



GOLD STANDARD NEW AREA & PERFORMANCE CERTIFICATION REPORT

OF

“VICHADA CLIMATE REFORESTATION PROJECT (PAZ)”

IN

COLOMBIA

GOLD STANDARD REGISTRY ID: GS422 1

**METHODOLOGY: GS4GG METHODOLOGY FOR
AFFORESTATION/REFORESTATION (A/R) GHG EMISSION REDUCTION &
SEQUESTRATION V2.0**

**MONITORING PERIOD: 27/07/ 2019 TO 30/09/ 2022 (3RD MONITORING
PERIOD)**

REPORT NO: CCIPL1952/GS/VAL-VER/VCRP/20230712

REVISION NUMBER: 03

REPORT DATE: 24/11/2023

CARBON CHECK (INDIA) PRIVATE LIMITED

CIN: U74930DL2012PTC232495

Regd. Off: 2071/38, 2nd Floor, Nai Wala, Karol Bagh, New Delhi – 110005

Corporate off: Unit No. 1701, Logix City Centre Office Tower, Plot No. BW-58, Sector-32 Noida, Uttar Pradesh

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I. PROJECT DATA

Project title:	Vichada Climate Reforestation Project (PAZ)		
Project Areas:	Vichada department, southeastern Colombia. Within the municipalities of Puerto Carreño, La Primavera and Cumaribo.		
Host Country	Colombia		
Registration No. / Date:	GS 4221 / 01/02/2006	Scale:	Large
Monitoring period:	27/07/2019 – 30/09/2022 (including both the dates)	Monitoring Period Number:	3 rd
Methodology:	GS4GG Methodology for Afforestation/Reforestation (A/R) GHG emission reduction & sequestration V 2.0	Sectoral Scope/Technical Area:	14/14.1
Initial Monitoring Report:	Version 1.0; Dated: 28/07/2023		
Final Monitoring Report:	Version 2.0; Dated: 30/10/2023		
Total GHG removals (tCO₂e):	Year	Verified/ ex-post CO₂ fixation (tCO₂e) (Before buffer)	Verified/ ex-post CO₂ fixation (After buffer)
	27/07/2019 – 31/12/2019	102,113	81,690
	01/01/2020 – 31/12/2020	389,306	311,445
	01/01/2021 – 31/12/2021	388,242	310,594
	01/01/2022 – 30/09/2022	289,320	231,456
	Total	1,168,981	935,185
GHG removal measures:	GHG (CO ₂) removal through afforestation of degraded grasslands through plantation with three main tree genera: <i>Acacia</i> species (<i>Acacia mangium</i>), <i>Pinus</i> species (<i>Pinus caribaea</i>) and <i>Eucalyptus</i> species (<i>Eucalyptus urophylla</i> , <i>Eucalyptus tereticornis</i> , <i>Eucalyptus pellita</i>).		

Party	Project participants	Party considered a project participant	Contract party
Germany (Host)	FORLIANCE GmbH	No	<input checked="" type="checkbox"/>
Colombia	Inverbosques SA	Yes	<input type="checkbox"/>
Colombia	Aldea Forestal SA	Yes	<input type="checkbox"/>

II. VERIFICATION TEAM

Verification Team	Role
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Full name	Affiliation	Appointed for Sectoral Scopes (Technical Areas)	Team leader	Acting/trainee Team Leader	Local Expert	Team Member (Auditor)	Technical Expert	Acting/Trainee Tech. Expert	Trainee Auditor	Technical Reviewer	Expert to TR	Trainee TR
Isha Kapoor	India	14.1	X				X					
Lalit Mohan Saklani	India	14.1							X			
Pablo Angulo	Costa Rica	14.1			X		X					
Vikash Kumar Singh	India	1.1, 1.2, 3.1,4.1,13.1, 13.2, 14.1 and 15								X		

Audit Team Experience:

The team composition is linked to the methodology and local experience in the host country.

Isha Kapoor: She is a forestry graduate and have knowledge & skills for the land use & forestry sector. She is a qualified lead assessor and technical expert for TA 14.1 (and corresponding organization lever scopes as mapped by CCIPL in its FM 7.7 competency matrix) under CDM/ISO 14065 SS categorization. She has 4 years of work experience in GHG mechanism including development of standards and methodology for an Indian GHG program. Currently, she is working on a variety of land use & forestry projects under different GHG programs including GS, CDM and VCS. She is having relevant ecological and biodiversity expertise for assessing Mangrove ARR projects and relevant agriculture, forestry and/or other land use experience in the region.

Lalit Mohan Saklani: He is a forestry post-graduate and have knowledge & skills for the land use & forestry sector and has been working for past one year in the GHG programs. Currently, he is working on a variety of land use & forestry projects under different GHG programs including GS, ISO and VCS. He is having relevant ecological and biodiversity expertise for assessing WRC, ARR, IFM & REDD projects and relevant forestry and/or other land use experience in the region.

Pablo Angulo: He is a forester with 24 years of experience with PhD in statistics and vast experience in GIS and remote sensing projects. He is working on a variety of land use & forestry projects under different GHG programs including GS, VCS and ISO.

Vikash Kumar Singh: He is a qualified lead assessor and internal technical reviewer for validations and verifications GHG mitigation projects under CDM, GS and Gold Standard (GS) and actively been involved in the validation and verification and internal technical review of more than 500 GHG mitigation projects and verification of several emission inventories. He is qualified as technical expert for TA 1.1, 1.2, 3.1,4.1,13.1, 13.2, 14.1 and 15 (and corresponding organization lever scopes as mapped by CCIPL in its FM 7.7 competency matrix) under CDM/ISO 14065 SS categorization. He has undergone extensive training in the validation and verification of carbon offset projects including the accreditation requirements for the VVBs. Currently, he is employed with Carbon Check in the capacity of Executive Director and Compliance Officer. Vikash has extensive work experience on working on land use & forestry projects under GS, CDM and GS projects globally. Vikash has extensive work experience on working in GS, CDM and GS projects in South east Asia, Middle east, Africa, as well as Central America.

III. VERIFICATION REPORT

Status	Verification Phases
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<input checked="" type="checkbox"/>	Desk Review
<input checked="" type="checkbox"/>	On Site Assessment
<input checked="" type="checkbox"/>	Follow up interviews
<input checked="" type="checkbox"/>	Corrective Actions / Clarifications Requested
<input checked="" type="checkbox"/>	Resolution of outstanding issues
<input type="checkbox"/>	Full Approval and Submission for Issuance
<input type="checkbox"/>	Rejected

Status	Distribution Conditions
<input checked="" type="checkbox"/>	No distribution without permission from the Client or responsible organizational unit
<input type="checkbox"/>	Limited Distribution
<input type="checkbox"/>	Unrestricted distribution

Final Approval	
Date	24/11/2023
Approved by	Amit Anand
Designation	Chief Executive Officer
Signature	

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ABBREVIATIONS

AF	Aldea Forestal
AGB	Above Ground Biomass
AQL	Acceptable Quality Limit
AFOLU	Agriculture, Forest, and other Land Use
ARR	Afforestation, Reforestation and Revegetation
BEF	Biomass Expansion Factor
BGB	Below Ground Biomass
CAR	Corrective Action Request
CC IPL	Carbon Check (India) Private Ltd.
CO_{2e}	Carbon Dioxide Equivalent
CL	Clarification Request
DBH	Diameter at breast height
GIS	Geographical Information System
KML	Keyhole Markup Language ¹
LULC	Land Use Land Cover
LULUCF	Land use, Land-use Change, and Forestry
DR	Document review
DVR	Draft Verification Report
EI	External Individual
FA	Final Approval
FAR	Forward Action Request
GHG	Greenhouse gas(es)

¹ an XML notation for expressing geographic annotation and visualization within two-dimensional maps and three-dimensional Earth browsers.

IPCC	Intergovernmental Panel on Climate Change
IR	Internal resource
KPI	Key Project Information
MP	Monitoring Period
MR	Monitoring Report
MUs	Modelling Units
PD	Project Developer
QC/QA	Quality control /Quality assurance
SOC	Soil Organic Carbon
TA	Technical Area
TR	Technical Review
VVB	Validation & Verification Body

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1. Introduction

The Project Developer (PD), FORLIANCE GmbH has appointed the Carbon Check (India) Private Limited (CC IPL), a GS VVB to perform an independent new area and third (03rd) performance certification of the GS project titled “Vichada Climate Reforestation Project PAZ” (GS 4221) in non-Annex 1 host country of Colombia.

This report summarises the findings of the performance certification of the project, performed on the basis of Gold Standard Afforestation/Reforestation (A/R) GHG Emissions Reduction & Sequestration Methodology (Version 2.0)^{/B01/}, GS4GG Principles & requirements v1.2^{/B02/}, GS4GG LUF activity requirements v1.2.1^{/B03/} and subsequent decisions by the Gold Standard Secretariat, as well as criteria given to provide for consistent project operations, monitoring and reporting and compliance with host country criteria and Gold Standard specific criteria.

This report contains the findings and resolutions from performance certification and a certification opinion on verified GHG removals occurred during this monitoring period due to implementation of the project. The report also contains the opinion on new area certification in compliance with the requirements of GS4GG LUF activity requirements v1.2.1^{/B03/}.

1.1 Objective

New area Certification:

New area certification is the addition or removal to an existing project area anytime after a project reaches Registered status by paying the applicable review fee to GS.

Certification is the written assurance by VVB based on a site visit to the new area/s being certified.

The objective of this certification is to verify the new areas included in the project activity titled “Vichada Climate Reforestation Project”. VVB has verified the new area in compliance with the section 2.1.17 and 2.1.18 of the LUF Activity requirements v1.2.1^{/B03/} and section 4.1.1(iii) of the A/R methodology v2.0^{/B01/}.

Performance Certification:

Verification is the periodic independent review and ex-post determination of both quantitative and qualitative information by a Validation & Verification Body (VVB) of the monitored GHG removals achieved as a result of the implementation and monitoring of the registered GS A/R project activity during a defined monitoring period.

Certification is the written assurance by a VVB that, during a specific period in time, a project activity achieved the GHG removals as verified.

The objective of this verification is to verify and certify GHG removals and emissions as reported for the project activity titled “Vichada Climate Reforestation Project (PAZ)” for the period 27/07/2019 to 30/09/2022 (including both the dates).

The purpose of verification is to review the monitoring results and verify that the monitoring methodology was implemented according to the monitoring plan and monitoring data and used to

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confirm the net GHG removals, is sufficient, definitive and presented in a concise and transparent manner. Other non-GHG parameters shall also be assessed as per the requirement of Gold Standard.

1.2 Scope and Criteria

The scope of the **new area certification** is:

- To verify the inclusion of new areas as per Principles and Requirements v1.2^{/B02/} and LUF Activity requirements v1.2.1^{/B03/}.
- To verify that the new areas present material differences from the Design certified project.
- To verify the new areas proposed for inclusion, the crediting period end date should be the same as for the previously Design certified project activity.
- To verify the information for new areas that is required to update in the registered monitoring & reporting plan.
- To verify the eligibility of the proposed activities in the new areas and providing an opinion.

The scope of the **performance certification** is:

- To verify the project implementation and operation with respect to the registered PDD and design change PDD^{/02/}.
- To verify the implemented monitoring plan with the registered PDD and applied Afforestation/Reforestation (A/R) Requirements (Version 2.0)^{/B01/}.
- To verify that the actual monitoring systems and procedures are in accordance with the monitoring systems and procedures described in the registered monitoring plan.
- To evaluate the GHG removal data and conclude with a reasonable level of assurance whether the reported quantity of GHG removal is free from material misstatement or not; and
- To verify that reported GHG removal data is sufficiently supported by evidence.

The verification shall ensure that the reported net GHG removals and emissions are complete and accurate in order to be certified.

CC IPL's scope of verification as a third-party verifier is to verify project's GHG removals and sustainable development impacts against the requirements set out by the Gold Standard. The verification shall ensure that the reported net GHG removals and emissions are complete and accurate in order to be certified.

The verification comprises a review of the KPI, design change PDD, monitoring report over the monitoring period from 27/07/2019 to 30/09/2022 and based on the registered/approved KPI, monitoring report, in part of the monitoring parameters and monitoring plan, GHG removal calculation spreadsheet, monitoring methodology and all related evidence provided by the PD.

On site visit and stakeholder's interviews has also been performed as part of the verification process.

1.3 Level of Assurance

The VVB conducted the assessment in order to reach a reasonable level of assurance of conformance against the defined audit criteria and materiality thresholds within the audit scope. Based on the assessment by VT, three (03) CARs, Seven (07) CLs and zero (00) FAR were raised which has been satisfactorily closed.

Please refer to Appendix 1.

2. Methodology

The new area and performance certification consists of the following four phases:

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1. Completeness check of the GS4GG PDD^{/02/} and GS4GG Monitoring Report^{/03/}.
2. Review of project documentation^{/01-34/} (Design change PDD^{/02/}, Transition annex^{/01/}, monitoring report^{/03/}, registered monitoring plan, applied methodology^{/B01/}, applicable tools in particular attention to the frequency of measurements, QA/QC procedures and other relevant documents and regulations).
3. On-site visit (including follow-up interviews with project stakeholders, when deemed necessary). The on-site visit and interviews assessment include the following:
 - An assessment of implementation and operation of project activity with respect to transition annex.
 - Review of information flows for generating, aggregating and reporting the monitoring parameters.
 - Interview with relevant personnel to determine whether the operational and data collection procedures are implemented and in accordance with monitoring plan of the transition annex^{/01/} and design change PDD^{/02/}.
 - Cross check of information and data provided in the transition annex with inventories, monitoring report^{/03/}, PD sampling records and GHG removal calculation sheet^{/04/}.
 - Review of assumptions made in calculating the GHG removals^{/03/04/}.
 - Implementation of QA/QC procedure in-line with the GS4GG PDD^{/02/} and methodology requirement.
4. Resolution of outstanding issues and the issuance of the final Verification report and Certification statement.

The following sections outline each step in more detail.

