLES LOCALMENTE

FORMATO DC-3
CONSTANCIA DE COMPETENCIAS O DE HABILIDADES LABORALES

DATOS DEL TRABAJADOR

Nombre (Anotar apellido paterno, apellido materno y nombre (s))
BARRERA GOMEZ NANCY ADRIANA

Clave Única de Registro de Población: BAGN960522MMCRMN01
Ocupación específica (Catálogo Nacional de Ocupaciones): 8.2 Administración

Puesto*
ESPECIALISTA

DATOS DE LA EMPRESA

Nombre o razón social (En caso de persona física, anotar apellido paterno, apellido materno y nombre(s))
ASOCIACIÓN DE NORMALIZACIÓN Y CERTIFICACIÓN

Registro Federal de Contribuyentes con homoclave (RFC*)
ANC-950211-IT8

DATOS DEL PROGRAMA DE CAPACITACIÓN, ADIESTRAMIENTO Y PRODUCTIVIDAD

NOMBRE DEL CURSO:
ISO 14064-2:2019 Gases de efecto invernadero Parte 2: Especificación con orientación, a nivel de proyecto, para la cuantificación, el seguimiento y el informe de la reducción de emisiones o el aumento en las remociones de gases de efecto invernadero.

Duración en horas: 8
Período de ejecución: De Año 2023 Mes 03 Día 01 a Año 2023 Mes 03 Día 11

Área temática del curso 2/
1000 Producción General

Nombre del agente capacitador o STPS ³
ASOCIACIÓN DE NORMALIZACION Y CERTIFICACION

Los datos se asientan en esta constancia bajo protesta de decir verdad, apercibidos de la responsabilidad en que incurre todo aquel que no se conduce con verdad.

Instructor o tutor — FIDENCIO ERNESTO ACOSTA — Nombre y Firma
Patrón o representante legal ⁴ — PAMELA DEL CARMEN RIVERA CABRERA — Nombre y firma
Representante de los trabajadores ⁵ — JUDITH GONZALEZ ESCALERA — Nombre y firma

La Reserva de Acción Climática
certifica que
Nancy Adriana Barrera Gómez de ANCE
ha aprobado satisfactoriamente el Examen General de Verificación el 17 de noviembre de 2024
La certificación expira el 9 de diciembre, 2027
El estatus del verificador individual está condicionado a obtener la acreditación de ISO 14065 y completar los entrenamientos y actualizaciones necesarios.

Amy Kessler, Director de Operaciones de Américas Latina
www.climateactionreserve.org • Phone: 213 891 1444 • Fax: 213 623 47

La Reserva de Acción Climática
certifica que

Nancy Adriana Barrera

ha aprobado satisfactoriamente el Examen del Protocolo Forestal para México el 10 de septiembre de 2024

La certificación expira el 10 de septiembre, 2027.

El estatus del verificador individual está condicionado a obtener la acreditación de ISO 14065 y completar los entrenamientos y actualizaciones necesarios.

Amy Kessler, Director de Operaciones de América Latina

www.climateactionreserve.org • Phone: 213 891 1444 • Fax: 213 623 67

ANCE

La Asociación de Normalización y Certificación, A.C.

Otorga la presente **constancia** a:

HERNÁNDEZ CONTRERAS JANAI MONSERRAT

Por su participación en el curso:

ISO 14064-2: 2019 Gases de Efecto Invernadero Parte 2: Especificación con orientación, a nivel de proyecto, para la cuantificación, el seguimiento y el informe de la reducción de emisiones o el aumento en las remociones de gases de efecto invernadero

Ing. Roberto Daniel Sosa Granados
Duracion: 16 hrs.
26 y 29 de mayo 2020

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SOLUCIONES GLOBALES DISPONIBLES LOCALMENTE

ANCE

La Asociación de Normalización y Certificación, A.C.

Otorga la presente **constancia** a:

HERNÁNDEZ CONTRERAS JANAI MONSERRAT

Por su participación en el curso:

ISO 14064-3:2019 Gases de Efecto Invernadero parte 3: Especificación con orientación para la validación y verificación de declaraciones sobre gases de efecto invernadero

Ing. Roberto Daniel Sosa Granados
Duracion: 27 hrs.
13 al 15 de mayo 2020

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SOLUCIONES GLOBALES

SOLUCIONES GLOBALES DISPONIBLES LOCALMENTE

FORMATO DC-3
CONSTANCIA DE COMPETENCIAS O DE HABILIDADES LABORALES

DATOS DEL TRABAJADOR

Nombre (Anotar apellido paterno, apellido materno y nombre (s))
HERNANDEZ CONTRERAS JANAI MONSERRAT

Clave Única de Registro de Población: H E C J 8 8 1 2 2 0 M M C R N N 0 6

Ocupación específica (Catálogo Nacional de Ocupaciones) 1/
8.2 Administración

Puesto*
EJECUTIVO (a) DE EVALUACION DE LA CONFORMIDAD OVV

DATOS DE LA EMPRESA

Nombre o razón social (En caso de persona física, anotar apellido paterno, apellido materno y nombre(s))
ASOCIACIÓN DE NORMALIZACIÓN Y CERTIFICACIÓN, A.C.

Registro Federal de Contribuyentes con homoclave (SHCP): A N C - 9 2 1 2 1 1 - 1 T 8

DATOS DEL PROGRAMA DE CAPACITACIÓN, ADIESTRAMIENTO Y PRODUCTIVIDAD

NOMBRE DEL CURSO: Desarrollo de Capacidades para la Cuantificación de Emisiones de GEI a nivel sectorial, Sector Agricultura, Silvicultura y otros usos de la tierra

Duración en horas: **24**

Período de ejecución: De Año 2019 Mes 05 Día 06 a Año 2019 Mes 05 Día 08

Área temática del curso 2/
1000 Producción General

Nombre del agente capacitador o STPS 3/
Alianza Sustentable

Los datos se asientan en esta constancia bajo protesta de decir verdad, apercibidos de la responsabilidad en que incurre todo aquel que no se conduce con verdad.

Instructor o tutor: Lucila María Balam de la Vega — Nombre y Firma

Patrón o representante legal 4/: Pamela del Carmen Rivero Cadena — Nombre y firma

Representante de los trabajadores 5/: Luis Alberto [illegible] Barceras — Nombre y firma

INSTRUCCIONES

- Llenar a máquina o con letra de molde.
- Deberá entregarse al trabajador dentro de los veinte días hábiles siguientes al término del curso de capacitación aprobado.

1/ Las áreas y subáreas ocupacionales del Catálogo Nacional de Ocupaciones se encuentran disponibles en el reverso de este formato y en la página www.stps.gob.mx
2/ Las áreas temáticas de los cursos se encuentran disponibles en el reverso de este formato y en la página www.stps.gob.mx
3/ Cursos impartidos por el área competente de la Secretaría del Trabajo y Previsión Social.
4/ Para empresas con menos de 51 trabajadores. Para empresas con más de 50 trabajadores firmaría el representante del patrón ante la Comisión mixta de capacitación, adiestramiento y productividad.
5/ Solo para empresas con más de 50 trabajadores.

*Dato no obligatorio.

DC-3 ANVERSO

Janai Monserrat Hernández Contreras *is an environmental engineer graduated from the Autonomous Metropolitan University (UAM) with Professional License number 9763033. She has six years of experience working at the ANCE validating verification body. She has worked on various emissions inventory verifications in the industrial, energy, and waste sectors, among others. In the validation and verification of mitigation projects, she has participated in voluntary programs such as CERCARBONO and Biocarbon Standard in the waste and energy sectors.*

CERTIFICADO DE APROBACIÓN

OTORGADO A:

Janai Monserrat Hernández Contreras

IDMEX1241816193

APROBÓ VIRTUALMENTE EL CURSO

NORMA ISO/IEC 17029
EVALUACIÓN DE LA CONFORMIDAD: PRINCIPIOS Y REQUISITOS GENERALES PARA LOS ORGANISMOS DE VALIDACIÓN Y VERIFICACIÓN
DESDE EL 05-06-23 HASTA 08-06-23
INTENSIDAD: 9 HORAS

FIRMADO A LOS 20 DÍAS DEL MES DE JUNIO DE 2023

Aparna Dhawan
Sr Counsellor and Head QS, CII-IQ

Ramón Madriñán
Presidente Ejecutivo
ASOCEC

CERTIFICADO DE ASISTENCIA

OTORGADO A:

Janai Monserrat Hernández Contreras

IDMEX 1241816193

ASISTIÓ VIRTUALMENTE AL CURSO

NORMA ISO/IEC 17029
EVALUACIÓN DE LA CONFORMIDAD: PRINCIPIOS Y REQUISITOS GENERALES PARA LOS ORGANISMOS DE VALIDACIÓN Y VERIFICACIÓN
DESDE EL 05-06-23 HASTA 08-06-23
INTENSIDAD: 9 HORAS

FIRMADO A LOS 20 DÍAS DEL MES DE JUNIO DE 2023

Aparna Dhawan
Sr Counsellor and Head QS, CII-IQ

Ramón Madriñán
Presidente Ejecutivo
ASOCEC

La Reserva de Acción Climática
certifica que

Janai Monserrat Hernandez Contreras

ha aprobado satisfactoriamente el Examen del Protocolo Forestal para México el 10 de septiembre de 2024

La certificación expira el 10 de septiembre, 2027.

El estatus del verificador individual está condicionado a obtener la acreditación de ISO 14065 y completar los entrenamientos y actualizaciones necesarias.

Amy Kessler, Directora de Operaciones de América Latina

www.climateactionreserve.org • Phone: 213 891 1444 • Fax: 213 623 07

La Reserva de Acción Climática
certifica que

Janai Monserrat Hernández Contreras de ANCE

ha aprobado satisfactoriamente el Examen General de Verificación el 20 de noviembre de 2024

La certificación expira el 9 de diciembre, 2027

El estatus del verificador individual está condicionado a obtener la acreditación de ISO 14065 y completar los entrenamientos y actualizaciones necesarias.

Amy Kessler, Directora de Operaciones de América Latina

www.climateactionreserve.org • Phone: 213 891 1444 • Fax: 213 623 07

ASOCEC

asocarbono

CERTIFICADO DE ASISTENCIA

JANAI MONSERRAT HERNÁNDEZ CONTRERAS
CURP: HECJ881220MMCRNN06

Participó y asistió virtualmente al curso denominado:

Programa de Formación para Auditores Líderes para la Validación y Verificación de Proyectos de Mitigación de GEI

Mayo de 2021 - Bogotá, Colombia

Firmado en Bogotá, Colombia a los (06) días del mes de julio de 2021.

RAMÓN MADRIÑÁN
DIRECTOR ASOCEC

FRANCISCO OCAMPO
DIRECTOR EJECUTIVO ASOCARBONO

JULIO GIRALDO
COORDINADOR PROGRAMA DE FORMACIÓN

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

The following table presents all findings identified by the Verification Team, along with the responses and the documentation provided by the Project Proponent.

Finding ID	***01***	*Type of finding*	*CAR – Corrective Action Request*	*Date* *26/06/2025*
Section No.				
BCR Risk and Permanence Tool v2.0 Sección 3.2 "Environmental Risk Factors": "Projects must assess both the likelihood and the potential magnitude of risks from natural disturbances (e.g., fires, floods, pests), taking into account seasonal or climatic variability. Risk assessments should be updated accordingly to reflect any temporal changes in risk profiles."				
Description of finding				
During the documentary review of the CO2Bio P2-2 project, it was identified that the risk analysis considers the existence of fire risk but does not adequately assess the potential magnitude of the impact that such an event could cause, especially during the dry season. While the analysis mentions that the climatic conditions of the rainy season in the Orinoquía reduce the likelihood of fires, it does not fully address how this probability and impact change during the dry season, representing an incomplete risk assessment.				
***Project holder response** (11/07/2025)*				
*To address the lack of precision with which the DDP and the Monitoring Report evaluated the probability and magnitude of fire impacts during the dry season, we applied the **BCR Risk & Permanence Tool v 2.0 (03-Jun-2025)** and completed its **Annex 1**, which requires a standardized quantification of natural disturbances. Using historical MODIS and VIIRS hotspot records (2013-2024) and local climate data, we recalculated the probability adjusted for the dry season, estimated the potentially affected area, and projected temporary biomass loss. Consequently, the **Natural/Environmental Risk** subcategory increased **to 2.25/5**; however, the overall weighted score remains 1.29, within the **Low Risk** band (≤ 2.5), and the buffer contribution continues at 10 %, transparently reflecting the higher seasonal vulnerability* *The tool also requires detailing mitigation and monitoring measures (section 2). In response, we developed the **Comprehensive Fire Management Plan (PIMF),** which includes: strategic firebreaks, community patrols during drought periods, an early warning system via the **FIRMS** platform, and training for local brigades. These activities fall under project action **G4**, related to "active monitoring of environmental threats and timely alert management."* *The new scores, assumptions, hotspot time series, threat maps, and control measures have been incorporated into the revised versions of the DDP, the Monitoring Report, and **Annex 1***				

***of the BCR Tool v 2.0**. This ensures traceability, consistency, and full compliance with the standard's guidelines for AFOLU projects, leaving the fire risk analysis updated and aligned with best practices in adaptive management.*
Documentation provided by the project holder
- 2. Annexes / 3. Compliance with Safeguards / 3.6. Safeguard F / 3.6.1. F13. Environmental and Territorial Planning / 3.6.1.1. Analysis of reversal risks carried out within the framework of the project / CO2Bio P2-2 Aneex 1. BCR risk-and-permanence (3) - Anexo 1 herramienta / *Annex 1 tool* - Matriz de riesgos (nueva) / *Risk Matrix (new)* - enlace a la actividad de proyecto G.4 / *Link to Project Activity G.4*
CAB assessment (28/07/2025)
The project proponent has significantly optimized the assessment of fire risk during the dry season, applying a standardized technical tool along with historical and climatic data. This allowed for adjusting the risk scores and complementing the assessment with concrete mitigation and monitoring measures. By updating all relevant documentation, the integrity of the project and compliance with established guidelines are ensured, guaranteeing effective adaptive management against environmental threats. In this way, the finding is fully addressed.

Finding ID	**02**	***Type of finding***	***CAR – Corrective Action Request***	***Date*** ***26/06/2025***
Section No.				
BCR Risk and Permanence Tool v2.0 – Section 3.3 "Political and Social Risk Factors": "Projects must assess political risks, including armed conflicts or instability, based on current conditions in the implementation area. The risk classification (probability and magnitude of impact) must be aligned with field-verified conditions, including areas that become inaccessible due to conflict."				
Description of finding				
During the documentary and on-site review of the CO2Bio P2-2 project, it was observed that the risk analysis identifies the political risk of "armed conflicts on the properties linked to the project." However, it was verified that the assigned classification of probability and impact does not adequately reflect the current situation, since during the site visit it was not possible to access certain areas of the project due to the presence of illegal armed actors or public order situations that posed a risk to the audit team and project personnel.				

Project holder response (11/07/2025)
The public order situation observed during the verification conducted in May 2025—which prevented the audit team from accessing certain sectors of the project—occurred outside the 2022-2024 monitoring period. However, in order to anticipate and properly manage any similar contingencies in future cycles, we have updated the ***BCR Risk & Permanence Tool v2.0 (03-Jun-2025)*** *and defined specific action plans that will be activated when comparable risk scenarios arise.* *During the same verification, the audit team was unable to access certain sectors of the CO2Bio P2-2 project (specifically some properties located in the department of Arauca) due to the presence of illegal armed actors and public order situations. This revealed that the probability and impact assigned to the "armed conflict" risk in the original version of the analysis did not reflect the actual context. In response, this risk was re-evaluated in the tool and its Annex 1, in accordance with section 3.3 applicable to events that prevent safe access and could interrupt project activities. With this adjustment, the overall weighted average remains* ***at 1.29****, within the* ***Low-Risk band (≤ 2.5),*** *so the regulatory contribution to the buffer pool continues at* ***10%****; however, the increased political vulnerability is now transparently documented.* *The update includes a set of management and monitoring measures: (i) an early warning system based on weekly reports from the Ombudsman's Office, UN-OCHA, and the SAT portal ("Temprano"); (ii) coordination with the Military Forces and National Police to define safe corridors and access windows; (iii) an internal protocol for suspending and rescheduling field activities supported by life insurance and risk coverage; and (iv) quarterly review sessions with community leaders to detect changes in public order. These actions are recorded in the annual operational plans and in indicator G-5 of the safeguard's matrix, complying with the tool's requirement (section 2.d) to "assess the risk of political or institutional instability and demonstrate the existence of mitigation and monitoring measures."* *The revised version of the DDP, the Monitoring Report, and Annex 1 of the BCR Tool incorporate official security sources, restricted-access maps, adaptive schedules, and documentary evidence of the institutional capacity to manage this risk. This ensures consistency between the risk analysis and the territorial reality, strengthening the project's permanence and the safety of all involved parties. We appreciate the observation, which has allowed us to reinforce our adaptive management system, and we remain available to provide any additional information that may be required.*
Documentation provided by the project holder
CO2Bio P2-2 Aneex 1. BCR_risk-and-permanence
CAB assessment (28/07/2025) – SECOND ROUND
The Project Holder acknowledges the updates implemented in the management and mitigation of the risk associated with armed conflict. However, a more detailed and fully supported technical clarification is considered necessary regarding the weighting assigned to political risk (value 1.29). This clarification should include the supporting documentation, the methodologies

applied, and the specific analyses that underpin this rating, as well as the justification for the weighting used in identifying and assessing the risk of non-permanence and its impact, as established and applied in the CO2Bio P2-2 Risk Analysis and Management.xlsx tool. This is intended to ensure transparency, traceability, and full validation of the analysis by the auditors.

Project holder response (08/08/2025)

In response to the request for clarification regarding the weighting assigned to political risk (1.29), we confirm that this rating is based on the methodology implemented in the Excel tool "CO2Bio P2-2 Risk Analysis and Management," which corresponds to version 2 of the document "3.8. Safeguards Monitoring Plan and Report (CO2Bio P2-2)" and develops Safeguard F: Adoption of measures to address reversal risks, specifically the national interpretation element F13. Environmental and Territorial Planning.

1. Applied methodology and scope of the tool

The "CO2Bio P2-2 Risk Analysis and Management" tool establishes a quantitative and qualitative framework to evaluate reversal risks, considering multiple dimensions: legal, environmental, financial-operational, socio-political, and community.

Each risk is assessed according to the following criteria:

- Potential impact.
- Probability of occurrence.
- Numerical rating (1 to 5).
- Qualitative rating (Very low to Very high).
- Management and mitigation actions.

In the social dimension, political risks are included, where their impact, probability, and mitigation mechanisms are evaluated.

2. Political risk assessment for the verification period 2022–2024

The analysis considered the monitoring indicator: "Armed conflicts on properties linked to the project."

- *Result: occurrence = 0 throughout the 2022–2024 period*
- *Rating: Low risk (matrix value = 1).*

Although this risk did not materialize during the verification period, the tool documents preventive and mitigation actions:

- *Preventive actions: creation of dialogue spaces among communities, local organizations, and authorities to address concerns related to potential conflict scenarios.*
- *Mitigation actions: guidance to ecosystem managers regarding the competent authorities (departmental and national) for reporting and channeling situations.*
- *Expected effect: strengthen the response capacity to any eventuality, reducing the negative impact on communities and project development, and ensuring a safe environment for the implementation of conservation and sustainable development activities.*

3. Additional evidence of political risk management

- *The internal procedure FC-GIP-20 "Authorization Request for Fieldwork" establishes controls to authorize, record, and monitor all movements associated with project activities, with oversight by the Continuous Improvement / SST Manager area.*
- *This control reinforces the traceability of field operations and the prevention of situations related to political and security risks.*

4. Justification of the 1.29 value and traceability
The 1.29 is the result of the weighted calculation across the five risk dimensions (legal/tenure, natural, financial-operational, governance/political, and community/stakeholders) applying the weights established in the BioCarbon Standard methodology. In this weighting, the governance/political risk carries a 10 % weight. The low rating (1.66) in this component, combined with the other factors, yields a final average of 1.29.
This result reflects a low reversal risk condition and is fully supported in the Excel matrix "CO2Bio P2-2 Risk Analysis and Management," which contains the criteria, evidence, and justifications used.
With this information, it is ensured that the political risk weighting is technically and documentarily substantiated, with full traceability in the project's official tool and alignment with the BioCarbon Standard, ensuring transparency and validation by auditors.
Additionally, it is important to highlight that Annex 1 of the BCR Risk & Permanence Tool v2.0 specifies the documents required for the project to support its risk ratings, reducing ambiguities in the interpretation and compliance with criteria. These documents, serving as compliance evidence, are detailed in Section 6.1 of the annex (CO2Bio P2-2 Aneex 1. BCR_risk-and-permanence).
Therefore, once the criteria and formulas of the tool are applied, the resulting analysis (1.29) indicates that 10 % of the CCV should be allocated to the project's risk reserve account, in addition to 10 % for the general BCR risk account, totaling 20 %.

Documentation provided by the project holder

2. Annexes / 3. Safeguard Compliance / 3.8. Plan y Reporte Monitoreo SALVAGUARDAS (CO2Bio P2-2) */ 3.8. Safeguards Monitoring Plan and Report (CO2Bio P2-2)*
2. Annexes / 3. Compliance with Safeguards / 3.6. Safeguard F / 3.6.1. F13. Environmental and Territorial Planning / 3.6.1.1. Analysis of reversal risks carried out within the framework of the project / Análisis y Gestión de Riesgos CO2Bio P2-2 */ CO2Bio P2-2 Risk Analysis and Management*
2. Annexes / 3. Compliance with Safeguards / 3.6. Safeguard F / 3.6.1. F13. Environmental and Territorial Planning / 3.6.1.1. Analysis of reversal risks carried out within the framework of the project / CO2Bio P2-2 Aneex 1. BCR_risk-and-permanence (3)
CO2Bio P2-2 - Second verification -ANCE / 1. CO2Bio P2-2 Verification 2 (2022-2024) / 4. Findings / ROUND II / GIP-20. Procedimiento Solicitud Autorización de Salidas Laborales.pdf */ GIP-20. Procedure for Requesting Authorization for Work-Related Field Trips.pdf*
3. Valid documents to demonstrate a low-risk level
(a) Legal/Tenure Risk:
1. Carbon Ownership:

- *Documents signed by each landowner that establish their participation in the project.*
- *Resolutions, property titles, or other documents that support legal ownership or land possession: certificates of title and land registry*

Letters of intent Letters of intent,

- *Legal compatibility matrix.*

(b) Natural/Environmental Risk: Evidence of the use of geospatial monitoring tools: REDD

(*Procedure; Reports; Geodatabase Etc.*); *Wetlands (Procedure; Reports; Geodatabase Etc.*); Anexo 8.4 *Verification points Etc. Forest area as a proportion of total area – CO2BIO P2-2. Annex 2.7. G.4 Monitoring of Hotspots – REDD+ CO2BIO P2-2. Annex 2.6. G.3 Implementation of conservation and PES activities.*

(c) Financial/Operational Risk:

- *Anexo 1.3.3. Signed contracts with participating landowners.*
- *Project financial model.*
- *Anexo 7 Project emission reports.*
- *Evidence of benefit-sharing with communities and landowners: Anexo 3.3.2.1 Distribución de Beneficios Economicos / Annex 3.3.2.1 Economic Benefits Distribution*
- *Management reports. Anexo 3.2.2.B3 - Rendición de Cuentas / Annex 3.2.2.B3 – Accountability*

(d) Governance/Political Risk:

- *Legal Compatibility Matrix.*
- *Conservation agreements signed with landowners.*
- *Stakeholder consultations;*
- *Governance strategy*

(e) Community/Stakeholder Risk:

- *Record of established communication channels (Documentation that demonstrates the communication mechanisms enabled for stakeholder dialogue (e.g., email address, phone number, records of in-person or virtual meetings).*
- *PQRS System: Anexo 3.4.1.1.1. PQRS (Petitions, Complaints, Claims, and Suggestions)*
- *Anexo 3.2.4. B5 - Capacity Building*
- *WebSite: https://cataruben.org/*

Anexo 2.4. G1 - Report and supporting documents on capacity building

CAB assessment (11/08/2025) – THIRD ROUND

According to the questions established for the risk evaluation associated with category 2.4 Governance / Political Risk Evaluation, as well as the weighting defined by the project proponent, the previously mentioned finding remains open.

This is because it is necessary for the project proponent to detail how they comply with section 4.1, regarding the classification of avoidable versus unavoidable reversals, since this classification is not included in the documents "Análisis y Gestión de Riesgos CO2Bio P2-2.xlsx" nor "CO2Bio P2-2 Annex 1. BCR_risk-and-permanence."

Therefore, the project proponent must carry out this classification and apply this distinction to all corresponding mitigation activities.

This classification is fundamental to ensure the proper implementation of compensation mechanisms, including the use of reserves or equivalent safeguards.

Project holder response (19/08/2025)

In response to the identified finding, the Monitoring Report was supplemented to include the classification of avoidable and unavoidable reversals, in compliance with section 4.1 of the "Permanence and Risk Management" tool.

Within this framework, the project distinguishes that:

- ***Avoidable reversals:*** *those that may occur due to inadequate management, negligence, or failure to implement feasible preventive measures (e.g., uncontrolled anthropogenic fires, lack of monitoring against land-use changes, or non-compliance with conservation agreements). These are subject to full compensation and may generate additional consequences, such as higher contributions to the buffer or temporary ineligibility for credit issuance.*

- ***Unavoidable reversals:*** *those that may occur despite the implementation of reasonable and context-appropriate mitigation measures (e.g., extreme floods, hurricanes, earthquakes, or uncontrollable pest outbreaks). These are compensated through the project reserve or the general buffer, without penalizing the project proponent.*

*Additionally, the document "**CO2Bio P2-2 Annex 1. BCR_risk-and-permanence (3)**" was updated to articulate this classification with the application of the **quantitative methodology for rating reversal risks**. In this way, the risk analysis integrates not only a weighted numerical component but also a qualitative typification that guides the implementation of compensation mechanisms and the proper use of the buffer reserve, ensuring coherence and traceability in the project's risk management.*

*Likewise, in the document "**Analysis and Risk Management CO2Bio P2-2**" the classification of avoidable and unavoidable reversal risks was carried out both generally and specifically for each identified risk, based on the results obtained during the quantification period and in accordance with the guidelines of the Permanence and Risk Management tool*

With these updates, the project fully addresses the requirements of section 4.1 of the standard, ensuring that all mitigation activities consider the correct distinction between avoidable and unavoidable reversals and, consequently, the application of the corresponding compensation mechanisms.

Documentation provided by the project holder

BCR_RM_CO2Bio P2-2_Vf2_Version 1.1

2. Annexes / 3. Compliance with Safeguards / 3.6. Safeguard F / 3.6.1. F13. Environmental and Territorial Planning / 3.6.1.1. Analysis of reversal risks carried out within the framework of the project / Análisis y Gestión de Riesgos CO2Bio P2-2 */ Analysis and Risk Management CO2Bio P2-2.*

2. Annexes / 3. Compliance with Safeguards / 3.6. Safeguard F / 3.6.1. F13. Environmental and Territorial Planning / 3.6.1.1. Analysis of reversal risks carried out within the framework of the project / CO2Bio P2-2 Aneex 1. BCR_risk-and-permanence (3)

CAB assessment (23/08/2025)
Considering the response from the Project Proponent and the modifications implemented regarding the weighting in the classifications of the quantitative reversal risk assessment methodology—which take into account risks as avoidable and unavoidable—as well as the information contained in the matrix "Análisis y Gestión de Riesgos CO2Bio P2-2.xlsx" and in the document "BCR_RM_CO2Bio P2-2_Vf2_Version 1.2.pdf," the finding is considered closed. However, it is important to note that in future periods this classification may vary depending on the monitoring indicator and the occurrence of the risk over time.

