



REGENERATING COLOMBIAN COFFEE ECOSYSTEMS VERIFICATION REPORT

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Summary:

AENOR has carried out the verification of the Regenerating Colombian Coffee Ecosystems project. The project is a grouped afforestation and reforestation project initiated by PUR Projet in 2014 in the Colombian Northern Andean Montane Forests, where watersheds and coffee lands are severely eroded and biologically degraded. The project was built following PUR Projet's traditional "insetting" scheme, meaning that Nespresso would fund tree planting activities implemented in the field by PUR Projet together with their local partner Federación Nacional de Cafeteros (FNC). In 2015 project activities were then extended to the Nariño Region, another key sourcing area for Nespresso. In 2018, PUR Projet leveraged its experience and presence in the Cauca territory to start new activities under the name "Coffee for Peace" / "Café Organico para la Paz". Still implemented with FNC, to support farmers with the installation of new coffee parcels with high quality standards in terms of sustainable agricultural practices and soil coverage.

In total the project has fulfilled 7 planting waves in Cauca & Nariño under the Nespresso insetting scheme and 3 planting waves under the Coffee for Peace scheme. It is mostly working with two nurseries who have consistently built up capacity and expertise over the years with the support of the project.

From 2019, while planting waves operations continued, the project has been introducing the notion of "Long-term strategy" to enhance the process of empowerment of local teams and farmers by helping them frame a vision for the future of their territory, which is considered by the project proponent as a key leverage to ensure trees permanence and sustainable impact.

This is the first verification event, corresponding to the monitoring period from 20-April-2014 to 18-October-2021. The total hectares for the project are 4,240.3 ha. This project activity is a AFOLU project category: ARR and the total crediting period type is 40 years.

The purpose of the verification was to determine the conformance of the project with respect to the VCS Standard v4.3 and the validated PD and the assessment of the ex-post monitored anthropogenic GHG emissions reductions and/or removals that have occurred as a result of the project's activities. The scope of the verification

was to assess the conformance of validated project, once implemented, with the VCS requirements and requirements in the validated PD. The process was performed through a combination of desk review, interviews, and communications with relevant personnel.

During the verification 3 CLs and 6 CARs were raised. All these issues were appropriately closed by means of corrections, more clear explanations, and other supporting documents.

Once all issues detected were appropriately resolved, AENOR carried out this final verification report and deems with reasonable level of assurance that the project complies with all of the verification criteria. The assessment team has no restrictions or uncertainties with respect to the compliance of the project with the verification criteria, hence, the audit team concludes that the cumulative net GHG emissions reductions or removals of 45,136 tCO₂-e over the monitoring period has been quantified in accordance with VCS rules. A buffer discount rate of 10% was applied, resulting 40,623 VCU's eligible for issuance.

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1 INTRODUCTION

1.1 Objective

The objective of the verification audit was to conduct an independent assessment of the project to determine:

- The extent to which methods and procedures, including monitoring procedures, have been implemented in accordance with the validated project description (PD), including the monitoring plan.
- The extent to which GHG emission reductions and removals reported in the monitoring report (MR) are materially accurate.

1.2 Scope and Criteria

The scope of the verification audit was to verify the emissions reductions and/or removals of the project, Regenerating Colombian Coffee Ecosystems against the Verified Carbon Standard, the identified methodology and the validated PD throughout the monitoring period from 20-April-2014 to 18-October-2021.

The objectives of this audit included a verification of the Project's calculated reductions and/or removals and the non-permanence risk assessment report with the Verified Carbon Standard requirements and any additional requirements of VCS AFOLU projects. In addition, the audit assessed the project with respect to the validated baseline scenarios presented in the PD.

In accordance with Section 4.1.8 of the VCS Standard, the criterion for validation and verification was the VCS Version 4, including the following documents:

- VCS Standard v4.3
- VCS Program Guide v4.2
- VCS AFOLU Non-Permanence Risk Tool v 4.0

Unless otherwise indicated, the assessment was performed against the most recent version of the relevant VCS guidance document.

1.3 Level of Assurance

The assessment was conducted to provide a reasonable level of assurance of conformance against the defined audit criteria and materiality thresholds within the audit scope. Based on the audit findings, a positive evaluation statement reasonably assures that the project GHG assertions are materially correct and is a fair representation of the GHG data and information.

All the versions of the verification report were subjected to an independent internal technical review before being submitted to the client to confirm that all verification activities had been completed according to the pertinent AENOR instructions required. The technical review was performed by a technical reviewer(s) qualified in accordance with AENOR's qualification scheme for VCS validation and verification.

The threshold for materiality with respect to the aggregate of errors, omissions, and misrepresentations relative to the total reported GHG emission reductions/removals was one percent (1%), as established for projects by the VCS Standard.

1.4 Summary Description of the Project

The Regenerating Colombian Coffee Ecosystems is a grouped project for the afforestation, reforestation and/or revegetation of lands in Colombia. The project started in 2014 by PUR project and its main goals are, while planting waves operations continued, the project has been introducing the notion of "Long-term strategy" to enhance the process of empowerment of local teams and farmers by helping them frame a vision for the future of their territory, which is considered by PUR Project as a key leverage to ensure trees permanence and sustainable impact. First project validation under VCS standard happened in 2017.

The project is located in the south part of Colombia, in the department of Cauca and the Department of Nariño.

The project starts, and implementation date is 20 April 2014 and will be operational until 19 April 2054. The emissions reduction for the current monitoring period (20-April-2014 to 18-October-2021.) is 41 851 tCO₂e. This is a grouped project.

2 VERIFICATION PROCESS

2.1 Method and Criteria

The verification was performed through a combination of document review and interviews with relevant personnel, as discussed in Sections 2.2 through 2.4 of this report. At all times, the project was assessed for conformance to the criteria described in Section 1.2 of this report. As discussed in Section 2.5, findings were issued to ensure that the project was in full conformance to all requirements.

A project specific Verification and Sampling Plan was developed to guide the verification auditing process to ensure efficiency and effectiveness. The purpose of the Verification and Sampling Plan was to present a risk assessment for determining the nature and extent of verification procedures necessary to ensure the risk of auditing error was reduced to a reasonable level. The Verification & Sampling Plan methodology was derived from all items in our verification process stated above. Specifically, the sampling plan utilized the VCS guidance documents and ISO 14064-3. Any modifications applied to the

Verification and Sampling plan were made based upon the conditions observed for monitoring in order to detect the processes with highest risk of material discrepancy.

The verification activities in which risks were assessed were the evaluations of the monitoring system (data flow, data control procedures, etc.) but mainly the quality of raw data as well as sources and the spreadsheet calculations. AENOR reproduced and verified 100% of sheets in the VCS Colombia Cauca_GHG calculations - Vsent 20230810, VCS Colombia CFP_GHG calculations - Vsent 20230810, VCS Colombia Narino_GHG calculations - Vsent 20230810 for the monitoring period 20-April-2014 to 18-October-2021 for the project area /1-3/. The project boundary and reforested areas in the project area for the monitoring period were 100% checked using the GIS database /77-95/.

AENOR carried out a deep and meticulous review of the spreadsheets in order to verify the correct application of the methodology (formulae, equations.) and checked that data required calculating the GHG removals were appropriately provided. Based on the assessment carried out, AENOR confirms with a reasonable level of assurance that the claimed emission removals are free from material errors, omissions, or misstatements.

AENOR confirms that sufficient evidence was presented for the reported net anthropogenic GHG emission removals and that there is a clear audit trail that contains the evidence and records that validate the stated figure in this verification report since:

- Sufficient evidence available: The project participant has provided the 100% of data used in the calculations to achieve the final amount of GHG emission reductions reported.
- Nature of evidence: The raw data were collected from reliable sources. They are detailed in the project documents and have been provided to the verification team and were checked during the interviews.
- Cross-checked evidence: AENOR cross-checked the collected information through interviews with stakeholders and reproducing calculations.

Hence, AENOR confirms that the stated figures in the monitoring report /10/ are correct and confirms that is able to certify net anthropogenic GHG removals based on verifiable and reliable evidence.

2.2 Document Review

A detailed review of all project documentation was conducted to ensure consistency with, and identify any deviation from, VCS program requirements, the methodology (AR-AMS0007 V 03.1), and the validated PD. Initial review focused on the MR /10/ and included an examination of the project details, implementation status, data and parameters, and quantification of GHG emission reductions and removals. Documents reviewed included data from monitoring /1-8/, carbon rights contracts /42-51/, forest management agreements /14/, maps and aerial images, monitoring and grievance SOPs, biomass and carbon calculation spread sheets /1-8/, and responses to Corrective Action Requests (CARs) and Clarifications (CLs) (annex 2).

The verification included a review of the validated PD and MR, relative to the field conditions and interviews with project management staff and stakeholders. Modifications to the Verification and Sampling plan were made based upon the conditions observed for monitoring in order to detect the processes with highest risk of material discrepancy.

The VCS AFOLU Non-Permanence Risk Tool was used by the Project Proponent to assess overall project risk. AENOR reviewed the Non-Permanence Risk Report /13/ provided with the verification supporting documentation and confirmed that the Project adheres to the requirements set out in the VCS AFOLU Non-Permanence Risk Tool. Each risk factor was thoroughly assessed for conformance. The final score was calculated to be 10%.

For a listing of all documents received from the client for this verification, see Appendix 1.

2.3 Interviews

Interviews were performed as part of the overall verification process which was additional to that provided in the project description, monitoring report and any supporting documents. The AENOR verification team met with individuals with various roles in the project. This included a series of interviews with in-country staff that support the mission of the project. In addition, interviews discussions were conducted with project members and leaders of the local communities. The following table summarizes the interviews carried out during the process.

Name	Title/Organization/Community	Date	Topic
Aurélien Cartal	Climate Change Manager PUR Project	04/10/2022 01/03/2022 05/05/2022	Project implementation. GIS. Carbon calculation.
Barbara Bonnet	Climate Change Manager PUR Project	04/10/2022 01/03/2022 05/05/2022	Project implementation. GIS. Carbon calculation.
Sergio Baez	Expert climate change PUR Project	05/05/2022	GIS. Risks. Carbon calculation
Anna Morio	Expert climate change PUR Project	04/10/2022 01/03/2022 05/05/2022	Carbon Calculation. Risks
Kelly Gouhoury	Expert climate change PUR Project	05/05/2022	Monitoring of the Project. QA/QC
Daniel Delgado	FNC Nespresso	20/10/2022	Project implementation. Benefits of the project. FNC collaboration. Type of trees and plantations. Risks.
Victor Bonilla	FNC Nespresso	20/10/2022	Project implementation. Benefits of the project. FNC collaboration. Type of trees and plantations. Risks.
Oscar Villota	FNC Nespresso	20/10/2022	Project implementation. Benefits of the project. FNC collaboration. Type of trees and plantations. Risks.
Alejandra Potosi	Coordinator Cauca project, FNC Nespresso	20/10/2022	Project implementation. Benefits of the project. FNC collaboration. Type of trees and plantations. Risks.
Katherine Moreno	Coordinator FNC Nespresso	21/10/2022	Project implementation. Benefits of the project. FNC collaboration.