Duration of Audit:

- Signing of Letter of Engagement: 31/07/2023
- On-site visit: 11/09/2023 – 15/09/2023

2.1 Desk Review

The following table outlines the documentation reviewed during the new area and performance certification:

Sl. No.	List of Document – Performance Certification	References
/01/	Duly filled GS template as provided for previous performance certification/Initial certification: Previous performance certification: <ul style="list-style-type: none"> • gs4221_191209_GSPerfCert_NACert_Report_Vichada_Rev5_Final (1) • gs4221_Vichada-Final_Goldstandard_V9_0_report-Final.doc_D2_TC(1) GS4GG transition annex	Version 0.9(30/10/2015) Version 1, September 2017
/02/	GS4GG PDD	Version 2, 07/07/2023 Version 3, 30/10/2023
/03/	GS4GG Monitoring report	Version 1 (28/07/2023)



		Version 2 (30/10/2023)
/04/	Excel Spreadsheet for: CO ₂ performance: <ul style="list-style-type: none"> VICH22_PR2023 VICH22_PR2023_Nov23_final 	—
/05/	Excel Spreadsheet for previous carbon models: <ul style="list-style-type: none"> PAZ15-FIX1-Vichada-Carbon Model555 VICHADA CARBON MODEL 2019_final201119_2 	—
/06/	Forest Inventory for different MU (Excel-Spreadsheets) <ul style="list-style-type: none"> VICH22_INV_Forest_Inventory2022 (Inverbosques) VICH22_AF_Forest_Inventory2022 (Aldea Forestal) Forest Inventory for different MU (pdf files) <ul style="list-style-type: none"> VICH22_INV_Forest_Inventory_2019 (Inverbosques) VICH22_INV_Forest_Inventory_Report2022 (Inverbosques) VICH22_AF_Forest_Inventory2022 (Aldea Forestal) VICH22_AF_Forest-Inventory_20 (Aldea Forestal) VICH22_AF_Forest-Inventory_21 (Aldea Forestal) 	—
/07/	Baseline Assessment Report <ul style="list-style-type: none"> VICH22_Baseline_Assessment_2015 	—
/08/	Project area & Mus (Excel files) <ul style="list-style-type: none"> MU-Client-Plantyear_from_mu_06_2023_final MUs_Overview 	—
/09/	Shapefiles of all planting areas and MUs, which is evidence of the total land area implemented under the project: <ul style="list-style-type: none"> Kml files Plots_forest inventory_PDD_rev2023 Plots_forest inventory_Perf. review2023 Vector info Vichada_Shapefiles_Update_Oct_2023 	—
/10/	Maps of all planting areas and MUs	—
/11/	KPI of initial certification <ul style="list-style-type: none"> GS4221_2.1 - PAZ15 Template - Key Project Information 	10/07/2015
/12/	Re-validation documents <ul style="list-style-type: none"> 230803_T-PR_V1.3-PDD_GSID4221_v2_clean 403.01_V1.0_LUF_AR-Methodology_Integrated-Vichada Climate VICH22_430_V1.0_IQ_SDG-Impact-Tool_DRAFT 	—
/13/	FSC Audit report & Certificates: FSC audit report for year 2019, dated 09/09/2019 by GFA Certification FSC audit report for year 2020, dated 06/11/2020 by GFA Certification FSC audit report for year 2021, dated 04/12/2021 by GFA Certification FSC audit report for year 2022, dated 23/01/2023 by GFA Certification	—
/14/	Baseline_leakage assessment <ul style="list-style-type: none"> VICH22_Baseline_Assessment_2015 	—
/15/	Reversal <ul style="list-style-type: none"> Reversals_Report_ID4221 VICH22_Carbon_Loss_Estimation(Excel) VICH22_INV_Historical_Reversal_Events 	—



	<ul style="list-style-type: none"> VICH22_INV_Reversals_04-2023_FL Fires_Folder Storms_Folder 	
/16/	<p>Regulatory framework</p> <ul style="list-style-type: none"> Decree_1532_2019 Resolucion_200.41-11.1130_2011 Resolution_0067_2023 Resolution_500.41.15.1753_03_2015 Resolution_500.41-13-1571_2013 VICH_Ministerial_Resolution_1912 VICH22_AF_Corporinoquia_Resolution_2014 VICH22_AF_Legal_Compliance_Policy VICH22_AF_Legal_Matrix 	—
/17/	<p>Grievance mechanism</p> <p>Aldea Forestal</p> <ul style="list-style-type: none"> VICH22_AF_Communication-participation-procedure VICH22_AF_Grievance-mechanism_21 VICH22_AF_Requests-complaints-claims-suggestions_form_2019 <p>Inverbosques</p> <ul style="list-style-type: none"> VICH22_INV_Grievance_Mechanism 	—
/18/	Carbon Credit Acknowledgment and Allocation Agreement	20 th December 2022
/19/	<p>Biodiversity</p> <ul style="list-style-type: none"> VICH22_AF_LaPalmita-foundation_2017 VICH22_AF_Policy_Hunting_Other-extractions VICH22_AF_FSC_HCV_2022 VICH22_AF_Species-monitoring-method VICH22_AF_HCV-capacity-building_2020 VICH22_AF_FSC_HCV_AnnexF_2022 VICH22_AF_HCV_Program_Managements_2020 20222605 REGISTRO FAUNA INVERBOSQUES VICH22_INV_HCV-Report_2023 VICH22_INV_Wildlife monitoring_Forest patrols VICH22_Fauna_monitoring_combined 	—
/20/	<p>Labor</p> <ul style="list-style-type: none"> VICH22_AF_Employee_contracts VICH22_AF_Health-Retirement_Payments VICH22_AF_salary_payments VICH22_AF_Employee_List VICH22_AF_FSC_principle_2 VICH22_INV_Employees VICH22_SDG8_Combined Decree_historic minimum salary wages_current 	--
/21/	<p>SOP</p> <ul style="list-style-type: none"> VICH22_INV_Emergency_Processes VICH22_INV_Health-Safety_Policy VICH22_INV_Reversals_Report VICH22_INV_Anti-corruption_policy VICH22_INV_Environmental_Policy VICH22_INV_Gender-Equity_Policy VICH22_INV_NoAlcohol_Tobacco_and_Drugs_Policy 	--



	<ul style="list-style-type: none"> VICH22_INV_Order_and_Cleanliness_Policy VICH22_INV_Reversals_Summary_Species VICH22_INV_Social_Policy VICH22_AF_Activities VICH22_AF_Emergencies-management VICH22_AF_Forest_Fires VICH22_AF_Health_and_safety_at_work VICH22_AF_Policies_and_Rules VICH22_AF_Social_responsibility VICH22_AF_Trainings 	
/22/	<p>Environmental Impacts and permits</p> <ul style="list-style-type: none"> VICH22_AF_Environmental_Impact VICH22_AF_Environmental_Permits VICH22_AF_Waste_Disposal VICH22_AF_Exotic-species-procedure_2021 VICH22_AF_Weather_Stations_Installation_Report VICH22_Environmental_status VICH22_INV_WasteWater_WaterConsumption_PermitRequest VICH22_INV_Trainings_Chronogram VICH22_INV_FSC_Env-Management_2021 VICH22_INV_Trainings_Participants_Lists VICH22_INV_Other_Env_Impacts VICH22_INV_General_Environmental-and-Forest_Management VICH22_INV_Energy_Consumption VICH22_INV_Environmental-management-indicators_Summaries 	--
/23/	<p>Land tenure</p> <ul style="list-style-type: none"> VICH22_AF_Land_tenure_Certificates VICH22_AFUsufruct_Contracts VICH22_AF_FSC_Principle_1_Legal_and_Land-Rights_2022 VICH22_AF_Properties_Summary VICH22_INV_Property_Certificates (1) EN - LAND SELECTION PROCESS - FORESTRY PLANNING - PLANTATION DESIGN – INVERBOSQUES 20230628 BD FINCAS INVERBOSQUES MODELO DE NEGOCIO Y DE INCLUSION DE TIERRAS SB-20221208 CONTRATO - INVERBOSQUES - VC4 Forest 2022-2023 ES-EN V4 (002) VICH22_INV_Properties_Summary 1. Trafigura - IB Services Agreement - FINAL (20 December 2022) fully executed INV_land_tenure_new_areas_added 	--
/24/	<p>Forest Management Plan</p> <ul style="list-style-type: none"> VICH22_AF_Forest_Management_Plan VICH22_AF_Activities_2022 VICH22_AF_Forest_Management_Public_Summary_2023 VICH22_AF_FSC_Reclassification_2021 VICH22_INV_Forest Plantations_Authorizations_ICA_Certificates 20230613 PLANES DE MANEJO 2007 - 2022 INVERBOSQUES PLAN DE MANEJO FORESTAL SOSTENIBLE (PMFS) VF 	--
/25/	Financial additionality	--

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	<ul style="list-style-type: none"> VICH22_AF_Annual_budget VICH22_AF_Budget_Working-hours VICH22_AF_Projected_cashflow_2019-2034 VICH22_INV_081222_Financial_model_2023 VC4 	
/26/	Soil Carbon tool <ul style="list-style-type: none"> PAZ15-FIX6-AR-Soil-Carbon-Tool_final VICHADA CARBON MODEL 2019_final201119 	-
/27/	ODA declaration <ul style="list-style-type: none"> 230828_ODA_Gold Standard_FL 	--
/28/	Local stakeholder consultation <ul style="list-style-type: none"> Continuous stakeholder engagement_Folder VICH22_Stakeholder_Consultation_Report__2015 VICH22_AF_Stakeholder_Consultation_2019 3.2-PAZ15 Template-Local-Stakeholder-Consultation – Kopie VICH22_Stakeholder-Consultation_Template_2015 	--
/29/	Conservation agreement-Fundation Omacha	--
/30/	Forest/Non-forest analysis report	--
/31/	Certificates of Incorporation- FORLIANCE	--
/32/	Validation report from AENOR	Version 2, 31/10/2023
/33/	SGD Impact tool	430_V1.3_IQ_ SDG-Impact- tool
/34/	Height and volume estimations _ technical documentation	--
/35/	Raw data sheets	--

During the desk review, CCIPL applied the standard auditing techniques to assess the quality of information provided.

2.2 Background documents:

No.	List of referred Documents
/B01/	GS LUF_AR-Methodology-GHGs-emission-reduction-and-Sequestration-Methodology (Version 2.0)
/B02/	Principles and Requirements (Version 1.2)
/B03/	AR LUF Activity requirements (Version 1.2.1)
/B04/	Validation and Verification standard (Version 1.0)
/B05/	Safeguarding Principles Requirements (Version 2.1)
/B06/	GHG Emissions Reductions & sequestration product requirements (Version 2.0)
/B07/	AR-Guidelines-Input & Grievance-Mechanism.pdf
/B08/	KPI and corresponding performance certification reports of the previous monitoring periods
/B09/	Website: (a) https://www.goldstandard.org/tags/g4gg (b) https://www.ipcc.ch (c) https://cdm.unfccc.int (d) https://www.ilo.org/global/lang-en/index.htm (e) https://www.unodc.org/unodc/en/corruption/ratification-status.html
/B10/	2006 IPCC Guidelines for National Greenhouse Gas Inventories: Chapter 6: Grassland (Volume 4: Agriculture, Forestry and Other Land Use)
/B11/	IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry: Table: 3A.1.8: Average belowground to aboveground biomass ratio (root-shoot ratio, r) in natural regeneration By broad category (tonnes dry matter/tonne dry matter)

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/B12/	VIC22_Ruegg_savannas_AGB-BGB_2017 VICH22_2007_Endangered_timber_species_Colombia VICH22_AF_LIBRO BIODIVERSIDAD DEL RIO BITA_2017 VICH22_Bird-Prioritization-Areas VICH22_Etteretal._LlanosCarbonEmissions_2010 VICH22_ibat_profile_colombia_2019 VICH22_IUCN_Guide_Spanish VICH22_IUCN_Relist_Standards_Consistency VICH22_IUCN_Species_Overview VICH22_Sanjose1998_Carbon-stocks-and-fluxes
/B13/	Sourcebook for Land Use, Land use change & Forestry Projects, Pearson <i>et al.</i> , 2005.

2.3 On-site visit and follow-up interviews with project stakeholders

The on-site inspection was performed by the members of the verification team of Carbon Check from 11/09/2023 to 15/09/2023 at PD's office and 7 sample plantation sites in Colombia for both performance (6) and new area certification (1). The project representatives and stakeholders interviewed were as:

Sl. No.	Name (Organisation)	Date	Type	Topic	Interviewer
/i/	Elkin Rodriguez (Aldea Forestal SA)	11/09/2023 & 15/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> • PP's roles and responsibilities. • Baseline scenario. • Sustainability and local stakeholders meeting. • Project implementation. • Future project plans. • Organization structure, roles and responsibilities. 	Isha Kapoor, Lalit Mohan Saklani & Pablo Angulo
/ii/	Maria Margarita Romaro (Aldea Forestal SA)	11/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> • Changes in organization structure • Ownership of land titles • Ownership of carbon credits • Recruitment of staff • Induction Training • Employment contracts • Safeguarding principles • Assessment with respect to labour laws, minimum wage, working hours, non-discrimination, sexual harassment, anti-corruption • Forest inventory. 	Isha Kapoor, Lalit Mohan Saklani & Pablo Angulo



				<ul style="list-style-type: none"> Monitoring activities, sampling activities DBH and height measurement Plantation techniques Species selection Project operation, roles and responsibilities Occupational health safety Training of forest technician, foreman etc. 	
/iii/	Andrea Vera (Forliance)	11/09/2023 – 15/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> PD's roles and responsibilities Project implementation Forest Inventory Land ownership titles Carbon credits ownership Induction Training Employment contracts Safeguarding principles with respect to labour laws, minimum wage, working hours, non-discrimination, sexual harassment, anti-corruption, etc Plantation techniques Training with respect to identification and protection of endangered / native species DBH and height measurement 	Isha Kapoor, Lalit Mohan Saklani & Pablo Angulo
/iv/	Natalia (Inverbosques)	11/09/2023 – 15/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> PP's roles and responsibilities. Baseline scenario. Sustainability and local stakeholders meeting. 	Isha Kapoor, Lalit Mohan Saklani & Pablo Angulo
/v/	Avaro Trujillo (Inverbosques)	11/09/2023 – 15/09/2023	<input type="checkbox"/> On-site <input type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input checked="" type="checkbox"/> Skype	<ul style="list-style-type: none"> Project implementation. Future project plans. Organization structure, roles and responsibilities. 	Isha Kapoor, Lalit Mohan Saklani & Pablo Angulo