Finding ID	***03***	***Type of finding***	***CAR – Corrective Action Request***	***Date*** ***26/06/2025***
Section No.				
BCR 0004 Methodological Document Section 11.1.5 – Assessment of Threats to the Project Area: "Threats that may affect the maintenance of the natural ecosystem must be identified, including those arising from agricultural activities such as the entry of livestock into restored or conserved areas." *BCR Risk and Permanence Tool v2.0* *Sección 3.2 "Environmental Risk Factors": "Livestock incursion or agricultural encroachment into restoration or conservation areas must be prevented through documented and verifiable management actions. Such events can trigger a partial or total reversal of credited removals."*				
Description of finding				
During the site visit, specifically at the sampled points of the CO2Bio P2-2 Project, the presence of livestock was observed within areas classified as forest in the project area. This situation represents a risk to the integrity of the ecosystem and the permanence of GHG reductions, as well as a potential source of unaccounted or poorly managed emissions (leakage).				
Project holder response (11/07/2025)				
We confirm the observation recorded during the 2025 verification: occasional entry of cattle was detected in a forest block eligible for the El Remache property (point P2-2). Although the incident occurred outside the monitored period 2022-2024, it represented a risk to the integrity of the ecosystem. The landowner indicated that during the rainy season, saturated soil loosens posts and wires, allowing cattle to enter from neighboring pastures where traditional livestock farming is practiced.				

Once the incident was identified, the landowner was formally notified, the cattle were removed, and 180 m of fencing was reinforced with metal posts and high-tension wire. In parallel, a temporary electric fence was installed, and local managers received a workshop on good livestock management practices and forest exclusion. The affected area—less than 3 ha—experienced only light browsing, which is considered fully reversible after the cattle were excluded.

Socio-productive characterization shows that some landowners occasionally allow cattle into forested areas: during the dry season to protect them from horseflies and provide shade, and during the rainy season to keep them away from mosquitoes. These movements are temporary, do not involve tree felling or clearing, and if they were to cause degradation, the corresponding emissions are quantified during activity data monitoring within the eligible area. Nevertheless, the project maintains exclusion, monitoring, and training measures to prevent this practice from becoming permanent pressure.

The event was incorporated into the re-evaluation using the ***BCR Tool – "Permanence and Risk Management" v 2.0 (03-Jun-2025).*** *The analysis of the five risk categories yielded a final weighted score of 1.29, which remains within* ***the Low-Risk*** *range (≤ 2.5) and maintains the regulatory contribution to the buffer pool at 10%. The event, assessed under the Financial/Operational subcategory, did not alter the threshold because the impact was minimal, the damage was immediately repaired, and preventive actions significantly reduce the probability of recurrence.*

As part of ***preventive and improvement actions****, in addition to structural reinforcement, a continuous training program was implemented, including illustrated guides, videos, and technical sheets on the effects of browsing on regeneration and carbon stocks, aimed at raising awareness among landowners and operators to prevent recurrence.*

In summary, the entry of cattle was an isolated event that has been resolved, does not compromise the GHG reductions reported for 2022-2024, and does not generate uncontrolled emissions. The measures applied and the improvement plan reinforce the permanence of climate benefits and demonstrate compliance with the updated BCR Tool and REDD+ safeguards. We appreciate the observation, which has strengthened our adaptive management system, and we remain available to provide any additional information required.

Documentation provided by the project holder

CO2Bio P2-2 Aneex 1. BCR_risk-and-permanence

CAB assessment (28/07/2025) – SECOND ROUND

The Project Holder acknowledges the occasional entry of cattle into an eligible forest and the actions implemented to address it; however, a technical clarification is requested regarding whether emissions from enteric fermentation are included, the methodology used to assess the environmental and carbon impact, how livestock emissions are considered in the monitoring of future similar events, as well as the evidence supporting the reversibility of the damage and the

effectiveness of the measures adopted, in order to ensure transparency and fully close the finding with confidence.

Project holder response (08/08/2025)

According to BCR 0002 Methodology version 3.1, Section 7 (Carbon Pools and GHG Sources), the project's quantification boundaries are established as follows:

Carbon Reservoirs:

- *Aboveground Biomass*
- *Belowground Biomass*
- *Soils*

GHG Sources:

- *Combustion of Woody Biomass: CH_4 and N_2O emissions are only quantified if forest fires are identified.*

The methodology does not include the quantification of emissions from enteric fermentation as a source or reservoir.

Therefore, the occasional presence of cattle would only generate emissions if it caused deforestation or forest degradation. In such cases, these emissions would be quantified as project emissions, meaning they are attributable to deforestation or forest degradation within the project areas.

Since the risks have been identified and mitigation activities defined, preventive and improvement measures have been implemented. In addition to structural reinforcements, a continuous training program has been established. During future monitoring periods, these actions will be applied and their effectiveness evaluated, aiming to prevent the risk of deforestation and/or forest degradation caused by cattle entering forested areas.

In summary, the entry of cattle was an isolated event that has been addressed. This incident does not compromise the GHG reductions reported for 2022–2024, as monitoring of the project area and potential leakages confirms. Additionally, strengthened measures are established for the upcoming monitoring periods

CAB assessment (11/08/2025) – THIRD ROUND

Regarding the actions taken by the Project Proponent, although the methodology does not explicitly account for emissions from enteric fermentation due to its focus on REDD+ activities linked to forest cover and carbon stored in forest ecosystems, there is a need to provide additional information to support and clarify the applicability of the following tools:

Considering the BCR0002 tool of the BioCarbon Standard (BCR), the consideration of emissions from enteric fermentation falls within a broader context of quantifying greenhouse gas (GHG)

emissions and reductions related to land-use, land-use change, and forestry activities in the AFOLU sector.

Additionally, in the BCR0004 tool of the BCR, section d) establishes that the causes of land-use change include the expansion of the agricultural/livestock frontier, mining activities, extraction or loss of natural vegetation cover, infrastructure (roads and urban areas), and tourism exploitation, understood as tourism activities exceeding the ecosystem's carrying capacity.

Furthermore, section 12 of the same document states that the Project Proponent must identify, describe, and analyze the causes and agents driving land-use change in the project area, as an input to:
a) design measures and actions aimed at reducing land-use change in continental wetlands;
b) delineate the reference region.

The key elements for carrying out this analysis include:

- ✓ *Identification of the direct causes or anthropogenic activities driving land-use change, characterizing their economic and socio-cultural significance.*
- ✓ *Delimitation of the spatial patterns associated with these activities.*
- ✓ *Measurement of their impact on Wetland transformation through multi-temporal spatial analysis, allowing for the establishment of the relationship between the Wetland area, changes in natural vegetation cover, and the identified direct causes.*

Therefore, the finding remains open, as it is necessary to take into account what is established in the aforementioned methodologies and sections.

Project holder response (20/08/2025)

The project proponent would like to clarify that:

Since the finding refers to the entry of livestock into forested areas, it has been justified that this specific, non-generalized situation could pose a risk to the integrity of the forests. Therefore, actions have been included to mitigate this risk. However, if this activity were to cause forest degradation or deforestation, it would be identified as project emissions, in accordance with the guidelines of methodology BCR 0002.

It is important to clarify that the project boundaries—referring to sources, sinks, as well as temporal and spatial limits—were defined in the project design. The project design was validated under a methodological scope focusing on REDD+ activities and activities that avoid land-use change in continental Wetlands. The focus of this type of project is the quantification of GHG emissions resulting from the loss of forest cover or changes in continental Wetland cover within the project area and the leakage area.

All analysis and compliance with the criteria for establishing the project boundaries are validated in the DDP, Section 3, specifically:

3.2 Project boundaries, sources and GHGs
3.2.1 Spatial limits of the project
3.2.1.1 Eligible Wetland Areas in the Project Boundary.
3.2.1.1.1 Leakage Area of Wedlands
3.2.1.1.2 Reference Region
3.2.1.2 Delimitation of the Forest Ecosystem
3.2.1.2.1 REDD+ eligible area.
3.2.1.2.2 Reference Region
3.2.1.2.3 Leakage area REDD+
3.2.2 Carbon reservoirs and GHG sources
3.2.3.1 Sources of GHGs
3.2.3 Time limits and analysis periods

Enteric fermentation, which is a source of CH4 emissions generated by livestock, is not part of the emission sources defined and validated in the Project Document (PD) or in methodologies BCR0002 and BCR0004. Its inclusion would require a different methodology, a change in the project scope, and consequently, an entirely different validation process.

Currently, the mention of the expansion of the livestock frontier in the methodology refers to the driver of change that causes the loss of natural cover, not the quantification of direct emissions from livestock. In other words, livestock is analyzed as a cause of the transformation of natural cover, but its intrinsic emissions (enteric fermentation) are not measured as part of the project's carbon balance.

Additionally, the reference to item d is part of the applicability conditions of methodology BCR0004, which were validated and detailed in the DDP, Section 3.1.1 "Applicability conditions of the methodology" and Section 2.3.1 "Analysis of the causes and agents of deforestation and transformation of natural coverage.".

Finally, item 12 of the BCR0004 methodology refers to the analysis of causes and agents. This analysis, necessary for defining the boundaries of the reference region and the project activities during the validated project design, is included in Section 2.3.1 "Analysis of causes and agents of deforestation and transformation of natural coverage," and specifically for methodology BCR0004 in Section 2.3.2 "Causes and drivers of land use change in wetlands."

In conclusion, we can respond to the requested clarification by stating that the project was validated, implemented, and monitored in a complete, precise, and conservative manner, with

full technical justification regarding the applicability of the standard, methodologies, and tools, in terms of project boundaries, the analysis of causes and agents, and the applicability conditions of the methodologies
Documentation provided by the project holder
BCR_DdP_CO2BIO_P2-2_Version_2.3_Nueva_plantilla */ BCR_DdP _CO2BIO P2-2_Version 2.3_ New template*
CAB assessment (23/08/2025)
As a result of the actions taken by the project proponent regarding the established clauses, as well as the technical justification provided on the applicability not only of the standard but also of the methodologies in relation to the project boundaries, the finding is considered closed.

Finding ID	***04***	***Type of finding***	***CAR – Corrective Action Request***	***Date*** ***26/06/2025***
Section No.				
BCR Standard v.3.4. Section 4.4 "Participation of local actors and shared benefits": *"The project owner must demonstrate that there is a clear, transparent, and documented process for informing, consulting, and involving the communities and actors involved. This includes the timely delivery of information related to benefits, distribution of income from VCCs, and other relevant aspects of the project."* *BCR Standard v.3.4. Section 4.3.2 "Accessibility of information": "The project must implement appropriate mechanisms adapted to the local context to ensure that all stakeholders, including those with limited access to or difficulties in using digital technologies, can participate and be informed."*				
Description of finding				
During the on-site visit to the CO2Bio P2-2 project, and based on interviews with landowners and managers, comments of dissatisfaction were identified regarding the lack of clarity regarding payments derived from Verified Carbon Credits (VCC). It was also evident that communication between the project and some local actors has been limited, mainly because certain landowners or managers have difficulty using mobile devices.				
Project holder response (11/07/2025)				

During the verification process, concerns were raised by some holders about the lack of clarity regarding payments derived from Verified Carbon Credits (VCCs) and the difficulties certain managers had in using mobile devices. However, there is documentary evidence demonstrating the ongoing operation of a multi-channel communication and accountability system:

- ***2022-2024 Communications Plan Matrix: includes** radio bulletins, in-person outreach events, mailings, and distribution of printed and digital material, ensuring timely dissemination of progress and obligations.*
- ***Regional Beneficiary Service Center (CARBO):** a multidisciplinary team that handles technical, administrative, and financial inquiries in person and remotely (by phone, WhatsApp, and email).*
- ***PQRS/RCCS system:** In 2023–2024, 12 requests, complaints, and claims were handled, all of which were resolved within the established deadlines, demonstrating effective responsiveness.*

- ***Newsletters and participatory forums:** Nine newsletters were issued between 2022 and 2024, and multiple meetings—both virtual and in-person—were held to present results, clarifications, and next steps.*

- ***CCV account statements and issuance reports:** Delivered by property after each verification, these detail certificates generated, income received, and available balances.*

Recognizing the need to further strengthen understanding and access to financial information, the following reinforcement actions will be implemented as part of continuous improvement:

1. *Printed account statements distributed semi-annually at each property, accompanied by field visits to explain movements and payments.*

2. *Toll-free hotline and basic text messages for managers without access to smartphones.*

3. *Explanatory modules in local workshops on reading financial reports and using the PQRS/ RCCS system.*

4. *Update of the safeguard's matrix (Annex 1, Safeguard B) with new indicators for "Beneficiary satisfaction" and "Response time to PQRS," reported quarterly.*

These measures will ensure that information on CCV generation and distribution is clear, accessible, and verifiable for all stakeholders, in compliance with the transparency requirements of Safeguard B and BCR standards. We remain available to provide any additional evidence that the audit team deems necessary.

Documentation provided by the project holder

(2. Annexes / 3. Compliance with Safeguards / 3.2. Safeguard B / 3.2.1. B2 - Transparency and access to information / 2.1 Canales de Comunicación)/2.1 Communication channels *(2. Annexes / 3. Compliance with Safeguards / 3.2. Safeguard B / 3.2.1. B2 - Transparency and access to information /* 2.2 Sistema de PQRS)/ 2.2 RCCS/PQRS System (*2. Annexes / 3. Safeguards Compliance / 3.2. Safeguard B / 3.2.2. B3 - Accountability / 2.4* Informes de Gestión)/ 2.4 Management report *(2. Annexes / 3. Safeguards Compliance / 3.2. Safeguard B / 3.2.2. B3 - Accountability / 2.4.1* Estados de Cuenta)./ 2.4.1 Account statements *(2. Annexes / 3. Safeguards Compliance / 3.2. Safeguard B / 3.2.2. B3 - Accountability / 2.4.2* Reportes de Emisión de Certificados de Carbono)/ 2.4.2 Carbon Certificate Issuance Reports
CAB assessment (28/07/2025) – SECOND ROUND
The project owner has implemented the CO2Bio P2-2 Communications Plan (2.1.1 CO2Bio P2-2 Communications Plan.xlsx) and has diverse channels for disseminating information and providing support to beneficiaries; However, it has been identified that these mechanisms do not fully take into account the limited availability of telephone and internet signals among farm managers and landowners, which affects the actual accessibility of information and the effective participation of communities. *In particular, although PQRS are recorded as closed, follow-up mainly by telephone calls is not very feasible given the territorial conditions, and training conducted via email limits attendance and understanding for those who do not have adequate internet access, contravening the principles established in Safeguard B.2 on transparency and access to information, which must be clear, appropriate, easily accessible, and available to all interested parties, with mechanisms adapted to particular needs and materials that facilitate understanding.* *The current management of printed account statements for accountability purposes is recognized as a positive practice; however, owners require a more detailed and straightforward explanation, and it is considered necessary to generate clear and direct management reports indicating how the resource has been invested and the progress made in implementation, in line with the provisions of Safeguard B.3.* *Additionally, it is considered essential to strengthen Safeguard B.5 in relation to capacity building, ensuring that the actors involved receive continuous, contextualized, and accessible training that allows them to make documented, analyzed, and informed decisions. These improvements should include timely and clear information on payment dates to increase transparency and confidence in the process.* *Given the above, it is requested that communication channels and training strategies be reviewed and adjusted to ensure their effectiveness and adequacy to the local context, and that concrete evidence and plans be presented to demonstrate strict compliance with Safeguards B.2, B.3, and B.5.*

Project holder response (08/08/2025)

In response to the finding issued, related to the need to adjust communication channels and training strategies within the framework of the CO2Bio P2-2 Project, a detailed presentation of compliance with safeguards B.2, B.3, and B.5 is provided below, along with the improvement actions implemented and the respective means of verification.

These actions are aligned with the principles of the BCR Standard, which requires ensuring inclusive access to information and participation mechanisms adapted to the territorial context. The strategies described have been designed considering the limitations of connectivity, educational levels, and sociocultural conditions of ecosystem managers, adapting channels, formats, and languages to the realities of the territory.

1. Safeguard B.2 – Transparency and Access to Information

The project has implemented a multi-channel communication strategy supported by document "2.1.1 CO2Bio P2-2 Communications Plan," which contains a robust matrix with specific activities, channels, responsible parties, indicators, media, and timelines, ensuring the delivery of clear and timely information. This matrix includes:

- Project stages: implementation, monitoring, verification, CCV marketing, and resource transfer.

- Media used: newsletters, emails, radio spots, face-to-face meetings, WhatsApp, printed and digital material.

- Key activities: communication about PIPs, biodiversity monitoring, implementation status, issuance of certificates, and payments.

Currently, the project is in the loyalty stage, and communication focuses on monitoring reports, verification processes, marketing reports, and economic transfers. Each activity is linked to accessible and verifiable evidence. In addition, the PQRS System was implemented, which has been subject to monitoring, systematization, and continuous improvement.

Relevant evidence includes:

- *GIP-04 V3 and V4 procedures.*
- *PQRSF Management Report 2022-2024.*

- PQRSF Response 24-0237.

- Database of PQRS received and addressed in 2023 and 2024.

Finally, this safeguard includes the fact that the project was registered with RENARE, ensuring traceability and alignment with national climate commitments.

2. Safeguard B.3 – Accountability

The project has developed multiple accountability tools, including:

- Newsletters: 2 in 2022, 6 in 2023, and 1 general newsletter in 2024, sent digitally and in person. The newsletters communicate progress, achievements, and next steps.

- CCV Emission Reports: delivered to each manager, they break down the number of certificates generated per property.

- Account Statements: they detail income received, movements, and inventory of certificates per property.

In addition, participatory forums and feedback spaces with local actors have been promoted, strengthening community ties and understanding of the process.

3. Safeguard B.5 – Capacity Building

A systematic training plan was implemented between 2022 and 2024, aimed at strengthening the technical, environmental, social, and financial capacities of ecosystem managers. Actions included:

- 13 thematic training sessions, including: Sustainable productive activities. Carbon measurement and monitoring. Forest restoration. Tax obligations. REDD+ safeguards and conservation figures.

- Active participation in the Biodiversity + Carbon & Water Forums, with exchange of experiences between local and regional actors.

Each session is documented with its respective records, content, participants, and impacts, which form part of the safeguard monitoring report.

With the intention of further strengthening compliance with the safeguards outlined above, the project will implement the following corrective and improvement actions:

- *Bimonthly distribution of printed account statements, accompanied by explanatory visits to each property.*
- *Toll-free line with basic text messages, aimed at users without access to smartphones.*
- *Simplified modules in local workshops, focused on reading financial reports, using the PQRS system, and payment dates.*
- *Additional indicators in the safeguard's matrix, such as "Beneficiary satisfaction" and "PQRS response time," with quarterly reporting.*
- *Readjustment of the training schedule, prioritizing financial and operational content, adapted to the technical level and sociocultural context of the managers.*

The corrective actions described will be monitored quarterly through the safeguard's matrix, with specific indicators (e.g., % satisfaction, % effective access to information), which will be reported in the project's newsletters and semi-annual reports.

The project team reaffirms its commitment to continuous improvement, effective participation, and strict compliance with social and environmental safeguards.
Documentation provided by the project holder
*2. Annexes / 3. Safeguard Compliance /*Plan y Reporte Monitoreo SALVAGUARDAS (CO2Bio P2-2)*/ Monitoring Plan and Report SAFEGUARDS (CO2Bio P2-2)* *9.1.1.1. Safeguard B.2 – Transparency and Access to Information* *2. Annexes / 3. Safeguard Compliance / 3.2. Safeguard B / 3.2.1. B2 - Transparency and Access to Information / 2.1 Communication Channels /2.1* Plan de comunicaciones CO2Bio P2-2 */ 2.1 CO2Bio P2-2 Communications Plan* *1. Implementation of project activities* - Concertación de PIP */ PIP coordination* - Capacitaciones */ Training* - Eventos */ Events* - Publicaciones */ Publications* - Comunicación PIP */ PIP Communication* - Monitoreo de biodiversidad */ Biodiversity monitoring* - Estado de implementación */ Implementation Status* *2. Monitoring Report and Auditable Inputs* - Insumos auditables */ Auditable Inputs* - Boletines informativos */ Newsletters* *3. Project verification process* - Comunicación estado del proyecto */ Project status communication* *4. CCV trading* - Reporte de emisión (Correos) */ Emission report (emails)* - Reunión Presencial */ Face-to-face meeting* *5. Resource transfers* - Comunicación información de pagos */ Payment information communication* - Recordatorios de facturas */ Invoice reminders* - Confirmar datos de proveedor */ Confirm supplier data* *2. Annexes / 3. Safeguard Compliance / 3.2. Safeguard B / 3.2.1. B2 - Transparency and access to information /2.2* Sistema de PQRS */* 2.2.RCCS System - Procedimientos GIP-04 V3 y V4. */GIP-04 V3 and V4 procedures.* - Informe de Gestión PQRSF 2022-2024. */ PQRSF Management Report 2022-2024.* - Respuesta PQRSF 24-0237. */ PQRSF Response 24-0237.* - *Database of PQRS received and addressed in 2023 and 2024 /* 2023 y 2024. *2. Annexes / 3. Safeguard Compliance / 3.2. Safeguard B / 3.2.1. B2 - Transparency and access to information / 2.3* Registro RENARE */ RENARE Registry* *9.1.1.2. Safeguard B.3 – Accountability* *2. Annexes / 3. Safeguard Compliance / 3.2. Safeguard B /* 3.2.2. B3 - Rendición de cuentas*: / Accountability* - Informes de gestión: 2022, 2023 y 2024 */ Management reports: 2022, 2023, and 2024* - Estados de cuenta */ Statements of account*

9.1.1.3. Safeguard B.5 – Capacity Building 2. Annexes / 3. Safeguard Compliance / 3.2. Safeguard B /3.2.4. B5 - Fortalecimiento de capacidades / *3.2.4 B5- Capacity building* - Informes capacitaciones / *Training reports* - Capacitaciones / *Trainings*
CAB assessment (11/08/2025)
Considering not only the actions already implemented and recorded in the "2. 1.1 CO2Bio P2-2.xlsx communications plan" matrix, but also the support and evidence presented in the various folders that back up compliance with each of the safeguards established in previous findings, as well as the project owner's determination to strengthen such compliance through the implementation of new corrective actions and opportunities for improvement, this finding is considered closed. *However, it is imperative that, in future verification periods, the implementation and monitoring of the aforementioned corrective actions be traceable and measurable.* *Likewise, based on evidence related to the agreement of PIPs, there has been a limited response from the project owner to attend the requested sessions. Therefore, it is fundamental to strengthen not only the relationship with the landowners, but also to establish mechanisms to measure their commitment and understanding. This is critical to ensure the success and permanence of the project and the fulfillment of its biodiversity conservation objectives in the corresponding areas, considering this as a future action.*

Finding ID	**05**	***Type of finding***	***CAR - Corrective Action Request***	***Date*** ***26/06/2025***
Section No.				
BCR Standard v. 3.4. Section 4.4 "Participation of local actors and shared benefits": *"Projects must implement training and capacity-building activities aimed at the local actors involved, ensuring their effective participation and documenting the results achieved."* *Section 4.3.1 "Monitoring of social indicators":* *"The project must establish monitoring and evaluation mechanisms to verify the scope and effectiveness of planned social activities, including training, awareness-raising, and capacity building."*				
Description of finding				
During the document review of the CO2Bio P2-2 project, the Training Report issued by the Fundación Cataruben was analyzed, which showed that attendance at most of the sessions was less than 20 people, including both landowners and land managers. Given				

that the project consists of approximately 120 properties, the low participation suggests that the goals established for the capacity-building component should be reconsidered, both in quantitative terms and in terms of representative scope.
Project holder response (11/07/2025)
During the evaluated monitoring period, 74 Ecosystem Managers participated in the 10 technical training sessions and knowledge-sharing meetings held within the framework of the project. These managers represent approximately 70 linked properties, indicating direct participation of close to 58% of the total number of properties (120). *In addition, expanded spaces for knowledge exchange were developed, such as the Biodiversity, Carbon, and Water Forums held in 2022 and 2023, which were attended by a total of 839 and 436 people, respectively. These events brought together managers from the CO2BIO P2-2 project ecosystem, strategic allies, and local organizations, expanding the scope of the capacity-building component.* *Although the cumulative participation in the training spaces reflects a representative reach in relation to the properties involved, it was identified that one of the main factors that has limited continuous attendance at the workshops is the intermittent availability of internet in rural areas, which particularly affects ecosystem managers with less access to connectivity.* *In response to this territorial context, and with the aim of expanding access to training content during the next implementation periods, the following strategies have been proposed and included in the Training Report (Annex 2.4.1):* ● *Availability of recordings of virtual activities for asynchronous consultation, shared through channels such as WhatsApp and email.* ● *Use of alternative methods of knowledge transfer, such as sending teaching materials in accessible formats (PDF, audio, short video).* ● *Coordination with technical site visits, incorporating face-to-face training sessions adapted to the interests of participants and the logistical conditions of the territory.*
Documentation provided by the project holder
G.1 - Informe y soportes de fortalecimiento de capacidades / *G1. Report and support materials for capacity building*
CAB assessment (28/07/2025) – SECOND ROUND
The project owner has correctly identified a limiting factor and has implemented specific, tailored, and relevant measures to mitigate it, in line with the Participation Safeguard. However, in order to consider the finding closed, it is essential that the report includes solid documentary evidence demonstrating effective implementation (massive participation representative of the project beneficiaries) and the preliminary results of the adaptive strategies applied. In addition, a monitoring and evaluation plan must be

presented to ensure continuous improvement in the inclusion and participation of all managers in future cycles.

Furthermore, clarification is required on how the provisions of Safeguard D10. Participation will be specifically complied with, which states that the participation structures of each stakeholder group, especially communities, must be recognized and respected, in accordance with national legislation and international agreements signed by Colombia.

Therefore, given that compliance with these key aspects of Safeguard D10 has not been clearly demonstrated, it is considered that the finding remains open and that this additional and detailed information must be provided in order to proceed with its closure.

Project holder response (01/08/2025)

In response to the finding issued regarding compliance with Safeguard D10 – Participation, the following is the supporting documentation that demonstrates the implementation of adaptive strategies, preliminary results, and a monitoring plan aimed at continuous improvement, as well as specific articulation with the principles of said safeguard.

1. ***Effective implementation of adaptive strategies***

The project has implemented FC-GPP-31. Procedure for Managing Participation in Project Training Processes, an institutional document that establishes a methodology to ensure the representative inclusion of actors in training processes. This procedure articulates mechanisms to address structural barriers such as limited connectivity, geographical distance, or time availability, through:

- Synchronous and asynchronous training actions.

Systematic recording of attendance and satisfaction levels.