			Type of trees and plantations. Risks.
Ruben	Manager sub project, FNC Comite Cauca	21/10/2022	Project implementation. Benefits of the project. FNC collaboration. Type of trees and plantations. Risks.
Ferrer Rengifo	FNC Comite Cauca	21/10/2022	Project implementation. Benefits of the project. FNC collaboration. Type of trees and plantations. Risks.
Carlos Rodrigo Solarte	Expansion director of cauca Comite, FNC Comite Cauca	21/10/2022	Project implementation. Benefits of the project. FNC collaboration. Type of trees and plantations. Risks.
Gerardo Montenegro	Director of Cauca Comite, FNC Comite Cauca	24/03/2022	Project implementation. Benefits of the project. FNC collaboration. Type of trees and plantations. Risks.
Mario Vega	Comercial Manager, FNC	24/03/2022	Project implementation. Benefits of the project. FNC collaboration. Type of trees and plantations. Risks.
Santiago Arrango	Project manager, Nespresso Colombia	24/03/2022	Project implementation. Benefits of the project. FNC collaboration. Type of trees and plantations. Risks.
Luiz enrique	Project manager, Nespresso Colombia	24/03/2022	Project implementation. Benefits of the project. FNC collaboration. Type of trees and plantations. Risks.
Oscar Castillo	Nursery cauca y Narino, Corsavida	24/03/2022	Project implementation. Benefits of the project. FNC collaboration. Type of trees and plantations. Risks.
Marino Delgado	Nursery and coffee productur, Nariño area	24/03/2022	Project implementation. Benefits of the project. FNC collaboration.

			Type of trees and plantations. Risks.
Jesus Noguera - Zona Cauca	Coffee producer, Cauca area	24/03/2022	Project implementation. Benefits of the project. Type of trees and plantations. Risks.
Eber Gil Ceron	Coffee producer, Narino area	22/03/2022	Project implementation. Benefits of the project. Type of trees and plantations. Risks.
Argelia Eloisa España Diaz	Coffee producer, Narino area	22/03/2022	Project implementation. Benefits of the project. Type of trees and plantations. Risks.
Fernando Guamanga Guamanga	Coffee producer, Cauca area	22/03/2022	Project implementation. Benefits of the project. Type of trees and plantations. Risks.
Lucila Gómez	Coffee producer, Cauca area	22/03/2022	Project implementation. Benefits of the project. Type of trees and plantations. Risks.
Adelmo Ordoñez Ordoñez	Coffee producer, Cauca area	22/03/2022	Project implementation. Benefits of the project. Type of trees and plantations. Risks.

Due to the COVID-19 pandemic situation, all interviews were carried out through videoconference, as explained in Section 2.4. The interviews were carried out on 20th and 21st October 2021 and 22nd March, 24th March 2022.

Also 5 video testimonials were reviewed /72-76/ and 10 letters for coffee producers /42-51/. In addition, the PP has provided written testimonies to verify the rights and the surface of some farms /52-71/, among them, the farms of the people interviewed through a call as well as them who has been evidenced with video and letter.

In the following table are shown the different testimonials that the audit team has reviewed for the verification.

Type	Name	Role
Video	Danny Dalberto Galindez Velarde	Coffee producer
Video	Pedro Manchabajoy Díaz	Coffee producer
Video	Luz Eneida Muñoz Muñoz	Coffee producer

Video	Juan Francisco Ortiz Sepúlveda	Coffee producer
Video	Luis Eyder Parra Montilla	Coffee producer
Written	Reinaldo Martínez Mayorga	Coffee producer
Written	Obairo Cruz Males	Coffee producer
Written	Luciano Recalde Insuasty	Coffee producer
Written	Juan Bautista Paredes	Coffee producer
Written	Emer Giraldo	Coffee producer
Written	Miguel Gómez Erazo	Coffee producer
Written	Elvio Henry Cifuentes Cruz	Coffee producer
Written	Jorge Elicer Paredes	Coffee producer
Written	Maria Erazo	Coffee producer
Written	Ana Milena Mayorga Alegría	Coffee producer

2.4 Site Inspections

Due to the exceptional situation caused by the COVID-19 crisis and the travel restrictions established by governments for safety reasons, it was not possible to carry out a site visit as part of the verification process of the project.

In accordance with VERRA's COVID-19 Travel Guidance for Projects (dated 18 March 2020) and considering that a reasonable level of assurance was achievable by other means, AENOR as VVB carried out a remote verification audit that ensured the achievement of the assurance level required by the VCS program. The remote audit was based on the following auditing techniques:

- Document review and cross checks between the information provided in the in the MR, the PD and supporting information and evidence provided by the PP Emissions calculations, GIS database, and supporting information and evidence provided.
- Review, based on the selected methodologies, tools and the other applied methodological regulatory documents, of the appropriateness of formulae and accuracy of calculations.
- Telephone, teleconference and/or e-mail interviews for the implementation of project activities and the elaboration of project's documents.
- Cross checks between information provided by interviewees to ensure that not relevant information has been omitted.

2.5 Resolution of Findings

All documentation provided by the PP was assessed against the applicable version of the relevant VCS guidance document. Clarification requests (CL) and corrective action requests (CAR) were raised and submitted to the PP, which addressed them either by providing to the audit team the requested information or by making the appropriate corrections. Updated versions of the documentation were submitted by the PP and the audit team reassessed them against the guidance documentation. This process was repeated iteratively until all CL and CAR were fully closed. Specifically, 3 CLs and 6 CARs were raised.

All findings issued by the AENOR audit team during the verification process have been closed. In accordance with Section 4.1.13 of the VCS Standard, all findings issued during the verification process, and the inputs for their closure, are described in Appendix 2 of this report.

2.5.1. Forward Action Requests

No FARs were raised to the PP during the verification process.

2.6 Eligibility for Validation Activities

AENOR holds accreditation for validation for the relevant sectorial scope 14 under which this project activity is classified.

3. VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

The verification team is not aware of project involvement in other forms of environmental credits from its activities. The project has not been registered, and is not seeking registration, under any other GHG programs.

3.2 Methodology Deviations

Methodology deviations have not occurred in the first verification period.

3.3 Project Description Deviations

For this verification period, one project description happened, as explained below:

PDD validation database was done in 2017, where data available was not 100% final with lots preliminary data collected from pre-registry of farmers that by nature have high probability to change a bit after

planting. Currently the PP have received post plantation monitoring data for all these parcels included in PDD at validation, therefore the database has been updated accordingly with the latest and most accurate data available.

Gaps generated by that update of project database are not significant and tend to be more conservative than the initial figures certified at validation. In the table 2bis of the MR is summarizing the different gaps between validation data and updated verification data presented in this monitoring period (2021).

The differences of the data are, from the previous PDD, are in the equivalent area and the number of trees planted.

These changes from the validated PD have occurred during this monitoring period. The deviation has been appropriately described and justified and do not affect the applicability of the methodology, the additionality of the project nor the appropriateness of the

The di baseline scenario. Thus, the audit team considers the deviation to be valid and that the project remains in compliance with the VCS rules.

Therefore, AENOR deems that the deviation does not impact on the applicability of the methodology, the appropriateness of the baseline scenario described in the validated PD nor its additionality.

The Project remains in compliance with the VCS rules, it is completely implemented and discrepancies between the Project and the PD have been clearly commented in the MR and suitability assessed by AENOR.

3.4 Grouped Project

This project is a grouped project as every year new instances, corresponding to the new planting waves, are integrated into the scope of the certification. In table 4 of the MR /9/ the description of the new instance has been described.

For the sampling process for validation of new project activity instances, the following issues were reviewed for each new instance:

1. Own by small holders (less than 20 hectares) as this the model of farming of the Cauca & Nariño regions.

AENOR has checked this against with the GPS tracks /87-94/ as well as written testimonies /42-71/ that evidence the area of specific farms.

2. Not deforested in the last 10 years

AENOR has checked this against the historical land use surveys/87-94/. The review of the pre-project land use has been done in a general way of the whole project which includes all the farms.

3. Not falling under “forest” category as define by Colombian DNA

AENOR has checked this against with the contract with the beneficiary /14/ and pre-registry results of land tenure.

4. Owner has clear land use rights with no land tenure conflict

AENOR has checked this against with the contract with the beneficiary /14/ and pre-registry results of land tenure.

5. Outside of any conservation area (National Parks, concessions for conservation, etc.) and any large economic concessions (forestry, oil, mining, etc.) /77/.

AENOR has checked this against with the GPS tracks and overlapped with the shapes of National Parks or other conservation spaces, without evidence of overlapping.

6. The reforestation will take place under one of the 5 models of the project and according to the project's proceedings described in the PDD.

In the sampling of beneficiary, the planting model was check, with the GPS track /87-94/ and during the remote audit.

7. Located to the Northern Andean Montane Forest

AENOR has checked this against with the GPS /77-95/ tracks and overlapped with the DTM and Orthophoto images.

For the people from the waves selected for the remote audit, the 7 eligibility criteria were checked. For the 30 people selected the following documents were reviewed: GSP tracks, the surveys at pre-registry stage, historical land use surveys performed, contract signed with each beneficiary and contract signed between PUR Project and the Entity. The number of new project activity instances added to the project in this verification period. The Quality control for this project activity is rolling out. Deliverable and control of monitoring data are applied in the same manner.

Therefore, AENOR deems correct the inclusion of the new instances to the monitoring period.

4. VERIFICATION FINDINGS

4.1 Project Implementation Status

The project is currently in its 8th year of operation. It has been operating one planting wave per year since 2014, covering more and more extended areas of the Cauca and Nariño departments. In 2018, the project enriched its planting models by introducing full coffee parcel installation with soil coverage (beans, corn) in some areas under the "Coffee for Peace" scheme.

The planting waves are divided in three areas: Cauca, Nariño, CFP. Each planting wave have different number of parcels, number of trees planted as stated in table 2 of the MR. The total planting area for this monitoring period is of 4,240.3 ha.

The MR provides in its Section 3.1 a detailed description of the activities implemented by the project since its start /14-15/. During this verification process, AENOR has not detected project changes in regards of the project title, its purposes and objectives.

During the verification process, the audit team checked the actual implementation of project activities through the analysis of evidence provided by the PP and through interviews to local stakeholders and project staff. No discrepancies have been found between the gathered evidence and the implemented activities reported in the MR, as well between the MR and the planned activities in the PD.

The project is designed as a grouped project, and for this monitoring period new instances have been included as detail in section 3.4 of this report.

Regarding the sustainable development, AENOR interviewed different stakeholders, and verified the claimed contributions of the project. The length of the crediting period is 40 years.

After the review of the MR /9/, spreadsheet /1-3/, and the other document to support calculations such as GIS information /77-95/, surveys/42-76/ and others /33-40/, AENOR deems that project status is in compliance with applicable methodologies and implementation is in support of the VCS principles of Conservativeness and Accuracy.