				<ul style="list-style-type: none"> • Changes in organization structure • Ownership of land titles • Ownership of carbon credits • Recruitment of staff • Induction Training • Employment contracts • Safeguarding principles • Assessment with respect to labour laws, minimum wage, working hours, non-discrimination, sexual harassment, anti-corruption • Forest inventory. • Monitoring activities, sampling activities • DBH and height measurement • Plantation techniques • Species selection • Project operation, roles and responsibilities • Occupational health safety • Training of forest technician, foreman etc 	
/vi/	Alonso Barrios Trilleras (Director, University of Del Tolima)	11/09/2023	<input type="checkbox"/> On-site <input type="checkbox"/> Face to Face <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> • Plantation techniques • DBH and height measurement • Forest inventory 	Isha Kapoor, Lalit Mohan Saklani & Pablo Angulo
/vii/	Alvaro Aguirre (Aldea Forestal)	11/09/2023	<input type="checkbox"/> On-site <input type="checkbox"/> Face to Face <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> • Induction Training • Employment contracts • Grievance mechanism 	
/viii/	Alvaro Rodriguez (Aldea Forestal)	11/09/2023	<input type="checkbox"/> On-site <input type="checkbox"/> Face to Face <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> • Induction Training • Employment contracts • Grievance mechanism 	
/ix/	Teresita Hernandez (Aldea Forestl)	11/09/2023	<input type="checkbox"/> On-site <input type="checkbox"/> Face to Face	<ul style="list-style-type: none"> • Induction Training • Employment contracts 	

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			<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	Grievance mechanism	
/x/	Mario Gonzales (Aldea Forestal)	11/09/2023	<input type="checkbox"/> On-site <input type="checkbox"/> Face to Face <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> • Induction Training • Employment contracts • Safeguarding principles Assessment with respect to labour laws, minimum wage, working hours, non-discrimination, sexual harassment, anti-corruption • Plantation techniques • Training with respect to identification and protection of endangered / native species • DBH and height measurement 	Isha Kapoor, Lalit Mohan Saklani & Pablo Angulo
/xi/	Michael Ponce (Forliance)	11/09/2023 – 15/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> • PD's roles and responsibilities • Project implementation • Forest Inventory • Land ownership titles • Carbon credits ownership • Induction Training • Employment contracts • Safeguarding principles with respect to labour laws, minimum wage, working hours, non-discrimination, sexual harassment, anti-corruption, etc • Plantation techniques • Training with respect to identification and protection of endangered / native species • DBH and height measurement 	



/xii/	Gustavo Escobar (Forestry Consulting Group)	13/09/2023 – 15/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> Plantation techniques DBH and height measurement Forest inventory Data recording QA/QC procedures 	Isha Kapoor, Lalit Mohan Saklani & Pablo Angulo
/xii/	Judidsa (Inverbosques)	14/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> Induction Training Employment contracts Safeguarding principles 	
/xiii/	Vicente Hernandez (Inverbosques)	14/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> Assessment with respect to labour laws, minimum wage, working hours, non-discrimination, sexual harassment, anti-corruption 	
/xiv/	Carlos Mario (Inverbosques)	14/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> Plantation techniques Training with respect to identification and protection of endangered / native species 	
/xv/	Hanier Ramero	14/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype	<ul style="list-style-type: none"> Nursery management 	
/xvi/	Kevin Farfan (Inverbosques)	13/09/2023 – 15/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype		
/xvii/	Juan Pablo Florez (Inverbosques)	13/09/2023 – 15/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype		
/xviii/	Estefanny Hernandez (Inverbosques)	14/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype		
/xix/	Liliana Parra (Inverbosques)	14/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype		
/xx/	Deisy (Inverbosques)	14/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face		

			<input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype		
/xxi/	Yuri (La Esmeralda)	14/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype		Isha Kapoor, Lalit Mohan Saklani & Pablo Angulo
/xxii/	Miguel Angel (La Esmeralda)	14/09/2023	<input checked="" type="checkbox"/> On-site <input checked="" type="checkbox"/> Face to Face <input type="checkbox"/> Telephone <input type="checkbox"/> Email <input type="checkbox"/> Skype		

VVB’s sampling and document review/assessment of key details including interviews during the on-site inspection:

VVB has adopted a standard method of calculating sample size by Morris Hamburg (Hamburg, 1985) using precision level, confidence level and response distribution for determining the sample size. Verification team has opted for 15% margin of error and 85% confidence level in determining the VVB’s sample size. Accordingly, we plan to take 07 samples from the entire plantation area under the project activity for the current monitoring period with pro-rata sample size calculated based on sample size taken by the PD (i.e., weightage of sample size for a project area taken by PD) multiplied by the VVB sample size.

VVB during its field measurement has randomly selected and visited 07 permanent sampling plots together in the modeling units. The selection of samples was based on the weighted average representation (in terms of area) by each of the modelling units. Accordingly, the number of samples verified by GS VVB during on-site assessment were as:

SI. No.	Name of PP	Area (hectares) as verified from the records (Shape files)	Sample size by PD	No. of PSPs verified by VVB
1	Inverbosques	15,926.13 ha	955	07
2	Aldea Forestal	3,282.26 ha		
Total		19,208.39 ha	955	07

VVB has also verified the area of the each of the 6 permanent sampling plots by measuring the radius during the on-site inspection. The 7th plot was verified as part of the new area certification. The MU wise size of the sampling plot is as below:



Fig 1: Height measurement



Fig 2: DBH measurement using diameter tape

Sl. No.	Name of MU	Area of the PSP (m ²)	Shape of PSPs	Radius of the PSP (m)
1	205, El Arava	400	Circular	11.28
2	238, Santa Cruz	400	Circular	11.28
3	239, Santa Cruz	400	Circular	11.28
4	505, Morichalito	400	Circular	11.28
5	527, La Fortelaza	400	Circular	11.28
6	445, El Morichal	400	Circular	11.28

The field measurement (on 13th September and 14th September 2023) by the VVB team reveals no material discrepancy as compared to the one conducted by PD. The PD has used hypsometer while VVB has used Nikon rangefinder for the measurement of height. Both the devices were calibrated on site and has been found to be accurate. The DBH has been verified through the diameter tape. Furthermore, the VVB has also interviewed the MRV personnel involved in such measurement from PD's side and found them competent to perform such standardized measurements for height and diameters. The equipment used for the measurement were found appropriate as the results from VVB's equipment reveals comparable results. VVB also interviewed PD's MRV team and noted that there exists a SOP for the field MRV activity. The raw data^{/35/} were also cross-checked with the one transferred to CO₂ Fixation work sheet and found that there were no material errors or omissions during the transfer of data from one platform to other. Hence, VVB confirms that no discrepancy was observed in the data and information flow system applied by the PD. VVB during the office assessment has checked the following documents to assess the PD's QA/QC process and to cross check the results presented in the CO₂ Fixation work sheet^{/04/} with the raw data sheets^{/35/}:

1. Latest FSC report (2022)^{/13/} and certificate and for the year 2019,2020, 2021^{/13/}.
2. Agreements with landowners^{/23/} which is evidence of the total land area implemented under the project. This is also evidence for the title of the land and this agreement also confirms the relinquishment of carbon credit rights from landowners to the PD.
3. Shape files of the each of the MUs^{/09/}.
4. SOP/Protocol for the project^{/21/}
5. Raw records of field measurement done by the PD^{/35/}
6. Records of training^{/21/22/}

VVB has interviewed personnel responsible for the carbon calculation^{/04/} including those who transferred the data in the mobile software and further trans imposed it to the excel sheets. This review of the system reveals correct data and information flow and no discrepancy was found. The QA/QC of the data/information flow including data archiving based on this assessment was found adequate.


Fig 3: Interview with project participant & document review

Fig 4: Nursery: seedling propagation site

Through the above-mentioned activities, the VVB confirmed the following aspects in relation to the project activity:

- confirm the implementation and operation of the project,
- review the data flow for generating, aggregating and reporting the monitoring parameters,
- confirm the correct implementation of procedures for operations and data collection,
- cross-check the information provided in the monitoring report with other sources,
- review the calculations and assumptions used to obtain the GHG removal data and ER,
- identify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters.

2.4 Resolution of outstanding issues

The objective of this phase of the verification is to resolve any outstanding issues (issues that require further elaboration, research or expansion) which have to be clarified/corrective action done prior to final VVB's conclusions on the project implementation, monitoring practices and achieved emission reductions. In order to ensure transparency a verification protocol is completed for the project activity. The protocol shows in transparent manner criteria (requirements), means of verification and resulting statements on verification actual project activity against identified criteria.

The verification protocol serves the following purposes:

- It organises in a table form, details and clarifies the requirements, a GS project is expected to meet GS4GG requirements.
- It ensures a transparent verification process where the VVB will document how a particular requirement has been verified and the result of the verification.
- It ensures that the issues are accurately identified, formulated, discussed and concluded in the verification report.
- It ensures the determination of achieving credible emission reductions from the project activity.

The verification protocol consists of a table i.e., tables of findings and preliminary and final opinion of the VVB on every particular issue raised during the verification process.

The findings of verification process are summarized in the tables below:

CAR/ CL/ FAR ID	xx	Section no.	Date: DD/MM/YYYY
Description of CAR/ CL/ FAR			
PD response			Date: DD/MM/YYYY

Documentation provided by the PD	
VVB assessment	Date: DD/MM/YYYY

In Table 1 FAR, shall reflect the forward actions initiated by the verification team if the monitoring and reporting require attention and/or adjustment for the next verification period.

Findings during the verification can be interpreted as a non-compliance with GS criteria or a risk to the compliance.

Corrective action requests (CARs) are raised, in case:

- (a) Non-conformities with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient.
- (b) Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants.
- (c) Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impair the estimate of emission reductions.
- (d) Issues identified in a FAR during validation/previous verification(s) that are not been resolved by the project participant(s) to be verified during current verification.

Requests for clarification (CLs) are raised, if information is insufficient or not clear enough to determine whether the applicable GS requirements have been met.

A forward action request (FAR) is raised during verification to highlight issues related to project implementation/monitoring that require review during the subsequent verification of the project activity. FARs shall not relate to the GS requirements for issuance.

2.5 Internal quality control

The final verification report has passed a technical review before being submitted to the project participant and SustainCert. A technical reviewer qualified in accordance with CCIPL's qualification scheme for GS validation and verification performed the technical review.

2.6 Verification Team

In accordance with the Accreditation Standard and CCIPL's internal procedures a competent team was appointed by CCIPL to carry out the verification of this MR. The team is outlined below:

Verification Team			Role									
Full name	Affiliation	Appointed for Sectoral Scopes (Technical Areas)	Team leader	Acting/trainee Team Leader	Local Expert	Team Member (Auditor)	Technical Expert	Acting/Trainee Tech. Expert	Trainee Auditor	Technical Reviewer	Expert to TR	Trainee TR
Isha Kapoor	India	14.1	X				X					
Lalit Mohan Saklani	India	14.1							X			
Pablo Angulo	Costa Rica	14.1			X		X					

Vikash Singh	Kumar	India	1.1, 1.2, 3.1, 4.1, 13.1, 13.2, 14.1 and 15								X		
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3. Verification findings:

The verification findings are explained in Appendix 1 below.

3.1 Sustainable Development Contributions Achieved

Means of validation	DR, OSV, I		
Findings	CL 01 was raised and has been satisfactorily closed		
Conclusion	CCIPL based on review of MR ^{/03/} , on-site inspection and interview confirms that the project has contributed to 3 SDGs including: SDG # 8: Decent Work & Economic Growth SDG # 13: Climate Action (Carbon sequestration) SDG # 15: Life on Land (Biodiversity)		
	SDGs	Target Achieved (as per MR^{/03/})	Assessment
	SDG 8: Decent work and economic growth	Increased employment opportunities: 127 Enhanced opportunities for income generation: 127	During the on-site inspection and interviews ^{/-xxii/} , VVB observed that the total number of women are 60% employed at different positions. Furthermore, VVB has reviewed the contracts ^{/20/} for employment for 15 persons under Aldea Forestal and 112 persons under Inverbosques.
	SDG 13: Climate Action	1,168,981 tCO₂e, excluding buffer (27/07/2019 – 30/09/2022)	VVB, based on review of GS MR ^{/03/} and carbon calculation sheets ^{/04/} , confirms SDG 13 has been appropriately calculated.
SDG 15: Life on Land	Increased area under tree canopy cover: 19,208.4 ha Enhanced biodiversity: 56 Enhanced biodiversity: 7,582.19ha	VVB, based on the on-site inspection and interviews ^{/-xxii/} along with the review of the provided KML files ^{/09/} confirms that the area under tree canopy cover is 19,208.4 ha out of which 7,582.19 ha is set aside as high conservation value zone.	