- Application of the Expected Virtual Connection Indicator (ICVE).

- Sending summaries with comprehension tests as a compensatory mechanism for those who were unable to attend the live sessions.

Monitoring and continuous improvement plan

In line with procedure FC-GPP-31, a monitoring plan is implemented that includes:

- *Bimonthly monitoring of key participation indicators.*
- *Annual training impact assessments.*
- *Semiannual review of adaptive strategies.*
- *Active channels for continuous feedback.*
- *Documentation consolidation for auditing and decision-making.*

2. Documentary evidence of implementation and preliminary results

Attached is the POA Training file, which documents:

- *Interests expressed by ecosystem managers regarding training content.*
- *Diagnosis of barriers to participation.*
- *Outline of the training plan for the following cycles, aligned with the aforementioned institutional procedure.*

In addition, links and supporting materials that validate the implementation of the training are included, such as:

- Digital invitations and materials sent to absent managers through channels such as WhatsApp and email.
- Recordings with verifiable attendance records
These actions reflect the effort to achieve effective, representative participation that is adapted to local conditions.
3. Communication channels and participation mechanisms (Safeguard D10)
One of the essential aspects of complying with Safeguard D10 is ensuring effective, culturally relevant, and permanently active communication channels. In this regard, the project has provided for:
- Dissemination of invitations and content through digital and community media.
- Feedback mechanisms such as virtual mailboxes, WhatsApp groups, perception surveys, and virtual meetings.
In an equivalent way, the documentation contained in folder 3.4.1.2 - Participation Mechanisms is attached, which includes evidence of the active participation of the Fundación Cataruben in instances such as:
- SIRAP Orinoquia, where its participation in technical committees is recognized as a representative actor of regional conservation and sustainability initiatives.
- SIRAP Orinoquia, where its participation in technical committees as a representative of regional conservation and sustainability initiatives is recognized.
- ASOCARBONO, through certification that accredits Cataruben as an active member with a voice in strategic decisions in the voluntary carbon market in Colombia.

In addition, as part of the engagement strategy, a governance committee has been established for the project. In this committee, landowners democratically elect their representatives, who collaborate with delegates from the Cataruben Foundation and Latam.
This evidence shows how the engagement structures of the actors involved have been respected and strengthened.
Finally, it is important to point out that the Co2bio p2-2 project is carried out on private properties, not in collective communities (indigenous, Afro-descendant, or peasant). The landowners are clearly identified, and the Fundación Cataruben has established long-term agreements with them.
This is a key point for interpreting safeguards. The agreement formalized between the parties, in a clear, transparent, informed, and legal manner, outlines the aspects of the project and the channels for communication and participation. This ensures compliance with national legislation on agreements between private parties and guarantees the rights of the parties. (See Section 5 of the ToP and Section 7 of the Monitoring Report.)

This is particularly important because, even though Cataruben issues invitations through all available means and channels (as evidenced above), ensuring communication and opportunities for participation, project participants may exercise their right not to attend because the topic in question is not of interest to them or for other private reasons.

Thanks to this agreement and ongoing dialogue, communication, and relationship building, Cataruben has managed to strengthen its communication and participation systems through all available channels. The foundation demonstrates a constant commitment to continuous improvement, also benefiting from its location in the same region as the project, which facilitates more fluid communication and greater proximity to participants.

Documentation provided by the project holder

Activity: *Provide training and skills development for men and women involved in the project in the technical-environmental, social, and administrative-financial areas, with the aim of strengthening their capacities and improving decision-making in line with the project's objectives.*

2. Annexes / 2. Project activities/ 2.4. G.1:

- *2. Annexes / 2. Project activities/ 2.4. G.1 / 2.4.1.1 Capacitación - Actividades productivas sostenibles, Soluciones hídricas alternativas y Gestión del recurso hídrico / 2.4.1.1. Training - Sustainable productive activities, Alternative water solutions, and Water resource management*
- *2. Annexes / 2. Project activities / 2.4. G.1 / 2.4.1.2 Capacitación - Buenas prácticas para la prevención de incendios forestales / 2.4.1.2 Training - Good practices for forest fire prevention*
- *2. Anexes / 2. Project activities / 2.4. G.1 /2.4.1.3 Capacitación - Figuras de Conservación / 2.4.1.2 Training - Conservation figures*
- *2. Annexes / 2. Project activities / 2.4. G.1 /2.4.1.4 Capacitación - Gestión Forestal Sostenible / 2.4.1.3 Training - Sustainable Forest Management*
- *2. Annexes / 2. Project activities / 2.4. G.1 /2.4.1.5 Capacitación - Importancia y clasificación de los Wetlandes - Estrategias de conservación de la biodiversidad /2.4.1.5 Training - Importance and classification of wetlands - Biodiversity conservation strategies*
- *2. Annexes / 2. Project activities / 2.4. G.1 / 2.4.1.6 Capacitación - Medición y monitoreo de carbono en Wetlandes y bosques / 2.4.1.6 Training - Carbon measurement and monitoring in wetlands and forests*
- *2. Annexes / 2. Project activities / 2.4. G.1 /2.4.1.7 Capacitación - Obligaciones tributarias / 2.4.1.7 Training - Tax obligations*
- *2. Annexes / 2. Project activities / 2.4. G.1 / 2.4.1.8 Capacitación - Restauración y Rehabilitación Forestal / 2.4.1.8 Training – Forest restoration and rehabilitation*
- *2.4.1.9 Capacitación - Salvaguardas REDD+ 2024 / 2.4.1.9 Training -REDD+ Safeguards 2024*
- *2. Annexes / 2. Project activities/ 2.4. G.1 / 2.4.1.10 Encuentro Virtual - Planes de Implementación Predial / 2.4.1.10Virtual Meeting - Land Implementation Plans*
- *2. Annexes / 2. Project activities / 2.4. G.1 / 2.4.1.11 III Foro de biodiversidad + Carbono & Agua /2.4.1.11 III Forum on Biodiversity + Carbon & Water*

- *2. Annexes / 2. Project activities / 2.4. G.1 / 2.4.1.12 IV Foro de biodiversidad + Carbono & Agua / 2.4.1.12 IV Forum on Biodiversity + Carbon & Water*
- *2. Anexes / 2. Project activities / 2.4. G.1 / 2.4.1.13 Programa Ecolíderes / 2.4.1.13 Ecolíderes Program*
- *2. Annexes / 2. Project activities/ 2.4. G.1 / Plan de Monitoreo y Evaluación – Participación en Fortalecimiento de Capacidades / Monitoring and Evaluation Plan – Participation in Capacity Building*

2. Annexes / 2. Project activities / 2.4. G.1 Monitoring and Evaluation Plan – Participation in Capacity Building / FC-GPP-31. Procedimiento para la Gestión de la Participación en Procesos Formativos de Proyectos / FC-GPP-31. Procedure for Managing Participation in Project Training Processes

2. Annexes / 2. Project activities/ 2.4. G.1 / Monitoring and Evaluation Plan – Participation in Capacity Building / POA Capacitaciones / POA Training

***Safeguard D10** – Participation*

2. Annexes / 3. Safeguard Compliance / Plan y Reporte Monitoreo SALVAGUARDAS (CO2Bio P2-2): / Monitoring Plan and Report SAFEGUARDS (CO2Bio P2-2):

2. Annexes / 3. Safeguard Compliance /3.4. Salvaguarda D: / 3.4. Safeguard D

- *2. Annexes / 3. Safeguard Compliance /3.4. Safeguard D / 3.4.1.1 Medios de comunicación / 3.4.1.1 Media*
- *2. Annexes / 3. Safeguard Compliance /3.4. Safeguard D /3.4.1.2 Mecanismos de participación / 3.4.1.2 Participation Mechanisms*

2. Annexes / 3. Safeguard Compliance / 3.2. Safeguard B / 3.2.1. B2 - Transparency and Access to Information/ 2.1 Communication Channels / 2.1.1 Plan de comunicaciones CO2Bio P2-2: / 2.1.1 CO2Bio P2-2 Communications Plan

- *2.1.1.1.2 Capacitaciones / 2.1.1.1.2 Training*
- *2.1.1.1.3 Eventos / 2.1.1.1.3 Events*

Governance Strategy

2. Annexes / 3. Safeguard Compliance / 3.2. Safeguard B / 3.2.3. B4 - Recognition of forest governance structures / 2.7 Estrategia de Gobernanza: / 2.7 Governance Strategy:

- *2. Annexes / 3. Compliance with Safeguards / 3.2. Safeguard B / 3.2.3. B4 - Recognition of forest governance structures/ 2.7 Governance Strategy / 3.2.3.1.1 - G2- Estrategia de Gobernanza / 3.2.3.1.1 - G2- Governance Strategy*

- *2. Annexes / 3. Compliance with Safeguards / 3.2. Safeguard B / 3.2.3. B4 - Recognition of forest governance structures / 2.7 Governance Strategy /3.2.3.1.2*

Informe Gestión 2024 Mesa de Gobernanza CO2Bio.pdf / *3.2.3.1.2 Management Report 2024 CO2Bio Governance Board.pdf*
CAB assessment (11/08/2025)
Based on the response provided by the project owner regarding the implementation of procedure FC-GPP-31, the monitoring plan, and the POA file, as well as the supporting documentation for the training sessions previously conducted and their corresponding annexes, the finding is considered closed. *However, it is essential that in future verification periods, the implementation and monitoring of the aforementioned corrective actions be traceable and measurable.*

Finding ID	***06***	***Type of finding***	***CAR - Corrective Action Request***	***Date*** ***28/07/2025***
Section No.				
BCR Standard v. 4.0, Section 12.3.1 "Leakage Management" *"Project proponents shall identify, assess, and account for significant leakage incidences that may result from the implementation of mitigation activities. Where applicable, project proponents shall define leakage boundaries, evaluate the risks of activity displacement and market leakage, implement measures to minimize such risks, and apply conservative deduction factors for residual emissions."*				
Description of finding				
During the document review of the CO2Bio P2-2 project, the Monitoring Report was analyzed, which highlighted the need to provide more detailed and substantiated information regarding the establishment and management of the leakage belt, in accordance with the BioCarbon Standard (BCR), version 3.2. In particular, clarity is required on the criteria and methodologies used to define the location and extent of the leakage belt (leakage area), considering the contextual range or mobility of the project. This is necessary because the report mentions the following: ● *For BCR0002 a leakage belt is defined as a buffer of 250 meters from the edge of the property; this belt has an area of 27.005 hectares, within which all forest areas are quantified for the temporal limits of the baseline and the monitoring period.* ● *While for BCR0004, a leakage belt is delimited with a buffer of 600 meters from the edge of the property, this belt has an area of 63.916 hectares, within which are quantified all natural vegetation covers that according to the methodology item 10.3 meet the eligibility criteria, for the temporal limits of the baseline and the monitoring period.*				

It is also essential to explain how new areas of potential leakage or deforestation expansion attributable to project activities are updated, ensuring that the leakage belt includes all potential sources of displaced emissions to avoid underestimation of environmental risk.

Additionally, the monitoring system implemented in this area must be detailed, including the use of spatial and satellite data (e.g., fire hotspots detection and land cover change imagery) and the consideration of baseline scenarios to measure and quantify emissions within the leakage belt. This is fundamental to avoid double counting and to ensure the integrity, accuracy, and transparency of the reported emissions reductions.

In addition, the project proponent must provide clear and detailed cartographic information that supports the territorial delimitation of the project in relation to adjacent Indigenous reserves or, alternatively, to ensure no overlap with collective territories. For this purpose, it is additionally requested to deliver a shapefile that allows visualization of the adjacency with collective Indigenous lands, areas of environmental importance (National Natural Parks, Flora and Fauna Sanctuaries, Integrated Management Districts, Protective Forest Reserves, unique Natural Areas, and RAMSAR Wetlands, among others) within the project area. Furthermore, a second shapefile is required showing the difference after excluding the four plots initially considered, reducing the total from 124 plots linked to the project, in order to demonstrate the impact on the extent and boundaries of the intervention area.

This information is essential to accurately assess the interaction and potential impact of the project on Indigenous territories, ensuring transparency and proper territorial adjustment in accordance with the applicable safeguards and current regulatory framework.

***Project holder response** (08/08/2025)*

First, it should be clarified that the applicable version of the standard is 3.2, not 4.0, due to the current phase of the project verification process (see finding 07). Second, geospatial information related to the delimitation of activity data, including the leakage area, is specified below:

1. Delimitation of the Leakage Area

The delimitation of the leakage area has been defined based on the criteria and procedures specified in the DDP, ensuring strict compliance with the applicable standards and methodologies. These elements have been reviewed and approved by a VVB during the project validation.

The criteria and evidence for the delimitation of the leakage areas are established in sections 3.2.1.1.1 Leakage Area of Wetlands and 3.2.1.2.3 Leakage Area REDD+ of the Project Document version 2.3.

These areas have been monitored to quantify any increase in deforestation, forest degradation, and/or wetland degradation during the monitoring period in accordance with section 14.5.1 of the BCR 0002 methodology and section 19.2 of the BCR 0004

methodology. Such increases are quantified and subtracted from the project's mitigation results in accordance with the methodological guidelines.

2. Delimitation of Leakage Areas

In accordance with the BCR0002 methodology version 3.1, section 8.3 "Leakage Area," the leakage belt was defined during validation, as described in sections 3.2.1.2.3 "Leakage Area REDD+" of the project DDP.

Subsequently, during verifications, emissions are monitored and quantified. During the current monitoring period, the leakage area was monitored following the criteria and procedures established in section 14.5.1 "Activity Data" of the BCR 0002 methodology. This monitoring was carried out for both the project areas and the leakage áreas, see Annex 8.1.3 REDD+ geodatabase. For wetlands, monitoring was conducted in accordance with the BCR 0004 methodology, section 19.1 "Annual Land Use Change in the Project Area" and section 19.2 "Annual Land Use Changes in the Leakage Area", see Annex 8.2.3 Geodatabase Wetlands.

3. Geospatial Information

Regarding the geographic information, it is important to clarify that the project maintains a high-quality and robust database for each applied methodology, in compliance with the criteria established in Section 18.1 "Monitoring of Project Boundaries" of the BCR 0004 methodology and Section 14.1 "Monitoring of Project Boundaries" of the BCR 0002 methodology. This ensures data traceability, data assurance, and the availability of the requested shapefiles.

The databases detail:

The spatial boundaries of the reference region, the project area, and the leakage area, as well as the boundaries of other projects, indigenous reserves, and other zones. Each geodatabase (GDB) includes a data dictionary. The GDBs are provided in Annex 8: Geospatial. Additionally, each GDB has its respective data dictionary.

Finally, the requested shapefiles are generated from these geodatabases.

***Shapefile 1.** Project area versus:*

- *Indigenous reserves, showing that there are no overlaps.*
- *Natural Parks with no project areas within the boundaries of the parks.*
- *Integrated Management Districts, with some plots located inside the district; however, these management districts do not correspond to collective/community lands.*
- *Ramsar Sites: None are located within the project areas.*

***Shapefile 2**. Eligible project areas within the properties, before and after the exclusion of 4 properties.*

Documentation provided by the project holder

- *2. Annexes> 9. Post-Registration Changes : BCR_DdP_CO2BIO P2-2_Version 2.3_Nueva plantilla / BCR_DdP CO2BIO P2-2_Version 2.3 New template*
- *Geodatabase REDD+ BCR0002: Annex 8.1.3 geodatabase REDD+*
- *Data dictionary GDB REDD+ : Annex 8.1.2. Diccionario de datos GDB REDD+ P2-2 / 8.1.2. Data Dictionary GDB REDD+ P2-2*
- *Geodatabase Wetlandes BCR0004: Annex 8.2.3 Geodatabase Wetlandes*

- *Data Dictionary GDB Wetlandes : 8.2.2. Diccionario Datos geográfico GDB WETLAND / 8.2.2. Geographic Data Dictionary GDB WETLANDS* - ***Shapefile 1 :** 2. Annexes> 8. geospatial > 8.5 OVV Requests>8.5.1. Comunidades Colectivas / 8.5.1. Collective Communities* - ***Shapefile 2 :** 2. Annexes > 8. Geospatial > 8.5 OVV Requests> 8.5.2. Vectorial Con y Sin Cambios Posteriores Resgistro / .5.2. Vectorial With and Without Post-Registration Changes*
CAB assessment (11/08/2025)
Derived from the attention carried out by the project proponent regarding the delimitation of the leakage belt, as well as the identification of the GDBs and the requested shapefiles, it is established that, after verifying the cartographic information provided, it was determined that the leakage areas, the reference area, and the project area do not present overlaps and are in accordance with the BCR guidelines.

Finding ID	***07***	***Type of finding***	***CAR – Corrective Action Requests***	***Date 28/07/2025***
Section No.				
BCR Standard v. 4.0, version 4.0, published on July 14, 2025				
Description of finding				
During the review of the Project Monitoring Report, it was identified that it does not adequately reflect the requirements and criteria established in the most up-to-date version of the BioCarbon Standard (BCR Standard) version 4.0, published on July 14, 2025. In accordance with the provisions of this standard, which establishes new guidelines and obligations to ensure integrity, transparency, and technical rigor in the quantification and monitoring of greenhouse gas reductions and removals, it is required that the report be revised to incorporate and reflect the current guidelines, methodologies, and requirements *The project proponent is requested to update the Monitoring Report considering the following key aspects indicated in version 4.0 of the BCR Standard:*				

- *Review and, if necessary, update the baseline scenario and applied methodologies, taking into account current national and sectoral policies.*
- *Incorporate procedures to ensure data quality in accordance with the standard's guidelines.*
- *Integrate criteria for the quantification, management, and updating of leakage risk, permanence, and other uncertainty factors in line with the new version.*
- *Include all required documentation in English, in accordance with the standard's requirements.*
- *Adopt any new requirements that may apply to future quantification periods or those in the process of renewal.*

The adoption and proper implementation of the BCR Standard v.4.0 is an essential requirement for the validity and continued certification of the project under the BioCarbon program, and to maintain trust and credibility in the carbon credits generated. Therefore, it is required that a revised and updated version of the Monitoring Report be submitted, demonstrating compliance with the new version of the standard and its provisions, accompanied by all technical documentation supporting the modifications.

***Project holder response** (11/07/2025)*

According to Section 29 of the standard version 4.0, a transition period of 90 business days is established. Thus, if the publication date was July 14, 2025, the effective date is November 14, 2025. By that date, in accordance with the audit schedule and plan, the project must have a verification report. Consequently, the applicable version of the standard is the one under which the project's first verification was designed and conducted (Version 3.2 of the standard).
Since the project is already registered, the standard specifies that: "If BIOCARBON introduces new requirements, projects already registered will not be required to comply with them for the remainder of their quantification period. Such projects will remain eligible to issue Verified Carbon Credits (VCCs) according to the version of the Standard and program documents in effect at the time of their registration, without the need for revalidation. Compliance with updated requirements will apply when requesting renewal of the quantification period."
Accordingly, the project will need to update its requirements at the time of requesting renewal of the quantification period, a procedure that is not part of the current verification.
Furthermore, the standard establishes that tools are governed by predefined criteria and, therefore, must undergo relevant updates. Since updates to tools and methodologies have been implemented during the project verification, the project has carried out an applicability analysis in accordance with the transition periods of such updates, as follows:

1. ***ODS version 1.0**: There are no new versions.*
2. ***Safeguards REDD+** : There are no new versions.*

3. Sustainable Development Safeguards V2.0: New version issued on June 23, 2025. However, Section 10.3 states:

"1.3 Effective date and transition period: The SDSs Tool, Version 2.0, shall enter into force on 23 June 2025. Its application shall be mandatory from the date of publication. Use of a previous version (e.g., Version 1.1) shall only be permitted for validation or verification processes in which the site visit was conducted prior to the publication date. This shall be demonstrated through the audit plan and official records from the Conformity Assessment Body. Projects that have not completed the site visit before the date of publication shall be required to apply Version 2.0."

Considering that the site visit concluded on May 30, it is not applicable to carry out the update during this verification. Applicable Version 1.1 is attached.

4. Permanence and Risk Management Version 2.0: New version issued on June 3, 2025. However, Section 5.3 states:

"5.3 Effective date and transition period: The Permanence and Risk Management Tool, Version 2.0, shall enter into force on 3 June 2025. Its application shall be mandatory from the date of publication. Use of a previous version (e.g., Version 1.1) shall only be permitted for validation or verification processes in which the site visit was conducted prior to the publication date. This shall be demonstrated through the audit plan and official records from the Conformity Assessment Body. Projects that have not completed the site visit before the date of publication shall be required to apply Version 2.0."

Since the site visit concluded on May 30, an update is not required during this verification. However, the project has voluntarily decided to apply the new version of the tool in response to Findings 1, 2, and 3. The resulting analysis indicates that 10% of the VCCs should be allocated to the project's risk reserve account, plus 10% to the BCR general risk account, totaling 20%.

5. Conservative Approach and Uncertainty Management Version 1.0: New tool issued on July 23, 2025; however, Section 16.3 states:

The Uncertainty Assessment Tool, Version 1.0, shall enter into force on July 23, 2025. Its application shall be mandatory for all validation and verification processes initiated on or after this date. Projects for which the site visit was conducted prior to the date of entry into force may apply the version of applicable procedures in effect at the time of the audit, unless otherwise required by the BioCarbon Standard. This ensures the fair application of new requirements while maintaining consistency with the principles of transparency and methodological integrity.

Considering that the site visit concluded on May 30, 2025, it is not applicable to carry out the update during this verification. In this regard, the uncertainty calculation is performed in accordance with the methodological documents BCR0002 Version 3.1, Section "13.1 Uncertainty Management," and BCR0004 Version 2.0, Section 15, "Managing Uncertainty." Both sections indicate that uncertainty is managed according to the accuracy of the maps used to estimate activity data values, and emission factors are accepted with an uncertainty of less than 10%.

In this context, the uncertainty of the 2024 forest–non-forest map was evaluated using QGIS 3.36.1 and the AcATaMa v24.12c plugin, achieving an overall accuracy of 96% with 225 Sentinel-2 image validation points.
The 2024 land cover map, relevant to the activities under BCR0004, was evaluated using the Corine Land Cover methodology (scale 1:25,000), based on Sentinel-2 images and computer-assisted visual interpretation (PIAO Method). Its accuracy was 94.0%, determined through a confusion/validation matrix with 164 random sampling points. Of these, 20% were field-verified and 80% were validated using Sentinel-2 and an AI-assisted tool.
The project determined that the accuracy and precision of the maps used to monitor activity data exceed 90%. Additionally, previously validated emission factors were applied, demonstrating an uncertainty of less than 10%. All of this is detailed in the Monitoring Report, Section 13.1.3, "Uncertainty Management."
6. REDD+ Methodology Version 5.0: New version of the methodology; however, Section 18.3 states:
The BioCarbon REDD+ Methodology, Version 5.0, shall enter into force on July 21, 2025. A transition period of ninety (90) calendar days from the date of publication shall apply. After this period, only Version 5.0 of the REDD+ Methodology shall be applicable for all validations, registrations, and verifications under the BioCarbon Standard, unless otherwise specified in a future update.
The use of a previous version (e.g., Version 4.0) shall only be permitted for validation or verification processes in which the site visit was conducted prior to the end of the transition period. This shall be demonstrated through the audit plan and official records from the Conformity Assessment Body. Projects that have not completed the site visit before the end of the transition period shall be required to apply Version 5.0.
Considering that the site visit concluded on May 30, 2025, it is not applicable to carry out the update during this verification. Applicable Version 3.1 is attached.

Documentation provided by the project holder

Carpeta: *4 Findings > Round II > Finding 7*

1. BCR_risk-and-permanence_v1.1.pdf

2. BCR_Salvaguardas_de_Desarrollo_Sostenible_v1.1.pdf

/BCR_Salvaguardas_de_Desarrollo_Sostenible_v1.1.pdf

3. BCR0002_Documento-metodologico-Proyectos-REDD_v3.1.pdf

/BCR0002_Methodological-Document-REDD-Projects_v3.1.pdf
4. BCR_Estandar_v3.2.pdf / *BCR_Standard_v3.2.pdf*

CAB assessment (11/08/2025)

Considering the attention given by the project proponent regarding the use of the criteria established in the most up-to-date version of the BioCarbon Standard (BCR Standard) version 4.0, the finding is now closed. However, although the aforementioned documents

effectively allow work to proceed using the previous version—since the on-site verification was conducted prior to the publication date associated with the most recent version—it is also established that: *"The use of Version 2.0 for subsequent verifications:* *All projects that have been validated and registered under a previous version of the Permanence and Risk Management Tool must apply Version 2.0 for their next verification."* *Therefore, it is essential that the project proponent update their documentation to the most recent versions for upcoming verification periods, thereby ensuring compliance with the current requirements.* *Tool versions to be considered:* *- Identification of a baseline scenario and demonstration of additionality, Version 1.0 | July 25, 2025.* *- Avoidance of double counting (ADC), Version 3.0 | April 7, 2025.* *- BCR Standard, Version 4.0 | July 14, 2025.* *- Sustainable Development Safeguards SDSs Tool, Version 2.0, June 2025, Annex A and the excel.* *- Tool to demonstrate compliance with the REDD+ safeguards, Version 1.1 | January 26, 2023.* *- Standard Operating Procedures (SOP), Version 2.0 | May 26, 2025.* *- Conservative approach and uncertainty management, Version 1.0| July 23, 2025.* *- Permanence and risk management Version 2.0 | June 3, 2025.* *- Monitoring, Reporting and Verification (MRV), Version 2.0 | June 23, 2025.*

Finding ID	***08***	***Type of finding***	***CL - Clarification***	***Date 26/06/2025***
Section No.				
15.2 Data and parameters to quantify the reduction of emissions. *Estándar BCR 0004 v 2.0, section 16.4 Emission Factor*				
Description of finding				
During the review of the project's Monitoring Report, it was identified that according to the data presented in Table 45, "Soil Organic Carbon in Wetlands," the specific emission factors for the analyzed strata are reported as follows: ● *Herbaceous stratum: 110,854* ● *Dispersed stratum: 114,508 (including soil organic carbon).* *However, it is important to note that other studies, such as the "Analysis of Results on Organic Carbon Content in Soils of Páramo and Wetland Ecosystems in Colombia"*				

(Humboldt Institute, 2018) and the "Map of Soil Organic Carbon Reserves" (IGAC, 2021), report different values for wetland ecosystems.

A continuación en la Tabla 85 se relacionan los contenidos COS en los diferentes órdenes de suelos para el área de humedales.