Related to the compliance with the Monitoring Plan, section 4.3 of the MR provides information about the monitoring plan and actions carried out for the current monitoring period. AENOR reviewed the procedures put in place to perform the biomass inventories /4/ and deems that they are in accordance with the procedures described in the validated monitoring plan. AENOR checked the monitoring plan contained in the validated PD and compared it with the MR /9/ to verify whether there was any difference that would cause an increase in estimates of the GHG emission removals in the current monitoring period. AENOR has confirmed that there are no material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodologies. Also, the project proponent effectively monitors the required parameters to determine the project's removals by sinks and emissions by sources as required by the monitoring plan and the applicable methodologies.

The parameters reported, including source, frequency and review criteria as indicated in the monitoring plan were verified to be correct and in line with the monitoring plan of the validated PD. As described in Section 4.4 of this verification report. Necessary management system procedures including responsibility and authority of monitoring activities have been verified to be consistent with the PD. Knowledge of personnel associated with the project activity was also found to be satisfactory.

Regarding leakage emission, they account zero (0). In this regard, AENOR has checked evidence provided which confirms the information included in the MR.

There is no evidence of double counting or that the project has participated nor been rejected under any other GHG programs. GHG emission reductions or removals generated by the project are not included in an emission trading program or any other mechanism that includes GHG allowance trading. The project has not received or sought any other form of environmental credit.

There is one project description deviation for this monitoring period as explained in section 3.3.

The following activities have been implemented that lead to intended GHG benefit during the monitored period:

- Digitalization of data collection (Do Forms software and tablets). AENOR checked this issue against do forms /38//39/40/
- Training of farmers (ECAs – Escuelas de Campo) developed by an expert team. AENOR checked this issue against /33/.
- Presence and support of PUR Projet (a project coordinator from PUR Projet based in Popayan is now staffed full time on the project). AENOR checked this issue though the remote audit.
- Project governance (organization of regular steering committees involving all stakeholders).

AENOR checked this issue against the local stakeholder documents /33/ and /34/.

- Project vision for the future/ long term vision (organization of a dedicated workshop led by an expert in collective dynamics and stakeholder's alignment).
- Improvement of logistics and technical knowledge of local nurseries on tree species and tree production, implementation of nursery quality control procedures. AENOR checked this issue though the remote audit.
- Systematic and more significant replanting activities after each wave. Supporting farmers' own capacity to replant trees.

AENOR checked this issue though the remote audit.

- Environmental impact of the project - planting pure stand models with the main goal of protecting water sources - since 2019 (Fair Trade USA program).

Colombia put in place a long-term strategy to align with Paris Agreements Targets. This strategy, named E2050, commits to reach carbon neutrality by 2050 and is aiming at three objectives, all three of them being addressed by the project:

- Country's adaptation to climate change – Tree planting contributes to maintaining temperatures at a lower level, thus helping to maintain main crops cultivation in the same areas.

- Reduction of GHG emissions – The project is contributing through carbon sequestration in planted trees.
- Increase Colombia's communities and ecosystems resilience to climate change – The project is directly working with coffee farmers community with the final expected outcome of building resilience.

Therefore, AENOR deems that the project implements activities in accordance with SDG of Colombia.

Beyond this climate strategy, Colombia also set country-wide sustainability objectives related to the coffee sector through a 10-year plan initiated in 2017 by the Federacion Nacional de Cafeteros. PUR Project is directly contributing to the plan's objectives at the level of the Cauca and Nariño department, as it is directly contributing to increase the surface of shaded coffee cultivation.

This is the first verification, so no other methodology deviation applied.

After a complete review of the different documents provided and the information gathered through the remote audit process, AENOR is able to confirm that the project implementation is in accordance with the validated PD. There are not material discrepancies between project implementation and the project description, with the exception of the one project deviation described in section 3.3.

4.2 Safeguards

4.2.1 No Net Harm

There are not potential negative environmental and socio-economic impacts identified by the PP. As described in the project design document, environmental and social impacts of project activities are mainly positive.

Therefore, AENOR checked that no mitigation actions will be necessary.

AENOR checked this issue against the local stakeholder documents /33/ and /34/.

4.2.2. Local Stakeholder Consultation

The project itself is built upon a systematic process of yearly Planting Waves. Each given planting wave starts with a consultative process: project socialization in each community that will potentially receive the project in that year, and then individual visits to each interested farmer. This visit is called "Pre-registry" and allows to confirm farmer's interest but also to assess eligibility, geo-localization of the land, determine the planting models and the choice of species. After tree delivery, the process also includes two individual monitoring visits to each participating farmer, thus allowing on-going communication. Also, technicians maintain regular contact with the farmers. As a matter of fact, in many cases technical teams settle down in the area they manage for the whole planting wave.

During this monitoring period the project staff-maintained communication and consultation with local stakeholders /33-34/. During these meetings information such as project progress, specific technical

recommendations, upcoming phases, and other outstanding subjects were discussed. The project staff prepared meetings reports and/or visit log sheets providing with a copy to the beneficiary. This log sheets registered both information provided by the project technician and inputs, needs and grievances presented by the beneficiaries.

The main comments during the stakeholder meetings and the main actions of the PP were the following:

-Incentive Payment: project need to be more agile in the incentive payment.

PP action: Implementation of different ways of payment for incentive according to banking realities of some rural area

-Logistic of tree delivering: Farmers say that they need a delivery point near their parcels.

PP action: Methodology of social mapping to trees delivery

-Specific tree species: famers express some specifics needs in term of tree species

PP action: Socialization in each village to adapt the list of species

-Quality of material vegetal: farmers said to the project team that some trees had some radicular defects, and it affects the growth of the trees.

PP action: The project implements strong follow-up to the nursery at different key moment of the production

-Date of tree delivering: Farmers need to receive trees when there is not such a lot of work in the farm to have time to plant it.

PP action: Delivering trees at the end of the calendar year. Out of the coffee picking seasons

The project proponent has taken due account of all and any input since it is reflected in table 1 of the MR. AENOR deems correct the actions of the PP in relations with the suggestion received by the farmers.

No relevant changes were considered or implemented during this monitoring period.

It is the opinion of AENOR, based on the information gathered during the audit process, that the PP communicates the necessary relevant information about the project implementation, risks, costs and benefits, relevant laws and regulations and the process of VCS Program to local stakeholders. All interviewed beneficiary was aware of the nature of the project, its implementation, and its results, as well as the basics regarding the VCS program and the auditing process.

4.3 AFOLU-Specific Safeguards

The main risks that farmers participating to the projects are taking are economic and related to the decision to plant trees on their land, as:

- If not well managed, the trees could generate undesired excess of shading or competition.
- Planting the trees represents a significant investment in time.
- They might have other plans for their land in the future that may not be compatible with a high tree cover.

Such risks are being mitigated by the PP with the following respective measures:

- For each parcel, the choice of the planting model and species is the result of a dedicated, technical conversation between the project technician and the farmer, taking into account parcel reality, farmer's vision and motivation to plant, existing shading, existing crops.
- The project team communicates transparently and repetitively about the implications of the decision to participate in the project and the completely voluntary nature of such decision.
- The socialization meetings to introduce the project, the pre-registry visit and the signing of the farmer contract are three key steps of the project procedures

There is no update to be mentioned regarding any negative impact of the project on local stakeholders' property and land use rights. Participation in the project is fully voluntary and both the land and the trees remain the entire property of the farmers. The project cannot be implemented without the authorization of the farmer who has the legal use of the land. AENOR has checked this against the farmers' land title who were sampled during the remote audit.

The technical team of the project within FNC is exposed to different types of risks, more related to safety:

- Transportation in motorbike on difficult roads
- Walking on sloped and sleepy parcels
- Circulation in areas could be exposed to armed conflicts, assassinations and rapt (armed groups and narcotraffic)

Such risks are being mitigated by the knowledge of the FNC who has 91 years of experience working in exposed areas in extremely challenging contexts. AENOR could checked this against the remote audit with the following people: Alejandra Potosi, Coordinator of Cauca project, Katherine Moreno, coordinator FCN Nespresso and Gerardo Montenegro, director of Cauca committee.

It is the opinion of AENOR that the PP has taken the appropriate measures to ensure that risks on local stakeholders are reduced to the minimum and has developed and put in place actions to mitigate such impacts when necessary and mitigate risks local stakeholders face due to project implementation. It is the opinion of the audit team that the project generates a net positive impact to all stakeholders involved.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

All calculations of greenhouse gas emission removals were checked by the audit team. No errors were discovered that materially affect the stated GHG removals of the project during the monitoring period. The methods used to estimate GHG benefits of the project were consistent with the methodology and the validated part of the project.

Baseline emissions

In the Project, the baseline Net GHG removals by sinks are calculated from a stratification of the project area, as it is explained in the MR section 5.1. and in the PDD in section 2.4.1, baseline emissions.

Each reforested parcel is stratified in 8 strata.

The baseline emissions are therefore calculated for each parcel according to its strata. The evolution of carbon sequestration in the baseline scenario $\Delta C_{bsl}(t)$, t CO₂e is calculated:

$$\Delta C_{bsl}(t) = C_{bsl}(t) - C_{bsl}(t-1)$$

$C_{bsl}(t)$ is the cumulated carbon sequestration in the baseline scenario the year t (tCO₂e)

$C_{bsl}(t-1)$ is the cumulated carbon sequestration in the baseline scenario the year $t-1$ (tCO₂e)

$$C_{bsl}(t) = \sum C_{bsl}(t,i,j)$$

$C_{bsl}(t,i,j)$ is the carbon sequestration of the parcels j in the baseline scenario the year t (tCO₂e)

$$C_{bsl}(t) = \sum C_{bsl}(t,i,j)$$

$C_{bsl}(t,i,j)$ is the carbon sequestration of the parcels j in the baseline scenario the year t (tCO₂e)

$$C_{bsl}(t,i,j) = 44/12 * B(ss)(i) * S(t,i,j)$$

$S(t,i,j)$ is the area of the parcel j in the baseline scenario in the baseline strata i the year t (ha):

Year	Baseline Cbsl (t) tCO2eq	GHG removals	Net annual baseline GHG removals ΔCbsl (t) tCO2eq/year
2014	0		0
2015	1,762		1,762
2016	18,154		16,393
2017	36,008		17,854
2018	58,043		22,035
2019	76,257		18,215
2020	111,336		35,078
2021	150,655		39,319

Project emissions

Results of biomass inventories

Biomass inventories were conducted across 437 plots in 16 strata. Results of biomass inventories are given in the table 10 of the MR.

For each stratum, measurements made are converted into Mean Average Increment (MAI) dividing the amount of biomass measured (tdm/ha) by the age (years) of the trees on the parcel measured at the date of biomass inventories.

The total uncertainty of measurements performed is 14%, leading to the application of a discount factor on MAI value of 3,6%, according to A/R CDM tools requirement.