3.2 Location of project

Means of validation	DR, OSV, I
Findings	--
Conclusion	<p>CCIPL based on review of MR^{/03/}, on-site inspection and interviews^{/i-xxii/} and provided KML files^{/09/} confirms that the project has been implemented in Department of Vichada in Puerto Carreno, La Primavera and Cumaribo.</p> <p>Furthermore, VVB confirms that the GPS coordinates of each site sampled has been checked and verified from the data sheet. The project area is spread over 69 properties, out of which 63 properties are managed by Inverbosques and 6 are managed by Aldea Forestal. VVB has also reviewed the land titles certificates^{/23/} issued by government authority of Department of Vichada and has verified it against the government website².</p>

3.3 Description of implemented project

Means of validation	DR, OSV, I
Findings	--
Conclusion	<p>CCIPL, based on review of MR^{/03/}, on-site inspection and interviews^{/i-xxii/} confirms that the technology implemented by the project is reforestation of degraded grassland through three genus of tree species suitable for planting according to the regional edaphic and climatic conditions.</p> <p>The plantations of <i>Eucalyptus urophylla</i>, <i>Eucalyptus tereticornis</i>, <i>Euclayptus pellita</i>, <i>Acacia mangium</i> and <i>Pinus caribaea</i> has been done on the degraded grasslands following a conservation approach.</p> <p>The plantations are developed in the nursery following with a rigorous process of selection and further transplanted in the project site. VVB during the on-site inspection has visited the Inverbosques nursery and has interviewed the relevant personnels^{/i-xxii/} involved in the nursery management and operation.</p> <p>VVB has also reviewed the Forest Management plan^{/24/} and other supporting documentation for the activities that are implemented yearly constituting the capacity building activities, Monitoring and FSC audit^{/13/}, Internal and external firewall maintenance, Forest fires brigades, Integrated Pest Management diseases and weeds, local stakeholder consultation^{/28/}, biodiversity monitoring research activities^{/19/} and HSEQ (Health, security, environmental and quality) activities^{/21/22/}.</p> <p>Project Stratification</p> <p>The modelling units or stratums has been developed for project stratification. Each stratum is defined by the company, establishment year and species. VVB has reviewed the raw data sheets^{/35/} along with the Modelling units sheet^{/08/} provided and confirms the same. VVB during the on-site inspection has recreated the process of circular plots measurement and has visited the 6 Mus namely El Avava, Santa Cruz (2), Morichalito, La Fortelaza and El Morichal. Thus, VVB confirms that the permanent plots are stratified appropriately and well defined.</p>

² [Certificate of Tradition and Freedom, Queries of Owner Indexes and Certificates of Non-Ownership \(supernotariado.gov.co\)](http://supernotariado.gov.co)

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3.4 Forward Action Requests

Means of validation	DR, OSV, I
Findings	Table 1 under Annex 1
Conclusion	<p>As per the previous performance certification report^{/01/}, one (01) FAR was raised during the previous performance certification which is as follows: FAR 01- The old PDD dated October 30th, 2015 has to be updated in regard to the new areas added with this certification.</p> <p>As per the GS MR^{/03/}, one (01) FAR was raised during the previous validation which is as follows:</p> <p>FAR 01- The Project is set up as a sustainable forestry project based on a conservation approach (C.1.2) therefore it is important to that the plantation include a proportion of native species in the near future.</p> <p>All previous FAR have been addressed in the GS MR^{/03/} and further assessed by the VVB (Refer to Table 1 under Annex 1). Both the FARs has been satisfactorily closed by VVB upon review of updated PD^{/02/} and MR^{/03/}.</p>

3.5 Post-Design Certification changes

Means of validation	DR, OSV, I
Findings	CL 06 was raised and has been satisfactorily closed
Conclusion	<p>The following post-design changes has been included during the performance review:</p> <ol style="list-style-type: none"> Volume and height equations: PD has incorporated site- and species-specific height allometric equations. Only 25% of the trees in the inventory had both measured heights and DBH. The estimation of height for the trees without height measurements has been done by developing species and site-specific allometric equations. The allometric equations took the form of (Burkhart & Tomé, 2012) and were log-transformed for linearization. Site-specific allometric equations were achieved by including the reforestation sites as random slopes within a linear mixed effects model. The equation developed for calculation of height for each genus involved in the project activity is done through the following: $\ln(\text{Height}) = \beta_0 + \beta_1 \ln(\text{DBH}_{(i,j)}) + v_{(0,i)} + v_{(1,i)} \ln(\text{DBH}_{(i,j)}) + e_{(0,i,j)}$ <p>Where β_0 and β_1 are the models fixed effects, $v_{(0,i)}$ is the random site-specific intercept, $v_{(1,i)}$ is the random site-specific slope and is $e_{(0,i,j)}$ the error term. The detailed standard error, regression value for the model fixed effects is demonstrated in the evident document^{/34/}.</p>



VVB has reviewed the provided evidence^{/34/} for demonstrating the process of estimating missing tree height and tree volume which deems to be valid and satisfactory. The uncertainty and the reliability for predicting missing tree heights based on available inventory data has been satisfactorily demonstrated^{/04/}. The following table mentions the general equations developed for each genus included in the project:

Genus	Equation	Reference
<i>Acacia</i>	$V = 00013 * DBH^{1.578} * Height^{0.8968}$	Developed for Inverbosques (i.e. internal)
<i>Eucalyptus</i>	$V = 0.00011 * DBH^{1.834} * Height^{0.7182}$	
<i>Pinus</i>	$V = \left(\frac{DBH}{100}\right)^2 * (0.953 + 0.280 * Height)$	(Jerez et al., 2005)

- 2. Reversals:** During the on-site inspection, VVB has been apprised that there are some events of biomass loss due to forest fires and wind storms. PD has satisfactorily reported the loss of biomass in the affected areas during the previous performance certification^{/01/}. The MUs 19 (19.1, 19.2, 19.3) are in properties verified in 2019 but, due to reversals, they were replanted again in 2019. No losses has been reported during this monitoring period. Additionally, SOPs^{/21/} has been developed for fire prevention, mitigation and control of forest fires.
- 3. SDGs:** During this monitoring period, SDG 12 has been excluded as there is no more timber production from the project area. The project is now under the conservation model.
- 4. Planted area:** As part of the new area certification, Inverbosques added 4,743.59 ha during this monitoring period which sums up to 15,926.13 ha. VVB has visited one sample plot under the new area certification and has analysed the KML files^{/09/} for the total area included in this new area certification which deems to be satisfactory and valid.

Overall, VVB confirms that the design change of the project has been validated by AENOR^{/32/}. The post design certification changes found to be reasonably valid and has been assessed by CCIPL.

3.6 Description of monitoring system applied by the project

The assessment of the monitoring system followed for different SDG is mentioned below:

SDG	Monitoring indicator	VVB assessment
8	Total number of jobs due to project activities, Total number of employees earning above local minimum wage	The monitoring system is head count based on contracts and salary payments per year. VVB during the on-site inspection has interviewed the employees confirming the salary above minimum wage in Colombia which is \$ 1,160,000.00 (1.16 million pesos) ^{/20/} . VVB has reviewed the contractual agreements ^{/20/} for the people employed and the evidence ^{/20/} for salary

		payments. Hence, VVB confirms that the monitoring system followed for SDG 8 is valid.
15	Enhanced biodiversity- Number of protected threatened species in the project area & conservation status of species	The monitoring system ^{21/24/} is based on the visual sightings of faunal diversity in the region. VVB during the on-site inspection has eye witnessed the camera traps installed within the HCV areas and the visual evidence of the recorded animal sightings captured.

For SDG 13, PD has prepared the sampling plan following the “Sourcebook for Land Use, Land-Use Change and Forestry Projects” by Pearson et al., 2005^{B13/}. The stratification has been done using randomly stratified sampling. The sampling size has been calculated with a confidence level of 95% with statistical error equal to or less than 10% variability level. Circular plots have been established with areas of 500 and 400 m² for Inverbosques and Aldea Forestal. The monitoring equipment as mentioned in section C of the GS MR^{03/} are valid including but not limited to: GPS, Fiberglass meter tape, clinometer, etc. VVB has reviewed the Forest Management plan^{24/} provided which satisfactorily demonstrate the sampling procedures, forest inventory and the methodology followed.

3.7 Data and parameters

a) Data and parameters fixed ex ante or at renewal of crediting period

Means of validation	DR, OSV, I	
Findings	CAR 02 was raised which has been satisfactorily closed.	
Conclusion	In line with the GS4GG PDD ^{02/} , VVB confirms that PD has appropriately defined Data and parameters fixed ex ante in the Section D.1GS MR ^{03/} .	
	Data and parameters fixed ex ante	VVB Assessment of compliance
	Emission removals in tCO ₂ e-Baseline	The value of 8.64 tCO ₂ /ha for both AGB and BGB baseline has been derived from the mean average value from three literatures, namely, Ruegg, 2017; Etter et al, 2011; San Jose et al, 1988 ^{B12/} . VVB confirms that the value estimated is conservative and has been demonstrate in the carbon calculation spreadsheet ^{04/} also. The baseline GHG has been updated based on the latest available literature for Colombia.
	AGB baseline in tCO ₂ e	VVB has reviewed the sources ^{B12/} of data provided and confirms that the value applied, 5.98 tCO ₂ /ha, is valid and consistent in both the documents. The baseline GHG has been updated based on the latest available literature for Colombia.
	BGB baseline in tCO ₂ e	VVB has reviewed the sources ^{B12/} of data provided and confirms that the value applied, 2.66 tCO ₂ /ha, is valid and consistent in both the documents. The baseline GHG has



		been updated based on the latest available literature for Colombia.
	Emission removals in tCO ₂ e- Leakage	PD has provided with a value of 0 tCO ₂ /ha. VVB, based on the on-site inspection and interviews ^{/i-xxii/} confirms the same. Additionally, the leakage assessment has been conducted for the project design certification in 2016 ^{/14/} .
	Emission removals in tCO ₂ e- Soil Carbon	Based on review of GS Soil tool ^{/26/} for A/R projects, VVB confirms that PD has applied the default data from the tropical, wet climatic region with high activity clay soils. VVB confirms that the calculated value of 2.09 tCO ₂ /ha/yr is valid.
	Emission removals in tCO ₂ e- Biomass Expansion factor	Based on review of IPCC LUCLUF, Good Practice Guidance for Land Use, Land-Use Change and Forestry, Annex 3A.1 Biomass Default Tables for Section 3.2 Forest Land ^{/B11/} , VVB confirms that PD has applied a conservative value of 1.5 for biomass calculation which deems to be valid by VVB.
	Emission removals in tCO ₂ e- Wood density	PD has applied the species-specific value of wood density from the Table 4, Tabla 4 Factores de emisión para las especies priorizadas en las regiones estratégicas de Colombia de the literature MINAM et al., 2021 ³ . VVB confirms that the value applied is valid in respect to the project area.
	Root to shoot ratio (R-t-s)	VVB confirms that the default value of 0.42 has been applied from IPCC LUCLUF, Good Practice Guidance for Land Use, Land-Use Change and Forestry, Annex 3A.1 Biomass Default Tables for Section 3.2 Forest Land which is valid.
	Carbon fraction tC/t.d.m	VVB confirms that the default value of 0.5 has been applied from the applied methodology ^{/B01/} which is valid.
	C to CO ₂ factor	VVB confirms that the applied value of 3.6667 (44/12) from the applied methodology ^{/B01/} is valid.

³ [Plantilla para la documentación de Catálogo de Representación \(biocarbono.org\)](http://Plantilla para la documentación de Catálogo de Representación (biocarbono.org))



b) Data and parameters monitored

Means of validation	DR, OSV, I																													
Findings	CL 06 was raised and has been satisfactorily closed.																													
Conclusion	In line with the GS4GG PDD ^{/02/} , VVB confirms that PD has appropriately defined Data and parameters monitored in the Section D.2 of GS MR ^{/03/} .																													
	Data and parameters monitored	VVB Assessment of compliance																												
	Productive area	VVB has done the remote sensing analysis ^{/09/} for the project area and confirms the value of 73,835.87 ha of productive area is valid and in compliance with the area mentioned in GS4GG MR ^{/03/} and design validated PDD ^{/02/} .																												
	Height	PD has applied the average value of 7.4m. The height for trees without measurement has been calculated through developed equations ^{/34/} and has been appropriately demonstrated in the evident document ^{/34/} . VVB during the on-site inspection has also reviewed the raw data sheets ^{/35/} and the measured value of height for the sampled plots against the self-measured values.																												
	DBH	PP has applied an average value of 5.8 cm. During the on-site inspection, VVB has measured the DBH of trees from sampled plots and reviewed it against the provided raw data sheets by PD.																												
	Tree volume mean annual increment (MAI)	VVB confirms that each project participant has allometric volume equations adjusted to the project planted areas. Age and volume per tree are used to estimate MAI, which is extrapolated, later, to plot and hectare level. PD has the applied the average value of 5.9 which has been calculated through the following equations:																												
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	<i>Pinus caribaea</i>	$\text{Ln}(H)=0.489+0.681*\text{ln}(d)$
	<i>Pinus tecunumanii</i>	$\text{Ln}(H)=1.107+0.457*\text{ln}(d)$
Aboveground tree biomass (AGB)	VVB has verified the ex-post carbon calculation sheet ^{04/} and reproduced the calculations for AGB and confirms that the applied average value of 70.6 tCO ₂ e/ha is valid and satisfactory.	
Belowground tree biomass (BGB)	VVB has verified the ex-post carbon calculation sheet ^{04/} and reproduced the calculations for BGB and confirms that the applied average value of 29.7 tCO ₂ e/ha is valid and satisfactory.	
Other emissions	VVB confirms that the value of 0.65 tCO ₂ e has been calculated using the fertilizer use (kg/ha) as mentioned in the Forest management plan ^{24/} for Inverbosques. The fertilizer content is multiplied by the default value of 0.005 tCO ₂ per kg as provided in the section 3.8.3 of the applied methodology ^{B01/} . Hence, the calculated value is deemed to be valid and conservative.	
Total number of jobs	VVB during the on-site inspection has reviewed the contractual agreement ^{20/} for the people employed under Inverbosques and Aldea Forestal. Hence, VVB confirms that the project activity has generated a total of 127 (112- Inverbosques & 15- Aldea Forestal) full time and temporary jobs.	
Total number of employees earning above local minimum wage	VVB during the on-site inspection has interviewed the peoples employed ^{i-xxii/} and confirms through the review of contractual agreements ^{20/} that the 127 people employed are earning wages above the local minimum wage.	
Total area of trees planted	VVB, through the remote sensing analysis ^{09/} and review of the provided shapefiles confirms that the area of 19,208.4 ha has been planted and has been verified through ground- truthing of the sampled plots also.	
Number of observations or presence of endemic or threatened species in the project location according to the IUCN Red List	VVB confirms that the applied value of 56 has been verified by VVB based on the monitoring data ^{19/} from the project area. VVB during the on-site inspection has eye – witnessed the visual evidence of mammals, birds and reptiles through the captured data from the installed trap cameras. Furthermore, the list of observed species has been verified against the IUCN Red list of threatened species database ⁴ .	
Total protected land area	VVB, based on the on-site inspection and remote sensing analysis ^{09/} confirms that the area of 7,582.19 has been protected in compliance with the LUF activity requirements ^{B03/} to keep 10% of the project area as a HCV. VVB has also visited one HCV area during the on-site inspection and confirms the protected area has been kept aside in order to enhance the functional and carrying capacity of the existing biodiversity and ecosystem.	