Tabla 85. Contenido de carbono orgánico del suelo a 30cm de profundidad por orden taxonómico en humedales en t ha^{-1}. Fuente: IGAC, 2018

COS por orden taxonómico/Región	Caribe	Orinoquia	Andina	Pacífica	Promedio
Andisol	-	-	178,99	-	178,99
Histosol	195,74	-	183,25	180,16	186,38
Inceptisol	46,34	40,62	60,91	53,8	50,34

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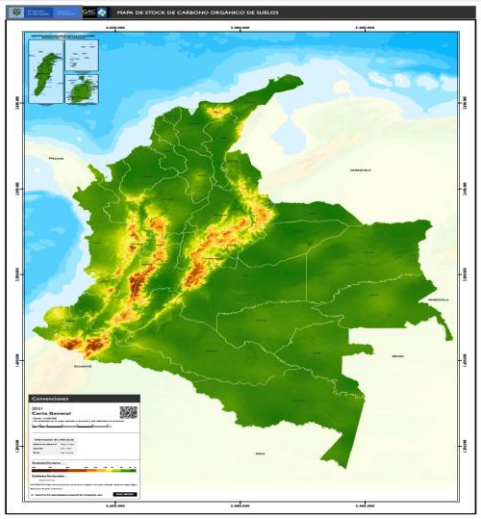
ENTIFICACIÓN DE LA HOJA DE RUTA
ROCEDIMIENTOS PARA LA ESTIMACIÓN
EL CONTENIDO DE CARBONO
PÁRAMOS Y HUMEDALES DE COLOMBIA

IGAC INSTITUTO GEOGRÁFICO AGUSTÍN CODAZZI

HUMBOLDT

Entisol	28,18	27,46	25,7	100,11	45,36
Alfisol	56,19	-	46,45	-	51,32
Mollisol	58,42	-	58,11	-	58,26
Vertisol	73,12	-	-	50	61,56



In this context, it is unclear how the conclusion was reached that "sampling was performed according to nationally validated methodologies and was carried out in eligible project areas." Further clarification is needed to reconcile these differences and provide a complete explanation of the sampling methodologies and data sources applied.

***Project holder response* (08/08/2025)**

1. Use of validated emission factors

Soil carbon is validated data and is not monitored, as indicated in the monitoring report section "14.2.1. Data and parameters determined at registration and not monitored during the monitoring period, including default values and factors."

This fulfills the criteria of the BCR 0004 methodology, section "18.5 Project emissions monitoring," which states: "Validated emission factors can be applied in the estimation of monitored emissions."

2. Clarification of the question

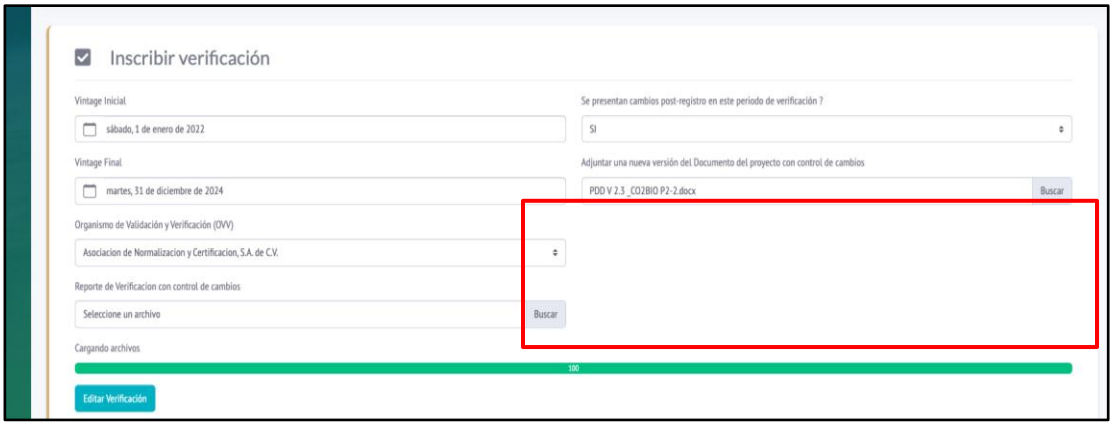
The determination and validation of emission factors, including Soil Organic Carbon (SOC), was carried out following the criteria in section "16.2.3 field measurements" of the BCR 0004 methodology. This methodology establishes a sampling depth of up to 100 cm. In contrast, the study cited only measured SOC at a depth of 30 cm and presented few results for different soil types. Full details of the validated emission factors can be found in section "3.7.3.3 Emission factors" of DDP V 2.3.

Documentation provided by the project holder

BCR_DdP_CO2BIO_P2-2_Version_2.3_Nueva_plantilla / *CR_DdP _CO2BIO P2-2_Version 2.3_ New template*
CAB assessment (11/08/2025)
Due to the clarity of the information specified in section 3. 7.3 Emission Factors, where the project owner provides a very detailed step-by-step description of the methodologies and results obtained, as well as the delimitation of atypical data obtained, using more conservative data and referencing not only the most recent NFRL for the Orinoco biome, but also the applicable methodologies, the finding is considered closed.

Finding ID	***09***	***Type of finding***	***CL - Clarification***	***Date 28/07/2025***
Section No.				
13.2.2.3 Changes to the GHG project design. *BCR Standard, v 4.0. Section 27 Changes after GHG project registration* *STANDARD OPERATING PROCEDURES (SOP), v 2.0. Section 16.5.2 Permanent changes and section 16.5.2.3 Changes to the project design, (f) Removal or addition of one or more project sites with multiple sites;*				
Description of finding				
During the review of the project Monitoring Report, it was identified that, in accordance with section 16.5.2.3 (f) of the BIOCARBON Standard, the removal or addition of sites in projects with multiple locations requires the Project Document to be updated and reviewed by BIOCARBON. However, upon reviewing the records (RM), no evidence was found that the corresponding procedure had been submitted to justify the reduction from the 124 properties initially validated and registered to the current total of 120. *Furthermore, an updated version of the Project Document was not provided, which should clearly describe the changes made in compliance with the guidelines set out in section 16.5.2.3 of the SOP.* *This lack of documentation makes it difficult to verify compliance with the standard and transparency in project modifications. Therefore, the project is requested to submit the relevant updated documentation and evidence of review by BIOCARBON to remedy this situation.*				
Project holder response (08/08/2025)				
Cataruben officially reported the changes made after registration by uploading the new version of the DDP with change control to the platform for analysis. This process is carried out during the public consultation period (which ends on August 20) and the BCR				

review, once the OVV uploads the corresponding veri fication documents. Screenshots of the platform and the selection of changes after registration with the new version of the DDP are attached.



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In accordance with standard operating procedures, evaluation by the OVV is now required as part of the verification process. To this end, folder 9, post-registration changes, was included in the previously shared RM annexes, containing the new version (2.3) in the DdP change control.

For this review, we have updated the project document to version 2.3, using the latest DdP template. We have adjusted the document to reflect the disengagement of four implementation sites (properties), and these changes are recorded in change control.

Documentation provided by the project holder

Folder: 2. Appendices: 9 Post-Registration Changes
BCR_DdP_CO2BIO_P2-2_Version_2.3_Nueva_plantilla / *BCR_DdP _CO2BIO P2-2_Version 2.3_ New template*

CAB assessment (11/08/2025) – THIRD ROUND

In the most recent version of DdP 2.3, the project owner details, in section 16.3, each of the parameters that were modified with respect to changes made after the project was registered. Appendix 1 identifies three important changes related to project design.

However, it is considered essential that the project developer describe the modifications made in a more precise and detailed manner, step by step, as well as the justification for them, especially with regard to the calculation of emissions and each of the items in the DdP, due to the withdrawal of four properties, including the implications and adjustments resulting from this exclusion.

Project holder response (20/08/2025)

1. ***Withdrawal of 4 properties***

DdP: Detailed in section 5, "Carbon ownership and rights," section 5.2, "Other project participants," Table 40: "Post-registration changes on project participants."

RM: Detailed in section 7, "Carbon ownership and rights," Table 15: "Properties in the process of being withdrawn from the project."

Internally, procedure FC-GPP-026 was applied. Procedure for Disassociating Properties from Climate Change Mitigation Projects

Once a property has been disassociated from each project, the information is updated in the Project Design Document and in the Monitoring Report, where the withdrawal of the property is specified. In the case of the CO2Bio P2-2 Project, four properties were withdrawn during the verification period (2022-2024):

Item	***Property Name***	***Ecosystem Manager***
1	*El Cairo*	*Jesus Mejia Ruiz*
2	*El Zaman*	*Jesus Mejia Ruiz*
3	*La Libertad*	*Jesus Mejia Ruiz*
4	*El Renacer*	*Edilberto Cruz Rodriguez*

2. Adjustment of project areas

The areas of the properties were removed from the start of the monitoring period for the second verification (December 31, 2021). To ensure that these areas do not generate mitigation results in the 2022-2024 monitoring period (second verification)

3. Calculation of emissions reductions in the monitoring period

3.1 Adjustment of baseline projections

Taking into account that the baseline emissions projection is calculated based on the project areas. The eligible areas of the withdrawn properties were subtracted from the projection of remaining areas. In this way, taking into account the principles of accuracy and conservatism, it is possible to proportionally reduce baseline emissions, and the leakage belt was also adjusted. These adjustments can be seen in the emissions reduction spreadsheet in Annex 7.1. Emissions Monitoring

- *On sheet 1. Wetlands LB grid cells K18 and K19 subtracted a total of 1,545.6 hectares of wetlands from the herbaceous layer of the projection of the remaining wetland areas.*
- *On sheet 1. Wetlands LB grid cells K18 and K19 subtracted a total of 1,463 hectares of wetlands from the herbaceous layer of the projection of the remaining leak areas.*
- *On sheet 2. LB deforestation. Cells K18 subtracted a total of 231.4 hectares of forest from the projection of the remaining forest areas.*
- *On sheet 2. Deforestation LB. cells u18 subtracted a total of 343 hectares of forest from the projection of the remaining forest areas in the leakage area.*

The following table shows the result of subtracting the eligible areas of the withdrawn properties from the projection of remaining areas.

Data	***without adjustment for post-registration changes***	***Eligible areas withdrawn***	***with adjustment for post-registration changes***
Projected Remaining Forest Area	10.412,4	231,4	10.181,0
Projected Remaining Forest Leakage Area	5.061	343	4.718
Projected Remaining Wetland Area	49214,5	1.545,6	47668,9
Projected Remaining Wetland Leakage Area	33.935,9	1463	32.472,9

This adjustment in the spreadsheet is reflected in the baseline emissions starting in 2022. As evidenced in the DdP, Table 35. Projected GHG emission reductions to avoid land use change in wetland ecosystems, for the period 2018-2038. and Table 36. Project GHG emission reductions from avoided deforestation, for the period 2018-2038.

Within the monitoring report for this verification (Second verification), these data are reflected in section 16.1 Baseline emissions.

3.2 Monitoring of the remaining project areas and quantification of emission reductions in the 2022-2024 monitoring period.

Once the areas have been adjusted with the removal of the four properties, monitoring will begin on January 1, 2022, and continue until December 31, 2024. The purpose of this monitoring is to identify changes in land cover and quantify activity data (changes in forest and wetland cover in the project area and the leakage area) during the monitoring period. *Detailed information on this monitoring can be found in Annex 7.1. Emissions Monitoring, specifically on sheet 3, entitled "Monitoring."* *The data sources used are the shapes of the project and leakage areas, once the changes subsequent to registration have been applied and monitored until December 31, 2024. The geographic files supporting the resulting areas, after the exclusion of properties, and their monitoring are found in the project's Geodatabases (GDB). The specific shapes were extracted from there and are attached in response to this request for clarification.*
Documentation provided by the project holder
- *Geodatabase REDD+ BCR0002: Anexo 8.1.3 geodatabase REDD+ / Annex 8.1.3 REDD+ geodatabase* - *Geodatabase Wetlandes BCR0004: Anexo 8.2.3 Geodatabase Wetlandes / Annex 8.2.3 Wetlands Geodatabase* - *Anexo 8.5.3. Shapefile Areas Con y Sin Ajuste PostRegistro / Annex 8.5.3. Shapefile Areas With and Without Post-Registration Adjustment*
CAB assessment (23/08/2025)
Based on the attention provided by the project owner to determine, step by step, the changes made after the exclusion of the four properties in relation to the quantification of the reductions presented, and considering these aspects from the first period in order to maintain conservative and transparent data, the finding is considered closed.

Annex 3. Documentation review

ITEM	Document Title / Version	Author	Organization
/I/	MONITORING REPORT CO2Bio P2-2 (BCR_Reporte de Monitoreo CO2Bio P2-2_Verificación_2.pdf);	Fundación Cataruben – Own elaboration	
/II/	MONITORING REPORT CO2Bio P2-2 (BCR_RM_ CO2Bio P2-2_Vf2_Version 1.2.pdf);		
/III/	BCR_DdP _CO2BIO P2-2_Version 2.3		
/IV/	CDM-EB67-A06-GUID, Guideline – Sampling and surveys for CDM project activities and programmes of activities, Version 04	CDM	United Nations Framework Convention on Climate Change
/V/	BCR0002 Methodology for Quantifying GHG Emission Reductions from Avoided Unplanned Deforestation and Forest Degradation, Version 3.1, September 15, 2022	BioCarbon Cert	BioCarbon Standard
/VI/	BCR0004 Quantification of GHG emission reduction and removal activities that avoid land use change in continental wetlands, Version 2.0, June 23, 2022	BioCarbon Cert	BioCarbon Standard
/VII/	Water Management Program (2.1.1. PROGRAMA DE GESTIÓN HÍDRICA - CO2BIO PROYECTO 2-2.pdf); 2.1.3 PROGRESS REPORT.pdf	Fundación Cataruben – Own elaboration	
/VIII/	List of species identified by bioacoustic monitoring (2.2.3.2. Lista de especies identificadas monitoreo bioacústico.xlsx)); 2.2.2. Results of Participatory Bioacoustic Monitoring of Biodiversity.pdf		
/IX/	Operational monitoring database (2.2.3.6. Base de datos seguimiento operativo.xlsx));		
/X/	Report on the Monitoring of High Conservation Values (2.3.1. Informe sobre el Monitoreo de Altos Valores de Conservación.pdf);		
/XI/	Fire Monitoring (Presentación Monitoreo de Incendios.pdf);		
/XII/	Forest Restoration and Rehabilitation (Presentación Restauración y Rehabilitación Forestal.pdf);		

ITEM	Document Title / Version	Author	Organization
/XIII/	REDD+ Co2Bio Hotspot Monitoring Project 2-2 (2.7.1. Monitoreo puntos de calor REDD+ Co2Bio Proyecto 2 - 2.pdf);		
/XIV/	Continued monitoring of changes in forest area (2.6.1. G.3. Monitoreo continuo de cambios en la Superficie forestal como proporción de la superficie total en las áreas de proyecto. CO2BIOP2-I2.pdf);		
/XV/	2018 Forest Validation (2.6.2. G.3. Validacion bosque 2018 CCD.xlsx));	Fundación Cataruben – Own elaboration	
/XVI/	Social, economic, environmental, and productive characterization (V5. Caracterización social, económica, ambiental y productiva 105 predios.pdf);		
/XVII/	Emissions Monitoring (7.1. Monitoreo de Emisiones.xlsx));		
/XVIII/	AcATaMa (8.1.4.2. Resultados AcATaMa CO2BIO P2-2.csv).;		
/XIX/	AcATaMa (8.1.4.3. Validation Model BNB 2024 a partir de datos de campo - AcATaMa.docx.pdf);		
/XX/	AcATaMa (8.1.4.2. Resultados AcATaMa CO2BIO P2-2 Formato PDF)pdf);		
/XXI/	Geodatabase (8.1.4.1.3. Diccionario Datos Geográfico GDB AcATaMa.xlsx));		
/XXII/	BCR_DdP _CO2BIO P2-2_Version 2.2		
/XXIII/	TOOL-ODS (4.4. TOOL-ODS .xlsx));		
/XXIV/	CO2Bio P2-2 monitoring plan and report (2022 - 2024) (3.8. Plan y Reporte Monitoreo SALVAGUARDAS (CO2Bio P2-2).xlsx));		
/XXV/	PQRSF MANAGEMENT REPORT 2022-2024 (2.2.3 INFORME DE GESTIÓN DE PQRSF 2022-2024 CO2Bio P2-2.pdf);		
/XXVI/	PQRSF 2023-2024 CO2Bio P2-2 (2.2.4 PQRSF 2023-2024 CO2Bio P2-2.pdf);	Fundación Cataruben – Own elaboration	
/XXVII/	Tradition and Freedom Certificates (109 certificados anexos en pdf);		
/XXVIII/	Assignment of Contract No. BH-P2-075 of 2022 entered into between the Fundación Cataruben and Lyda Maria		

ITEM	Document Title / Version	Author	Organization
	Ochoa Tumaya (1.2.1 Cesión de Contrato - Las Garzas.pdf);		
/XXIX/	Contract No. BH-P2-008 of 2023 Entered into between Fundación Cataruben y Yamile Vargas Hernandez (1.3.3 Contratos Firmados.pdf);		
/XXX/	SDG Monitoring Plan and Report (CO2Bio P2-2) (4.5. Plan y Reporte Monitoreo ODS (CO2Bio P2-2).xlsx));		
/XXXI/	Environmental Assessment Matrix CO2Bio P2-2 (2. Matriz de Evaluación Ambiental CO2Bio P2-2.xlsx));		
/XXXII/	Socioeconomic Assessment Matrix CO2Bio P2-2 (3. Matriz de evaluación de aspectos socioeconómicos CO2Bio P2-2.xlsx);		
/XXXIII/	Sustainable Development Safeguards Tool Assessment Questionnaire (6.1 Anexo A_ Cuestionario de evaluación de la herramienta Salvaguardas de Desarrollo Sostenible - CO2BioP2-2.pdf);		
/ XXXIV/	CO2Bio P2-2 Annex 1. BCR_risk-and-permanence.docx CO2Bio P2-2 Annex 1. BCR_risk-and-permanence (3).docx	Fundación Cataruben – Own elaboration	
/XXXV/	Risk Management Monitoring Plan and Report.xlsx		
/XXXVI/	Risk Analysis and Management CO2Bio P2-2 (Análisis y Gestión de Riesgos CO2Bio P2-2 .xlsx));		
/ XXXVII/	FC-GIP-20 "Request for Authorization of Work Trips.pdf		
/XXXVIII/	CO2Bio P2-2 Annex 1. BCR_risk-and-permanence (CO2Bio P2-2 Annex 1. BCR_risk-and-permanence (3).docx);		
/ XXXIX/	Communications Plan CO2Bio P2-2 (2.1.1 Plan de comunicaciones CO2Bio P2-2.xlsx));		
/ XL/	Tranings (POA Capacitaciones.xlsx));		
/XLI/	FC-GPP-31. Procedure for Managing Participation in Project Training Processes.pdf		
/XLII/	BCR Tool – Monitoring, Reporting and Verification (MVR), version 2.0, June 23, 2025		
/XLIII/	GPP-26. Procedimiento de Desvinculación de Predios a Proyectos de Mitigación de Cambio Climático.docx (5).pdf		

ITEM	Document Title / Version	Author	Organization
/XLIV/	UNILATERAL TERMINATION AGREEMENT OF CONTRACT No. BH-P2-121 OF 2022 ENTERED INTO BETWEEN THE CATARUBEN FOUNDATION AND EDILBERTO CRUZ RODRIGUEZ (Unilateral Termination Agreement BH-P2-121 of 2022 - El Renacer.pdf);		
/XLV/	UNILATERAL TERMINATION AGREEMENT OF CONTRACT No. BH-P2-121 OF 2022 ENTERED INTO BETWEEN THE CATARUBEN FOUNDATION AND EDILBERTO CRUZ RODRIGUEZ (Unilateral Termination Agreement BH-P2-009 OF 2023 - Jesus Mejia Ruiz.docx);		
/XLVI/	El Renacer Contract (Notificación Terminación Unilateral del contrato El Renacer.pdf);	Fundación Cataruben – Own elaboration	
/XLVII/	Shapefile Areas Without Post-Registration Adjustment 8 files (AP_2021_Sin_Cambios_Posteriores_al_Registro.shx. Shapefile Areas Without Post-Registration Adjustment 16 files (Wetland_AP_2021_Sin_Cambios_Posteriores_al_Registro.dbf;		
/XLVIII/	Shapefile Areas con Ajuste PotsRegistro 8 archivos (AP_2021_Con_Cambios_Posteriores_al_Registro.shp; Shapefile Areas con Ajuste PotsRegistro 10 archivos (AF_2021_Sin_Cambios_Posteriores_al_Registro.dbf;		
/XLIX/	Manual AcATaMa (8.1.1.3. Instructivo AcATaMa.pdf);		
/L/	Procedure in Geographic Information Systems (GOP-13. Procedimiento en Sistemas de información Geográfica. (1).pdf);		
/LI/	Procedure for determining eligible areas (FC-GOP-01 Procedure for determining eligible areas - RED Projects.pdf);		
/LII/	PROCEDURE FOR DELIMITING LEAKAGE AREAS (GOG-03 PROCEDURE FOR DELIMITING LEAKAGE AREAS.pdf);		
/LIII/	Guide for quantifying historical annual deforestation (GOG-19.Guía para la cuantificación de la deforestación histórica anual.docx.pdf);		

ITEM	Document Title / Version	Author	Organization
/LIV/	General Carbon Procedure - Procedures for monitoring wetland areas (8.2.1.5. Procedimiento General Carbono - Procedimientos monitoreo áreas Wetlandes.pdf);		
/LV/	CLC 2024 Validation Matrix (8.2.4.4. Matriz de validación CLC 2024.xlsx));		
/LVI/	Confusion Matrix Plan (8.2.4.3. Plano Matriz de Confusion.jpg);		
/LVII/	Validation of the Classification Model based on field data in Wetlands (8.2.4.2. Validación del Modelo de Clasificación a partir de datos de campo en Wetlandes.pdf);	Fundación Cataruben – Own elaboration	
/LVIII/	Confusion Matrix (8.2.1.2. FC-GOG-24. Matriz de Confusion.pdf);		
/LIX/	Interpretation instructions for Corine Land Cover Scale 1:100,000 (8.2.1.1. FC-GOG-29. Interpretation instructions for Corine Land Cover Scale 1:100,000.pdf);		
/LX/	Galindo G. et al 2023. IDEAM. Methodological sheet for the indicator Proportion of land covered by natural forest Version 1.3 (8.1.7.1. Galindo G. et al 2023. IDEAM. Methodological sheet for the indicator Proportion of land covered by natural forest Version 1.3.pdf);	Galindo G. et al 2023. IDEAM	
/LXI/	Land cover classification with spatial resolution of 10 meters in forests of the Colombian Caribbean based on Sentinel 1 and 2 missions (8.2.1.4. Anaya, J.A., Rodríguez-Buriticá, S., Londoño, M.C. 2023. Land cover classification with spatial resolution of 10 meters in forests of the Colombian Caribbean based on Sentinel 1 and 2 missions. Revista de Teledetección,.pdf);	Anaya, J.A., Rodríguez-Buriticá, S., Londoño, M.C. 2023	
/LXII/	8.1.1.4. GOG-01 Guide for verification of viable areas.pdf	Fundación Cataruben – Own elaboration	
/LXIII/	2.4.1. Training reports.pdf		
/LXIV/	GIP-04. PQRSF Management Procedure V04 (2.2.1 GIP-04. PQRSF Management Procedure V04.pdf);		
/LXV/	BioCarbon_Special_Categories_Label_tool.pdf, versión 1, julio 2025		
/ LXVI/	5.1. CO2Bio Project 2-2 Co-benefits Monitoring Plan (2022-2024).xlsx		

ITEM	Document Title / Version	Author	Organization
/LXVII/	Participatory Bioacoustic Biodiversity Monitoring Methodology. (2.2.1. Metodología Monitoreo Bioacústico Participativo de la Biodiversidad.pdf);		
/LXVIII/	Bioacoustic monitoring training (2.2.3.4. Capacitación monitoreo bioacústico.pdf);		
/LXIX/	Version Law 84 of 1873 Civil Code, Author: Congress of the Republic of Colombia, Organization Not applicable, ANCE Version Decree 960 of 1970 Author: Congress of the Republic of Colombia, Organization Not applicable, ANCE Version Law 1996 of 2019, Author: Congress of the Republic of Colombia, Organization Not applicable, ANCE	Decrees of the Republic of Colombia	
/LXX/	Identification of a baseline scenario and demotration of additionality, Version 1.0, July 25, 2025.	Fundación Cataruben – Own elaboration	
/LXXI/	BCR Tool PERMANENCE AND RISK MANAGEMENT, version 2.0, June 3, 2025	BioCarbon Standard	
/LXXII/	BCR Standard, version 3.2, September 15, 2025		
/LXXIII/	Monitoring, Reporting and Verification (MRV), Version 2.0 | June 23, 2025.		
/LXXIV/	Continuous monitoring of changes in forest area as a proportion of the total area in the project areas. CO2BIOP2-I2.pdfForest validation 2018 CCD.xlsx	Fundación Cataruben – Own elaboration	
/LXXV/	Property-level implementation plans / 2.8.4. Monitoring implementation plans,		
/LXXVI/	Report on productive practices and conservation actions 2022-2024.pdf		
/LXXVII/	Methodological process for monitoring heat spots and thermal anomalies.pdf		
/LXXVIII/	Practical guide to integrated rural fire management.pdf		
/LXXIX/	Report on productive practices and conservation actions 2022-2024.pdf		
/LXXX/	Forest area as a proportion of total area CO2BIOP2-I2.xlsx		
/LXXXI/	Spatial location of biodiversity importance zones.xlsx		

ITEM	Document Title / Version	Author	Organization
/LXXXII/	RNSC Authorization (Baul de Los Recuerdos Property, La Maporaloza Property, Moscu Property)	Fundación Cataruben – Own elaboration	
/LXXXIII/	Safeguard Report A1 (CO2BIO P2-2).pdf Legal Compatibility Matrix.xlsx		
/LXXXIV/	CO2Bio Management Report 2024.pdf		
/LXXXV/	Management Report 2024 CO2Bio Governance Table.pdf G2- Governance Strategy.pdf		
/LXXXVI/	SIRAP.pdf		
/LXXXVII/	CATARUBEN Certificate - ASOCARBONO.pdf		
/LXXXVIII/	Resolution on Non-Admissibility of Prior Consultation ST - 0003 of 2022.pdf	Colombia Goverment	
/LXXXIX/	Data Analysis - Thermal Anomalies.xlsx Monitoring Thermal Anomalies.xlsx	Fundación Cataruben – Own elaboration	
/XC/	Vulnerable and invasive species of Co2Bio P2-2.pdf List of invasive fauna and flora species - Co2Bio P2-2.xlsx		
/XCI/	Corporinoquia Certification.pdf		
/XCII/	Risk Analysis and Management CO2Bio P2-2.xlsx		
/XCIII/	Identification and Evaluation of Leaks.xlsx Leak Analysis.pdf and Leak Analysis Results.pdf		
/XCIV/	BCR "Avoiding Double Counting (ADC) versión 3.0, 7 de abril de 2025	BioCarbon Standard	
/XCV/	Procedure GJP-14.pdf	Fundación Cataruben – Elaboración propia	
/XCVI/	Binding Contract to Co2bio P2-2.pdf		
/XCVII /	Orinoquia Emissions Reduction Program – PRE Biocarbon).	Gobierno Colombia	
/XCVIII/	Resolution 529 of 2020.pdf		
/XCIX/	IGAC Resolution 471 of 2020.pdf		
/C/	Political Constitution, Law 388 of 1997.pdf		
/CI/	Orinoquia Emissions Reduction Program – PRE Biocarbon		
/CII/	PROPOSAL FOR THE REFERENCE LEVEL OF FOREST EMISSIONS IN COLOMBIA FOR THE PERIOD 2023-		