The average MAI per type of planting model is calculated in the excel: "Biomass inventories 2021 - Vsent 20230810", the following results are summarized:

Average MAI to be used for each planting model types in GhG removal calculation: (tdm/ha/yr)	
Model 1	1.2
Model 2	1.8
Model 4	4.9
Model 3	0.0

Carbon stocks calculation

$$C(t) = \sum C(t,j)$$

$C(t)$ standing is the stock of carbon in the standing trees planted in the project area the year t (tCO₂e);

For each parcel, we calculate the carbon removed from the trees growth planted in the project area:

$$C(t,j) = C(t,i;j) * S_j$$

$C(t,j)$ standing is the stock of carbon in the standing trees planted in the project area the year t in the parcel j (tCO₂e);

S_j is the total planted area of the parcel j (ha)

$$C(t,i;j) = 44/12 * CF * (1 + R) * MAI_j + (C(t-1;i;j))$$

$C(t-1;i;j)$ is the stock of carbon per hectare of the parcel j of the project strata i in the standing trees the year t (tCO₂e/ha).

MAI_j is the Mean Annual Increment of above ground biomass per hectare(in tdm/(ha*yr)), as measured during the biomass inventories for parcel j strata

As a result, GHG removals achieved in planted trees can be summarized as follow:

Year	GHG removals in planted trees (cumulative) tCO ₂ eq
2015	482
2016	3,084
2017	8,032
2018	15,245
2019	24,850
2020	39,059
2021	59,161

Leakage

As described in the validated PDD in the section 4.3 the identification of the risk of leakage is based on stratification, and in accordance with the methodology AR-AMS0007 Version 03.1. Stratifications are monitored based on the area of each parcel, assessing the displacement of agricultural activities through field surveys, with a recording frequency of once after the project is established and before the first verification, as described in the monitoring plan of the validated PD. The surveys were carried out by 2 field technicians from the local implementation partner (FNC) of the project proponent, according to the monitoring plan described in the validated PD, being a monitoring activity of the project.

Parcels in Strata SB2b and SB3b where potential leakage could occur (36 ha out of the 4240 ha of the project) were monitored following the method described in the CDM AR TOOL 15 “Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity”, version 02.0.

According to this tool:

Leakage emission attributable to the displacement of agricultural activities due to implementation of an A/R CDM project activity is estimated as the decrease in carbon stocks in the affected carbon pools of the land receiving the displaced activity.

Note 1. Displacement of an agricultural activity by itself does not result in leakage emission. Leakage emission occurs when the displacement leads to an increase in GHG emissions relative to the GHG emissions attributable to the activity as it exists within the project boundary.

Note 2. Increase in GHG emission occurring outside the project boundary attributable to the secondary effects of the A/R CDM project activity (e.g. changes in demand, supply or price of goods) is considered insignificant for the purpose of this tool and hence accounted as zero.

Leakage emission attributable to the displacement of grazing activities under the following conditions is considered insignificant and hence accounted as zero:

(a) Animals are displaced to existing grazing land and the total number of animals in the receiving grazing land (displaced and existing) does not exceed the carrying capacity of the grazing land;

(b) Animals are displaced to existing non-grazing grassland and the total number of animals displaced does not exceed the carrying capacity of the receiving grassland;

(c) Animals are displaced to cropland that has been abandoned within the last five years;

(d) Animals are displaced to forested lands, and no clearance of trees, or decrease in crown cover of trees and shrubs, occurs due to the displaced animals;

(e) Animals are displaced to zero-grazing system.

Taking into account above conditions, out of the 212 parcels at risk of leakage in Strata SB2b and SB3b, 41 were selected to perform quantitative leakage surveys /97-137/, exceeding the minimum sample size for this population size (with a level of confidence 90% and error +/- 10%). The minimum sample size for the surveys was determined following the best practices described in Annex 1 of the “Sampling and surveys for CDM project activities and programmes of activities” document. The specific plots to be sampled were randomized with an R script, which was confirmed by the audit team.

The information collected in each survey could be summarize as follows.

- Section 1. General information
 1. General information of the plot (date, technician, parcel code, reforestation model, planting wave, area and additional comments).
 2. Do the trees planted by PUR replace the prior land use inside the plot?
 3. Indicate the prior land use (annual crop, perennial crop, pastures/grasslands, degraded fallow, other)
- Section 2. Leakage information
 1. In respect to the prior land use, detail the productivity (units/plot) or details regarding the non-productive use of the land.
 2. Do the trees planted by PUR replace the prior land use to another plot?
 3. In which year did that displacement happen?
 4. How many hectares were displaced?
 5. Indicate the land use in which the crops were displaced (primary forest, secondary forest, abandoned land, pasture/grassland, annual crop, perennial crop, other).
 6. Indicate the reasons why the crops were displaced.
- Section 3. Information about the plot over the crops were displaced
 1. Indicate region, municipality and road/path.

2. Owner of the plot
3. Indicate GPS coordinates of the center of the plot
4. GPX code (to save on the Drive)
5. Pictures code (to save on the Drive)
6. In case the visit to the plot could not be carried out, indicate the reason why.

The audit team determined that the questionnaire quantitatively captures leakage by monitoring the area of land from which agricultural activity is being displaced in year t (ha), which is the parameter required to be monitored in section 7.2 of the CDM AR TOOL 15 “Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity”, version 02.0.

On addition, and by request of the audit team, each of the farmers signed a testimonial form declaring that they have answered the questionnaire freely and truly to the best of their abilities, and that the answers were provided unbiased without influence of pression from any party /97-137/. Additionally, video testimonies of a subsample of the farmers of these plots were recorded to increase transparency /138-141/ and further substantiate the lack of bias.

An Excel summary of the results /96/ was provided, and the audit team reviewed 100% of the questionnaires to confirm that their contents match. Every plot sampled did not displace any agricultural activity to other plot. This information was assessed and it is consistent with the answers obtained from the farmers on the stakeholder interviews listed on Section 2.3.

In stratum SB2b, farmers usually decide to plant timber trees in model 4 “Mixed Stand” because they have grazing areas in excess of their need for the number of cattle heads (ratios of up to 5 ha per head of cattle). In that case, the planting will not trigger pasture displacement as the existing cattle will be moved to other existing grazing areas (leakage considered insignificant and hence accounted as zero according to AR TOOL 15).

In stratum SB3b, farmers usually cultivate annual crops by default in unproductive area in a periodic system. Land deforested before 2000 was used in a slash and burn system, where rice first, then maize was grown, before it was left as a fallow because of the soil degradation. In a first fallow, it takes normally 4 years after the land can be used for agriculture again. After a second cultivation period, it takes at least 7 year before it can be used again for cropping, and after that it takes at least 10-12 years before land can be recovered. On top of that, production yields keep going down. Being conservative, a cycle of more than 10 – 12 years of fallow followed by one year of annual crops can be considered, on those areas deforested before 2000.

Annual crops cultivation is for them more a way of using as much as possible low productive land that was degraded by the cultivation of coca in the past. The crops cultivated are most often not necessary for the farmer’s subsistence. Therefore, it is not very likely any displacement of this activity due to the project, and if there was, it would mostly be to other degraded areas / “rastrojo”.

Based on the evidence provided, the leakage quantification surveys, videos and Excel summary of the results /96-141/, the audit team detected no signs of leakage, as the initial land use and related production

was not displaced outside of the project area after the project implementation. Moreover, in order to account for leakage according to the CDM tool, not only the activities should have been displaced to other plots, but their production would need to have been intensified, leading to an increase in GHG emissions relative to the GHG emissions attributable to the activity as it exists within the project boundary (as described in note 1), which is not credible given the farmer livelihoods and described conditions of local smallholder agriculture.

In consequence, leakage estimated for these baseline strata is zero, and AENOR deems this consideration as correct, according to CDM AR TOOL 15.

Net GHG Emission Reductions and Removals

According the applied methodology the net anthropogenic GHG removals by sinks are calculated as follows:

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

Where:

$\Delta C_{AR-CDM,t}$ Net anthropogenic GHG removals by sinks, in year t; tCO₂-e

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

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

LK_t GHG emissions due to leakage, in year t; tCO₂-e

The following table summarizes the results:

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)	Buffer pool allocation	VCUs eligible for Issuance
2014	0	0	0	0	0	0
2015	2,449	2,734	0	285	28	256
2016	16,871	18,943	0	2,072	207	1,865
2017	18,296	22,398	0	4,102	410	3,692

2018	22,035	28,247	0	6,212	621	5,591
2019	18,215	25,815	0	7,600	760	6,840
2020	35,078	46,031	0	10,953	1,095	9,858
2021	39,319	53,232	0	13,913	1,391	12,522
TOTAL	152,262	197,399	0	45,136	4,514	40,623

The total GHG benefit calculated as the sum of stock changes along the monitoring period (20-April-2014 to 18-October-2021) is 45,136 tCO₂e. The overall non-permanence risk rating was 10%. Therefore, the total number of credits to be deposited in the buffer account is 4,514 VCUs and the total VCUs to be issued are 40,623 VCUs.

AENOR reproduced the calculations to achieve the same results and deems they are depicted clearly and correctly in the provided sheets. The AENOR verification team was able to trace calculations directly from the data sources of inventory's field measurements. Formulae used are in compliance with monitoring plan, MR section and methodology used. The default values used to determine the parameters are appropriate. Thus, the net amount of VCUs to be issued is accurate and realistic.

In order to calculate the above terms, the monitoring report details the data and parameters used during the verification process. For each of them, AENOR checked its accuracy, consistency, and reliability by reproducing the spreadsheets calculations, verifying the correctness of formulae and methods used and crosschecking the data values with sources (Appendix 1).

AENOR carried out a deep review of the monitoring report section and the calculations.

AENOR verified the consistency and accuracy of each parameter detailed in the lists below by crosschecking the information in the MR section with the information in the PD section, as well as checking values and reproducing the calculations in the spreadsheet calculation package and did not find inconsistencies between them after the closing of CARs and CL requested. Therefore, AENOR deems that values reported for the parameters are accuracy and consistent.

Moreover, AENOR also verified a complete GIS package provided to cross check the information with data values used in calculations and monitoring report. Other default values used are from sources well accredited and verified.

AENOR did not find inconsistencies between the MR /9/ and spreadsheet calculation /1-3/.

The following table summarizes the data and parameters monitored during the monitoring period and used by the PP to calculate the GHG emission removals, which has been assessed by AENOR:

Data/Parameter monitored	Value applied	Purpose of data/parameter	Assessment procedure and result
Area planted by strata	Multiple values	Calculation of project emission Calculation of baseline emission	• Verified with GIS database. • Correctly inputted in the calculation spreadsheets.
Plantation density by parcel	Multiple values	Calculation of project emission	• Verified with GIS database. • Correctly inputted in the calculation spreadsheets.
Diameter at breast height	Multiple values	Calculation of project emission	• Values correctly measured. • Correctly inputted in the calculation spreadsheets.
Total Height	Multiple values	Calculation of project emission	• Values correctly measured. • Correctly inputted in the calculation spreadsheets.
Area of biomass inventory plots	Multiple values	Calculation of project emission	• Values correctly measured. • Correctly inputted in the calculation spreadsheets.
Area affected by fire and inundations	0 ha	Calculation of project emissions	Evidence provided by PP with GPS tracks and observation at each parcel monitoring

In order to verify the accuracy and consistency of parameters monitored and used to calculate the removals achieved for the monitoring period, the AENOR verification team reproduced the calculations checking the correctness of the formulae applied and assumptions used, when applicable and that values used matched with data sources.