⁴ [IUCN Red List of Threatened Species](#)



4. Implementation of sampling plan

Means of validation	DR, OSV, I							
Findings	CAR 03 was raised and has been satisfactorily closed							
Conclusion	<p>Sampling Design and data collection</p> <p>i) <u>Type of plots</u> VVB, based on the on-site inspection and desk review^{/01-34/} confirms that permanent-sampling plots have been established and maintained.</p> <p>ii) <u>Shape and Size</u> VVB, during the on-site inspection of the sample plots, observed that PD has identified circular plots, 12.62m and 11.28m in diameter using distance measuring equipment and a fixed central point with an area of approx. 500 m² and 400 m².</p> <p>All the trees are measured at a height equal or greater than 1.3m clockwise starting to the north, with the closest tree to the plot center. VVB during the on-site inspection has layed over the plots again and confirms the same. Furthermore, PD has calculated and used a correction factor for sloping lands, which was verified by the VVB by reproducing the same procedure.</p> <p>iii) <u>Number of Plots</u> As per the desk review and on-site inspection, the precision estimate was calculated as 14% average at 95% confidence levels under Aldea Forestal. For Inverbosques, the sampling intensity was kept at 0.5%. The details of the uncertainty calculation has been provided in the ex-post carbon calculation sheet which has been verified by VVB.</p> <p>iv) <u>Location of sampling plots</u> In order to avoid bias with regard to plot locations, permanent sample plots are located systematically with a random start for Inverbosques properties. For the Aldea Forestal properties, the plots are permanent and randomly located. The geographical position (GPS coordinate), location, plantation year and company of each plot is recorded and archived. It is to be ensured that the sampling plots are distributed randomly, and as evenly spread as possible.</p> <p>v) <u>Monitoring frequency</u> In line with the GS MR template instructions, VVB has assessed section D.4 as follows:</p> <table border="1"> <thead> <tr> <th>GS Template Instruction</th> <th>Assessment of Compliance</th> </tr> </thead> <tbody> <tr> <td>(a) Description of implemented sampling design.</td> <td>The design has been verified by VVB upon the review of the Forest management plan^{/24/} for both the project participants. VVB confirms that the description of the implemented design has been satisfactorily demonstrated in the management plan.</td> </tr> <tr> <td>(b) Collected data.</td> <td>The data collection has been done using the digital forms and through an open source software, i.e. Kobo</td> </tr> </tbody> </table>		GS Template Instruction	Assessment of Compliance	(a) Description of implemented sampling design.	The design has been verified by VVB upon the review of the Forest management plan ^{/24/} for both the project participants. VVB confirms that the description of the implemented design has been satisfactorily demonstrated in the management plan.	(b) Collected data.	The data collection has been done using the digital forms and through an open source software, i.e. Kobo
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		collect. VVB during the on-site inspection has reviewed the data collection form and the process for the collection of various data parameters like DBH, tree height, basal area and tree species.
	(c) Analysis of the collected data.	The collected data has been used to estimate the volume of the tree stands. Site and species specific allometric equations has been applied. For trees without height measurements, project participants has developed plot specific DBH to height allometric equations ^{/34/} . VVB confirms that the analysis of the collected data has been done satisfactorily and demonstrated in the carbon calculation sheet ^{/04/} .
	(d) Demonstration that the required confidence/precision level has been met.	VVB confirms that the sampled MUs ^{/08/} meet the precision requirements with a maximum error of $\pm 20\%$ at a 90% confidence interval in compliance with the section 3.11.5 of the applied methodology ^{/B01/} . Additionally, VVB has reviewed the precision calculations demonstrated in the carbon calculation sheet ^{/04/} which deems to be valid and satisfactory.
	(e) Demonstration that the samples were randomly selected and are representative of the population.	The random stratified sampling has been carried out under the area for both the project participants. The sampling intensity is 0.5 % which represents 814 plots that has been established. Out of the 814 sampled plots, VVB has verified the 6 plots randomly including the area under new area certification.

4.1 Calculation of SDG impacts

a) **Calculation of baseline value or estimation of baseline situation of each SDG Impact**

Means of validation	DR, OSV, I
Findings	--
Conclusion	Based on the desk review ^{/02/} and on-site inspection, VVB has concluded the assessment of SDG Impact calculation as follows:



	SDG 8: Decent Work & Economic Growth	PD has calculated the total number of jobs projected in baseline is 116 for both the project participants. The total number of employees earning above local minimum wage was projected as 86 for the whole project. Inverbosques has observed 25% growth due to increasing of project operations generating more employment.
	SDG 13: Climate Action	The ex-ante estimate for the GHG removal over the whole crediting period is 4,155,846 tCO ₂ e with an annual average of 138,528 tCO ₂ e/year.
	SDG 15: Life on Land	PD has calculated the ex-ante estimations for total area of trees planted (ha) as 14,464.8 ha for the whole project area. The number of observations of protected threatened species in the project area is kept as 65. For the total protected land area, the baseline area is kept as 7,487 ha.

b) Calculation of project value or estimation of project situation of each SDG impact

Means of validation	DR, OSV, I	
Findings	--	
Conclusion	Based on the desk review ^{/03/04/20/} and on-site inspection, VVB has concluded the assessment of SDG Impact calculation as follows:	
	SDG 8: Decent Work & Economic Growth	The project has created 127 job opportunities and the employment contracts ^{/20/} for all has been verified by VVB.
	SDG 13: Climate Action	The project has resulted in removal of 1,168,981 tCO ₂ e for this monitoring period. This has been verified by VVB after reviewing and replicating the carbon calculation spreadsheet ^{/04/} .
	SDG 15: Life on Land	The land planted under trees is 19,208.4 ha which has been cross checked by VVB after reviewing the provided shapefiles ^{/09/} . Additionally, VVB has also eye-witnessed the trap cameras in the HCV areas installed for reporting of the fauna. A total of 56 sightings has been reported which has been verified by

		VVB ^{/19/} including mammals, birds and reptiles. In compliance with the GS requirements, 7,582.19 ha has been kept aside as total protected land area which has also been verified by VVB. VVB also visited one HCV area within the project area during on-site inspection.
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c) Calculation of leakage

VVB confirms that leakage assessment was conducted for the project design certification in 2016. VVB has reviewed the baseline and leakage assessment report^{/14/}. VVB, further through on-site inspection and interviews confirms that there is no shifting of any activities due to project implementation. Thus, leakage mentioned as zero is valid.

d) Calculation of net benefits or direct calculation for each SDG Impact

Means of validation	DR, OSV, I	
Findings		
Conclusion	Based on the desk review ^{/03/04/20/} and on-site inspection, VVB has concluded the assessment of SDG Impact calculation as follows:	
	SDG 8 Decent Work & Economic Growth	Based on the review of GS MR ^{/03/} , employment contracts ^{/20/} and on-site inspection/interviews ^{/i-xxii/} , VVB confirms that 127 peoples has been employed by both the project participants. This has resulted in net benefit of 11 jobs against the baseline estimate.
	SDG 13: Climate Action	Based on the review of GS MR ^{/03/} , ex-post carbon calculation spreadsheet ^{/04/} , VVB confirms that the project has resulted in removal of 1,168,981 tCO ₂ e until this monitoring period. The net benefit achieved from baseline estimate for the whole crediting period is calculated to be 295,909 tCO ₂ e.
	SDG 15: Life on Land	Based on the review of GS MR ^{/03/} and review of shapefiles ^{/09/} , VVB confirms that the total protected land area is 7,582.19 ha with net benefit of 95.19 ha. The number of protected threatened species in the project area & conservation status of species has a project estimate of 56 which has been verified by VVB through monitoring data ^{/19/} from trap cameras.

a) Comparison of actual SDG Impacts with estimates in approved PDD

Means of validation	DR, OSV, I	
Findings	--	
Conclusion	Based on the desk review ^{/03/04/20/} and on-site inspection, VVB has concluded the assessment of SDG Impact calculation as follows:	
	SDG 8 Decent Work & Economic Growth	Based on the review of GS MR ^{/03/} , employment contracts ^{/20/} and on-site inspection/interviews ^{/i-xxii/} , VVB confirms that 127 peoples has been employed by both the project participants until the end of this monitoring period. In comparison with values estimated in PDD ^{/02/} , there has been increase of the actual values achieved.
	SDG 13: Climate Action	Based on the review of GS MR ^{/03/} , ex-post carbon calculation spreadsheet ^{/04/} , VVB confirms that the project has resulted in removal of 1,168,981 tCO ₂ e until this monitoring period.
	SDG 15: Life on Land	Based on the review of GS MR ^{/03/} and review of shapefiles ^{/09/} , VVB confirms that the total protected land area is 7,582.19 ha with net benefit of 95.19 ha against the value of 7,487 ha estimated in ex-ante. The number of protected threatened species in the project area & conservation status of species has a project estimate of 56 which has been verified by VVB through monitoring data ^{/19/} from trap cameras and there has been a slight decrease from the estimated value of 65.

e) Remarks on increase in achieved SDG Impacts from estimated value in approved PDD

Means of validation	DR, OSV, I
Findings	--
Conclusion	NA for A/R project activities.



4.2 Safeguards reporting

Means of validation	DR, OSV, I										
Findings	--										
Conclusion	As per section F of the GS4GG MR ^{/03/} , VVB assessed the compliance of following safeguards:										
	<table border="1"> <thead> <tr> <th>Safeguards</th> <th>VVB Assessment</th> </tr> </thead> <tbody> <tr> <td> 2.2 Gender Quality Projects shall apply the principles of non-discrimination, equal treatment, and equal pay for equal work </td> <td> Based on review of employment contracts^{/20/} and on-site inspection and interviews^{/i-xxii/} with representatives and local stakeholders, VVB confirms the safeguard was appropriate. Mitigation measure: Documentation of contracts and monitoring of salary payments^{/20/}. </td> </tr> <tr> <td> 3. Community, Health, Safety and Health conditions The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community </td> <td> Based on document review^{/21/} and on-site inspection and interviews^{/i-xxii/} with project representatives and local stakeholders, VVB confirms the trainings and policies has been developed to safeguard the principle appropriately. Mitigation measure: Health and safety policies, and trainings on these topics^{/21/}. </td> </tr> <tr> <td> 6.1.3 Labour rights Working agreements with all individual workers shall be documented and implemented and include: A) Working hours (must not exceed 48 hours per week on a regular basis), AND B) Duties and tasks, AND C) Remuneration (must include provision for payment of overtime), AND D) Modalities on health insurance, AND E) Modalities on termination of the contract with provision for voluntary resignation by employee, AND F) Provision for annual leave of not less than 10 days per year, not including sick and casual leave. </td> <td> VVB has reviewed the contracts^{/20/} during the on-site inspection and has also interviewed^{/i-xxii/} the workers confirming that the safeguard was appropriate. Mitigation measure: Documentation of contracts^{/20/}. </td> </tr> <tr> <td> 6.1.5 Labour rights The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation </td> <td> Based on document review^{/20/} and on-site inspection and interview^{/i-xxii/} with project representatives and local stakeholders, VVB confirms </td> </tr> </tbody> </table>	Safeguards	VVB Assessment	2.2 Gender Quality Projects shall apply the principles of non-discrimination, equal treatment, and equal pay for equal work	Based on review of employment contracts ^{/20/} and on-site inspection and interviews ^{/i-xxii/} with representatives and local stakeholders, VVB confirms the safeguard was appropriate. Mitigation measure: Documentation of contracts and monitoring of salary payments ^{/20/} .	3. Community, Health, Safety and Health conditions The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community	Based on document review ^{/21/} and on-site inspection and interviews ^{/i-xxii/} with project representatives and local stakeholders, VVB confirms the trainings and policies has been developed to safeguard the principle appropriately. Mitigation measure: Health and safety policies, and trainings on these topics ^{/21/} .	6.1.3 Labour rights Working agreements with all individual workers shall be documented and implemented and include: A) Working hours (must not exceed 48 hours per week on a regular basis), AND B) Duties and tasks, AND C) Remuneration (must include provision for payment of overtime), AND D) Modalities on health insurance, AND E) Modalities on termination of the contract with provision for voluntary resignation by employee, AND F) Provision for annual leave of not less than 10 days per year, not including sick and casual leave.	VVB has reviewed the contracts ^{/20/} during the on-site inspection and has also interviewed ^{/i-xxii/} the workers confirming that the safeguard was appropriate. Mitigation measure: Documentation of contracts ^{/20/} .	6.1.5 Labour rights The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation	Based on document review ^{/20/} and on-site inspection and interview ^{/i-xxii/} with project representatives and local stakeholders, VVB confirms
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2.2 Gender Quality Projects shall apply the principles of non-discrimination, equal treatment, and equal pay for equal work	Based on review of employment contracts ^{/20/} and on-site inspection and interviews ^{/i-xxii/} with representatives and local stakeholders, VVB confirms the safeguard was appropriate. Mitigation measure: Documentation of contracts and monitoring of salary payments ^{/20/} .										
3. Community, Health, Safety and Health conditions The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community	Based on document review ^{/21/} and on-site inspection and interviews ^{/i-xxii/} with project representatives and local stakeholders, VVB confirms the trainings and policies has been developed to safeguard the principle appropriately. Mitigation measure: Health and safety policies, and trainings on these topics ^{/21/} .										
6.1.3 Labour rights Working agreements with all individual workers shall be documented and implemented and include: A) Working hours (must not exceed 48 hours per week on a regular basis), AND B) Duties and tasks, AND C) Remuneration (must include provision for payment of overtime), AND D) Modalities on health insurance, AND E) Modalities on termination of the contract with provision for voluntary resignation by employee, AND F) Provision for annual leave of not less than 10 days per year, not including sick and casual leave.	VVB has reviewed the contracts ^{/20/} during the on-site inspection and has also interviewed ^{/i-xxii/} the workers confirming that the safeguard was appropriate. Mitigation measure: Documentation of contracts ^{/20/} .										
6.1.5 Labour rights The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation	Based on document review ^{/20/} and on-site inspection and interview ^{/i-xxii/} with project representatives and local stakeholders, VVB confirms										