ITEM	Document Title / Version	Author	Organization
	2027 AS A MECHANISM TO OPT FOR RESULTS-BASED PAYMENTS OF REDD+ UNDER THE UNFCCC, January 2024, IDEAM		
/CIII/	Special Categories Exceptional Benefits Label, BioCarbon TOOL, Version 1.0, July 15, 2025	BioCarbon Standard	
/CIV/	IPCC Guidelines for National Greenhouse Gas Inventories, section 2 and 4. 2006	IPCC	
/CV/	Third National Communication on Climate Change (This is a standardized term under the UNFCCC). 2022	IDEAM and Ministry of Environment and Sustainable Development.	
/CVI/	Resolution 1447: 2018.	Ministry of Environment and Sustainable Development	
/CVII/	Decree 926 of 2017.	Ministry of Environment and Sustainable Development	
/CVIII/	Special Categories Exceptional Benefits Label, BioCarbon TOOL, Version 1.0, July 15, 2025	Fundación Cataruben – Own elaboration	
/CIX/	Validation and Verification Manual for Greenhouse Gas Projects, Version 2.0, Jun 23/2022		
/CX/	Updated NDC, 2020.	Ministry of Environment and Sustainable Development	
/CXI/	Guia-Practica-Manejo-Integral-Fuego-Rural.pdf.	Fundación Cataruben – Own elaboration	
/CXII/	Procedimiento de Desvinculación de Predios a Proyectos de Mitigación de Cambio Climático.docx (6).pdf		
/CXIV/	BCR_Salvaguardas_de_Desarrollo_Sostenible_v1.1.pdf		
/CXV/	Registro de Asistencia - Gestión del Recurso Hídrico.pdf		
/CXVI/	Informe de Avance Estrategia de Gobernanza.docx		
/CVXII/	BCR0002_Documento-metodologico-Proyectos-REDD_v3.1.pdf	BioCarbon Standard	
/CVXIII/	Modelo Financiero (MF CO2BIO P2-2 ACTUALIZACIÓN junio_2023.xlsx)	Fundación Cataruben – Own elaboration	
/CXX/	Procedimiento de Gestión de PQRS (3.4.1.1.1 Procedimiento Gestión de PQRS.pdf.)	Fundación Cataruben – Own elaboration	

ITEM	Document Title / Version	Author	Organization
/CXXI/	*Informe de Monitoreo de Cobertura Forestal (8.1.6.1. Informe Perdida de cobertura forestal 2021 - 2024.pdf.)*	*Fundación Cataruben – Own elaboration*	
/CXXII/	*Plan y reporte de monitoreo CO2Bio P2-2 (2022 - 2024)*	*Fundación Cataruben – Own elaboration*	
/CXXII/	*PLAN NACIONAL DE ADAPTACIÓN AL CAMBIO CLIMÁTICO.pdf*	*DEPARTAMENTO NACIONAL DE PLANEACION (DNP)*	
/CXXIII/	*Interpretación Nacional de las Salvaguardas Sociales y Ambientales para REDD+ en Colombia Bogotá-Colombia. Camacho A., Lara I., Guerrero R. D. 2017.*	*MADS, WWF Colombia and ONU REDD Colombia Government*	
/CXXIV/	*Pagos a Propietarios (Boletín Informativo.pdf.)*	*Fundación Cataruben – Own elaboration*	
/CXXV/	*Informe entrega de beneficios económicos CO2BIO P2-2.pdf*	*Fundación Cataruben – Own elaboration*	
/CXXVI/	*Procedimiento de Gestión de PQRS (3.4.1.1.1 Procedimiento Gestión de PQRS.pdf.)*	*Fundación Cataruben – Own elaboration*	
/CXXVII/	*Informe de Monitoreo de Cobertura Forestal (8.1.6.1. Informe Perdida de cobertura forestal 2021 - 2024.pdf.)*	*Fundación Cataruben – Own elaboration*	
/CXXVIII/	*Plan y reporte de monitoreo CO2Bio P2-2 (2022 - 2024)*	*Fundación Cataruben – Own elaboration*	
/CXXIX/	*Law 2294 of 2023. Issuing the National Development Plan 2022-2026*	*Congress of the Republic of Colombia*	
/CXXX/	*ISO 14064-2:2019*	*ISO Technical Committee TC 207. International Organization for Standardization*	
/CXXXI/	*ISO 14064-3:2019*	*ISO Technical Committee TC 207. International Organization for Standardization*	
/CXXXII/	*Informe entrega de beneficios económicos CO2BIO P2-2.pdf*	*Fundación Cataruben – Own elaboration*	
/CXXXIII/	*Standard Operating Procedures (SOP), version 2.0, May 26, 2025*	*BioCarbon Standard*	
/CXXXIV/	*Sustainable Development Safeguards SDSs Tool, Version 2.0, June 2025, Annex A and the excel.*	*BioCarbon Standard*	

ITEM	Document Title / Version	Author	Organization
/CXXXV/	Tool to demonstrate compliance with the REDD+ safeguards, Version 1.1 | January 26, 2023.	BioCarbon Standard	
/CXXXVI/	Conservative approach and uncertainty management, Version 1.0| July 23, 2025.	BioCarbon Standard	
/CXXXVII/	https://www.ecoregistry.io/projects-list/cercarbono-co2	CERCARBONO Certified Carbon Standard	
/CXXXVIII/	https://registry.verra.org/app/search/VCS	VERRA STANDARDS	
/CXXXIX/	https://www.colcxregistry.com/projects	ColCX Registry	
/CXC/	https://www.planetainature.org/projects-registry	PlanetAI Nature Space	
/CXCI/	https://mer.markit.com/br-reg/public/index.jsp?entity=retirement&sort=account_name&dir=ASC&start=0&acronym=PV&limit=15&additionalCertificationId=&categoryId=10000000000001&name=&standardId=1000000000000004&unitClass=	S&P Global Plan Vivo	
/CXCII/	https://marketplace.goldstandard.org/collections/projects?srsltid=AfmBOoocbyC1KQevw1_WB9Aci-Q9P9uLTRdUn1r5Ddouy7tZXe90X03	Gold Standard	
/CXCIII/	https://acr2.apx.com/myModule/rpt/myrpt.asp?r=111	American Carbon Registry	
/CXCIV/	https://globalcarbontrace.io/	BioCarbon Standard	
/CXCV/	https://cdm.unfccc.int/Projects/index.html	CDM	
/CXCVI/	Ley 165 de 1994 (Convenio sobre la Diversidad Biológica - CDB)	Congreso de la República de Colombia	
/CXCVII/	Ley 1844 de 2017 (Acuerdo de París)	Congreso de la República de Colombia (ratifica el acuerdo internacional bajo la Convención Marco de las Naciones Unidas sobre el Cambio Climático - CMNUCC).	
/CXCVVIII/	Ley 357 de 1997 (Convención de Ramsar sobre Humedales)	Congreso de la República de Colombia (ratifica la	

ITEM	Document Title / Version	Author	Organization
		convención internacional).	
/CXCIC/	Ley 461 de 1998 (Convención de las Naciones Unidas de Lucha contra la Desertificación - CNULD)	Congreso de la República de Colombia (ratifica la convención internacional).	
/CCC/	Ley 17 de 1981 (Convención sobre el Comercio Internacional de Especies Amenazadas de Fauna y Flora Silvestres - CITES)	Congreso de la República de Colombia. Creó el Ministerio del Medio Ambiente y el Sistema Nacional Ambiental (SINA).	
/CCCI/	Ley 99 de 1993	Congreso de la República de Colombia.	
/CCCII/	Ley 115 de 1994 (Ley General de Educación)	Congreso de la República de Colombia	
/CCCIV/	Ley 1257 de 2008	Congreso de la República de Colombia. Es la ley de sensibilización, prevención y sanción de formas de violencia y discriminación contra las mujeres.	
/CCCV/	Ley 1523 de 2012 (Ley de Gestión del Riesgo de Desastres)	Congreso de la República de Colombia.	
/CCCVI/	Ley 1931 de 2018 (Ley de Cambio Climático)	Congreso de la República de Colombia.	
/CCCVII/	Decreto 1791 de 1996	Presidencia de la República de Colombia. Regula el aprovechamiento forestal.	
/CCCVII/	Decreto 1076 de 2015	Presidencia de la República de Colombia. Decreto Único Reglamentario del Sector Ambiente y Desarrollo Sostenible.	
/CCCVIII/	Decreto 3930 de 2010	residencia de la República de Colombia. Regula el	

ITEM	*Document Title / Version*	*Author*	*Organization*
		reuso de aguas residuales y el aprovechamiento de aguas lluvias.	
/CCCIX/	*Decreto 2245 de 2017*	*Presidencia de la República de Colombia. Modifica y complementa el Decreto 1076 de 2015 en materia de uso eficiente y ahorro de agua.*	
/CCCX/	*Resolución 2115 de 2007*	*Ministerio de la Protección Social (hoy Salud) y Ministerio de Ambiente, Vivienda y Desarrollo Territorial. Establece el sistema para la calidad del agua para consumo humano.*	
/CCCXI/	*Resolución 1283 de 2016*	*Ministerio de Ambiente y Desarrollo Sostenible. Reglamenta la delimitación de humedales.*	
/CCCXII/	*Resolución 1125 de 2015*	*Ministerio de Ambiente y Desarrollo Sostenible. Establece la metodología para la elaboración y presentación de los Planes de Manejo para el Aprovechamiento Sostenible de Especies Silvestres.*	
/CCCXIII/	*CONPES 3700 de 2011*	*Consejo Nacional de Política Económica y Social (CONPES), Departamento Nacional de Planeación (DNP). Estrategia Institucional para la Articulación de Políticas y Acciones en Materia de Cambio Climático.*	

ITEM	*Document Title / Version*	*Author*	*Organization*
/CCCXIV/	*CONPES 4080 de 2022*	*o Consejo Nacional de Política Económica y Social (CONPES), Departamento Nacional de Planeación (DNP). Política Pública Nacional de Equidad de Género para las Mujeres.*	
/CCCXV/	*PNGIBSE (Política Nacional para la Gestión Integral de la Biodiversidad y sus Servicios Ecosistémicos)*	*Ministerio de Ambiente y Desarrollo Sostenible de Colombia.*	
/CCCXVI/	*FAO VGGT (Directrices Voluntarias sobre la Gobernanza Responsable de la Tenencia)*	*Organización de las Naciones Unidas para la Alimentación y la Agricultura (FAO).*	
/CCCXVII/	*Law 1931 of 2018 (Climate Change Management)*	*Ministerio de Ambiente y Desarrollo Sostenible de Colombia.*	

Annex 4. Conflict interest analysis

Asociación de Normalización y Certificación, S.A. de C.V.
Organismo de Verificación/Validación de Gases de Efecto Invernadero
Acreditación ante ema, a.c.: OVVGEI 001/15

2025SV-OVV0002_Cataruben Fecha: 26/05/2025

DECLARACIÓN DE NO CONFLICTO DE INTERESES

ANCE, a través de su Organismo de Verificación/Validación de Gases de Efecto Invernadero (OC VV GEI-ANCE), notificó desde la presentación del Cronograma los nombres de las personas que integran el equipo de validación y verificación de GEI a cargo de realizar el presente servicio sin que se presentara la recusación de alguno de ellos por identificarse en una situación de conflicto de intereses y amenaza a la imparcialidad.

Mediante esta declaración, el abajo firmante reporta que **no** está involucrado en alguna relación, proceso comercial, financiero u otro que pueda colocarlo en conflicto de interés en relación con el Proyecto descrito.

Información del equipo declarante		
Nombre:	**Cargo o relación**	**Correo de contacto:**
Joel Miguel Ramirez	Aprobador	joel.ramirez@bureauveritas.com
Excalibur Ernesto Acosta Miranda	Verificador líder	ernesto.acostamiranda@bureauveritas.com
Nancy Adriana Barrera Gómez	Verificadora	nancy.barrera@bureauveritas.com
Janai Monserrat Hernández Contreras	Revisora independiente	janaimonserrat.hernandez@bureauveritas.com

Identificación del conflicto	
☒ **Conflicto de interés no identificado**	
El conflicto de interés está relacionado con:	
☐ Relación con personas externas	☐ Contratación de personal
☐ Actividades económicas y participaciones en sociedades	☐ Uso de información confidencial
☐ Interés financiero	☐ Actividades económicas de personas cercanas
☐ Regalos/beneficios	☐ Otro (si ha seleccionado otros, indique los detalles)
En caso de elegir "otro" explicar los detalles en este espacio.	
Nombre de la(s) empresa(s), persona(s) y/o proyecto(s) implicado(s): FUNDACIÓN CATARUBEN, proyecto BioCO2-P2-2	
Descripción de la situación que da lugar al conflicto de interés real o potencial: No detectado	
Medidas para mitigar el conflicto de intereses real o potencial: a) El Organismo no realizará la elaboración del inventario y lo verifica. b) El Organismo solicita información al cliente potencial sobre todos los servicios recibidos para confirmar que no existe riesgo a la imparcialidad d) El Organismo notifica al cliente potencial los datos de los miembros del equipo verificador designado y solicita la recusación de algún miembro del equipo o revisor independiente si hay COI de interés. e) El Organismo designará un equipo de verificación que no tenga ninguna relación/familia con el cliente potencial.	

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Asociación de Normalización y Certificación, S.A. de C.V.
Organismo de Verificación/Validación de Gases de Efecto Invernadero
Acreditación ante ema, a.c.: OVVGEI 001/15

h) El equipo verificador designado se apegará a las políticas de ANCE y no aceptará beneficios personales durante la ejecución de servicios de verificación.

Periodicidad con la que se van a implementar las medidas

☐ Cada mes	☐ Cada seis meses	☐ Cada año
☒ Cada Certificación	☐ Otro – explicar	☐ N/A

Las personas implicadas se comprometen a evitar futuros conflictos de interés o situaciones en las que sus intereses personales puedan entrar en conflicto o parezcan entrar en conflicto con sus deberes o responsabilidades laborales.

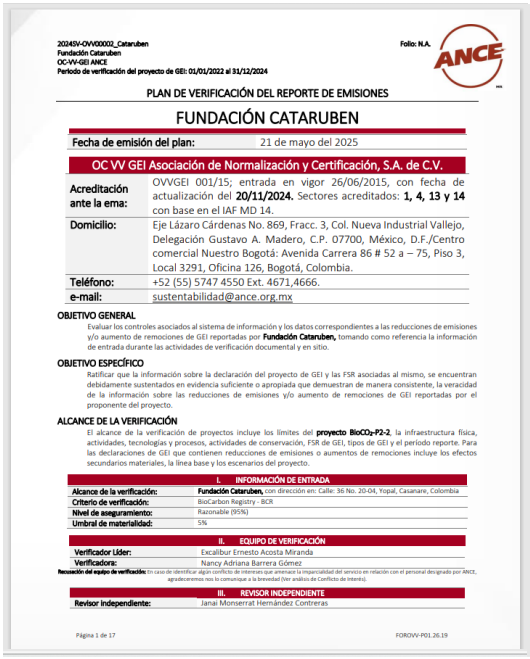
Firmas

El declarante
Declaro que toda la información relacionada con mis funciones y con mis intereses profesionales o privados aquí declarados han sido revelados y documentados en su totalidad.
Acepto y me comprometo a cumplir las medidas de mitigación identificadas en este formulario para eliminar o gestionar el conflicto de interés o en su caso preservar las conductas para mantener el servicio libre de conflicto de interés.

Nombre:	Firma	Fecha
Excalibur Ernesto Acosta Miranda		26/05/2025
Nancy Adriana Barrera Gómez		26/05/2025

Titular
FUNDACIÓN CATARUBEN,
proyecto BioCO2-P2-2

Annex 5. Verification plan



2024SV-OVV00002_Cataruben
Fundación Cataruben
OC-VV-GEI ANCE
Periodo de verificación del proyecto de GEI: 01/01/2022 al 31/12/2024

Folio: N.A.

PLAN DE VERIFICACIÓN DEL REPORTE DE EMISIONES

FUNDACIÓN CATARUBEN

Fecha de emisión del plan:	21 de mayo del 2025

OC VV GEI Asociación de Normalización y Certificación, S.A. de C.V.

Acreditación ante la ema:	OVVGEI 001/15; entrada en vigor 26/06/2015, con fecha de actualización del **20/11/2024.** Sectores acreditados: **1, 4, 13 y 14** con base en el IAF MD 14.
Domicilio:	Eje Lázaro Cárdenas No. 869, Fracc. 3, Col. Nueva Industrial Vallejo, Delegación Gustavo A. Madero, C.P. 07700, México, D.F./Centro comercial Nuestro Bogotá: Avenida Carrera 86 # 52 a – 75, Piso 3, Local 3291, Oficina 126, Bogotá, Colombia.
Teléfono:	+52 (55) 5747 4550 Ext. 4671,4666.
e-mail:	sustentabilidad@ance.org.mx

OBJETIVO GENERAL

Evaluar los controles asociados al sistema de información y los datos correspondientes a las reducciones de emisiones y/o aumento de remociones de GEI reportadas por **Fundación Cataruben,** tomando como referencia la información de entrada durante las actividades de verificación documental y en sitio.

OBJETIVO ESPECÍFICO

Ratificar que la información sobre la declaración del proyecto de GEI y las FSR asociadas al mismo, se encuentran debidamente sustentados en evidencia suficiente o apropiada que demuestran de manera consistente, la veracidad de la información sobre las reducciones de emisiones y/o aumento de remociones de GEI reportadas por el proponente del proyecto.

ALCANCE DE LA VERIFICACIÓN

El alcance de la verificación de proyectos incluye los límites del **proyecto BioCO2-P2-2**, la infraestructura física, actividades, tecnologías y procesos, actividades de conservación, FSR de GEI, tipos de GEI y el período reporte. Para las declaraciones de GEI que contienen reducciones de emisiones o aumentos de remociones incluye los efectos secundarios materiales, la línea base y los escenarios del proyecto.

I. INFORMACIÓN DE ENTRADA

Alcance de la verificación:	**Fundación Cataruben,** con dirección en: Calle: 36 No. 20-04, Yopal, Casanare, Colombia
Criterio de verificación:	BioCarbon Registry - BCR
Nivel de aseguramiento:	Razonable (95%)
Umbral de materialidad:	5%

II. EQUIPO DE VERIFICACIÓN

Verificador Líder:	Excalibur Ernesto Acosta Miranda
Verificadora:	Nancy Adriana Barrera Gómez

Recusación del equipo de verificación: En caso de identificar algún conflicto de intereses que amenace la imparcialidad del servicio en relación con el personal designado por ANCE, agradeceremos nos lo comunique a la brevedad (Ver análisis de Conflicto de Interés).

III. REVISOR INDEPENDIENTE

Revisor independiente:	Jana Monserrat Hernández Contreras

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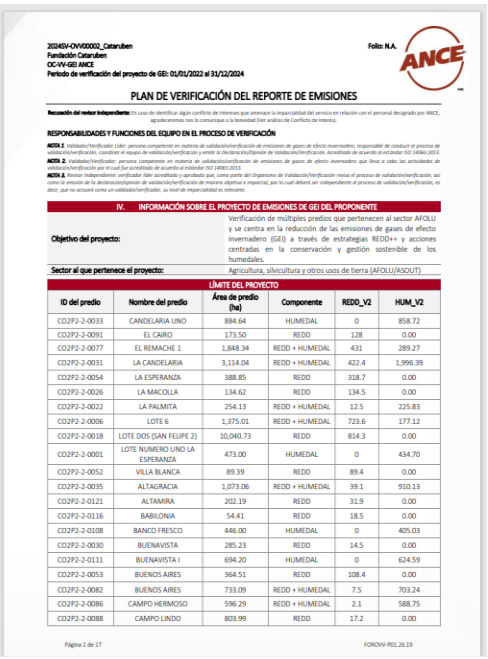

2024SV-OVV00002_Cataruben
Fundación Cataruben
OC-VV-GEI ANCE
Periodo de verificación del proyecto de GEI: 01/01/2022 al 31/12/2024

Folio: N.A.

PLAN DE VERIFICACIÓN DEL REPORTE DE EMISIONES

Recusación del revisor independiente: En caso de identificar algún conflicto de intereses que amenace la imparcialidad del servicio en relación con el personal designado por ANCE, agradeceremos nos lo comunique a la brevedad (Ver análisis de Conflicto de Interés).

RESPONSABILIDADES Y FUNCIONES DEL EQUIPO EN EL PROCESO DE VERIFICACIÓN

NOTA 1. *Validador/Verificador Líder: persona competente en materia de validación/verificación de emisiones de gases de efecto invernadero, responsable de conducir el proceso de validación/verificación, coordinar el equipo de validación/verificación y emitir la Declaración/Opinión de Validación/Verificación. Acreditado de acuerdo al estándar ISO 14065:2013.*

NOTA 2. *Validador/Verificador: persona competente en materia de validación/verificación de emisiones de gases de efecto invernadero que lleva a cabo las actividades de validación/verificación por el cual fue acreditado de acuerdo al estándar ISO 14065:2013.*

NOTA 3. *Revisor Independiente: verificador líder acreditado y aprobado que, como parte del Organismo de Validación/Verificación revisa el proceso de validación/verificación, así como la emisión de la declaración/opinión de validación/verificación de manera objetiva e imparcial, por lo cual deberá ser independiente al proceso de validación/verificación, es decir, que no actuará como un validador/verificador, su nivel de imparcialidad es relevante.*

IV. INFORMACIÓN SOBRE EL PROYECTO DE EMISIONES DE GEI DEL PROPONENTE

Objetivo del proyecto:	Verificación de múltiples predios que pertenecen al sector AFOLU y se centra en la reducción de las emisiones de gases de efecto invernadero (GEI) a través de estrategias REDD+ y acciones centradas en la conservación y gestión sostenible de los humedales.
Sector al que pertenece el proyecto:	Agricultura, silvicultura y otros usos de tierra (AFOLU/ASOUT)

LÍMITE DEL PROYECTO

ID del predio	Nombre del predio	Área de predio (ha)	Componente	REDD_V2	HUM_V2
CO2P2-2-0033	CANDELARIA UNO	884.64	HUMEDAL	0	858.72
CO2P2-2-0091	EL CAIRO	173.50	REDD	128	0.00
CO2P2-2-0077	EL REMACHE 1	1,848.34	REDD + HUMEDAL	431	289.27
CO2P2-2-0031	LA CANDELARIA	3,114.04	REDD + HUMEDAL	422.4	1,996.39
CO2P2-2-0054	LA ESPERANZA	388.85	REDD	318.7	0.00
CO2P2-2-0026	LA MACOLLA	134.62	REDD	134.5	0.00
CO2P2-2-0022	LA PALMITA	254.13	REDD + HUMEDAL	12.5	225.83
CO2P2-2-0006	LOTE 6	1,375.01	REDD + HUMEDAL	723.6	177.12
CO2P2-2-0018	LOTE DOS (SAN FELIPE 2)	10,040.73	REDD	814.3	0.00
CO2P2-2-0001	LOTE NUMERO UNO LA ESPERANZA	473.00	HUMEDAL	0	434.70
CO2P2-2-0052	VILLA BLANCA	89.39	REDD	89.4	0.00
CO2P2-2-0035	ALTAGRACIA	1,073.06	REDD + HUMEDAL	39.1	910.13
CO2P2-2-0121	ALTAMIRA	202.19	REDD	31.9	0.00
CO2P2-2-0116	BABILONIA	54.41	REDD	18.5	0.00
CO2P2-2-0108	BANCO FRESCO	446.00	HUMEDAL	0	405.03
CO2P2-2-0030	BUENAVISTA	285.23	REDD	14.5	0.00
CO2P2-2-0111	BUENAVISTA I	694.20	HUMEDAL	0	624.59
CO2P2-2-0053	BUENOS AIRES	364.51	REDD	108.4	0.00
CO2P2-2-0082	BUENOS AIRES	733.09	REDD + HUMEDAL	7.5	703.24
CO2P2-2-0086	CAMPO HERMOSO	596.29	REDD + HUMEDAL	2.1	588.75
CO2P2-2-0088	CAMPO LINDO	803.99	REDD	17.2	0.00

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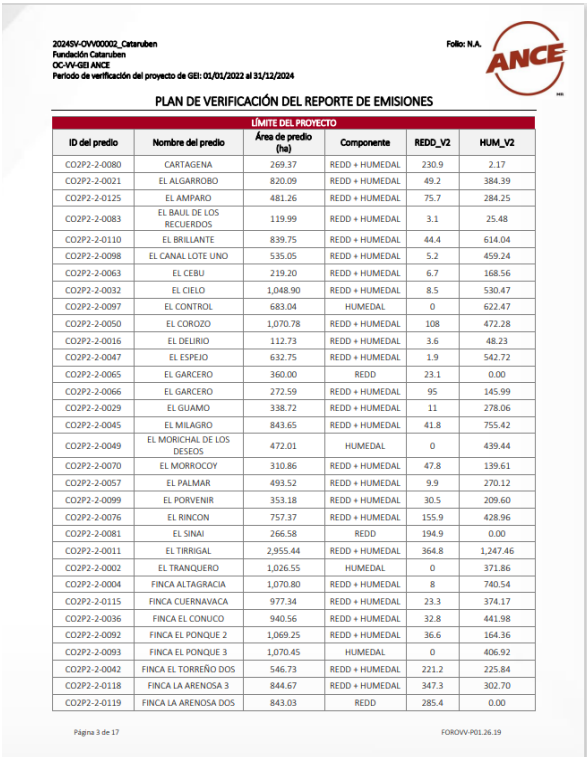

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ID del predio	Nombre del predio	Área de predio (ha)	Componente	REDD_V2	HUM_V2
CO2P2-2-0080	CARTAGENA	269.37	REDD + HUMEDAL	230.9	2.17
CO2P2-2-0021	EL ALGARROBO	820.09	REDD + HUMEDAL	49.2	384.39
CO2P2-2-0125	EL AMPARO	481.26	REDD + HUMEDAL	75.7	284.25
CO2P2-2-0083	EL BAUL DE LOS RECUERDOS	119.99	REDD + HUMEDAL	3.1	25.48
CO2P2-2-0110	EL BRILLANTE	839.75	REDD + HUMEDAL	44.4	614.04
CO2P2-2-0098	EL CANAL LOTE UNO	535.05	REDD + HUMEDAL	5.2	459.24
CO2P2-2-0063	EL CEBU	219.20	REDD + HUMEDAL	6.7	168.56
CO2P2-2-0032	EL CIELO	1,048.90	REDD + HUMEDAL	8.5	530.47
CO2P2-2-0097	EL CONTROL	683.04	HUMEDAL	0	622.47
CO2P2-2-0050	EL COROZO	1,070.78	REDD + HUMEDAL	108	472.28
CO2P2-2-0016	EL DELIRIO	112.73	REDD + HUMEDAL	3.6	48.23
CO2P2-2-0047	EL ESPEJO	632.75	REDD + HUMEDAL	1.9	542.72
CO2P2-2-0065	EL GARCERO	360.00	REDD	23.1	0.00
CO2P2-2-0066	EL GARCERO	272.59	REDD + HUMEDAL	95	145.99
CO2P2-2-0029	EL GUAMO	338.72	REDD + HUMEDAL	11	278.06
CO2P2-2-0045	EL MILAGRO	843.65	REDD + HUMEDAL	41.8	755.42
CO2P2-2-0049	EL MORICHAL DE LOS DESEOS	472.01	HUMEDAL	0	439.44
CO2P2-2-0070	EL MORROCOY	310.86	REDD + HUMEDAL	47.8	139.61
CO2P2-2-0057	EL PALMAR	493.52	REDD + HUMEDAL	9.9	270.12
CO2P2-2-0099	EL PORVENIR	353.18	REDD + HUMEDAL	30.5	209.60
CO2P2-2-0076	EL RINCON	757.37	REDD + HUMEDAL	155.9	428.96
CO2P2-2-0081	EL SINAI	266.58	REDD	194.9	0.00
CO2P2-2-0011	EL TIRRIGAL	2,955.44	REDD + HUMEDAL	364.8	1,247.46
CO2P2-2-0002	EL TRANQUERO	1,026.55	HUMEDAL	0	371.86
CO2P2-2-0004	FINCA ALTAGRACIA	1,070.80	REDD + HUMEDAL	8	740.54
CO2P2-2-0115	FINCA CUERNAVACA	977.34	REDD + HUMEDAL	23.3	374.17
CO2P2-2-0036	FINCA EL CONUCO	940.56	REDD + HUMEDAL	32.8	441.98
CO2P2-2-0092	FINCA EL PONQUE 2	1,069.25	REDD + HUMEDAL	36.6	164.36
CO2P2-2-0093	FINCA EL PONQUE 3	1,070.45	HUMEDAL	0	406.92
CO2P2-2-0042	FINCA EL TORREÑO DOS	546.73	REDD + HUMEDAL	221.2	225.84
CO2P2-2-0118	FINCA LA ARENOSA 3	844.67	REDD + HUMEDAL	347.3	302.70
CO2P2-2-0119	FINCA LA ARENOSA DOS	843.03	REDD	285.4	0.00