AENOR checked that the list of parameters to be monitored was complete and consistent with information in the monitoring plan of the PD document.

After a deep and thorough review and reproduction of calculations and the corresponding tracks to the other spreadsheets, AENOR deems the parameters monitored are correct, reliable, and consistent. Information in the monitoring report and it complies with the validated PD, the calculations provided and

the applicable methodology. Then, the results showed in the monitoring report are reliable, consistency and accuracy.

AENOR did not find inconsistencies between the PD, technical annex, monitoring report and spreadsheet calculation.

After a deep and thorough review and reproduction of calculations and the corresponding tracks to the other spreadsheets, AENOR deems the parameters monitored and available at validation are correct, reliable, and consistent. Information in the monitoring report is in compliance with the PD, the calculations provided and the applicable methodology. Thus, the results showed in the monitoring report are reliable, consistent, and accurate.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

The data and parameters used to determine GHG emission removals are listed in Section 4 of the MR.

During AENOR's verification, the evidence provided by the PP was enough in both quantity and quality to support the determination of GHG emission removals reported by the project.

Quality assurance and control is an essential part of company procedures in order to assure the accuracy of inventory data, modelling results, and carbon accounting. Quality assurance procedures are done in order to minimize and correct any potential data transcription, calculation, or formatting errors that may result in inaccurate carbon accounting results.

In accordance with VCS, the PP is committed to storing all project data in a secure and retrievable manner. In order to facilitate project management and long-term accounting, all primary data outputs supporting annual verification including the spatial database is stored and maintained.

Roles and responsibilities are clearly identified in the MR. QA/QC procedures were developed by the PP for maintaining consistency and quality of field inventories over time. Interviews with the PP and inspection of data and results demonstrated that the PP possess all of the competencies required for reporting of GHG emissions removals in an accurate way.

Data presented to the audit team were clear and coherent and processing steps could be traced to the corresponding sections of the methodology and monitoring plan with transparency.

The global monitoring structure is linked to the project implementation organization. PUR Projet signs a contract with the implementing partner (FNC). For each planting wave or long-term activity phase, the contract between PUR Projet specifies a certain number of monitoring deliverables that the FNC commits to send to PUR Projet while PUR Projet commits to support the technical team of the FNC with the appropriate tools, methodologies and templates.

The entire project is split in 3 teams according to geographical realities. Each team is managed by a Project Coordinator, in charge of planning, coordination of monitoring activities, and quality control on the data collected by the field technicians. From 2014 to 2021, the team of field technicians was in charge of farmer's training, plantation designs, seedlings distribution, and plantation monitoring. Each project coordinator is managed by a Departmental coordinator and a national coordinator.

Data monitoring is mostly based on Do Forms application, Backcountry Navigator, Microsoft Excel and Basecamp (data collection, GIS tracking and consolidation / analysis).

Above procedures to ensure this are described in Section 4.3 of the MR, in terms of general QA/QC of the monitoring plan and specific QA/QC procedures applied to data and parameters monitored.

Throughout the verification, the PP demonstrated a commitment toward conservativeness and took all measures appropriate to ensure the reliability of evidence provided. Interviews conducted (oral evidence) are outlined in Section 2.3, and the final documents received from the PP supporting the determination of GHG removals can be viewed in Appendix 1.

AENOR deems that the PP performed good practices in this assessment and concludes that GHG reductions were quantified correctly in accordance with the PD and applied methodology, and that the evidence is sufficient in quantity and appropriate in quality to determine the GHG removals of the project.

AENOR has verified that monitoring crews implemented the monitoring plan as it is established in the MR. AENOR also could evidence during the remote visit that key workers are fully involved in monitoring events (training, measuring, archiving, reporting, quality control, etc.). QA/QC procedures are considered strict at identifying, reviewing, and handling inconsistencies found.

Roles and responsibilities are clearly identified in the project document as well as QA/QC procedures. Thus, the use of these procedures monitored to ensure that net anthropogenic GHG removals by sinks are measured and monitored precisely, and are credible, verifiable, and transparent. Training was held for all relevant personnel on all data collection and analysis procedures. AENOR checks this against the monitoring report and other supported documents.

The monitoring crew was experienced in forest measurement and highly attentive to details. Field data collected at this stage was compared with the original data.

During the remote interviews, the AENOR team discussed the implementation of quality control when the project team cross checked the accuracy of the data collected in the field and when the data was translated to the spreadsheets, with the project developer, the management team onsite, and representatives of the monitoring crews. Additionally, a video demonstration of the monitoring activities in the field were provided to the audit team. Original data sheets were provided to the verification team of AENOR. A random sample of these were selected and traced through to the corresponding excel spreadsheets with no errors observed. Finally, data management and archival system is also detailed in the MR.

Interviews with the PP, PUR consultants and the management team in the project area and inspection of data and results demonstrated that the PP possess all the competencies required for reporting of GHG emissions removals on an accurate way.

Data presented to the audit team were clear and coherent and processing steps could be traced to the corresponding sections of the methodology and monitoring plan with transparency.

The monitoring plan provides means for internal data review and quality control, and the data presented by the project proponent included the results of these internal assessments. AENOR reviewed the different procedures applied by PUR Project and AENOR considers that information provided is sufficiency and the quality of that information is appropriate to determine the GHG removals.

During the remote process, AENOR verified the enforcement of the quality assurance and quality protocols and checked that all instruments used for the whole monitoring period were checked and in good conditions to be used. Furthermore, AENOR performed a consistency check in order to verify the consistency of the previous measurement and the re-measurement, and to verify the correctness of the reported results.

4.6 Non-Permanence Risk Analysis

PP has elaborated a VCS Non permanence Risk Report (NPRR) /13/ for the verification process according to the AFOLU Non-Permanence Risk Tool v4.0.

Below, it is explained the assessment and the issues raised on regard the non-permanence risk rating determined by the PP in the NPRR.

Risk factor	Risk Rating	Findings and mitigation activities	CARs/CLs
Internal Risks			
Project Management: It is assessed using table 1 of the VCS AFOLU Risk Tool.	-4 (total may be less than zero)	a) Most of the species uses are native. Risk rating=0 is justified. b) No enforcement is necessary to prevent encroachment by outside actors. All trees are planted on individual farmer's parcels. Risk rating=0 is justified. c) In accordance with the evidence provided, the project staff is organized in three different teams (two in Cauca, one of them dedicated to "Coffee for Peace" activities, and one for Nariño) each of them managed by a local Project Coordinator who is an Engineering (in forestry, agronomy, or environment). As part of the Federación Nacional de Cafeteros, these project coordinators benefit from the experience and knowledge of the FNC Directors who have years of experience operating projects and working with coffee farmers in the area. Risk rating=0 is justified. d) All parcels reforested are less than a day of travel from the FNC offices. Risk rating=0 is justified. e) Management team, PUR Project includes individuals with significant experience in AFOLU project design and implementation, carbon accounting and reporting. Risk rating=-2 is justified. f) The project has an adaptive management plan. Risk rating=-2 is justified.	No corrective actions or clarifications were requested. AENOR could check this during the remote interviews with the Project coordinators and also with their CVs.
Financial viability: It is assessed using table 2 of the VCS AFOLU Risk Tool.	0 (total may not be less than zero)	a-c) N/A d) Project financing is based on a mechanism where tree plantations, farmers incentives, and technical assistance for the first years (plantation, monitoring) is funded upfront by financial partners through the sale of tree planting commitments (e.g. Ecosia) or through the sales of ex-ante carbon credits (e.g. Nespresso, who is the main funder of	No corrective actions or clarifications were requested. AENOR could check this with the cash out of the project activity.

Risk factor	Risk Rating	Findings and mitigation activities	CARs/CLs
		the project in the context of its carbon neutrality strategy). Project break- even point was reached from the beginning of the project as PUR Project started by defining a budget reflecting the whole project's financial needs and then had it approved by the client before initiating operations. This budget not only includes installation costs to cover tree planting and monitoring but also provisions to be able to ensure field presence, activities and trees permanence over the long-term. Risk rating=0 is justified. e)-g) N/A Risk rating=0 is justified. h) Project has secured more than 80% of funding needed to cover the total cash out before the project reaches breakeven. Risk rating=0 is justified. i) n/a Risk rating=0 is justified.	
Opportunity Cost: It is assessed using table 3 of the VCS AFOLU Risk Tool.	-6 (total may be less than zero)	a)-e) N/A Risk rating=0 is justified. f) The revenues from project (timber, yield increase) are more than 50% more profitable for the farmers than coffee alone or annual crops in the rotational fallow system, and that socio-economic impacts are very positive for the populations. Risk rating=-4 is justified. g) N/A Risk rating=0 is justified. h) Project is protected by legally binding commitment to continue management practices over the length of the project crediting period. The project has a legal agreement or management to continue the management practice as stated in the legal agreements with the main funder Nespresso. Risk rating=-2 is justified. i) N/A Risk rating=0 is justified.	No corrective actions or clarifications were requested. AENOR could check this with the cash out of the project activity.
Project Longevity: It is assessed using table 4 of the VCS AFOLU Risk Tool.	10 (total may not be less than zero)	a) Not applicable Risk rating=0 is justified. b) 80-year project longevity and it does have a legal agreement or management to continue the management practice as	No corrective actions or clarifications were requested. AENOR could check this with the legal

Risk factor	Risk Rating	Findings and mitigation activities	CARs/CLs
		stated in the legal agreements with the main funder Nespresso, for at least 40 years. Risk rating=10 is justified.	agreement with Nespresso.
Total internal risk=0 (total may not be less than zero)			
External Risks			
Land Tenure and resources access/impact: It shall be assessed using table 6 of the Risk Tool.	5 (total may not be less than zero)	a) Ownership and resource access/use right are held by the same entity Risk rating=0 is justified. b) n/a Risk rating=0 is justified. c) n/a Risk rating=0 is justified c) There are no disputes over land tenure or ownership of the project area in more than 5 % of the project area nor disputes over access/use rights (or overlapping rights). Risk rating=0 is justified. d) Rating is chosen hereafter as to account for potential disputes over access/use rights. Risk rating=5 is justified e) Not applicable. f) Project area is not protected by legally binding commitment to continue management practices that protect carbon stocks over the length of the project crediting period. N/A. Risk rating = 0 is justified g) Mitigation: N/A Risk rating = 5 is justified	No Corrective Actions or Clarifications were requested. AENOR could check this against the implementation contract FNC.
Community engagement: It shall be assessed using table 7 of the Risk Tool.	-5 (total may be less than zero)	a) The project procedures allow a systematic consultation of each participating stakeholder. Risk rating=0 is justified. b) Project procedures allow a systematic consultation of each participating stakeholder. Risk rating=0 is justified Risk rating=0 is justified. c) Mitigation: The project generates net positive impacts on the social and economic well-being of the local communities who derive livelihoods from the project area Risk rating= -5 is justified.	No Corrective Actions or Clarifications were requested. AENOR could check this against the local stakeholder report June 2021 and during the remote interviews.
Political Risks: It shall be assessed using table 8 of the Risk Tool.	0 (total may not be less than zero)	a) N/A b) N/A	No Corrective Actions or Clarifications were requested. AENOR could check this against the