	<p>and reporting of accidents and incidents, and emergency preparedness and response measures</p>	<p>that safety workshops are conducted timely.</p> <p>Mitigation measure: Documentation of workers safety workshops^{/21/}</p>
	<p>7.2 Energy supply Will the Project use energy from a local grid or power supply (i.e., not connected to a national or regional grid) or fuel resource (such as wood, biomass) that provides for other local users?</p>	<p>VVB, during the on-site inspection has observed that solar panel installation has been carried out in the local communities area. Along with that there is capacity building going on for sustainable energy use. VVB has further interviewed the stakeholders and confirms the safeguard reported is appropriate.</p> <p>Mitigation measure: Ongoing capacity building for sustainable energy use and stakeholder consultations in the frame of FSC certification^{/21/}.</p>
	<p>8.1 Impact on Natural water patterns/flows Will the Project affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?</p>	<p>VVB confirms that there is an environment management policy^{/22/} in effect. The water use is monitored and sustainable consumption policies are in place. This has been further confirmed through on-site inspection and interviews.</p> <p>Mitigation measure: Monitoring of water consumption and existence of sustainable consumption policies^{/22/}</p>
	<p>8.2 Erosion and/or Water Body Instability a. Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion? b. Is the Project's area of influence susceptible to excessive erosion and/or water body instability?</p>	<p>VVB has reviewed the management plan^{/24/} certified by FSC and confirms that the safeguard reporting is appropriate.</p> <p>Mitigation measure: Forest Management plans and certified compliance with them (FSC)^{/24/}</p>
	<p>9.1 Landscape Modification and soil Does the Project involve the use of land and soil for production of crops or other products?</p>	<p>VVB has reviewed the management plan^{/24/} certified by FSC and confirms that the safeguard reporting is appropriate. This has been further confirmed during the site visit that the project does not involve in production of crops or other products.</p>



		Mitigation measure: Forest Management plans and certified compliance with them (FSC) ^{/24/}
	<p>9.4 Release of pollutants Could the Project potentially result in the release of pollutants to the environment?</p>	<p>VVB has reviewed the management plan^{/24/} certified by FSC and confirms that the safeguard reporting is appropriate. This has been confirmed during the on-site inspection also.</p> <p>Mitigation measure: Forest Management plans and certified compliance with them (FSC)^{/24/} - Additional information under Principle 9.5 and 9.6</p>
	<p>9.5 Hazardous and Non-hazardous Waste Will the Project involve the manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials?</p>	<p>VVB has reviewed the management plan^{/24/} certified by FSC and confirms that the safeguard reporting is appropriate. This has been confirmed during the on-site inspection also. Furthermore, the waste disposal is also involved in the capacity building^{/25/}.</p> <p>Mitigation measure: Forest Management plans and certified compliance with them (FSC)^{/24/} Monitoring of waste disposal and capacity building^{/25/}</p>
	<p>9.6 Pesticides and Fertilizers Will the Project involve the application of pesticides and/or fertilisers?</p>	<p>VVB confirms that there is minimal usage of fertilizer following the national legislation on pesticides and FSC pesticide policy, FSC-POL30-001 v3^{/22/}.</p> <p>Mitigation measure: Forest Management plans^{/24/} and certified compliance with them (FSC)</p>
	<p>9.11 Endangered Species a. Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)? b. Does the Project potentially impact other areas where endangered species may be present through transboundary affects?</p>	<p>VVB has reviewed the biodiversity assessment report^{/19/} and has also visited one of the HCV during the on-site inspection. Thus, the safeguard reported is appropriate.</p> <p>Mitigation measure: Forest Management plans^{/24/} and certified compliance with them (FSC) Additional biodiversity monitoring^{/19/} in the frame of SDG 15 and capacity building for Flora and Fauna Management</p>

4.3 Stakeholder Inputs and Legal Disputes

Means of validation	DR, OSV, I
Findings	--
Conclusion	<p>As per section G of the GS4GG MR^{/03/}, there are no disputes, inputs and comments reported by Aldea Forestal. However, Inverbosques has received a list of grievances and requested received via multiple channels. The grievances and the solutions are appropriately defined in section G.1 of the GS4GG MR^{/03/}.</p> <p>This was further verified by the VVB through desk review^{/03/17/} and on-site visit^{/i-xxii/}. Furthermore, VVB verified that the Inputs and Grievances logbook^{/17/} is kept within the community accessibility and the project participant.</p>

5. Certification Opinion

CC IPL has performed the third (03rd) periodic verification (performance certification) of the registered Gold standard project activity “Vichada Climate Reforestation Project (PAZ)” (GS 4221) for the period 27/07/2019 to 30/09/2022 (including both the dates).

The verification has been conducted on the basis of the Gold Standard Afforestation/Reforestation (A/R) GHG Emissions Reduction & Sequestration Methodology (Version 2.0)^{/B01/}, PAR Principles-requirements v1.2^{/B02/}, GS4GG Land Use & Forests Activity Requirements Version 1.2.1^{/B03/}, Risks & Capacities Guideline for Land Use & Forest projects Version 1.0, PAR Validation and Verification standard v1.0^{/B04/} and GHG Emissions Reduction & Sequestration Product Requirements Version 2.0^{/B06/}.

The performance certification activities conducted by CC IPL included : collection of information, documents and data supporting the reported GHG removals; assessment of biomass inventory and GHG calculation spreadsheets; assessment of monitoring practices on the field; assessment of information management system; assessment of whether the project has been implemented in accordance with the validated documentation; and assessment of whether the provisions made in the monitoring plan were consistently and appropriately applied.

The VVB has raised seven (07) clarification requests (CLs), three (03) corrective action requests (CARs) and zero (00) Forward action requests (FAR) during this verification, all of which has been satisfactorily closed. Two (02) FARs raised from the previous verification has also been addressed during this verification and has been satisfactorily closed.

The VVB concludes with a reasonable level of assurance that the project is in conformance with Gold Standard Afforestation/Reforestation (A/R) GHG Emissions Reduction & Sequestration Methodology (Version 2.0)^{/B01/}, PAR Principles-requirements v1.2^{/B02/}, GS4GG Land Use & Forests Activity Requirements Version 1.2.1^{/B03/}, Risks & Capacities Guideline for Land Use & Forest projects Version 1.0, PAR Validation and Verification standard v1.0^{/B04/} and GHG Emissions Reduction & Sequestration Product Requirements Version 2.0^{/B06/}.

No qualifications or limitations exist with respect to the verification opinion reached by the auditor. CC IPL confirms that the project has been implemented in accordance with the validated project documentation and applied GS A/R requirements.

The VVB, hereby certifies that the quantity of achieved GHG removals^{/03/04/} by the project activity from 27/07/2019 to 30/09/2022 (including both the dates), 1,168,981 tCO₂e as described in the table below:

Vintage Year	Verified CO ₂ Certificates (tCO ₂ e)	Risk buffer of 20% (tCO ₂ e)	Net CO ₂ -certificates (tCO ₂ e) (Rounded down)
27/07/2019 – 31/12/2019	102,113	20,422	81,690
01/01/2020-31/12/2020	389,306	77,861	311,445
01/01/2021-31/12/2021	388,242	77,648	310,594
01/01/2022 – 30/09/2022	289,320	57,864	231,456

 Carbon CHECK	FM 4.9 Gold Standard Verification Report Template	September 2020
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Total	1,168,981	233,795	935,185
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VVB has assessed the inclusion of new area in compliance with section 2 (c) of the AR LUF activity requirements v1.2.1^{/B03/}. PD has proposed inclusion of new area of 4743.59 ha under project participant Inverbosques.

The aspects regarding the project area have been already assessed during the initial design certification including the baseline scenario, additionality, stakeholder consultations, etc. which are not part of this audit.

VVB, during the on-site inspection, has visited a plot of new area around 20 hectares with plantation from year 2022. Furthermore, VVB has reviewed the shapefiles confirming that the new areas included are within the project boundary. The performance for the new area has also been monitored and verified by VVB after reviewing the provided carbon calculation sheets. In compliance with the requirements set out in section 2.1.17 of the AR LUF activity requirements v1.2.1, VVB has conducted the following assessment:

- a) VVB confirms that the inclusion of new areas follows the design certification process as per the Principles and requirements.
- b) VVB confirms that there are no material differences observed from the project. As the design change of the project has also occurred simultaneously with the performance certification and new area certification. VVB has conducted the new area certification process against the validated PDD from AENOR^{/32/}.
- c) VVB confirms that the new areas proposed for inclusion have the same crediting period end date as for the previously design certified project activity, i.e., 01/02/2036.
- d) The monitoring plan as prepared for the existing areas are also applicable to the new area included in the project.

VVB, based on the on-site inspection gives a positive opinion regarding the inclusion of new area under Inverbosques and confirm the proposed activities in the new areas are eligible.

Appendix 1. List of Findings from Verification

Table 1. FAR from previous verification

FAR	01	Section no.		Date 27/11/2019
Description of FAR				
The old PDD dated October 30th, 2015 has to be updated in regard to the new areas added with this certification.				
Project Developer response				Date: 23/10/2023
The project has gone under a design change renewal in 2023. The latest re-validated PDD follows the GS4GG framework. Further, the PDD has been updated adding the new areas planted in this performance review event.				
Documentation provided by Project Developer				
<ul style="list-style-type: none"> - Re-validated PDD certified in 2023 updated to the latest GS4GG- File name: "PDD_GSID4221_v2_design change-approved.doc" - PDD in track changes adding the new areas planted File name: "PDD_updated_PerRev_GSIF4221" 				
VVB assessment				Date: 27/10/2023
VVB, based on review of revised PDD, "PDD_updated_PerRev_GSIF4221", confirms that PD has included 4,743.59 hectares under Inverbosques during this verification. VVB during the on-site inspection has eye witnessed the new area added. Additionally, this has also been confirmed by VVB through remote sensing analysis. VVB has also reviewed the land tenure agreements for the new area added and cross verified it with the online registry for Municipality of Puerto Carreno for legal situation of the property.				
FAR has been closed				
FAR	02	Section no.	--	Date 10/07/2015
Description of FAR				
The Project is set up as a sustainable forestry project based on a conservation approach (C.1.2) therefore it is important to that the plantation include a proportion of native species in the near future.				
Project Developer response				Date: 23/10/2023
This FAR was closed in the design change event. The project participants have already started to do an assessment for enrichment of forest plantation with native species for a landscape management, biodiversity development, water regulation, soil enrichment, and carbon sequestration. They are assessing if a natural succession from forest plantation to native species forest is feasible, or take action through an assisted natural succession depending on the area characteristics. There are 6 native species selected (supporting documentation) for forest enrichment activities. It is expected the forest enrichment with native species follows a slow succession towards a natural forest by end of the crediting period. The project participants will continue assess and implement these activities and reported in further monitoring reports. Lastly, in the auditing site visit with the VVB, it was possible to visit the forest nursery area where native species are being propagated, as well as, the areas where they are planted as part of enrichment activities.				
Documentation provided by Project Developer				
<ul style="list-style-type: none"> - Document: assessment for forest plantation enrichment with native species - Document: Validation report from VVB for renewal of crediting period and design change showing FAR has been closed. 				
VVB assessment				Date: 27/10/2023

VVB, based on review of validation report from AENOR INTERNACIONAL(VVB) for renewal of crediting period and design change confirms that FAR has been closed by other VVB. Additionally, Carbon Check team has visited the nursery where native tree species has been propagated and the areas where they are going to be planted as part of enrichment activities. VVB has also observed the natural regeneration of native species in some areas due to project implementation activities and confirms that the provided response for natural succession is satisfactory.

FAR has been closed

Table 2. CL from this verification

CL	01	Section no.	Table 01	Date: 23/08/2023
Description of CL				
<p>a) As per Table 01 of the GS MR, for SDG 8, the increase in employment opportunities have been provided as 116 and for enhanced opportunities for income generation, the value has been given as 86.</p> <p>However, during the on-site, VVB was informed that the minimum wage for all the employees are over and above the minimum wage in Colombia.</p> <p>PD shall provide minimum wage requirement for Colombia as well employment contracts and agreements.</p> <p>b) For SDG 15, the value for biodiversity increase (63) is not consistent with the evidence provided “VICH22_INV_Wildlife monitoring_Forest patrols” (56).</p>				
Project Developer response				Date: 23/10/2023
<p>a. Table 1 has been corrected. It has been verified with each project participants that every employee wage is above the minimum wage in Colombia. Salary contracts, salary payments and contracts, and an employee list has been shared with the auditor.</p> <p>b. The value has been changed to 56 as mentioned in the provided evidence.</p>				
Documentation provided by Project Developer				
<ul style="list-style-type: none"> - Employment contract folder including the historical minimum wages in Colombia - List of employees for each project participant 				
VVB assessment				Date: 27/10/2023
<p>a) VVB, based on review of table 1 and other relevant sections of the revised GS PDD, confirms that the people that has been employed under Inverbosques and Aldea Forestal are 127. The same has been confirmed through reviewing the salary payments and contracts. Additionally, VVB during the on-site inspection has also interviewed the peoples employed and confirms the salary is above the minimum wage in Colombia.</p> <p>b) VVB confirms that the value has been revised to 56 and is now consistent within the revised GS-PDD. The value has been confirmed through the evidence provided based on forest patrols.</p>				
CL has been closed				