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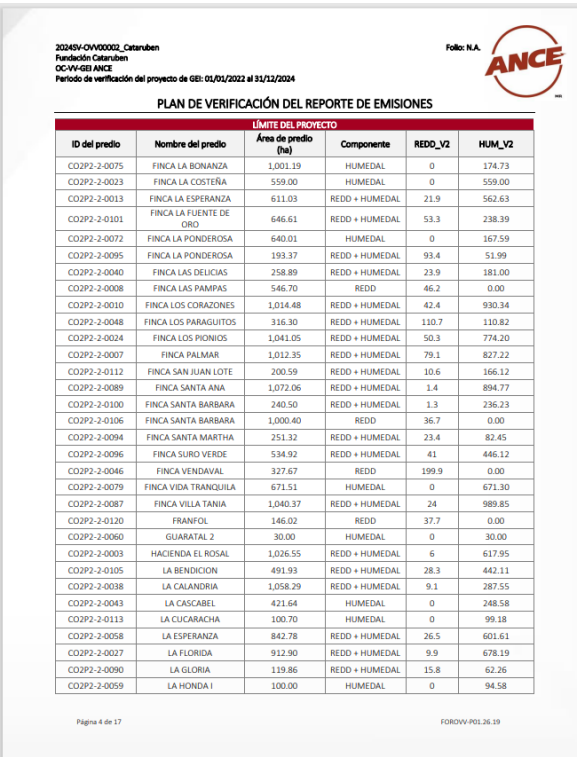

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CO2P2-2-0075	FINCA LA BONANZA	1,001.19	HUMEDAL	0	174.73
CO2P2-2-0023	FINCA LA COSTEÑA	559.00	HUMEDAL	0	559.00
CO2P2-2-0013	FINCA LA ESPERANZA	611.03	REDD + HUMEDAL	21.9	562.63
CO2P2-2-0101	FINCA LA FUENTE DE ORO	646.61	REDD + HUMEDAL	53.3	238.39
CO2P2-2-0072	FINCA LA PONDEROSA	640.01	HUMEDAL	0	167.59
CO2P2-2-0095	FINCA LA PONDEROSA	193.37	REDD + HUMEDAL	93.4	51.99
CO2P2-2-0040	FINCA LAS DELICIAS	258.89	REDD + HUMEDAL	23.9	181.00
CO2P2-2-0008	FINCA LAS PAMPAS	546.70	REDD	46.2	0.00
CO2P2-2-0010	FINCA LOS CORAZONES	1,014.48	REDD + HUMEDAL	42.4	930.34
CO2P2-2-0048	FINCA LOS PARAGUITOS	316.30	REDD + HUMEDAL	110.7	110.82
CO2P2-2-0024	FINCA LOS PIONIOS	1,041.05	REDD + HUMEDAL	50.3	774.20
CO2P2-2-0007	FINCA PALMAR	1,012.35	REDD + HUMEDAL	79.1	827.22
CO2P2-2-0112	FINCA SAN JUAN LOTE	200.59	REDD + HUMEDAL	10.6	166.12
CO2P2-2-0089	FINCA SANTA ANA	1,072.06	REDD + HUMEDAL	1.4	894.77
CO2P2-2-0100	FINCA SANTA BARBARA	240.50	REDD + HUMEDAL	1.3	236.23
CO2P2-2-0106	FINCA SANTA BARBARA	1,000.40	REDD	36.7	0.00
CO2P2-2-0094	FINCA SANTA MARTHA	251.32	REDD + HUMEDAL	23.4	82.45
CO2P2-2-0096	FINCA SURO VERDE	534.92	REDD + HUMEDAL	41	446.12
CO2P2-2-0046	FINCA VENDAVAL	327.67	REDD	199.9	0.00
CO2P2-2-0079	FINCA VIDA TRANQUILA	671.51	HUMEDAL	0	671.30
CO2P2-2-0087	FINCA VILLA TANIA	1,040.37	REDD + HUMEDAL	24	989.85
CO2P2-2-0120	FRANFOL	146.02	REDD	37.7	0.00
CO2P2-2-0060	GUARATAL 2	30.00	HUMEDAL	0	30.00
CO2P2-2-0003	HACIENDA EL ROSAL	1,026.55	REDD + HUMEDAL	6	617.95
CO2P2-2-0105	LA BENDICION	491.93	REDD + HUMEDAL	28.3	442.11
CO2P2-2-0038	LA CALANDRIA	1,058.29	REDD + HUMEDAL	9.1	287.55
CO2P2-2-0043	LA CASCABEL	421.64	HUMEDAL	0	248.58
CO2P2-2-0113	LA CUCARACHA	100.70	HUMEDAL	0	99.18
CO2P2-2-0058	LA ESPERANZA	842.78	REDD + HUMEDAL	26.5	601.61
CO2P2-2-0027	LA FLORIDA	912.90	REDD + HUMEDAL	9.9	678.19
CO2P2-2-0090	LA GLORIA	119.86	REDD + HUMEDAL	15.8	62.26
CO2P2-2-0059	LA HONDA I	100.00	HUMEDAL	0	94.58

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CO2P2-2-0012	LA LIBERTAD	845.78	REDD + HUMEDAL	36.3	736.87
CO2P2-2-0017	LA MAGOLA	1,062.63	REDD + HUMEDAL	1.2	902.02
CO2P2-2-0041	LA MAPOROZA	64.97	REDD	33.4	0.00
CO2P2-2-0069	LA REVANCHA	1,071.82	REDD + HUMEDAL	27.3	817.10
CO2P2-2-0074	LA YUBEREÑA	1,949.68	REDD + HUMEDAL	110.5	1,641.58
CO2P2-2-0068	LAGUNITAS	842.85	HUMEDAL	0	822.22
CO2P2-2-0020	LAS BRISAS	355.84	REDD	13.7	0.00
CO2P2-2-0051	LAS BRISAS	842.84	REDD + HUMEDAL	123.5	190.27
CO2P2-2-0073	LAS BRISAS	2,584.00	REDD + HUMEDAL	415.6	857.00
CO2P2-2-0014	LAS ESCUDILLAS	486.77	REDD + HUMEDAL	1.6	411.17
CO2P2-2-0114	LAS GARZAS	63.06	REDD	12.6	0.00
CO2P2-2-0025	LAS PAMPAS	1,011.76	REDD	240.5	0.00
CO2P2-2-0039	LOS ARRECIFES	627.89	REDD + HUMEDAL	6.9	571.53
CO2P2-2-0061	LOS ESFUERZOS	3,120.04	REDD + HUMEDAL	28.7	2,506.29
CO2P2-2-0102	LOS SIETE DIAMANTES	41.05	REDD	12.1	0.00
CO2P2-2-0062	LOTE 1	88.00	HUMEDAL	0	36.87
CO2P2-2-0064	LOTE 2	117.00	HUMEDAL	0	103.54
CO2P2-2-0056	LOTE 2 ANA MARIA	463.69	REDD + HUMEDAL	2	246.04
CO2P2-2-0067	LOTE LA MOSCA	861.26	REDD + HUMEDAL	43.4	740.75
CO2P2-2-0034	LOTE NUMERO TRES EL PARAISO	100.00	HUMEDAL	0	100.00
CO2P2-2-0019	MATA DE SAMURO	701.41	REDD	72.7	0.00
CO2P2-2-0044	MIRALINDO	471.17	REDD + HUMEDAL	36.3	418.30
CO2P2-2-0009	MIRAMAR	166.03	REDD	33	0.00
CO2P2-2-0104	MOSCU	279.76	REDD + HUMEDAL	8.4	233.01
CO2P2-2-0015	NARANJAL	842.21	REDD + HUMEDAL	6.5	821.35
CO2P2-2-0078	NO SE SABE	377.68	REDD + HUMEDAL	98.8	226.25
CO2P2-2-0005	PANAMA	4,677.33	REDD + HUMEDAL	160.3	4,057.65
CO2P2-2-0085	PUERTO LINDO	94.54	REDD + HUMEDAL	7.2	59.44
CO2P2-2-0107	SAN BENITO	150.01	REDD + HUMEDAL	2.5	146.44
CO2P2-2-0037	SAN ESTEBAN	3,460.85	REDD + HUMEDAL	1,835.1	793.07
CO2P2-2-0055	SAN JOSÉ	123.87	REDD + HUMEDAL	15.4	70.20
CO2P2-2-0103	SAN JUAN 2	170.81	REDD + HUMEDAL	3.7	141.07

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CO2P2-2-0028	SANTO DOMINGO FLORIDEÑO	674.48	REDD	33	0.00
CO2P2-2-0109	VILLA FERNANDA	249.99	REDD + HUMEDAL	2.1	125.66
CO2P2-2-0071	VILLA MARTHA	471.20	HUMEDAL	0	408.22

Tipos de GEI incluidos en la declaración de GEI:

CO_2	CH_4	N_2O	HFC	PFC	NF_3	SF_6

Procedencia de los datos para el escenario de línea base y la línea base del proyecto de GEI:

Datos históricos de un año (X)
Datos históricos de un promedio de varios años ( )

Nota: *Categoría 1: emisiones y remociones directas de GEI; Categoría 2: emisiones indirectas de GEI por energía importada; Categoría 3: emisiones indirectas de GEI por transporte; Categoría 4: emisiones indirectas de GEI por productos utilizados por la organización; Categoría 5: emisiones indirectas de GEI asociadas con el uso de productos de la organización; Categoría 6: emisiones indirectas de GEI por otras fuentes.*

V. CRONOGRAMA DE TRABAJO

Notas para verificación:
* Los planes de verificación deben contar con firma de aceptación del cliente
* Los días máximos para la atención de los hallazgos son 30 días hábiles, estos se contabilizan posterior al día de entrega del informe de hallazgos.
* Para el análisis de la atención de los hallazgos, así como la elaboración y envío del informe consolidado de hallazgos, el OVV cuenta con 10 días hábiles máximo.
* Al entregar el informe consolidado de hallazgos, el cliente cuenta con 3 días hábiles máximo para otorgar el Vo.Bo. vía correo electrónico, en caso de no hacerlo, el OVV lo dará como aceptado y procederá a la siguiente etapa del proceso.
* El tiempo de elaboración del borrador de la Declaración e Informe de verificación por parte del OVV son 7 días hábiles, esto incluye el proceso de revisión independiente.
* Al entregar el borrador de la Declaración e informe de verificación, el cliente cuenta con 7 días hábiles máximo para otorgar el Vo.Bo. vía correo electrónico, en caso de no hacerlo, el OVV lo dará como aceptado y procederá a la siguiente etapa del proceso.
* La Declaración e informe de verificación en físico se enviarán al cliente posterior al envío de los documentos de manera digital y al concluir el proceso de facturación y pago.

I. PLAN DE RECOPILACIÓN DE EVIDENCIAS Y ANÁLISIS DE RIESGOS

A. FSR de emisión y su porcentaje de contribución al total de emisiones

Categoría de emisión	Nombre del predio	Componente	Tipo de parcela		Área (ha)	%
			Bosque	Humedal		
CO2P2-2-0033	**CANDELARIA UNO**	**HUMEDAL**	**No Aplica**	**Herbáceo**	**884.64**	**2.36**
CO2P2-2-0043	LA CASCABEL	HUMEDAL	No Aplica	Disperso	421.64	1.13
CO2P2-2-0018	**LOTE DOS (SAN FELIPE 2)**	**REDD**	**Parcela Bosque**	**No Aplica**	**10,040.73**	**26.84**
CO2P2-2-0025	LAS PAMPAS	REDD	Parcela Bosque	No Aplica	1,011.76	2.70

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Categoría de emisión	Nombre del predio	Componente	Tipo de parcela		Área (ha)	%
			Bosque	Humedal		
CO2P2-2-0019	MATA DE SAMURO	REDD	Parcela Bosque	No Aplica	701.41	1.88
CO2P2-2-0046	FINCA VENDAVAL	REDD	Parcela Bosque	No Aplica	327.67	0.88
CO2P2-2-0091	**EL CAIRO**	**REDD**	**Parcela Bosque**	**No Aplica**	**173.50**	**0.46**
CO2P2-2-0026	LA MACOLLA	REDD	Parcela Bosque	No Aplica	134.62	0.36
CO2P2-2-0037	SAN ESTEBAN	REDD + HUMEDAL	Parcela Bosque	No Aplica	3,460.85	9.25
CO2P2-2-0031	**LA CANDELARIA**	**REDD + HUMEDAL**	**Parcela Bosque**	**Herbáceo**	**3,114.04**	**8.32**
CO2P2-2-0011	EL TIRRIGAL	REDD + HUMEDAL	Parcela Bosque	Herbáceo	2,955.44	7.90
CO2P2-2-0073	LAS BRISAS	REDD + HUMEDAL	Parcela Bosque	Herbáceo	2,584.00	6.91
CO2P2-2-0077	**EL REMACHE 1**	**REDD + HUMEDAL**	**Parcela Bosque**	**No Aplica**	**1,848.34**	**4.94**
CO2P2-2-0006	**LOTE 6**	**REDD + HUMEDAL**	**Parcela Bosque**	**No Aplica**	**1,375.01**	**3.68**
CO2P2-2-0035	ALTAGRACIA	REDD + HUMEDAL	No Aplica	Herbáceo	1,073.06	2.87
CO2P2-2-0004	FINCA ALTAGRACIA	REDD + HUMEDAL	No Aplica	Herbáceo	1,070.80	2.86
CO2P2-2-0092	FINCA EL PONQUE 2	REDD + HUMEDAL	Parcela Bosque	No Aplica	1,069.25	2.86
CO2P2-2-0087	FINCA VILLA TANIA	REDD + HUMEDAL	No Aplica	Herbáceo	1,040.37	2.78
CO2P2-2-0007	FINCA PALMAR	REDD + HUMEDAL	Parcela Bosque	Herbáceo	1,012.35	2.71
CO2P2-2-0054	**LA ESPERANZA**	**REDD**	**No Aplica**	**No Aplica**	**388.85**	**1.04**
CO2P2-2-0012	LA LIBERTAD	REDD + HUMEDAL	No Aplica	Herbáceo	845.78	2.26
CO2P2-2-0107	**SAN BENITO**	**REDD + HUMEDAL**	**No Aplica**	**No Aplica**	**150.01**	**0.40**
CO2P2-2-0026	**LA MACOLLA**	**REDD**	**Parcela Bosque**	**No Aplica**	**134.62**	**0.36**
CO2P2-2-0042	FINCA EL TORREÑO DOS	REDD + HUMEDAL	Parcela Bosque	No Aplica	546.73	1.46
CO2P2-2-0034	**LOTE NUMERO TRES EL PARAISO**	**HUMEDAL**	**No Aplica**	**No Aplica**	**100.00**	**0.27**
CO2P2-2-0078	NO SE SABE	REDD + HUMEDAL	Parcela Bosque	Herbáceo	377.68	1.01
CO2P2-2-0022	**LA PALMITA**	**REDD + HUMEDAL**	**No Aplica**	**No Aplica**	**254.13**	**0.68**
CO2P2-2-0070	EL MORROCOY	REDD + HUMEDAL	Parcela Bosque	No Aplica	310.86	0.83

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A.1 Muestreo para alcanzar el nivel de aseguramiento.

Actividad	Plots	Auditoría de Campo por Muestreo	Porcentaje de muestreo %
HUMEDAL	2	2	76.91
REDD	6	2	
REDD + HUMEDAL	20	7	
Entrevistas	No aplica	11	100
Estimación de reducción de GEI	No aplica	100	100
GIS	No aplica	100	100
Documentación que sustenta DdP	No aplica	100	100
Reporte de monitoreo	No aplica	100	100
		Nivel de aseguramiento	**96.15%**

B. Análisis de riesgos

Los riesgos que se deben evaluar de forma cuantitativa y cualitativa son:

- Riesgos inherentes: riesgo de que se produzcan errores, extravíos o desviaciones atribuibles al manejo de información del establecimiento.
- Riesgos de control: riesgo de que el sistema de control interno del establecimiento no pueda prevenir, detectar y/o corregir errores.
- Riesgo de detección: riesgo de que los procedimientos del verificador no detecten errores.

Cuadro 1. Análisis de riesgos*.

No.	Actividad	Descripción de los riesgos		RI	RC	RD	Riesgo de la Verificación
		RI	RC				
1	¿El proyecto explica y justifica adecuadamente la línea base?	Se detectó alguna probabilidad de declaración errónea intencional (de la fuente) en la declaración de GEI;	Existen procesos de control de calidad para la información involucrada	B	B	A	Bajo
2	¿El proyecto explica y justifica la adicionalidad de manera clara?	Se aplica la metodología de acuerdo con el Programa GEI aplicable;	Se detectó incumplimiento de las leyes y regulaciones aplicables que puedan tener un efecto directo en las emisiones de la fuente	M	B	M	Medio
3	¿El proyecto aborda y justifica el riesgo de pertenencia?	Se detectó alguna probabilidad de declaración errónea intencional (de la fuente) en la declaración de GEI;	Existen procesos de control de calidad para la información involucrada	B	B	A	Bajo
4	¿El proyecto justifica las salvaguardas sociales y ambientales?	Se detectó alguna probabilidad de declaración errónea intencional (de la fuente) en la declaración de GEI;	La parte responsable identifica y previene de errores u omisiones en la fuente de manera eficaz	B	B	A	Bajo
5	¿Se identifican los procesos establecidos para evitar la doble contabilidad?	Se detectó alguna probabilidad de declaración errónea intencional en el proyecto GEI;	Para el cálculo de emisiones de la fuente, ¿los datos de origen están procesados de forma controlada?	M	B	M	Medio
6	¿Se ha evitado la sobreestimación en las reducciones de emisiones?	Se detectó alguna probabilidad de declaración errónea intencional en el proyecto GEI;	Para el cálculo de emisiones de la fuente, ¿los datos de origen están procesados de forma controlada?	M	B	M	Medio
7	¿Existen procedimientos documentados para la gestión de bases de datos georeferenciadas y se reporta el porcentaje de error?	Se detectó alguna probabilidad de declaración errónea intencional en el proyecto GEI;	Existen procesos de control de calidad para la información involucrada	B	M	A	Bajo

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8	¿El proyecto cumple con todos los requerimientos de la metodología aplicada?	Se aplica la metodología de cálculo de acuerdo al Programa GEI aplicable;	La fuente está integrada a un sistema de manejo de información de GEI	M	M	M	Medio
9	¿El proyecto adopta un enfoque conservador al establecer la línea base?	No se detectaron errores en el procesamiento de datos en el cálculo de emisiones, sin embargo, existe complejidad en el procesamiento;	Existen procesos de control de calidad para la información involucrada	B	B	A	Bajo
10	¿Se ha verificado la titularidad de los derechos al uso del suelo donde se implementan las actividades del proyecto?	Se detectó alguna probabilidad de declaración errónea intencional en el proyecto GEI;	Se detectó incumplimiento de las leyes y regulaciones aplicables que puedan tener un efecto directo en las emisiones de la fuente	B	B	A	Bajo
11	¿El equipo responsable cuenta con el conocimiento técnico necesario para el diseño y desarrollo del proyecto?	Se detectó alguna probabilidad de declaración errónea intencional (de la fuente) en la declaración de GEI;	Detectó experiencia, habilidad y formación del personal en el cálculo de emisiones para la fuente	B	B	A	Bajo
12	¿Se presenta información suficiente que demuestre la contribución del proyecto a los Objetivos de Desarrollo Sostenible (ODS)?	Se aplica la metodología de acuerdo al Programa GEI aplicable;	Existen procesos de control de calidad para la información involucrada	B	B	A	Bajo
13	¿Se cuenta con evidencia que respalde los derechos de propiedad sobre las tierras incluidas en el proyecto GEI?	Se detectó alguna probabilidad de declaración errónea intencional en el proyecto GEI;	Existen procesos de control de calidad para la información involucrada	B	B	A	Bajo
14	¿Se han identificado y gestionado los riesgos asociados a la imposibilidad de acceder a las propiedades por condiciones de orden público o climáticas?	Se detectó alguna probabilidad de declaración errónea intencional en el proyecto GEI;	Existe comunicación entre áreas involucradas en el Proyecto	B	B	A	Bajo
15	¿Se ha identificado los riesgos sociales los cuales el proyecto está involucrado?	El equipo de Verificación de ANCE conoce el contexto social del proyecto	Existe comunicación entre áreas involucradas en el Proyecto	A	A	B	Alto
16	¿Se ha identificado los riesgos ambientales los cuales el proyecto está involucrado?	El equipo de Verificación de ANCE conoce el contexto ambiental del proyecto	Existe comunicación entre áreas involucradas en el Proyecto	A	A	B	Alto
17	¿Se ha identificado los riesgos políticos o regulatorios los cuales el proyecto está involucrado?	El equipo de Verificación de ANCE conoce el contexto regulatorio del proyecto	Existe comunicación entre áreas involucradas en el Proyecto	A	A	B	Alto
18	¿Se ha identificado los riesgos técnicos los cuales el proyecto está involucrado?	El ESR cuenta con el sustento cálculo de emisiones mediante una herramienta;	Existe comunicación entre áreas involucradas en el Proyecto	A	A	B	Alto

Siglas: *RI: Riesgo inherente; RC: Riesgo de control; RD: Riesgo de detección. Ver anexo A para la descripción de medidas de mitigación.*

Evaluación del riesgo	
Riesgo de la verificación:	***Bajo***

*Con base en el ANEXO A.

C. Justificación del nivel de aseguramiento.

a) Para validaciones/verificaciones bajo criterios de la UNE EN ISO 14064 o algún otro programa de GEI que se base en ella: existen dos niveles de aseguramiento, el limitado (60%) y el razonable (80%). Con base en el numeral A.2 del "Anexo A Verificaciones de niveles de aseguramiento limitado" de la norma UNE EN ISO 14064-3:2019, en los casos de las verificaciones de nivel de aseguramiento limitado, no se debe cambiar dicho nivel una vez comenzado el compromiso. En caso de que se cambie, se debe documentar las razones del cambio, así como comenzar una nueva verificación a un nivel de aseguramiento diferente.

Verificación documental	
Número de FSR incluidas en la declaración de GEI:	120 predios
Número de FSR que serán verificadas a nivel documental:	120 predios
Periodo del escenario de línea base:	15/01/2018 al 14/01/2038
Periodo de monitoreo de proyecto:	01/01/2022 al 31/12/2024
Periodo del proyecto (inicio y término de las actividades):	15/01/2018 al 14/01/2038

PLAN DE VERIFICACIÓN DEL REPORTE DE EMISIONES

Días requeridos para la verificación documental:	07 días hábiles
Verificación en sitio	
Número de FSR que serán verificados en sitio:	11 predios
Días verificador para la verificación en sitio:	05 días verificador

Nota: *El tiempo máximo por día verificador es de 8 horas.*

VI. ACTIVIDADES DE VERIFICACIÓN

Verificación documental.