Risk factor	Risk Rating	Findings and mitigation activities	CARs/CLs
		c)- Governance score of -0.32 to less than 0.19. Average score for Colombia is:-0.17. AENOR verified the value and reliability of source. Risk rating=2 is justified. d)-e) N/A f) Colombia is active in the UNFCCC REDD+ negotiations where it supports market-based mechanisms and has been a vocal proponent of the idea that REDD+ should accommodate a stepped subnational approach. Risk rating=-2 is justified.	Governance Indicators from the WB, 2015 to 2019.
Total external risks=0 (Total may not be less than zero)			
Natural risks			
Fire Risk: It shall be assessed using table 10 of the Risk Tool.	LS*M= 1	Insignificant. Less than every 10 years likelihood. Thus LS= 2 is reasonable. Mitigation (M) measures: The project will limit the number of plots in areas identified as vulnerable to forest fires. Some precautionary measures could be adopted to mitigate the adverse effect of drought (avoid clean weeding in interrow areas, but circle weeding can be done with mulching around the trees with weed removals). For this purpose, training courses will be provided to producers in order to enforce these practices effectively on their plantations. Then, M=0.50 is reasonable.	No Corrective Actions or Clarifications were requested. AENOR could check this against the training course of fire prevention.
Pest and disease outbreaks: It shall be assessed using table 10 of the Risk tool.	LS*M=1	Insignificant (less than 5% loss of carbon stocks) Less than 10 year Thus LS= 2 is reasonable. Mitigation (M) measures: The control is made by planting randomly the specie Cedrelata Odorata in the parcels, in limited number. Once the tree is attacked, the farmer will have to look for the pest and kill it manually. In this case, the control is organic. If other pest or a disease appears, the control will also be exclusively organic. Then, M=0.50 is reasonable.	No Corrective Actions or Clarifications were requested. AENOR could check this against the interviews with the coffee farmers on 22/03/2022 and 24/03/2022.
Extreme weather: It shall be assessed using table 10 of the Risk tool.	LS*M=1	Insignificant. Less than every 10 years likelihood. Thus LS= 2 is reasonable. Mitigation (M) measures:	No Corrective Actions or Clarifications were requested.

Risk factor		Risk Rating	Findings and mitigation activities	CARs/CLs
			The project design is focused on studying effects of afforestation models on erosion rates of the soils in the valley. Then, M=1 is reasonable.	
Geological risks: It shall be assessed using table 10 of the Risk Tool.		LS*M=0	Eruption of the Galeras volcano in Nariño. Could damage 5 to 25% of carbon stocks Thus LS= 0 is reasonable. Mitigation (M) measures: None	No Corrective Actions or Clarifications were requested. AENOR could check this against the data provided by Geological Service of Colombia.
Other Risks	Natural	N/A	N/A	No Corrective Actions or Clarifications were requested
Total natural risks=3				
OVERALL RISK RATING=-0+0+3=3. The overall risk rating is below the minimum risk rating of 10. So, the overall risk buffer is 10%.				

AENOR has checked that information provided in the NPRR for the monitoring period is consistent with supporting documents provided. The assumptions and justifications provided to determine the risk rating of each risk factor are elaborated and they are based on provided documents using conservative assessments. AENOR deems that information provided is reliable and appropriate from reliable sources, thus, the overall risk rating is credible and realistic. Thus, the overall risk rating of 10% is credible and realistic.

5. VERIFICATION CONCLUSION

AENOR has verified that the *Regenerating Colombian Coffee Ecosystems* with the Verified Carbon Standard version 4.3 without qualifications or limitations. The project has been implemented in accordance with the validated Project Description and its validated variations.

AENOR is able to issue a positive verification opinion for the 45,136tCO₂e of verified emissions removals, as reported in the Monitoring Report version 5.4 dated on 11 October 2023.

The verification assessment covered the monitoring period from 20-April-2014 to 18-October-2021 and verified that calculated emission reductions and/or removals were achieved during the monitoring period with a reasonable level of assurance. The overall non-permanence risk rating was 10%. Therefore, the total number of credits to be deposited in the buffer account is 4,514 VCUs and the total VCUs eligible for issuance are 40,623VCUs. Verification period: From 20-April-2014 to 18-October-2021.

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

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)	Buffer pool allocation	VCUs eligible for Issuance
2014	0	0	0	0	0	0
2015	2,449	2,734	0	285	28	256
2016	16,871	18,943	0	2,072	207	1,865
2017	18,296	22,398	0	4,102	410	3,692
2018	22,035	28,247	0	6,212	621	5,591
2019	18,215	25,815	0	7,600	760	6,840
2020	35,078	46,031	0	10,953	1,095	9,858
2021	39,319	53,232	0	13,913	1,391	12,522
TOTAL	152,262	197,399	0	45,136	4,514	40,623

Date: 11 October 2023

A handwritten signature in blue ink, appearing to read 'Daniel Bermejo Vesga', is written over a faint, light blue grid background.

Lead Auditor
Daniel Bermejo Vesga

APPENDIX 1: LIST OF EVIDENCES PROVIDED

N°	Type
General documentation	
1	VCS Colombia Cauca_GHG calculations - Vsent 20230810.xlsx
2	VCS Colombia CFP_GHG calculations - Vsent 20230810.xlsx
3	VCS Colombia Narino_GHG calculations - Vsent 20230810.xlsx
4	Biomass inventories 2021 - results _ MAI estimation - Vsent 20230810.xlxb
5	Interview_Database_round2.xlsx
6	Interview_round2_Eligibility_criteria.xlsx
7	Tables for MR - Vsent 20230810.xlsx
8	VCS Colombia_project database- Vsent 20230810.xlsx
9	VCS_MR_PUR_Colombia_5.4.pdf
10	VCS_MR_PUR_Colombia_vsent20211005.pdf
11	VCS_nonpermanencerisk_calculation_PUR_Colombia_1.0.xlsm
12	VCS_nonpermanencerisk_Report_PUR_Colombia__2.0_vsent 20211130.pdf
13	VCS_nonpermanencerisk_Report_PUR_Colombia__3.0.pdf
Start date	
14	PURSD1_Contract_Corsavida_PURProjet_2014
15	PURSD2_20140420_Invoice_TPP_Corsavida_W1_COL_001
Implementation	
16	PURSD5_Implementation_Contract_FNCNational_PURProjet_Wave4.pdf
17	PURSD6_Implementation_Contract_FNCNational_PURProjet_Wave5.pdf
18	PURSD7_Implementation_Contract_FNCNational_PURProjet_Wave6.pdf
19	PURSD8_Implementation_Contract_FNCNational_PURProjet_Wave7.pdf
20	PURSD9_Implementation_Contract_FNCNational_PURProjet_Wave8.pdf
21	PURSD10_Implementation_Contract_Nursery_Wave2017_Wave4.pdf
22	PURSD11_Implementation_Contract_Nursery_Wave2018_Wave5.pdf
23	PURSD12_Implementation_Contract_Nursery_Wave2019_Wave6.pdf
24	PURSD13_Implementation_Contract_Nursery_Wave2020_Wave7.pdf
25	PURSD14_Implementation_Contract_FNCNational_PURProjet_Longterm.pdf
26	PURSD15_Implementation_Contract_FNCCauca_PURProjet_Wave1.pdf
27	PURSD16_Implementation_Contract_FNCCauca_PURProjet_Wave2.pdf
28	PURSD17_Implementation_Contract_FNCCauca_PURProjet_Wave3.pdf
29	PURSD18_Implementation_Contract_FNCCauca_PURProjet_Wave4.pdf
New instance	
30	PURSD19_New_instance_Project_tecnical_document.pdf
31	PURSD20_New_instance_document_beneficiary.pdf

32	PURSD21_New_instance_Collect_data. Pdf
Communication local stakeholders	
33	PURSD22_Proof_comunication_report_reunion_june2021. pdf
34	PURSD23_Proof_comunication_workshop_allactors_2018. pdf
Bibliography	
35	PURSD24_Carbon_footprints_carbon_stock_article.pdf
36	PURSD28_allometric above 5cm.pdf
37	PURSD29_allometric below 5cm.pdf
DoForm	
38	PURSD25_Doform_collect_data_inventory_biomass_example.pdf
39	PURSD26_Doform_collect_data_preregistry_example.pdf
40	PURSD27_Doform_collect_data_monitoring_example.pdf
FireRisk	
41	PURSD27_training_course_firerisk.pdf
Interviews data	
42	Escrito_230_Reinaldo Martinez Mayorga.pdf
43	Escrito_493_Obairo Cruz Males.pdf
44	Escrito_1215_LUCIANO RECALDE INSUASTY.pdf
45	Escrito_1313_JUAN BAUTISTA PAREDES.pdf
46	Escrito_2537_EMER GIRALDO.pdf
47	Escrito_2738_MIGUEL GOMEZ ERAZO.pdf
48	Escrito_2889_Elvio Henry Cifuentes Cruz.pdf
49	Escrito_2958_JORGE ELIECER PAREDES.pdf
50	Escrito_3050_Maria Erazo.pdf
51	Escrito_3067_Ana Milena Mayorga Alegría.pdf
52	SP_17_Dany Dalberto Galindez Velarde_video.pdf
53	SP_230_Reinaldo Martinez Mayorga_escrito.pdf
54	SP_248_Pedro Manchabajoy Diaz_video.pdf
55	SP_264_Argelia Eloisa España Diaz_llamada.pdf
56	SP_493_Obairo Cruz Males_escrito.pdf
57	SP_814_Luz Eneida Muñoz Muñoz_video.pdf
58	SP_1071_Adelmo Ordoñez Ordoñez_llamada.pdf
59	SP_1075_Juan Francisco Ortiz Sepulveda_video.pdf
60	SP_1215_Luciano Recalde Insuasty_escrito.pdf
61	SP_1294_Luis Eyder Parra Montilla_video.pdf
62	SP_1313_Juan Bautista Paredes Lara_escrito.pdf
63	SP_1590_Lucila Gómez Hoyos_llamada.pdf
64	SP_1838_Fernando Guamanga Guamanga_llamada.pdf
65	SP_2307_Eber Gil Ceron_llamada.pdf
66	SP_2537_Emer Giraldo Armero_escrito.pdf
67	SP_2738_Miguel Gomez Erazo_escrito.pdf