CL	02	Section no.	A.3, GS MR	Date:12/09/2023
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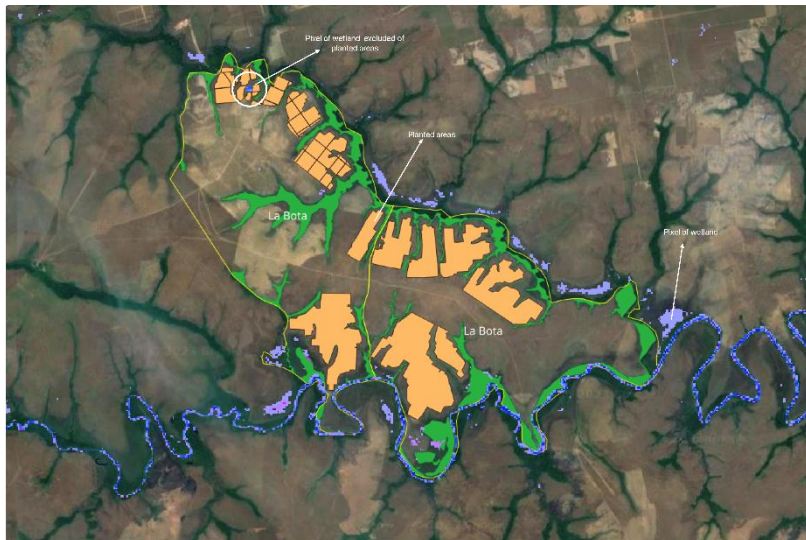
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Description of CL	
<p>As per section 2.1.2 of the applied GS Methodology, the project shall not be on wetlands.</p> <p>As per the document “<i>the bita river ramsar site</i>”⁵, the Bita River wetland (part of the project area) has been declared as a Ramsar site in July 2018. PD shall demonstrate how the project complies by the GS requirement, as stated above.</p>	
Project Developer response	Date: 23/10/2023
<p>To make sure that no wetland is part of the project area, a wetland-non wetland analysis was carried out as part of the eligibility analysis according to the standard. To achieve this, the planted area was overlaid with the Global Surface Water extent dataset provided by Joint Research Center (JRC) of the European Union. The surface water extent dataset is a raster which maps area covered with water at any point in time between 1984 and 2021 and summarizes all surface water observations in that period the maximum extent of surface water. Surface water detected in this dataset was vectorized, buffered according to the standard’s requirements and wetland definition and then removed from the planted area.</p> <p>In addition, Fundacion Omacha is the entity that has been coordinating the actors' engagement and participation and the management plan for the Bita Ramsar area. In the document “Certificado Fundacion Omacha” shared as supporting documentation, the Fundacion certified that Inverbosques and Aldea has been key actors of the management and conservation of the Bita area; and has signed a conservation agreement. Hence, the forestry activities are not laying within wetland areas of the Bita ramsar area but are within the productive area. Currently, the Ministry of Environment, Corporinoquia and Fundacion Omacha are working together to harmonize the zoning of the Bita Basin Management Plan and the Management plan of the Ramsar area.</p>	
Documentation provided by Project Developer	
<ul style="list-style-type: none"> - Vichada eligibility analysis report - Document: Certificacion Fundacion Omacha – proceso zonificacion humedal Ramsar - Document: Acuerdo de voluntadas para la conservacion de biodiversidad en la cuenca del sitio Ramsar rio Bita • Document: Acuerdos conservacion final 	
VVB assessment	Date: 30/10/2023
<p>VVB has done the remote sensing analysis for the project area and confirms that the planted area has been excluded from the area covered with water at any point in time between 1984 and 2021. The water pixels demonstrate the water covered area. As highlighted below, any area covered with water pixel is not included in the planting area.</p>	

⁵ chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ramsar.org/sites/default/files/colombia_-_agriculture_and_bita_ramsar_site.pdf



Furthermore, based on the review of the evidence, “*Certificacion Fundacion Omacha , Acuerdo de voluntadas para la conservacion de biodiversidad en la cuenca del sitio Ramsar rio Bita & Acuerdos conservacion final*”, VVB confirms that project participants have agreement to preserve and protect corridor for 3 major fauna species and alike the project they have to protect the forest area around rivers wetland.

CL has been closed

CL	03	Section no.	Reversals	Date: 12/09/2023
Description of CL				
<p>During the on-site inspection, VVB was apprised that there was an event of fire during this monitoring period, in multiple locations of Aldea and Inverbosques areas.</p> <p>PD shall clarify how the loss of the biomass from burning has been accounted in the total carbon removals.</p>				
Project Developer response				Date: 23/10/2023
<ul style="list-style-type: none"> - The forest fires reported impacted small areas of the forest plantation. There was an assessment by each entity about the percentage of survival which was up to 100% for some areas and due to the regenerative capacity of the forestry species. The affected areas correspond to 214.65 ha for inverbosques, and 184.20 ha for Aldea – areas not consecutive and in different farms spread all over the project area. Further, it is important to clarify that there was a forest fire event but the evaluation after event of the plantation trees showed there was no or little damage to the biomass. These areas are continued and yearly monitoring per each project proponent. - The permanent sample plots from the forest inventory for both Aldea and Inverbosques are located within the affected areas. The forest inventory database and consequently monitoring data per plot reflects the dead or missing trees when doing the inventory, as the objective of PSPs is to monitor changes of forests over time (PSP plots are representative form the affected area). And hence, the reduction in biomass (less density) is accounted and reflected later at MU level (as the volume for the plots that it is within the affected area reflects a lower living trees as an assessment of the current forest status) 				

- For example, the project plot ID 475 falls within an affected forest area – the coding 100 means the tree is affected and subsequently the volume /biomass loss is subtracted from any carbon calculations removals.

M	N	O	P	Q	R	S	T
Plot_area (m2)	Tree_No	Tree/ha	DBH1 (cm)	DBH2 (cm)	Mean DBH (cm)	H (m)	
475	400	1	8.9	0	8.9	8.2	
475	400	2	12.6	0	12.6	12.8	
475	400	3	10.8	0	10.8	9.639202	
475	400	4	100	0	100	0	
475	400	5	100	0	100	0	
475	400	6.1	13.9	0	13.9	10.8305	
475	400	6.2	8.8	0	8.8	8.769394	
475	400	7	11.2	0	11.2	9.80245	
475	400	8	100	0	100	0	
475	400	9	100	0	100	0	
475	400	10	15.5	0	15.5	9.5	
475	400	11	12.8	0	12.8	10.42592	
475	400	12	7.6	0	7.6	8.195364	
475	400	13	12.6	0	12.6	11	
475	400	14	10.7	0	10.7	9.597884	
475	400	15	12.2	0	12.2	10.5	
475	400	16	100	0	100	0	
475	400	17.1	100	0	100	0	
475	400	17.2	100	0	100	0	
475	400	18	100	0	100	0	
475	400	19	100	0	100	0	
475	400	20	100	0	100	0	
475	400	21.1	12.5	0	12.5	10.31236	
475	400	21.2	11.7	0	11.7	10.00216	
475	400	22	16.8	0	16.8	12.7	
475	400	23	100	0	100	0	
475	400	24	11	0	11	10.8	
475	400	25	14.4	0	14.4	11.00869	

Documentation provided by Project Developer

- Excel sheet to show the list of permanent sample plots within affected areas that reflects how the biomass affected has been considered in the carbon removal accounting.

VVB assessment

Date: 30/10/2023

Based on PD response, VVB confirms that the loss of biomass has been demonstrated in the ex-post carbon calculation sheet and has been calculated accurately. VVB during the on-site inspection has visited the permanent plots and has observed that some of the marked trees were dead. The trees have been coded as 100 in the raw data sheets which demonstrates that they are dead wood now. Hence, VVB confirms that the provided response is valid and satisfactory.

CL has been closed

CL 04 **Section no.** D.2, GS MR **Date:** 23/08/2023

Description of CL

As per section D.2 of the GS MR, VVB has been found inconsistency in values of “Productive Area” (73,804.74 ha) in line with the GS4GG Transition Annex (19,436.4 ha).

Project Developer response **Date:** DD/MM/YYYY

- The productive area for this performance event includes eligible and non-eligible areas considering the new areas added to the project. The value 73,835.87 ha (value updated – previously 73,804.74 ha)) is the current project area (eligible+non eligible but where other activities take place), whereas the 19,208.4 ha corresponds to the planted eligible areas. The GS4GG Transition Annex has been updated to the latest PDD revalidated and the current PD updated including the new added areas.

Documentation provided by Project Developer

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<ul style="list-style-type: none"> - GIS consolidated shapefile - Re-validated PDD certified in 2023 updated to the latest GS4GG- File name: "PDD_GSID4221_v2_design change-approved.doc" - PDD in track changes adding the new areas planted File name: "PDD_updated_PerRev_GSIF4221"
VVB assessment Date: 30/10/2023
VVB confirms that the updated value of project area of 73,835.87 ha is in compliance with the updated PDD which has been validated by AENOR.
CL has been closed

CL	05	Section no.	Land ownership	Date: 13/09/2023
Description of CL				
PD is requested to provide the land title agreements for the new area added (4743.59 ha)				
Project Developer response				Date: DD/MM/YYYY
<ul style="list-style-type: none"> - All land tenure titles and agreements are shared to the VVB 				
Documentation provided by Project Developer				
Folder CL5				
<ul style="list-style-type: none"> - Folder INV_Contracts_forest plantations management - Folder_land tenure_new areas added 				
VVB assessment				Date: 30/10/2023
VVB confirms that the land title agreements for the new areas added has been provided. The original agreements have also been reviewed by VVB during the on-site inspection and cross verified it with the online registry for Municipality of Puerto Carreno for legal situation of the property.				
CL has been closed				

CL	06	Section no.	GS transition annex	Date: 14/09/2023
Description of CL				
During the review of GS MR in line with GS Transition Annex, VVB has found various inconsistency pertaining to the following design changes:				
<ul style="list-style-type: none"> • Volume and height equations • Reversals • SDG's • Planted area • Data & parameters monitored 				
PD shall provide approved Design Change report for the same.				
Project Developer response				Date: 23/10/2023
<ul style="list-style-type: none"> - The GS transition annex is the previous document from the project. It has been shared the latest and approved revalidation PDD to the auditor with all the design changes that solves this clarification request. 				
Documentation provided by Project Developer				
<ul style="list-style-type: none"> - Report from VVB that certified the design change of the project. - Re-validated PDD certified in 2023 updated to the latest GS4GG- File name: "PDD_GSID4221_v2_design change-approved.doc" 				

- PDD in track changes adding the new areas planted File name: "PDD_updated_PerRev_GSIF4221"	
VVB assessment	Date: 30/10/2023
VVB confirms that the provided documents are satisfactorily demonstrating the design changes in regard to the volume and height equations, reversals, SDG's, planted area and data & parameters to be monitored.	
CL has been closed	

CL	07	Section no.	GS transition annex	Date: 14/09/2023
Description of CL				
VVB has observed that the PD in the transition annex is "ForestFinest Consulting GmbH". However, as per the GS MR, the project representative has been mentioned as "FORLIANCE GmbH". PD shall clarify on this inconsistency.				
Project Developer response				Date: 23/10/2023
- ForestFinest Consulting GmbH is the former name of FORLIANCE GmbH. All registration documentation is available to the auditor.				
Documentation provided by Project Developer				
Folder CL7 - Certificates of incorporation				
VVB assessment				Date: 30/10/2023
Based on the review of the evidence, "FORLIANCE_Chronological_Certificate_of_Incorporation_EN", VVB confirms that the provided response is valid and satisfactory.				
CL has been closed				

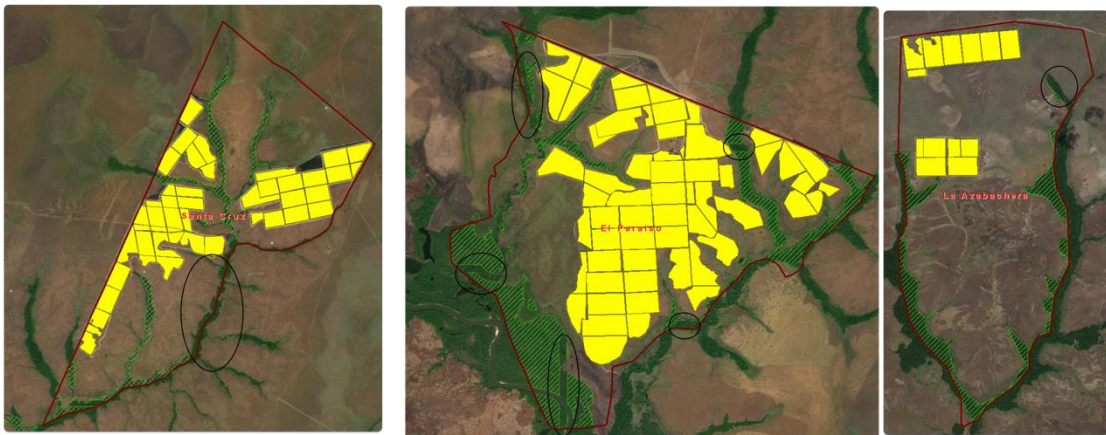
Table 3. CAR from this verification

CAR	01	Section no.	Editorial	Date: 23/08/2023
Description of CAR				
PD is requested to revise the term "Project proponent" as the GS terminology for the project owner is "Project Developer" for a standalone project.				
Project Developer response				Date: 23/10/2023
- The document has been revised and the terminology used is project participant as mentioned in the Land use & Forest Activity Requirements				
Documentation provided by Project Developer				
- Updated Monitoring report in track changes. File name: "0923_Vichada23_PerfCert_Monitoring-Report_v2_track change"				
VVB assessment				Date: 30/10/2023
VVB confirms that the INverbosques and Aldea Forestal are the project participants for the project while the FORLIANCE GmbH is the project developer. The same has been reflected in the revised GS PDD.				
CAR has been closed				

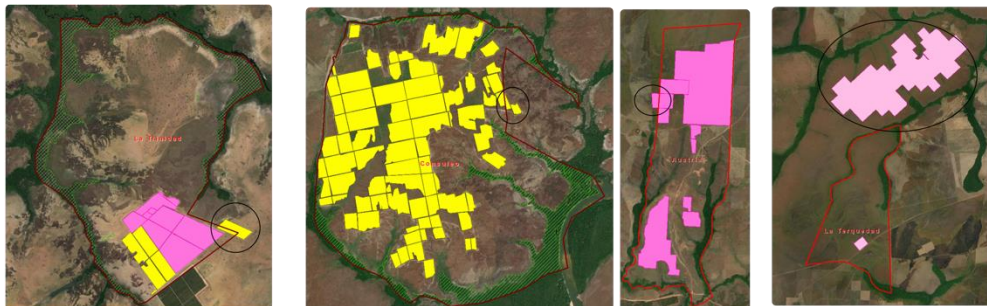
CAR	02	Section no.	Shapefiles and maps	Date: 23/08/2023
Description of CAR				

VVB, based on review of provided shapefiles, has observed some inconsistencies as mentioned below :

1. In the **Santa Cruz** property, the existence of a riverine forest (starting at coordinates⁶ [5.856438, -68.566718, to 5.860727, -68.565516]) was confirmed for various time periods using Google Earth Pro; However, these areas not included in the shapefile as a designed conservation zone. The same issue applies for **El Paraiso** property, with coordinates (5.849207, -68.603831;5.830118, -68.609432;5.823748, -68.622634;5.836138, -68.632320 & 5.858048, -68.627045). The **La Azabachera** property also experience this problem center at the point (5.668189, -68.011871).