Durante el proceso de la verificación documental que se lleva a cabo del **15/05/2025** al **23/05/2025** se realizan las actividades que se mencionan a continuación, considerando la evidencia (documentos) presentada por **Fundación Cataruben,** listada en el cuadro 2**.**

La revisión documental conllevará la evaluación de:

a. El sistema de manejo de información de GEI y sus controles para determinar las fuentes de errores, omisiones o desviaciones potenciales conforme a:
   - la selección, gestión de los datos y la información relacionada a emisiones y/o remociones de GEI;
   - los procesos para recopilar, procesar, consolidar y reportar la información de GEI;
   - los procesos que aseguren la exactitud de los datos y la información del reporte de GEI;
   - los resultados de evaluaciones previas, en caso de haberse realizado;
b. Los datos y la información documental de las emisiones y/o remociones de GEI del proyecto;

Cuadro 2. Documentos evaluados en la revisión documental**.**

Nombre del documento
Carpeta: Documentos OVV
MAPA_GENERAL_RUTAS.pdf
Predios CO2BIO P2-2.xlsx
Visita a campo – CO2Bio P2-2 Verification 2.xlsx
Carpeta: CO2Bio P2-2 Verificación 2 (2022-2024) – Reporte de monitoreo
BCR_Reporte de Monitoreo CO2Bio P2-2_Verificación_2.pdf
Carpeta: CO2Bio P2-2 Verificación 2 (2022-2024) – Anexos
1.- Propiedad del carbono
1.1. Certificados de Tradición y Libertad
1.2 Cesiones de contrato
2.- Actividades de proyecto
2.1. A.1
2.1.1. PROGRAMA DE GESTIÓN HÍDRICA – CO2BIO PROYECTO 2.2.pdf
2.1.2. Anexos
2.1.3. INFORME DE AVANCE.pdf
2.2. B.1
2.2.1 Metodología Monitoreo Bioacústico Participativo de la Biodiversidad.pdf
2.2.2. Resultados de Monitoreo Bioacústico Participativo de la Biodiversidad.pdf
2.2.3 Anexos
2.2.4 Información Geográfica
2.3. B.2
2.3.1 Informe sobre el Monitoreo de Altos Valores de Conservación.pdf
2.3.2 Geodatabase AVC
2.4 G.1
2.4.1 Informes capacitaciones.pdf
2.4.1.1. Capacitación – Actividades productivas sostenibles, soluciones hídricas alternativas y Gestión del recurso hídrico.
2.4.1.2 Capacitación – Buenas prácticas para la prevención de incendios forestales.
2.4.1.3. Capacitación – Figuras de Conservación
2.4.1.4 Capacitación – Gestión Forestal Sostenible
2.4.1.5 Capacitación – Importancia y clasificación de los humedales – Estrategias de conservación de la biodiversidad
2.4.1.6 Capacitación – Medición y monitoreo de carbono en humedales y bosques

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2.4.1.7 Capacitación – Obligaciones tributarias
2.4.1.8 Capacitación – Restauración y Rehabilitación Forestal
2.4.1.9 Capacitación – Salvaguardas REDD+ 2024
2.4.1.10 Encuentro virtual – Planes de Implementación Predial
2.4.1.11 III Foro de biodiversidad + Carbono & Agua
2.4.1.12 IV Foro de biodiversidad + Carbono & Agua
2.4.1.13 Programas Ecolideres
2.5. G.2
2.5.1 G.2 – Informe de Avance Estrategia de Gobernanza.pdf
2.5.2 Anexos
2.5.3 Editables
2.6. G.3
2.6.1 G.3 Monitoreo continuo de cambios en la Superficie forestal como proporción de la superficie total en áreas de proyecto
2.6.2 G.3 Validación de bosque 2018 CCD.xlsx
2.6.3 Editable
2.7 G.4
2.7.1 Monitoreo puntos de calor REDD+ CO2Bio Proyecto 2-2.pdf
2.7.2 Proceso Metodológico del monitoreo de puntos de calor y anomalías térmicas.pdf
2.7.2 Resultados
2.7.3 Guia-Practica.Manejo-Integral-Guego-Rural.pdf
2.7.4 Editables
2.8. G.5
2.8.1 Informe de Prácticas productivas y Acciones de Conservación 2022-2024.pdf
2.8.2 Caracterizaciones SEAP
2.8.3 Planes de Implementación Predial
2.8.4 Seguimiento Planes de Implementación
2.8.5 Editable
2.9 Plan y reporte de monitoreo CO2Bio P2-2 (2022-2024).xlsx
3. Cumplimiento de Salvaguardas
3.1 Salvaguarda A
3.1.1.A1 – Correspondencia con legislación nacional
3.2 Salvaguarda B
3.2.1. B2 – Transparencia y acceso a la información
3.2.1. B3 – Rendición de cuentas
3.2.3 B4 – Reconocimiento de las estructuras de gobernanza forestal
3.2.4 B5 – Fortalecimiento de capacidades
3.3 Salvaguarda C
3.3.1. C6 – Consentimiento libre, previo e informado
3.3.2. C7 – Respeto del conocimiento tradicional
3.3.3. C8 – Distribución de beneficios
3.3.4. C9 – Derechos Territoriales
3.4 Salvaguarda D
3.4.1. D10 – Participación
3.5. Salvaguarda E
3.5.1 E11 Conservación de Bosques y su Biodiversidad
3.5.2 E12 Provisión de Bienes y Servicios Ambientales
3.6. Salvaguarda F
3.6.1 F13 Ordenamiento Ambiental y Territorial
3.7. Salvaguarda G
3.7.1 G15 Contro y Vigilancia Forestal para evitar el Desplazamiento de emisiones
4. ODS
4.1. ODS 6 – Agua limpia y saneamiento
4.2. ODS 13 – Acción por el clima
4.3. ODS 15 – Vida de ecosistemas terrestres
4.4 TOOL – ODS.xlsx
4.5 Plan y Reporte Monitoreo ODS (CO2Bio P2-2)

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5. Cobeneficios
5.1 Plan de Monitoreo de Cobeneficios CO2Bio Proyecto 2 -2 (2022-2024).xlsx
6. Aspectos ambientales y Socioeconómicos
6.1 Anexo A _ Cuestionario de evaluación de la herramienta de Salvaguardas de Desarrollo Sostenible – CO2Bio P2-2.pdf
6.2 Soportes
6.3 Editables
7. Monitoreo de emisiones
7.1 Monitoreo de Emisiones
8. Geoespacial
8.1 REDD
8.2 Humedales
8.3 Proyectos Carbono
8.4 área de Proyecto
9. Cambios posteriores al registro
BCR_DdP_CO2BioP2-2 Versión 2.3 EN.docx
9.1 Geodatabases

Verificación en sitio.

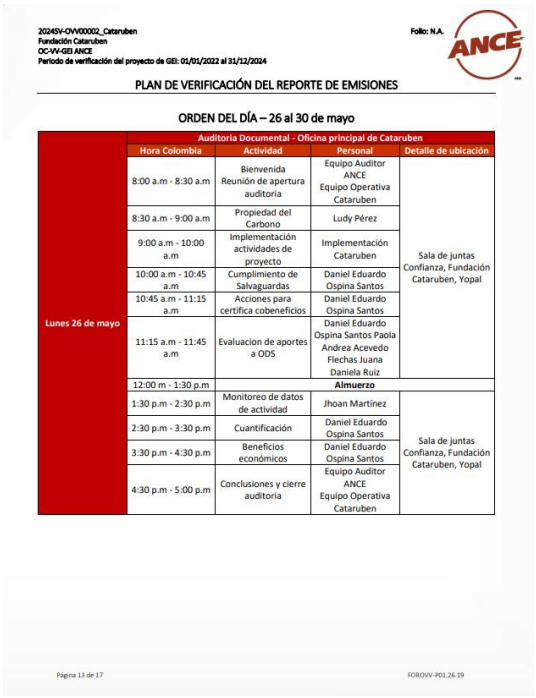
Una vez concluidas las actividades mencionadas para verificación documental, se continuará con la revisión de las evidencias de la información que conforma el Documento del Diseño del Proyecto de GEI y el Plan de Monitoreo, dichas actividades destinadas a realizarse durante la visita en sitio se mencionan a continuación:

La visita en sitio implica:

- La revisión exhaustiva en el sitio de acuerdo con los límites del proyecto.
- Entrevistar al personal involucrado en los diferentes procesos, en la generación y en el manejo de los datos y llevar un registro detallado tanto de las revisiones de los FSR como de las entrevistas llevadas a cabo.
- Confirmar si fueron consideradas todas los FSR de GEI.
- La revisión de los procesos para identificar, seleccionar y justificar el escenario de la línea base y la línea base.
- Corroborar la disponibilidad de evidencia para la información y la declaración de GEI por la parte responsable;
- Verificar la aplicación de supuestos y consideraciones;
- Verificar los procedimientos operacionales y de control que la parte responsable va a implementar para asegurarse de la calidad, integridad y seguridad de la información sobre los GEI;
- Verificar los procesos utilizados para reunir y revisar cualquier documentación que apoya la información proporcionada sobre los GEI.

INFORMACIÓN SOBRE LA VERIFICACIÓN EN SITIO

INFORMACIÓN GENERAL SOBRE LA VERIFICACIÓN EN SITIO	
Fecha de verificación en sitio:	26/05/2025 al 30/05/2025
Horario de actividades:	08:00 – 18:00 hrs



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ORDEN DEL DÍA – 26 al 30 de mayo

	Auditoria Documental - Oficina principal de Cataruben			
	Hora Colombia	Actividad	Personal	Detalle de ubicación
Lunes 26 de mayo	8:00 a.m - 8:30 a.m	Bienvenida Reunión de apertura auditoria	Equipo Auditor ANCE Equipo Operativa Cataruben	Sala de juntas Confianza, Fundación Cataruben, Yopal
	8:30 a.m - 9:00 a.m	Propiedad del Carbono	Ludy Pérez	
	9:00 a.m - 10:00 a.m	Implementación actividades de proyecto	Implementación Cataruben	
	10:00 a.m - 10:45 a.m	Cumplimiento de Salvaguardas	Daniel Eduardo Ospina Santos	
	10:45 a.m - 11:15 a.m	Acciones para certifica cobeneficios	Daniel Eduardo Ospina Santos	
	11:15 a.m - 11:45 a.m	Evaluacion de aportes a ODS	Daniel Eduardo Ospina Santos Paola Andrea Acevedo Flechas Juana Daniela Ruiz	
	12:00 m - 1:30 p.m	Almuerzo		
	1:30 p.m - 2:30 p.m	Monitoreo de datos de actividad	Jhoan Martínez	Sala de juntas Confianza, Fundación Cataruben, Yopal
	2:30 p.m - 3:30 p.m	Cuantificación	Daniel Eduardo Ospina Santos	
	3:30 p.m - 4:30 p.m	Beneficios económicos	Daniel Eduardo Ospina Santos	
	4:30 p.m - 5:00 p.m	Conclusiones y cierre auditoria	Equipo Auditor ANCE Equipo Operativa Cataruben	

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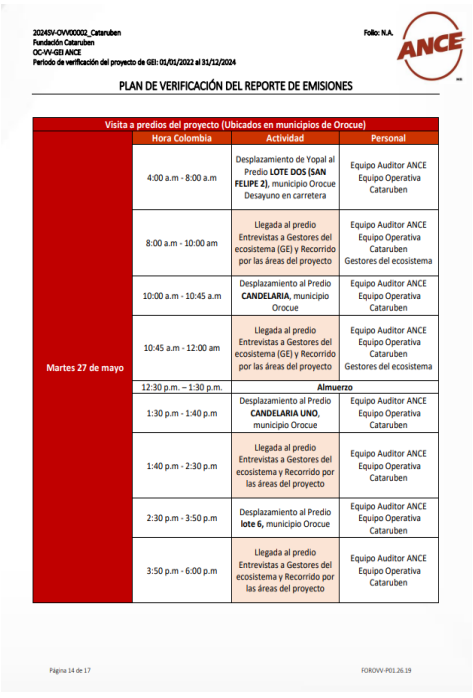

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	Visita a predios del proyecto (Ubicados en municipios de Orocue)		
	Hora Colombia	Actividad	Personal
Martes 27 de mayo	4:00 a.m - 8:00 a.m	Desplazamiento de Yopal al Predio **LOTE DOS (SAN FELIPE 2)**, municipio Orocue Desayuno en carretera	Equipo Auditor ANCE Equipo Operativa Cataruben
	8:00 a.m - 10:00 am	Llegada al predio Entrevistas a Gestores del ecosistema (GE) y Recorrido por las áreas del proyecto	Equipo Auditor ANCE Equipo Operativa Cataruben Gestores del ecosistema
	10:00 a.m - 10:45 a.m	Desplazamiento al Predio **CANDELARIA**, municipio Orocue	Equipo Auditor ANCE Equipo Operativa Cataruben
	10:45 a.m - 12:00 am	Llegada al predio Entrevistas a Gestores del ecosistema (GE) y Recorrido por las áreas del proyecto	Equipo Auditor ANCE Equipo Operativa Cataruben Gestores del ecosistema
	12:30 p.m. – 1:30 p.m.	Almuerzo	
	1:30 p.m - 1:40 p.m	Desplazamiento al Predio **CANDELARIA UNO**, municipio Orocue	Equipo Auditor ANCE Equipo Operativa Cataruben
	1:40 p.m - 2:30 p.m	Llegada al predio Entrevistas a Gestores del ecosistema y Recorrido por las áreas del proyecto	Equipo Auditor ANCE Equipo Operativa Cataruben
	2:30 p.m - 3:50 p.m	Desplazamiento al Predio **lote 6,** municipio Orocue	Equipo Auditor ANCE Equipo Operativa Cataruben
	3:50 p.m - 6:00 p.m	Llegada al predio Entrevistas a Gestores del ecosistema y Recorrido por las áreas del proyecto	Equipo Auditor ANCE Equipo Operativa Cataruben

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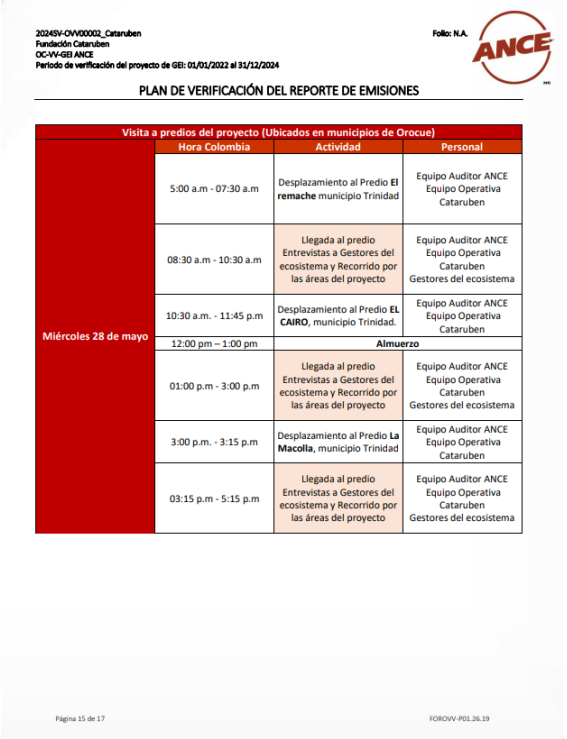

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	Visita a predios del proyecto (Ubicados en municipios de Orocue)		
	Hora Colombia	Actividad	Personal
Miércoles 28 de mayo	5:00 a.m - 07:30 a.m	Desplazamiento al Predio **El remache** municipio Trinidad	Equipo Auditor ANCE Equipo Operativa Cataruben
	08:30 a.m - 10:30 a.m	Llegada al predio Entrevistas a Gestores del ecosistema y Recorrido por las áreas del proyecto	Equipo Auditor ANCE Equipo Operativa Cataruben Gestores del ecosistema
	10:30 a.m. - 11:45 p.m	Desplazamiento al Predio **EL CAIRO**, municipio Trinidad.	Equipo Auditor ANCE Equipo Operativa Cataruben
	12:00 pm – 1:00 pm	Almuerzo	
	01:00 p.m - 3:00 p.m	Llegada al predio Entrevistas a Gestores del ecosistema y Recorrido por las áreas del proyecto	Equipo Auditor ANCE Equipo Operativa Cataruben Gestores del ecosistema
	3:00 p.m. - 3:15 p.m	Desplazamiento al Predio **La Macolla**, municipio Trinidad	Equipo Auditor ANCE Equipo Operativa Cataruben
	03:15 p.m - 5:15 p.m	Llegada al predio Entrevistas a Gestores del ecosistema y Recorrido por las áreas del proyecto	Equipo Auditor ANCE Equipo Operativa Cataruben Gestores del ecosistema

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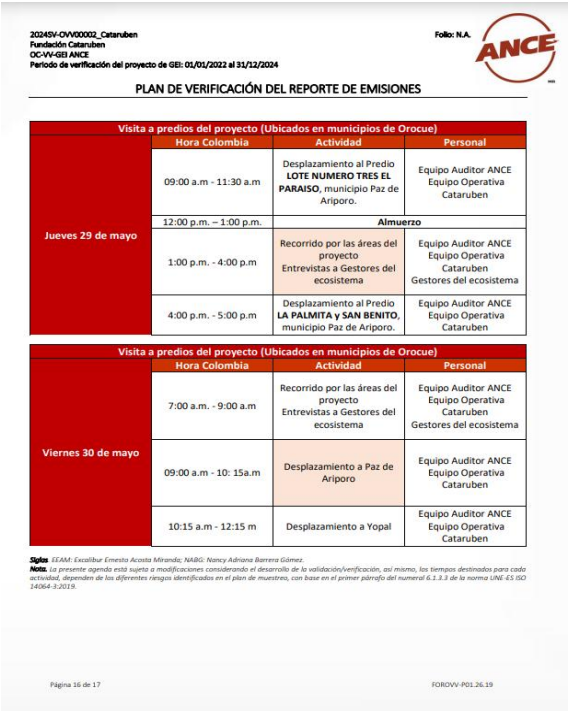

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	Visita a predios del proyecto (Ubicados en municipios de Orocue)		
	Hora Colombia	Actividad	Personal
Jueves 29 de mayo	09:00 a.m - 11:30 a.m	Desplazamiento al Predio **LOTE NUMERO TRES EL PARAISO**, municipio Paz de Ariporo.	Equipo Auditor ANCE Equipo Operativa Cataruben
	12:00 p.m. – 1:00 p.m.	Almuerzo	
	1:00 p.m. - 4:00 p.m	Recorrido por las áreas del proyecto Entrevistas a Gestores del ecosistema	Equipo Auditor ANCE Equipo Operativa Cataruben Gestores del ecosistema
	4:00 p.m. - 5:00 p.m	Desplazamiento al Predio **LA PALMITA y SAN BENITO**, municipio Paz de Ariporo.	Equipo Auditor ANCE Equipo Operativa Cataruben

	Visita a predios del proyecto (Ubicados en municipios de Orocue)		
	Hora Colombia	Actividad	Personal
Viernes 30 de mayo	7:00 a.m. - 9:00 a.m	Recorrido por las áreas del proyecto Entrevistas a Gestores del ecosistema	Equipo Auditor ANCE Equipo Operativa Cataruben Gestores del ecosistema
	09:00 a.m - 10: 15a.m	Desplazamiento a Paz de Ariporo	Equipo Auditor ANCE Equipo Operativa Cataruben
	10:15 a.m - 12:15 m	Desplazamiento a Yopal	Equipo Auditor ANCE Equipo Operativa Cataruben

Siglas. *EEAM: Excalibur Ernesto Acosta Miranda; NABG: Nancy Adriana Barrera Gómez.*
Nota. *La presente agenda está sujeta a modificaciones considerando el desarrollo de la validación/verificación, así mismo, los tiempos destinados para cada actividad, dependen de los diferentes riesgos identificados en el plan de muestreo, con base en el primer párrafo del numeral 6.1.3.3 de la norma UNE-ES ISO 14064-3:2019.*

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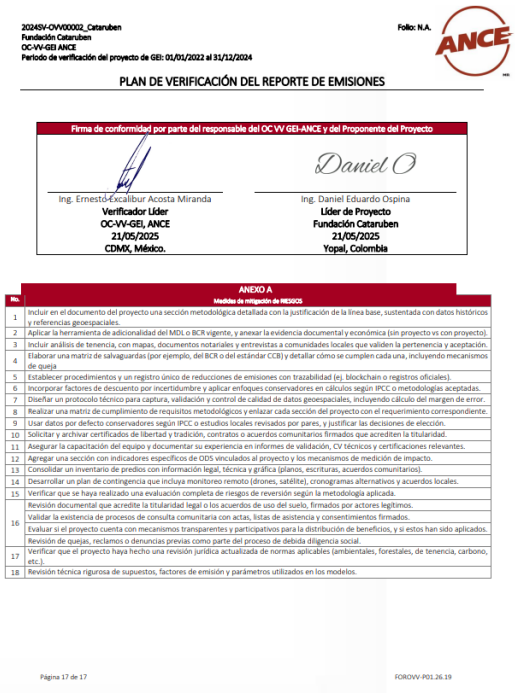

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PLAN DE VERIFICACIÓN DEL REPORTE DE EMISIONES

Firma de conformidad por parte del responsable del OC VV GEI-ANCE y del Proponente del Proyecto

Ing. Ernesto Excalibur Acosta Miranda
Verificador Líder
OC-VV-GEI, ANCE
21/05/2025
CDMX, México.

Ing. Daniel Eduardo Ospina
Líder de Proyecto
Fundación Cataruben
21/05/2025
Yopal, Colombia

ANEXO A

No.	Medidas de mitigación de RIESGOS
1	Incluir en el documento del proyecto una sección metodológica detallada con la justificación de la línea base, sustentada con datos históricos y referencias geoespaciales.
2	Aplicar la herramienta de adicionalidad del MDL o BCR vigente, y anexar la evidencia documental y económica (sin proyecto vs con proyecto).
3	Incluir análisis de tenencia, con mapas, documentos notariales y entrevistas a comunidades locales que validen la pertenencia y aceptación.
4	Elaborar una matriz de salvaguardas (por ejemplo, del BCR o del estándar CCB) y detallar cómo se cumplen cada una, incluyendo mecanismos de queja
5	Establecer procedimientos y un registro único de reducciones de emisiones con trazabilidad (ej. blockchain o registros oficiales).
6	Incorporar factores de descuento por incertidumbre y aplicar enfoques conservadores en cálculos según IPCC o metodologías aceptadas.
7	Diseñar un protocolo técnico para captura, validación y control de calidad de datos geoespaciales, incluyendo cálculo del margen de error.
8	Realizar una matriz de cumplimiento de requisitos metodológicos y enlazar cada sección del proyecto con el requerimiento correspondiente.
9	Usar datos por defecto conservadores según IPCC o estudios locales revisados por pares, y justificar las decisiones de elección.
10	Solicitar y archivar certificados de libertad y tradición, contratos o acuerdos comunitarios firmados que acrediten la titularidad.
11	Asegurar la capacitación del equipo y documentar su experiencia en informes de validación, CV técnicos y certificaciones relevantes.
12	Agregar una sección con indicadores específicos de ODS vinculados al proyecto y los mecanismos de medición de impacto.
13	Consolidar un inventario de predios con información legal, técnica y gráfica (planos, escrituras, acuerdos comunitarios).
14	Desarrollar un plan de contingencia que incluya monitoreo remoto (drones, satélite), cronogramas alternativos y acuerdos locales.
15	Verificar que se haya realizado una evaluación completa de riesgos de reversión según la metodología aplicada.
16	Revisión documental que acredite la titularidad legal o los acuerdos de uso del suelo, firmados por actores legítimos. Validar la existencia de procesos de consulta comunitaria con actas, listas de asistencia y consentimientos firmados. Evaluar si el proyecto cuenta con mecanismos transparentes y participativos para la distribución de beneficios, y si estos han sido aplicados. Revisión de quejas, reclamos o denuncias previas como parte del proceso de debida diligencia social.
17	Verificar que el proyecto haya hecho una revisión jurídica actualizada de normas aplicables (ambientales, forestales, de tenencia, carbono, etc.).
18	Revisión técnica rigurosa de supuestos, factores de emisión y parámetros utilizados en los modelos.

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Furthermore, as a complement to this Annex 5, Table 24 includes the identification of inherent risks, their probability and impact, as well as the corresponding assessment and mitigation measures, based on the information provided by the project owner.

Table 24. Inherent Risks Associated with the Documentary Review of the Project.

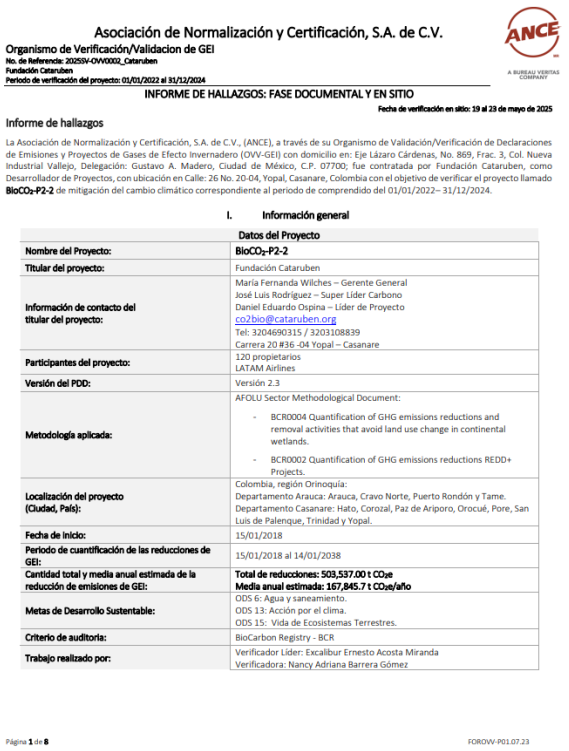
INHERENT RISKS	*PROBABILITY*	*IMPACT*	*RISK ASSESSMENT*	*RISK MANAGEMENT MEASURE*
Extensive and difficult-to-access verification areas	*HIGH*	*HIGH*	*HIGH*	*100% review of procedures for SSR calculation, cartographic information processing, emission/removal quantification methods, and land title verification.*

INHERENT RISKS	*PROBABILITY*	*IMPACT*	*RISK ASSESSMENT*	*RISK MANAGEMENT MEASURE*
Low participation of relevant actors	*HIGH*	*HIGH*	*MEDIUM*	*Conduct in-person and/or virtual interviews with as many beneficiaries and local authorities as possible.*
Complex data management systems	*LOW*	*MEDIUM*	*MEDIUM*	*Review 100% of the related evidence from spreadsheets and processes to build the GDB, including information from IDEAM on forest and non-forest areas.*
Control risk				
Errors in methodological interpretation	*HIGH*	*HIGH*	*LOW*	*Review 100% of the processes for incorporating validation/verification criteria. Consult the BCR standard in case of doubts or deviations.*
Lack of knowledge among project team members	*HIGH*	*HIGH*	*LOW*	*Submit supporting documentation proving that personnel are qualified in accordance with ISO 14066, ISO 14065, and IAF MD 6.*

INHERENT RISKS	*PROBABILITY*	*IMPACT*	*RISK ASSESSMENT*	*RISK MANAGEMENT MEASURE*
Insufficient information on land use rights	*HIGH*	*HIGH*	*LOW*	*Review all supporting documentation for the cadastral update process carried out by the Fundación Cataruben.*
Insufficient information on contribution to SDGs	*HIGH*	*HIGH*	*HIGH*	*Verify alignment of SDGs with targets and indicators associated with the scope of the project.*
Insufficient information on compliance with REDD+	*HIGH*	*HIGH*	*HIGH*	*Verify that activities comply with the national interpretation of safeguards for Colombia.*
Detection risk and Information and Communication Technologies (ICT)				
Probability of intentional misreporting in GHG reporting	*HIGH*	*HIGH*	*MEDIUM*	*Verify measurement data against PH calculation spreadsheet. Check correct application of methodological equations.*
Existence of some significant emissions that occur outside the normal course of the responsible party's economic activities, or that for other reasons can be	*HIGH*	*HIGH*	*HIGH*	*On-site inspection and comparison of the project description with the actual state of implementation and the methodology applied reduce the risk of omitting any emission sources. In this case, verify livestock activity.*

INHERENT RISKS	*PROBABILITY*	*IMPACT*	*RISK ASSESSMENT*	*RISK MANAGEMENT MEASURE*
considered unusual.				
Communication failures (power, internet, signal).	*HIGH*	*HIGH*	*MEDIUM*	*Have a backup mobile data plan, prior connectivity tests, and charged devices.*
Loss of connectivity during interviews.	*HIGH*	*HIGH*	*HIGH*	*Reschedule interviews in case of incidents.*
Lack of ICT skills	*HIGH*	*HIGH*	*HIGH*	*Agree in advance with interviewees on the most appropriate ICT tools.*
Loss of confidentiality or data security	*HIGH*	*HIGH*	*HIGH*	*Apply a policy of impartiality and limit processing to information in the public domain.*

Annex 6. Findings Report



Asociación de Normalización y Certificación, S.A. de C.V.

Organismo de Verificación/Validacion de GEI
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Fundación Cataruben
Periodo de verificación del proyecto: 01/01/2022 al 31/12/2024

INFORME DE HALLAZGOS: FASE DOCUMENTAL Y EN SITIO

Fecha de verificación en sitio: 19 al 23 de mayo de 2025

Informe de hallazgos

La Asociación de Normalización y Certificación, S.A. de C.V., (ANCE), a través de su Organismo de Validación/Verificación de Declaraciones de Emisiones y Proyectos de Gases de Efecto Invernadero (OVV-GEI) con domicilio en: Eje Lázaro Cárdenas, No. 869, Frac. 3, Col. Nueva Industrial Vallejo, Delegación: Gustavo A. Madero, Ciudad de México, C.P. 07700; fue contratada por Fundación Cataruben, como Desarrollador de Proyectos, con ubicación en Calle: 26 No. 20-04, Yopal, Casanare, Colombia con el objetivo de verificar el proyecto llamado **BioCO$_2$-P2-2** de mitigación del cambio climático correspondiente al periodo de comprendido del 01/01/2022– 31/12/2024.