68	SP_2889_Elvio Henry Cifuentes Cruz_escrito.pdf
69	SP_2958_Jorge Eliecer Paredes.pdf
70	SP_3050_Maria Erazo_escrito.pdf
71	SP_3067_Ana Milena Mayorga Alegría_escrito.pdf
72	Video_17_Danny Dalberto Galindez Velarde.mp4
73	Video_248_Pedro Manchabajoy Diaz.mp4
74	Video_814_Luz Eneida Munoz Munoz.mp4
75	Video_1075_Juan Francisco Ortiz Sepulveda.mp4
76	Video_1294_Luis Eyder Parra Montilla.mp4
Geodatabase	
77	COL GIS DB - 10-05-2022.gpkg
78	Location_surface_interview_VCS_2021_36tracks.cpg
79	Location_surface_interview_VCS_2021_36tracks.dbf
80	Location_surface_interview_VCS_2021_36tracks.gpx
81	Location_surface_interview_VCS_2021_36tracks.kml
82	Location_surface_interview_VCS_2021_36tracks.prj
83	Location_surface_interview_VCS_2021_36tracks.shp
84	Location_surface_interview_VCS_2021_36tracks.shx
85	parcel_line_to_polygon_with_area_ha.gpkg
86	parcel_line_to_polygon_with_area_ha.kml
87	PURDS4_Tracks_VCS_Verification_2021_v2.cpg
88	PURDS4_Tracks_VCS_Verification_2021_v2.dbf
89	PURDS4_Tracks_VCS_Verification_2021_v2.prj
90	PURDS4_Tracks_VCS_Verification_2021_v2.shp
91	PURDS4_Tracks_VCS_Verification_2021_v2.shx
92	PURSD3_Tracks_VCS_2021.kml
93	PURSD3_Tracks_VCS_2021_2.kml
94	PURSD4_Tracks_VCS_Verification_2021.shp
95	SD_Location_Surface_polygon_send2.gpkg
Leakage	
96	Consolidado respuestas_ Monitoreo de Fugas.xls
97	ARCENIO ALEGRIA PIAMBA_ROUFARCE01M4.pdf
98	BEIMAR MUÑOZ_P1_ROUFBEU01M4.pdf
99	BEIMAR MUÑOZ_P2_ROUFBEU01M4.pdf
100	Benito Arquimedes Diaz Hidalgo_Reg_87302986_W2015_M4_PA_P101.pdf
101	Blanca Edilma Pacichana Cañar_Reg_36860170_W2016_M4_AC_P2 001.pdf
102	BLANCA OLIVA RENGIFO_SIDEOLCA01M4C.pdf
103	CARLOS ELIAS CRUZ ALEGRIA_Reg_76247101_W2016_M4_PA_P3.pdf
104	Edil Hoyos Chilito_Reg_10527070_W2016_M4_PA_P3.pdf
105	Emilson Vidal Zuñiga_Reg_FNC_MZ_W16_10566076_M4_PAST_P1 .pdf
106	Ener Meneses Muñoz_Reg_FNC_MZ_W16_4697117_M4_O_P1 .pdf

107	Enma Mariela Castillo Chicaiza_Reg_27155899_W2016_M4_OC_P3 001.pdf
108	Fernando Narvaez Cruz_Reg_FNC_MZ_W16_10567624_M4_OC_P1.pdf
109	GLORIA OLIVA LOPEZ_ROUFGU01M4.pdf
110	Gumerinda Rosa Manchabajoy Cañar_Reg_36860185_W2016_M4_PA_P2 001.pdf
111	Heovany Hoyos Rengifo_W2016_HEOVANY HOYOS RENGIFO_4752460_W2016_PA_P2 .pdf
112	Hipolito Eduardo Zamudio Ortega_Reg_14277881_W2016_M4_PA_P1 001.pdf
113	Hugo Humberto Martinez Arcos_Reg_6511519_W2015_M4_RA_P101.pdf
114	Hulpiano Homero Cordoba Insuasty_Reg_14390018_W2016_M4_PA_P1 001.pdf
115	INOCENCIO HERNANDEZ_W2016_INOCENCIO HERNANDEZ_76269007_W2016_PA_P1.pdf
116	Jesus Maria Noguera_SIRAJECU01M4A.pdf
117	JOHN KENNEDY TROCHEZ_SISPNITR002M4-L2.pdf
118	Jorge Edilberto Ricaurte Velasquez_Reg_12855159_W2016_M4_PA_P1 001.pdf
119	Jose Argel Alban_ROMAJOSU01M4 .pdf
120	JOSE LEIDER PAZ GARZON_SJARLEHIO1M4.pdf
121	Juan Bautista Gaviria_Reg_SOT_W16_4771165_M4_PAST_P1.pdf
122	JULIANA CRUZ_ROCHJUCRAGO2M4.pdf
123	Leonidas Lopez Jimenez_Reg_5248476_W2015_M4_RA_P2 001.pdf
124	Libardo Amador Criollo Diaz_Reg_98332360_W2015_M4_OT_P101.pdf
125	Luis Alejandro Erazo_Reg_12810072_W2016_M4_OT_P1 001.pdf
126	Manuel Mesias Rodriguez Criollo_Reg_12855024_W2016_M4_CO_P1 001.pdf
127	MELBA ALBAN ALEGRIA_RORAMEPLO2M4.pdf
128	MILLER FERNANDO CERÓN MENESES_SIAPMICENAO2M4-L2.pdf
129	Olga Rosario Arteaga Benavides_Reg_27156210_W2016_M4_RA_P2 001.pdf
130	Omar Ciro Burgos Riascos_Reg_12981382_W2016_M4_AC_P1 001.pdf
131	ORFA FRANCO ORDOÑEZ_Reg_FNC_MZ_W16_25479423_M4_PAST_P1.pdf
132	Pablo Emilio Macias_W2016_PABLO EMILIO MACIAS_4751308_W2016_PA_P1.pdf
133	Ricardo Leon Moncayo_Reg_FNC_MZ_W16_1517771_M4_PAST_P1.pdf
134	ROSA ELENA BOLAÑOZ_Reg_FNC_MZ_W16_25483128_M4_CPCS_P2.pdf
135	Uriel Cifuentes_ROLAURCIMA02M4.pdf
136	Wilson Alberto Jimenez Madroñero_Reg_1082746183_W2016_M4_PA_P1 001.pdf
137	Zoila Julia Matabajoy Erazo_Reg_27198327_W2015_M4_PA_P101.pdf
138	Edil Hoyos_.mp4
139	Ener Meneses_.mp4
140	Leonidas Lopez Jimenez_Reg_5248476_W2015_M4_RA_P2 001.mp4
141	Pablo Emilio Macías_.mp4

APPENDIX 2: CLARIFICATIONS AND CORRECTIVE ACTIONS REQUESTED

Clarification Requests (CLs)

CL ID	01	Date: 22/10/2021
Description of CL		
Please, provide evidence of the following topics regarding the MR: 1. Project start date and the first contract signed between PUR and Corsavida. 2. Project location and surfaces. Provide KML and SHP files. 3. Evidence of the actual project implementation, section 1.1. 4. New instance of this verification period, eligibility criteria of section 3.3. 5. The results of Project implementation and monitoring are regularly communicated to local stakeholders. 6. Within section 4.2, provide the document “ <i>Carbon footprints and carbon stocks reveal climate-friendly coffee production. Agronomy for Sustainable Development</i>”. 7. The Do Forms collection evidence.		
Country participant response		Date: 24/11/2021
Documentation provided by the Country Participant		
1- Please refer to the document : <i>PURSD1_Contract_PUR_Corsavida_2014</i> and <i>PURSD2_20140420_Invoice_TPP_Corsavida_W1_COL_001</i> 2- Proof of project location and surface - Project tracks in KML - please refer to the document : <i>PURSD3_Tracks_VCS_2021.kml</i> - Project tracks in shape file - please refer to the document: <i>PURSD4_Tracks_VCS_Verification_2021.shp</i> 3- Proof of implementation - Contract between National Federation of Coffee Growers and PUR Projet for wave 2017 - 4 - please refer to the document <i>PURSD5_Implementation_Contract_FNCNational_PURProjet_Wave4</i> - Contract between National Federation of Coffee Growers and PUR Projet for wave 2018 - 5 - please refer to the document		

PURSD6_Implementation_Contract_FNCNational_PURProjet_Wave5

- Contract between National Federation of Coffee Growers and PUR Projet for wave 2019 - 6 - please refer to the document

PURSD7_Implementation_Contract_FNCNational_PURProjet_Wave6

- Contract between National Federation of Coffee Growers and PUR Projet for wave 2020 - 7 - please refer to the document:

PURSD8_Implementation_Contract_FNCNational_PURProjet_Wave7

- Contract between National Federation of Coffee Growers and PUR Projet for wave 2021 - Wave 8 - please refer to the document

PURSD9_Implementation_Contract_FNCNational_PURProjet_Wave8

- Contract with nursery for wave 2017 - please refer to the document:

PURSD10_Implementation_Contract_Nursery_Wave2017_Wave4

- Contract with nursery for wave 2018 - please refer to the document:

PURSD11_Implementation_Contract_Nursery_Wave2018_Wave5

- Contract with nursery for wave 2019 - please refer to the document:

PURSD12_Implementation_Contract_Nursery_Wave2019_Wave6

- Contract with nursery for wave 2020 - please refer to the document:

PURSD13_Implementation_Contract_Nursery_Wave2020_Wave7

- Contract of activity of longterm's activities and biomass inventory - please refer to the document:

PURSD14_Implementation_Contract_FNCNational_PURProjet_Longterm

- Contract between Cauca Committee of National Federation of Coffee Growers and PUR Projet for wave 2018 - Wave 1 - please refer to the document

PURSD15_Implementation_Contract_FNCCauca_PURProjet_Wave1

- Contract between Cauca Committee of National Federation of Coffee Growers and PUR Projet for wave 2019 - Wave 2 - please refer to the document

PURSD16_Implementation_Contract_FNCCauca_PURProjet_Wave2

- Contract between Cauca Committee of National Federation of Coffee Growers and PUR Projet for wave 2020 - Wave 3 - please refer to the document

PURSD17_Implementation_Contract_FNCCauca_PURProjet_Wave3

- Contract between Cauca Committee of National Federation of Coffee Growers and PUR Projet for wave 2021 - Wave 4- please refer to the document

PURSD18_Implementation_Contract_FNCCauca_PURProjet_Wave4

4- New instances proofs of eligibility criteria:

- Project Technical document of the project - please refer to the document:

PURSD19_New_instance_Project_tecnical_document

- Example of physical documents collected from a beneficiary of new instance - please refer to the document:

PURSD20_New_instance_document_beneficiary

- Example of physical documents collected from a beneficiary of new instance - please refer to the document:

PURSD21_New_instance_Collect_data

Concerning the different eligibility criteria, here is how it could be evidenced:

- owned by small holders (less than 20 hectares) → please see GPS tracks of the project
- not deforested in the last 10 years → qualitative survey from farmers (questions about previous land use) + by design majority of project parcels do not replace previous land-use (agroforestry).
- not be cleared of native ecosystems within the 10-year period prior to the project start date, as set out in section 3.1.6. of the VCS AFOLU requirements → qualitative survey from farmers (questions about previous land use) + by design majority of project parcels do not replace previous land-use (agroforestry).
- not falling under “forest” category as defined by Colombian DNA → by design our planting models (agroforestry) don’t allow planting on forest land.
- owner has clear land-use rights with no land tenure conflicts → physical evidence collected from farmers along project implementation (see example PURSD9)
- outside of any conservation area (National Parks, concessions for conservation, etc.) and any large economic concessions (forestry, oil, mining, etc.) → by design our planting models (agroforestry) don’t allow planting on national parks + GPS tracks would be an evidence.
- where the reforestation will take place under one of the 5 models of the project and according to the project’s proceedings described in the PDD → monitoring database and site visit would be the evidence that demonstrates planting models are respected.