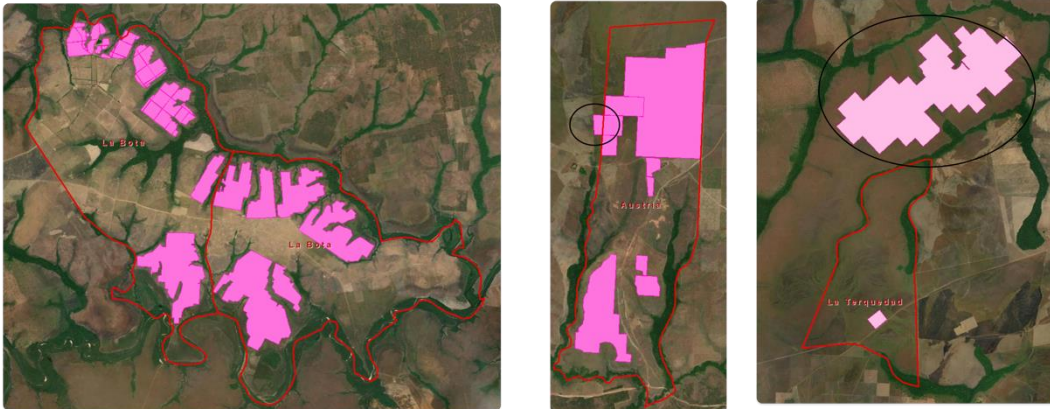


2. The **La Trinidad** property has an area that has been planted outside of defined perimeter of the property, specifically at coordinate (5.697693, -67.717989). Similarly, this issue is observed in the **Consuleo** property at coordinate (6.121344, -67.942665), the **Austria** property at coordinate (5.389306, -69.800587), and the northern side of **La Terquedad** at the point (5.469026, -69.743619).

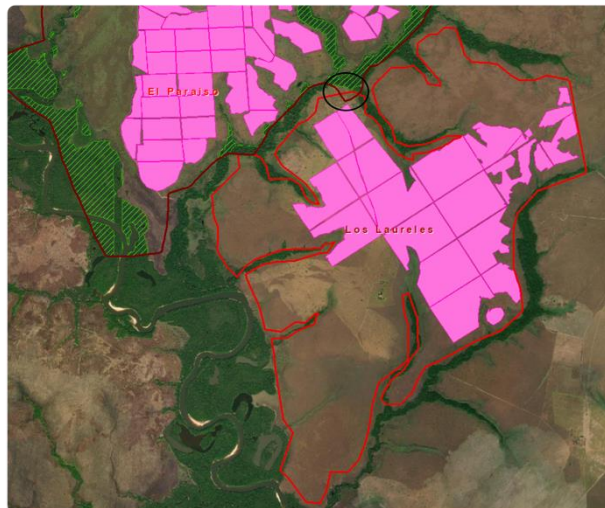


⁶ Coordinate in Decimal Degree (Latitude and Longitude).

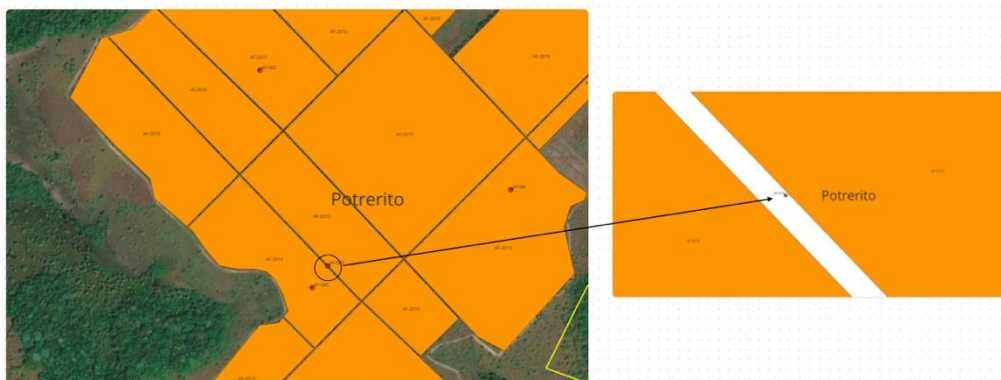
3. The forested areas of the properties (La Bota, Austria, La Terquedad) were not included in the shapefiles of the Vichada PR (Vichada_PR_Project_Conservation.shp) files.



4. The shapefiles of the Los Laureles property exhibit unclear boundaries of the farms and topologic issue is observed when compared with the El Paraiso boundary property.



5. In the Potrerito property the Plot-ID:"AF-079" in MUs number: "AF-Pc_2010" apparently appear outside of planted area.



Project Developer response

Date: 23/10/2023

1. Unfortunately, a faulty dataset was incorporated into the data shared with the auditor. We have investigated together with the project participants and updated all conservation area so that it

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reflects current high resolution imagery from the area. The continuous dataset was incorporated into the database, screenshots below show the consolidation of data.



2. Regarding the data on parcels outside project boundaries, a new dataset with clear boundary definition was acquired from the project participants which reflects the latest developments and updates of the project. All parcels are within the new property boundaries. To reflect changes of areal figures, a new Project Region map at PR stage was produced showing the latest figures. As well as the shapefile shared to the auditor. Parcels which are completely outside the project properties, as shown in the screenshot above, are part of our extensive database, but are effectively excluded by filtering and making use of the attributes PR (PDD) Yes (Y) or No (N).

3. see answer 1 – all conservation areas of all properties were updated an updated shapefile showing conservation area is shared with the auditor.

4. See answer 2 – the boundaries of the properties were fully revised with the project participants – an updated shapefile showing boundaries is shared the auditor.

5. The project participant Aldea Forestal has corrected the location of the plot ID AF-079. It was an error in digitization and a standard error of the GPS location. The location of the plot has been updated in the geodatabase and digital images (photos, videos) has been shared to the auditor.

Documentation provided by Project Developer

- Updated consolidated shapefile for the forestry carbon project (Vichada_Conservation_Update_Oct_2023, Vichada_Properties_Update_Oct_2023)
- Folder CAR2_point5.zip (please download in zip as the word document contains video links)

VVB assessment

Date: 30/10/2023

VVB, based on the review of the revised KML files confirms that the requested corrections has been satisfactorily rectified by PD.

CAR has been closed

CAR	03	Section no.	Section C, GS MR	Date: 23/08/2023
Description of CAR				
As per section C of the GS MR, the following information is missing as per template instructions:				
"Provide a description of the monitoring system in accordance with the description of monitoring system and the monitoring plan in the Design Certified PDD."				
PD is requested to revise the section accordingly.				
Project Developer response				Date: 23/10/2023

<ul style="list-style-type: none"> - The missing information has been added and completed in Section C of the Monitoring Report. 	
Documentation provided by Project Developer	
<ul style="list-style-type: none"> - Updated Monitoring report in track changes. File name: "0923_Vichada23_PerfCert_Monitoring-Report_v2_track change" 	
VVB assessment	Date: 09/11/2023
VVB, based on the revised Monitoring report in accordance with the PDD (Approved by AENOR) confirms that the requested information has been provided and is consistent.	
CAR has been closed	

APPENDIX 2: Certificates of Competencies



Carbon Check (India) Private Limited

Certificate of Competency

Ms. Isha Kapoor

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

<input checked="" type="checkbox"/> Validator	<input checked="" type="checkbox"/> Verifier	<input checked="" type="checkbox"/> Team Leader	<input checked="" type="checkbox"/> Technical Expert
<input type="checkbox"/> Technical Reviewer	<input type="checkbox"/> Health Expert	<input type="checkbox"/> Gender Expert	<input type="checkbox"/> Plastic Waste Expert
<input type="checkbox"/> SDG+	<input type="checkbox"/> Social no-harm(S+)	<input type="checkbox"/> Environment no-harm(E+)	<input type="checkbox"/> CCB Expert
<input type="checkbox"/> Financial Expert	<input checked="" type="checkbox"/> Local Expert for India		

in the following Technical Areas:

<input type="checkbox"/> TA 1.1	<input type="checkbox"/> TA 1.2	<input type="checkbox"/> TA 2.1	<input type="checkbox"/> TA 3.1	<input type="checkbox"/> TA 4.1
<input type="checkbox"/> TA 4. n	<input type="checkbox"/> TA 5.1	<input type="checkbox"/> TA 5.2	<input type="checkbox"/> TA 7.1	<input type="checkbox"/> TA 8.1
<input type="checkbox"/> TA 9.1	<input type="checkbox"/> TA 9.2	<input type="checkbox"/> TA 10.1	<input type="checkbox"/> TA 13.1	<input type="checkbox"/> TA 13.2
<input checked="" type="checkbox"/> TA 14.1	<input type="checkbox"/> TA 15.1			

Issue Date 1st January 2023	Expiry Date 31st December 2023
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Mr. Vikash Kumar Singh
 Compliance Officer



Mr. Amit Anand
 CEO

CCIPL_FM 7.9 Certificate of Competency_V2.1_012023

**Carbon Check (India) Private Limited****Certificate of Competency****Mr. Pablo Angulo**

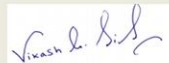
has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC 14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

- | | | | |
|---------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------|------------------------------------------------------|
| <input type="checkbox"/> Validator | <input type="checkbox"/> Verifier | <input type="checkbox"/> Team Leader | <input checked="" type="checkbox"/> Technical Expert |
| <input type="checkbox"/> Technical Reviewer | <input type="checkbox"/> Health Expert | <input type="checkbox"/> Gender Expert | <input type="checkbox"/> Plastic Waste Expert |
| <input type="checkbox"/> SDG+ | <input type="checkbox"/> Social no-harm(S+) | <input type="checkbox"/> Environment no-harm(E+) | <input type="checkbox"/> CCB Expert |
| <input type="checkbox"/> Financial Expert | <input checked="" type="checkbox"/> Local Expert for Costa Rica | | |

in the following Technical Areas:

- | | | | | |
|---------------------------------------------|---------------------------------------------|----------------------------------|--------------------------------------------|----------------------------------|
| <input type="checkbox"/> TA 1.1 | <input type="checkbox"/> TA 1.2 | <input type="checkbox"/> TA 2.1 | <input checked="" type="checkbox"/> TA 3.1 | <input type="checkbox"/> TA 4.1 |
| <input type="checkbox"/> TA 4. n | <input type="checkbox"/> TA 5.1 | <input type="checkbox"/> TA 5.2 | <input type="checkbox"/> TA 7.1 | <input type="checkbox"/> TA 8.1 |
| <input type="checkbox"/> TA 9.1 | <input type="checkbox"/> TA 9.2 | <input type="checkbox"/> TA 10.1 | <input type="checkbox"/> TA 13.1 | <input type="checkbox"/> TA 13.2 |
| <input checked="" type="checkbox"/> TA 14.1 | <input checked="" type="checkbox"/> TA 15.1 | | | |

Issue Date**20th January 2023****Expiry Date****19th January 2024****Mr. Vikash Kumar Singh**
Compliance Officer**Mr. Amit Anand**
CEO

CCIPL_FM 7.9 Certificate of Competency_V2.1_012023

CARBON CHECK (INDIA) PRIVATE LIMITED**CIN: U74930DL2012PTC232495****Regd. Off:** 2071/38, 2nd Floor, Nai Wala, Karol Bagh, New Delhi – 110005**Corporate off:** Unit No. 1701, Logix City Centre Office Tower, Plot No. BW-58, Sector-32 Noida, Uttar Pradesh
Tel: +91 120 4373114 | **URL:** www.carboncheck.co.in | **e-mail:** info@carboncheck.co.in



Carbon Check (India) Private Limited

Certificate of Competency

Mr. Vikash Kumar Singh

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

- | | | | |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------|
| <input checked="" type="checkbox"/> Validator | <input checked="" type="checkbox"/> Verifier | <input checked="" type="checkbox"/> Team Leader | <input checked="" type="checkbox"/> Technical Expert |
| <input checked="" type="checkbox"/> Technical Reviewer | <input type="checkbox"/> Health Expert | <input type="checkbox"/> Gender Expert | <input checked="" type="checkbox"/> Plastic Waste Expert |
| <input checked="" type="checkbox"/> SDG+ | <input checked="" type="checkbox"/> Social no-harm(S+) | <input checked="" type="checkbox"/> Environment no-harm(E+) | <input checked="" type="checkbox"/> CCB Expert |
| <input checked="" type="checkbox"/> Financial Expert | <input checked="" type="checkbox"/> Local Expert for India, South Africa, and Spanish speaking countries | | |

in the following Technical Areas:

- | | | | | |
|---------------------------------------------|---------------------------------------------|----------------------------------|---------------------------------------------|---------------------------------------------|
| <input checked="" type="checkbox"/> TA 1.1 | <input checked="" type="checkbox"/> TA 1.2 | <input type="checkbox"/> TA 2.1 | <input checked="" type="checkbox"/> TA 3.1 | <input checked="" type="checkbox"/> TA 4.1 |
| <input checked="" type="checkbox"/> TA 4. n | <input type="checkbox"/> TA 5.1 | <input type="checkbox"/> TA 5.2 | <input checked="" type="checkbox"/> TA 7.1 | <input type="checkbox"/> TA 8.1 |
| <input type="checkbox"/> TA 9.1 | <input type="checkbox"/> TA 9.2 | <input type="checkbox"/> TA 10.1 | <input checked="" type="checkbox"/> TA 13.1 | <input checked="" type="checkbox"/> TA 13.2 |
| <input checked="" type="checkbox"/> TA 14.1 | <input checked="" type="checkbox"/> TA 15.1 | | | |

Issue Date
1st January 2023

Expiry Date
31st December 2023



Mr. Amit Anand
CEO

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