I. Información general

Datos del Proyecto	
Nombre del Proyecto:	**BioCO$_2$-P2-2**
Titular del proyecto:	Fundación Cataruben
Información de contacto del titular del proyecto:	María Fernanda Wilches – Gerente General José Luis Rodríguez – Super Líder Carbono Daniel Eduardo Ospina – Líder de Proyecto co2bio@cataruben.org Tel: 3204690315 / 3203108839 Carrera 20 #36 -04 Yopal – Casanare
Participantes del proyecto:	120 propietarios LATAM Airlines
Versión del PDD:	Versión 2.3
Metodología aplicada:	AFOLU Sector Methodological Document: - BCR0004 Quantification of GHG emissions reductions and removal activities that avoid land use change in continental wetlands. - BCR0002 Quantification of GHG emissions reductions REDD+ Projects.
Localización del proyecto (Ciudad, País):	Colombia, región Orinoquia: Departamento Arauca: Arauca, Cravo Norte, Puerto Rondón y Tame. Departamento Casanare: Hato, Corozal, Paz de Ariporo, Orocué, Pore, San Luis de Palenque, Trinidad y Yopal.
Fecha de inicio:	15/01/2018
Periodo de cuantificación de las reducciones de GEI:	15/01/2018 al 14/01/2038
Cantidad total y media anual estimada de la reducción de emisiones de GEI:	**Total de reducciones: 503,537.00 t CO$_2$e** **Media anual estimada: 167,845.7 t CO$_2$e/año**
Metas de Desarrollo Sustentable:	ODS 6: Agua y saneamiento. ODS 13: Acción por el clima. ODS 15: Vida de Ecosistemas Terrestres.
Criterio de auditoria:	BioCarbon Registry - BCR
Trabajo realizado por:	Verificador Líder: Excalibur Ernesto Acosta Miranda Verificadora: Nancy Adriana Barrera Gómez

Asociación de Normalización y Certificación, S.A. de C.V.

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INFORME DE HALLAZGOS: FASE DOCUMENTAL Y EN SITIO

Fecha de verificación en sitio: 19 al 23 de mayo de 2025

DATOS DEL OC VV GEI-ANCE	
Domicilio:	Eje Lázaro Cárdenas, No. 869, Frac. 3, Col. Nueva Industrial Vallejo, Delegación: Gustavo A. Madero, Ciudad de México, C.P. 07700.
Acreditación ante la Entidad Mexicana de Acreditación (ema):	**OVVGEI 001/15**, entrada en vigor 26/06/2015, con fecha de actualización **20/11/2024** **Sectores acreditados:** del 1 al 13 con base en el IAF MD 14, excepto 5 y 9.
Excalibur Ernesto Acosta Miranda **Especialista OVV** **Verificador Líder**	**Nancy Adriana Barrera Gómez** **Especialista OVV** **Verificadora**

II. Resumen Ejecutivo

DESCRIPCIÓN GENERAL DEL PROYECTO

El Proyecto reduce las emisiones de CO_2 mediante el desarrollo de actividades que reducen la deforestación de bosques, así como la transformación de Humedales naturales en 120 predios privados ubicadas en los departamentos de Arauca y Casanare. Para lograr este objetivo, el proyecto apoya acciones que aborden de manera integral el paisaje, considerando el cambio de cambio de uso del suelo y la implementación de prácticas más sostenibles en los ecosistemas forestales y de humedales. El impacto socioambiental resultante del desarrollo de las actividades del proyecto permite a los gestores de los ecosistemas recibir beneficios económicos para fortalecer la gobernanza local, promover el desarrollo rural sostenible y mejorar su calidad de vida en una región marcada por una frontera agrícola con cultivos industriales.
La fecha de inicio de actividades del proyecto corresponde a 2018, y su impacto ambiental, social y económico se dirige a 102.863 hectáreas totales, cuyas áreas contables se distribuidas en 10.532,3 hectáreas de bosque y 50.352,8 hectáreas de humedales. El área del proyecto comprende propiedades rurales privadas, en un paisaje predominantemente de llanura aluvial. Asimismo, el Proyecto se centra en demostrar cómo las actividades del proyecto contribuyen a los Objetivos de Desarrollo Sostenible, concretamente el ODS 6 (Agua limpia y saneamiento), ODS 13 (Acción por el clima) y ODS 15 (Vida de los ecosistemas terrestres). Además de demostrar que las acciones relacionadas con la mitigación del cambio climático aportan beneficios además de la reducción de las emisiones de GEI - Co-beneficios en la categoría Orquídea, como un enfoque integral y a largo plazo de los beneficios sociales y medioambientales que las actividades del proyecto aportarán en materia de conservación de la biodiversidad, beneficios para la comunidad y equidad de género.

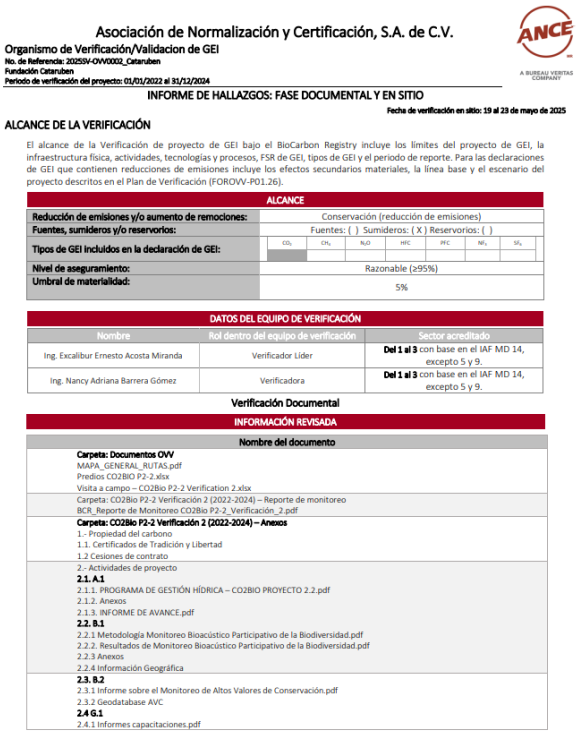
III. Proceso de Verificación

OBJETIVO DE LA VERIFICACIÓN DE GEI

Obtención de una declaración de verificación del Proyecto de reducciones de GEI titulado "BioCO$_2$P2-2", confirmando el cumplimiento con los requisitos establecidos por el esquema de BioCarbon Registry.

OBJETIVO DEL PROYECTO DE GEI

Reducir las emisiones de CO_2 mediante la prevención de la deforestación y la transformación de humedales, promoviendo prácticas sostenibles en 120 propiedades privadas en los departamentos de Arauca y Casanare.



Asociación de Normalización y Certificación, S.A. de C.V.

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INFORME DE HALLAZGOS: FASE DOCUMENTAL Y EN SITIO

Fecha de verificación en sitio: 19 al 23 de mayo de 2025

ALCANCE DE LA VERIFICACIÓN

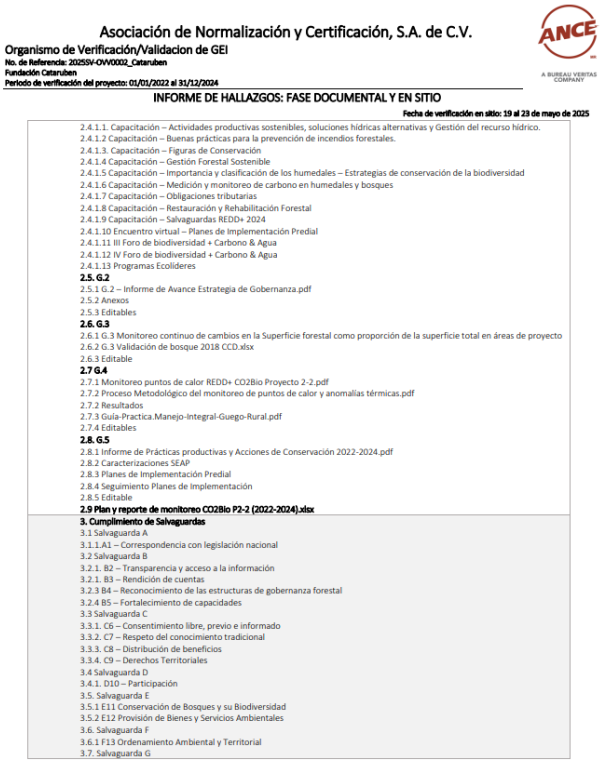
El alcance de la Verificación de proyecto de GEI bajo el BioCarbon Registry incluye los límites del proyecto de GEI, la infraestructura física, actividades, tecnologías y procesos, FSR de GEI, tipos de GEI y el periodo de reporte. Para las declaraciones de GEI que contienen reducciones de emisiones incluye los efectos secundarios materiales, la línea base y el escenario del proyecto descritos en el Plan de Verificación (FOROVV-P01.26).

ALCANCE							
Reducción de emisiones y/o aumento de remociones:	Conservación (reducción de emisiones)						
Fuentes, sumideros y/o reservorios:	Fuentes: ( ) Sumideros: (X) Reservorios: ( )						
Tipos de GEI incluidos en la declaración de GEI:	CO_2	CH_4	N_2O	HFC	PFC	NF_3	SF_6
Nivel de aseguramiento:	Razonable (≥95%)						
Umbral de materialidad:	5%						

DATOS DEL EQUIPO DE VERIFICACIÓN		
Nombre	Rol dentro del equipo de verificación	Sector acreditado
Ing. Excalibur Ernesto Acosta Miranda	Verificador Líder	**Del 1 al 3** con base en el IAF MD 14, excepto 5 y 9.
Ing. Nancy Adriana Barrera Gómez	Verificadora	**Del 1 al 3** con base en el IAF MD 14, excepto 5 y 9.

Verificación Documental

INFORMACIÓN REVISADA
Nombre del documento
Carpeta: Documentos OVV MAPA_GENERAL_RUTAS.pdf Predios CO2BIO P2-2.xlsx Visita a campo – CO2Bio P2-2 Verification 2.xlsx
Carpeta: CO2Bio P2-2 Verificación 2 (2022-2024) – Reporte de monitoreo BCR_Reporte de Monitoreo CO2Bio P2-2_Verificación_2.pdf
Carpeta: CO2Bio P2-2 Verificación 2 (2022-2024) – Anexos 1.- Propiedad del carbono 1.1. Certificados de Tradición y Libertad 1.2 Cesiones de contrato
2.- Actividades de proyecto **2.1. A.1** 2.1.1. PROGRAMA DE GESTIÓN HÍDRICA – CO2BIO PROYECTO 2.2.pdf 2.1.2. Anexos 2.1.3. INFORME DE AVANCE.pdf **2.2. B.1** 2.2.1 Metodología Monitoreo Bioacústico Participativo de la Biodiversidad.pdf 2.2.2. Resultados de Monitoreo Bioacústico Participativo de la Biodiversidad.pdf 2.2.3 Anexos 2.2.4 Información Geográfica
2.3. B.2 2.3.1 Informe sobre el Monitoreo de Altos Valores de Conservación.pdf 2.3.2 Geodatabase AVC **2.4 G.1** 2.4.1 Informes capacitaciones.pdf



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Fundación Cataruben
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2.4.1.1. Capacitación – Actividades productivas sostenibles, soluciones hídricas alternativas y Gestión del recurso hídrico. 2.4.1.2 Capacitación – Buenas prácticas para la prevención de incendios forestales. 2.4.1.3. Capacitación – Figuras de Conservación 2.4.1.4 Capacitación – Gestión Forestal Sostenible 2.4.1.5 Capacitación – Importancia y clasificación de los humedales – Estrategias de conservación de la biodiversidad 2.4.1.6 Capacitación – Medición y monitoreo de carbono en humedales y bosques 2.4.1.7 Capacitación – Obligaciones tributarias 2.4.1.8 Capacitación – Restauración y Rehabilitación Forestal 2.4.1.9 Capacitación – Salvaguardas REDD+ 2024 2.4.1.10 Encuentro virtual – Planes de Implementación Predial 2.4.1.11 III Foro de biodiversidad + Carbono & Agua 2.4.1.12 IV Foro de biodiversidad + Carbono & Agua 2.4.1.13 Programas Ecolideres **2.5. G.2** 2.5.1 G.2 – Informe de Avance Estrategia de Gobernanza.pdf 2.5.2 Anexos 2.5.3 Editables **2.6. G.3** 2.6.1 G.3 Monitoreo continuo de cambios en la Superficie forestal como proporción de la superficie total en áreas de proyecto 2.6.2 G.3 Validación de bosque 2018 CCD.xlsx 2.6.3 Editable **2.7 G.4** 2.7.1 Monitoreo puntos de calor REDD+ CO2Bio Proyecto 2-2.pdf 2.7.2 Proceso Metodológico del monitoreo de puntos de calor y anomalías térmicas.pdf 2.7.2 Resultados 2.7.3 Guía-Practica.Manejo-Integral-Guego-Rural.pdf 2.7.4 Editables **2.8. G.5** 2.8.1 Informe de Prácticas productivas y Acciones de Conservación 2022-2024.pdf 2.8.2 Caracterizaciones SEAP 2.8.3 Planes de Implementación Predial 2.8.4 Seguimiento Planes de Implementación 2.8.5 Editable **2.9 Plan y reporte de monitoreo CO2Bio P2-2 (2022-2024).xlsx**
3. Cumplimiento de Salvaguardas 3.1 Salvaguarda A 3.1.1.A1 – Correspondencia con legislación nacional 3.2 Salvaguarda B 3.2.1. B2 – Transparencia y acceso a la información 3.2.1. B3 – Rendición de cuentas 3.2.3 B4 – Reconocimiento de las estructuras de gobernanza forestal 3.2.4 B5 – Fortalecimiento de capacidades 3.3 Salvaguarda C 3.3.1. C6 – Consentimiento libre, previo e informado 3.3.2. C7 – Respeto del conocimiento tradicional 3.3.3. C8 – Distribución de beneficios 3.3.4. C9 – Derechos Territoriales 3.4 Salvaguarda D 3.4.1. D10 – Participación 3.5. Salvaguarda E 3.5.1 E11 Conservación de Bosques y su Biodiversidad 3.5.2 E12 Provisión de Bienes y Servicios Ambientales 3.6. Salvaguarda F 3.6.1 F13 Ordenamiento Ambiental y Territorial 3.7. Salvaguarda G

	3.7.1 G15 Contro y Vigilancia Forestal para evitar el Desplazamiento de emisiones
	4. ODS 4.1. ODS 6 – Agua limpia y saneamiento 4.2. ODS 13 – Acción por el clima 4.3. ODS 15 – Vida de ecosistemas terrestres 4.4 TOOL – ODS.xlsx 4.5 Plan y Reporte Monitoreo ODS (CO2Bio P2-2)
	5. Cobeneficios 5.1 Plan de Monitoreo de Cobeneficios CO2Bio Proyecto 2 -2 (2022-2024).xlsx
	6. Aspectos ambientales y Socioeconómicos 6.1 Anexo A _ Cuestionario de evaluación de la herramienta de Salvaguardas de Desarrollo Sostenible – CO2Bio P2-2.pdf 6.2 Soportes 6.3 Editables
	7. Monitoreo de emisiones 7.1 Monitoreo de Emisiones
	8. Geoespacial 8.1 REDD 8.2 Humedales 8.3 Proyectos Carbono 8.4 área de Proyecto
	9. Cambios posteriores al registro BCR_DdP_CO2BioP2-2 Versión 2.3 EN.docx 9.1 Geodatabases

Verificación en Sitio

Una vez concluidas las actividades mencionadas en el Plan de verificación, se continuará con la revisión de las evidencias de la información que conforman el Documento de Diseño del Proyecto de Gases de Efecto Invernadero y Plan de Monitoreo.

La relación del personal entrevistado en sitio, así como los diferentes documentos validados/verificados y que sustentan las reducciones de emisiones y/o aumento de remociones de GEI, se mencionan a continuación:

INFORMACIÓN REVISADA: VERIFICACIÓN EN SITIO		
Nombre	**Cargo y/o área**	**Proceso/actividad/fuente/sumidero/reservorio asociado**
Andrés Reyes Díaz	Propietario de Finca – La Candelaria & Candelaria 1	Se han enfocado en la conservación de los bosques mediante la instalación de cercas eléctricas y la reducción del uso de madera para la construcción de cercas de alambre de púas. Además, han implementado pozos profundos para el suministro de agua al ganado. Debido al programa Cataruben, han adquirido madera inmunizada y cercado los bosques para evitar el ingreso del ganado. También realizan rondas periódicas para reforzar los cercados y prevenir la presencia de candelas durante la temporada de verano.
César De Betancourt	Propietario de Finca – El Remache 1	Se han enfocado en la conservación ambiental, evitando la tala de árboles y promoviendo la implementación de cercas para proteger el ecosistema. Además, se han delimitado las zonas de intervención y se han sembrado especies maderables para favorecer la regeneración forestal. Paralelamente, se han fortalecido las medidas de seguridad para prevenir la tala ilegal dentro de los predios.
María Lucila Reyes	Propietario de Finca – San Felipe	Se ha priorizado el cercado para preservar las áreas de bosque, además de implementar bebederos para el ganado. Con los recursos obtenidos, se han sembrado árboles en los terraplenes, contribuyendo así al apoyo y conservación de las sábanas inundables. En cuanto a la seguridad, se han establecido medidas específicas para proteger la fauna local, especialmente venados y chigüiros, que

		son abundantes en el predio. Asimismo, se cuenta con cámaras trampa y se realiza un monitoreo constante de la biodiversidad.
José Uber García Farfán	Propietario de Finca – La Macolla	Se ha priorizado la implementación de energía solar mediante paneles de 4,500 vatios, lo que permite abastecer la finca, alimentar las cercas eléctricas y facilitar el bombeo de agua para una ganadería sostenible. Además, se han sembrado seis rodales o grupos de árboles nativos en los potreros para promover la reforestación. Durante la temporada de verano, se realizan rayas corta fuegos como medida preventiva contra incendios forestales. La fundación brinda acompañamiento de tal forma que las actividades a implementar sean rentables.
Eduardo Martínez & Lidia Parales	Propietario de Finca – Lote 3 El Paraíso	El tipo de predio es considerado como Reserva Natural de la Sociedad Civil, al ingresar con la fundación permitió la conservación de la fauna, aunque la actividad principal es ganadería, se busca conservar el medio ambiente.
Tania Leidy Garces Gaitán	Propietario de Finca – Villa Tania	Se ha priorizado el mejoramiento del suelo, aprovechando la riqueza hídrica del predio, que se maneja bajo un enfoque integrado. Además, se desarrolla un proyecto de apicultura familiar que no solo busca la comercialización, sino también fomentar la colaboración en la conservación ambiental. Gracias a estas acciones, se ha logrado preservar especies en peligro de extinción. Asimismo, se han instalado paneles solares y se implementan cortafuegos durante la temporada de verano para minimizar el riesgo de incendios.
Evidencia de sustento		
Mapa SIG de la distribución de capaz		

IV. Registro de hallazgos

No.	**Referencia al incumplimiento**		**Descripción del hallazgo**
	Tipo de No conformidad: (CAR, CL, FAR)	**CAR**	**Materialidad en la fuente de emisión (%): N/A**
1	**BCR Risk and Permanence Tool v2.0** Sección 3.2 "Environmental Risk Factors": "Los proyectos deben evaluar tanto la probabilidad como la magnitud potencial del impacto de los riesgos por perturbaciones naturales (por ejemplo, incendios, inundaciones, plagas), tomando en cuenta la variabilidad estacional o climática. Las evaluaciones de riesgo deben actualizarse en consecuencia para reflejar cualquier cambio temporal en los perfiles de riesgo."		Durante la revisión documental del proyecto CO2Bio P2-2, se identificó que el análisis de riesgos considera la existencia del riesgo de incendios, pero no evalúa adecuadamente la magnitud del impacto que podría ocasionar un evento de esta naturaleza, especialmente durante la temporada seca. Si bien el análisis menciona que las condiciones climáticas de la temporada de lluvias en la Orinoquia reducen la probabilidad de ocurrencia de incendios, no se aborda de manera completa cómo cambia dicha probabilidad e impacto en la temporada seca, lo que representa una evaluación incompleta del riesgo.
No.	**Referencia al incumplimiento**		**Descripción del hallazgo**
	Tipo de No conformidad: (CAR, CL, FAR)	**CAR**	**Materialidad en la fuente de emisión (%): N/A**
2	**Herramienta de Riesgo y Permanencia del BCR v2.0** – Sección 3.3 "Factores de riesgo político y social": "Los proyectos deben evaluar los riesgos políticos, incluidos los conflictos armados o la inestabilidad, con base en las condiciones actuales en el área de		Durante la revisión documental y en sitio del proyecto CO2Bio P2-2, se observó que el análisis de riesgos identifica el riesgo político de "conflictos armados en los predios vinculados al proyecto". Sin embargo, se verificó que la clasificación asignada de probabilidad e impacto no refleja adecuadamente la situación actual, ya que durante la visita a sitio no fue posible acceder a ciertas zonas del proyecto debido a la presencia de actores armados ilegales o

	implementación. La clasificación del riesgo (probabilidad y magnitud del impacto) debe estar alineada con las condiciones verificadas en campo, incluidas las zonas que se vuelve inaccesible debido al conflicto."	situaciones de orden público que representaban un riesgo para el equipo auditor y para el personal del proyecto
No.	**Referencia al incumplimiento**	**Descripción del hallazgo**
	Tipo de No conformidad: (CAR, CL, FAR) **CAR**	**Materialidad en la fuente de emisión (%): N/A**
3	**Documento Metodológico BCR0004 Sección 11.1.5 - Evaluación de las amenazas al área del proyecto**: "Se deben identificar las amenazas que pueden afectar el mantenimiento del ecosistema natural, incluyendo aquellas derivadas de actividades agropecuarias como el ingreso de ganado a zonas restauradas o conservadas." **BCR Risk and Permanence Tool v2.0 Sección 3.2 "Environmental Risk Factors"**: "Livestock incursion or agricultural encroachment into restoration or conservation areas must be prevented through documented and verifiable management actions. Such events can trigger a partial or total reversal of credited removals."	Durante la visita a sitio, específicamente en los puntos muestreados del Proyecto CO_2Bio P2-2, se observó la presencia de Ganado dentro de zonas clasificadas como bosque en el área del proyecto. Esta situación representa un riesgo para la integridad del ecosistema y para la permanencia de las reducciones de GEI, así como una posible fuente de emisiones no consideradas o mal gestionadas (fugas).
No.	**Referencia al incumplimiento**	**Descripción del hallazgo**
	Tipo de No conformidad: (CAR, CL, FAR) **CAR**	**Materialidad en la fuente de emisión (%): N/A**
4	**Estándar BCR v.3.4. Sección 4.4 "Participación de actores locales y beneficios compartidos":** "El titular del proyecto debe demostrar que existe un proceso claro, transparente y documentado de información, consulta y participación con las comunidades y actores involucrados. Esto incluye la entrega oportuna de información relacionada con beneficios, distribución de ingresos por VCC y otros aspectos relevantes del proyecto." **Estándar BCR v.3.4. Sección 4.3.2 "Accesibilidad de la información":**	Durante la visita a sitio del proyecto CO2Bio P2-2, y a partir de las entrevistas realizadas a titulares y gestores de predios, se identificaron comentarios de inconformidad relacionados con la falta de claridad respecto a los pagos derivados de los Créditos Verificados de Carbono (VCC). Asimismo, se evidenció que la comunicación entre el proyecto y algunos actores locales ha sido limitada, principalmente porque ciertos titulares o gestores tienen dificultades para utilizar dispositivos móviles

	"El proyecto debe implementar mecanismos apropiados y adaptados al contexto local para asegurar que todos los actores, incluyendo aquellos con acceso limitado o dificultades en el uso de tecnologías digitales, puedan participar y estar informados."	
No.	**Referencia al incumplimiento**	**Descripción del hallazgo**
	Tipo de No conformidad: (CAR, CL, FAR) **CAR**	**Materialidad en la fuente de emisión (%): N/A**
5	**Estándar BCR v. 3.4. Sección 4.4 "Participación de actores locales y beneficios compartidos":** "Los proyectos deben implementar actividades de capacitación y fortalecimiento de capacidades dirigidas a los actores locales involucrados, garantizando su participación efectiva y documentando los resultados alcanzados." **Sección 4.3.1 "Seguimiento de indicadores sociales":** "El proyecto debe establecer mecanismos de monitoreo y evaluación que permitan comprobar el alcance y efectividad de las actividades sociales planificadas, incluyendo la capacitación, sensibilización y desarrollo de capacidades."	Durante la revisión documental del proyecto CO_2Bio P2-2, se analizó el Informe de Capacitaciones impartidas por la Fundación CATARUBEN, en el que se evidenció que la asistencia a la mayoría de las jornadas fue inferior a 20 personas, incluyendo tanto titulares como gestores de predios. Dado que el proyecto está compuesto por aproximadamente 120 predios, la baja participación sugiere que las metas establecidas para el componente de fortalecimiento de capacidades deben ser reconsideradas, tanto en términos cuantitativos como de alcance representativo.
		Materialidad en la reducción de las emisiones del Proyecto (%): 0.00

CAR: Requerimiento de acción correctiva; CL: Requerimiento de clarificación; FAR: Medidas adicionales.

Firma de conformidad por parte del Proponente del Proyecto
Ing. José Luis Rodríguez Nombre y firma 25/06/2025
El tiempo para atención de hallazgos es de 30 días hábiles contados a partir de 25/06/2025 y finalizan el 06/08/2025; con base en lo establecido en el PROOVV-01 Procedimiento General para Verificación del Organismo de Validación/Verificación. Cabe mencionar que los primeros 15 días son para el envío de información por parte de la organización, y los 15 restantes para revisión por parte del OC VV GEI-ANCE, en caso de ocupar los 30 días establecidos, el OC VV GEI ANCE ya no solicitará aclaraciones de la información enviada, y la etapa de atención de hallazgos se dará por terminada continuando con el proceso de verificación.

Annex 7. Abbreviations

Abbreviations	Full texts
AFOLU	Agriculture, Forestry and Other Land Use
ANCE	Asociación de Normalización y Certificación, S.A. de C.V.
BCR	BioCarbon Standard
CAR	Corrective Action Request
CARBO	Regional Beneficiary Service Center
CL	Clarification Requests
CLC	Corine Land Cover
FAR	Forward Action Requests
GHG	Greenhouse Gases
HCVs	High Conservation Values
KBA	Key Biodiversity Areas
MCL	Legal Compatibility Matrix
NFRL	National Forest Reference Level
PSBN	Percentage of Area with Natural Forest
RCCS/PQRS	Requests, Complaints, Claims, and Suggestions
REDD+	Reduction of Emissions from Deforestation and Forest Degradation
RENARE	National Registry of Greenhouse Gas Emission Reductions
RM	Report Monitoring
RUNAP	National Registry of Protected Areas
SDS	Sustainable Development Goals
SOC	Soil Organic Carbon
SSR	Sources, Sinks, and Reservoirs
UNFCCC	United Nations Framework Convention on Climate Change
VCC	Verified Carbon Certificates