5- Proof of implementation and monitoring between stakeholders of the project:

- Operative Committee report of June 2021 - please refer to the document:
PURSD22_Proof_comunication_report_reunion_june2021

- Vision Workshop report - 2018 - please refer to the document:
PURSD23_Proof_comunication_workshop_allactors_2018

6- Document of “Carbon footprints and carbon stocks reveal climate-friendly coffee production. Agronomy for Sustainable Development” - please refer to the document:
PURSD24_Carbon_footprints_carbon_stock_article

7- PDF Extract of a doform tablet collection- please refer to the document:
PURSD25_Doform_collect_data_inventory_biomass_example

PURSD26_Doform_collect_data_Pre-registry_example

PURSD27_Doform_collect_data_Monitoring_example	
VVB assessment	Date: 14/12/2021
The evidence for the eligibility criteria and for the proofs of implementation have been provided and AENOR deems then correct. CL 01 is closed	

CL ID	02	Date: 22/10/2021
Description of CL		
For the NPRR, please, provide evidence of the training courses done to mitigate the fire risk.		
Country participant response		Date: 24/11/2022
<i>Training courses done to mitigate the fire risk aren't given directly by the team of the agroforestry project but by the team of Nespresso technical assistance in the activities of the cluster and inside the Rainforest Alliance and Fair Trade certification requirements. The team</i>		
Documentation provided by the Country Participant		
PURSD27_training_course_firerisk		
VVB assessment		Date: 14/12/2021
The training course has been provided, and it is considered correct. Therefore, CL 02 is closed		

CL ID	03	Date: 22/10/2021
Description of CL		
Please, clarify the following topic, how is estimated the surface of the affected areas by fire and inundations.		

Country participant response	Date: 24/11/2021
<i>Parcels affected by fires or inundation are identified during monitoring 2 where technicians count and report all remaining trees alive on each parcel of the project in the database. In case fire leads to partial tree mortality on the parcel, the parcel stays registered in the database but tree density is lower and thus impact of fire is included in project sequestration. If the fire led to 100% tree mortality then the parcel is reported in this monitored parameter (in ha).</i> <i>So far, this second option never occurred and that is why we reported a surface equivalent to zero for that parameter (surface affected by fire).</i>	
Documentation provided by the Country Participant	
VVB assessment	Date: 14/12/2021
The information provided is deemed clear. Therefore CL 03 is closed	

Corrective Actions Requests (CARs)

CAR ID:	01	Date: 22/10/2021
Description of CAR		
Some errors have been found according to the VCS MR template: 1. Section 1.1, <i>Summary description</i> occupies more than one page. Also, further information about equipment, process or conservation measures is missing. 2. Section 2.2, <i>Local stakeholder consultation</i>: missing the process of VCS Program verification and the validation/verification body's site visit. 3. Section 3.2, <i>Deviations</i>, the sub-section Methodology deviations have not been completed. 4. Please, provide the title and the reference of all the tables and images of the document, for instance section 4.4. table, the precedence of the baseline stratification. 5. Within the leakage section, according to the template is mandatory to quantify leakage emissions providing sufficient information to allow the reader to reproduce the calculation.		
Country participant response		Date: 24/11/2022

1. OK . the summary description had been reduced to one page, and more informations about equipment, process or conservation measures have been added in the new version of MR 2. OK. Explication about the process of VCS Program verification and the validation/verification body's site visit had been added in the new version of MR 3. OK. Methodology deviations sub-section has not been completed because there is no deviations 4. OK. The title and the reference of all the tables and images of the document had been added in the new version of MR 5. OK. In section 5.3, we add details about the calculation of leakage, still the leakage is negligible. In section 4.4, we explained in detail why we can say that leakage is negligible thanks to the analyses by stratification.		
Documentation provided by the Country Participant		
VCS_MR_PUR_Colombia_2.0_vsent 20211130.docx		
VVB Assessment		Date: 14/12/2021
1. The section has been updated and it is deemed corrected. 2. Please, explain deeper the process of VVB site visit. Also, explain if had any issue regarding COVID pandemic and how the site visit was dealt. 3. The section has been updated according to the template requirements. 4. The issue has been solved properly. 5. The section of leakage has been updated including information. However, details about what document is referred to section 4.4, given that section 4.4 does not appear nor the PDD or MR, are required. Therefore, the CAR 01 is not closed, see the comments in the MR, the MR has to be reinforced with the VCS template.		
Country participant response	Date: 20/01/2022	
1. OK. 2. OK , the MR had been updated in the 2.2 seccion according to the comment. We put more detail about the VVB site visit. 3. OK. 4. OK. 5. OK, we were referring to section 4.3 (not 4.4), so in section 4.3 we explained in detail why we can say that leakage is negligible thanks to the analyses by stratification.		
Documentation provided by the Country Participant		

VCS_MR_PUR_Colombia_3.0_.docx	
VVB Assessment	Date: 28/02/2022
The correct information has been included in the MR, and AENOR deems it correct CAR 1 is closed.	

CAR ID:	02	Date: 22/10/2021
Description of CAR		
The following inconsistencies in the MR according to the reference in the PDD: 1. The table found within section 3.3, <i>Grouped projects</i> does not match with the reported in the PDD. 2. Some eligibility criteria are missing. 3. When mentioned in the MR, the PDD section, specify in which section of the PDD is the reference. 4. The total equivalent area of the table stratification of the project area – inventory of biomass (section 4.4, Monitoring plan) is rounded, but in the PDD is reported with decimals.		
Country participant response		Date: 14/12/2021
1. <i>Indeed PDD database was done at a time where data available was not 100% final. However gaps observed are not significant and tend to be more conservative in the ME. Two main reasons explain these gaps:</i> - <i>For planting wave 2016, at the moment of the creation of the PDD, we have used the data of pre-registry which is preliminary info we collect with farmers before planting. We actualized the data using the monitoring's data that was collected after planting which is by definition more accurate.</i> - <i>For other planting waves data has been updated from info raised at monitoring 2 which was not always available at PDD date. In a process of continuous improvement we were updating the database everytime a more accurate info comes to our knowledge.</i> <u>Table: Difference between data PDD (2017) and data Verificacion (2021) - source PUR Projet</u>		

		ACTUALIZED AND FINAL DATA 2021		PREVIOUS DATA FROM PDD		Justification
Plantation wave		Equivalent Area (ha)	Number of trees planted	Equivalent Area (ha)	Number of trees planted	
2016		521	368 059	2 033	370 000	Area data: the difference is because the data in 2017 was from pre-registry, wa actualized with monitoring data #planted trees is because the data use in 2017 are contracted data and not real planted trees, we actualised data
Cauca		287	170 588	266	170 000	
Narino		234	197 471	1 767	200 000	
2015		474	274 822	495	276 228	Area data: the difference is because we actualised the data base with the more relevant monitoring, so teh data of 2021 is more precise. Continuous improvement lead us to be conservator in terms of area #planted trees: in 2017 the pre-registry data have been used, in 2021 we actualised with the real #delivered trees
Cauca		205	142 443	199	141 572	
Narino		269	132 379	296	134 656	
2014		70	83 334	59	82 835	Area data: we have consolidated data of 2014 with th emore relevant monitoring #planted trees: in 2017 the pre-registry data have been used, in 2021 we actualised with the real #delivered trees
Cauca		70	83 334	59	82 835	

3.

We confirm that new instances comply with all criteria of the PDD.

3. OK, on the new version of the MR, when the PDD is mentioned it's specified the section of the PDD of the reference.

4. OK decimals were included in the new version of the MR

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VCS_MR_PUR_Colombia_3.0_.docx

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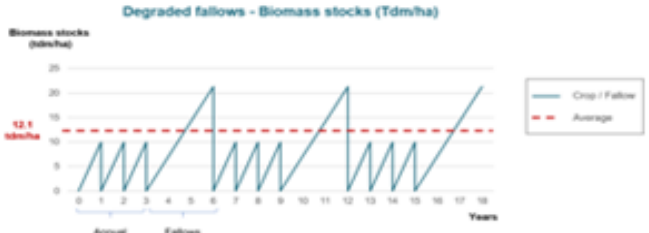
Date: 14/12/2021

The information has been updated in accordance with the VCS template and it is deemed correct.

Therefore, CAR 02 is closed.

CAR ID:	03	Date: 22/10/2021
Description of CAR		
The following mistakes have been found with regards to the section 4.2., data and parameters available at validation: 1. It is stated that the data CO2 Fraction was obtained from CDM AR-TOOL 14, but actually this value does not provide from the mentioned tool. 2. The data ABG biomass – pasture is reported as 6, but the data in the PDD and the excel is different. 3. Regarding Biomass parameters: Biomass – degraded fallow is reported as 12.3 but this value is not found in the PDD. Also the data Biomass – other degraded land, reported as 21.3 in the MR but not found in the PDD where it has been accepted.		
Country participant response		Date: 24/11/2021

1. OK source of data was changed in the new version of MR
 2. OK figure was changed to 6.2 tdm / ha in the new version of MR
 3. OK, degraded land value was changed to 19.2 according to PDD table 5.
- Concerning the “other degraded land” value, it is not in the PDD but was validated during validation in excel files as a conservative value as explained in the table below:

Degraded Fallows		
ABG biomass Annual growth during regeneration	Value:	5 tdm/ha/yr
	Reference:	IPCC, GPG for LULUCF, Table 3A.1.5: Average annual increment in aboveground biomass in natural regeneration by broad category. Tropical/sub-tropical forest, Montane Moist, America <20 years
Justification of value:	Data considered is 7 tdm/ha/yr, corresponding to the average annual increment in aboveground biomass in natural regeneration. In our case, degraded fallows are in average 3-year old, which gives the final value of 21 tdm/ha.	
Root-to-Shoot ratio	Value:	0.42
	Reference:	IPCC, GPG for LULUCF, Table 3A.1.8: Average belowground to aboveground biomass ratio (root-shoot ratio, r) in natural regeneration by broad category. Secondary tropical/sub-tropical forest. Aboveground biomass < 125 tdm/ha.
Justification of value:	-	
Annual Crops: Total biomass	Value:	10 tdm
	Reference:	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 4 AFOLU, Chapter 6 Grassland, Chapter 6.3.1.2, choice of emission removal factors. "For Cropland containing annual crops: Use default of 4.7 tons of carbon ha-1 or 10 tons of dry matter ha-1."
Justification of the Value	-	
Baseline non-tree biomass – Degraded fallows	12.1 tCO2/ha	
Justification	As such lands are cyclically used as annual crops and fallows (see diagram below), the final value is calculated as the average between 3 years of annual crops (10 tdm/ha) and 3-year fallow lands growth (7.1, 14.2, 21.3 tdm/ha): 12.1 tdm/ha. 	

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VCS_MR_PUR_Colombia_3.0.docx

VVB Assessment

Date: 14/12/2021

The reference has been changed, the values have been modified and are deemed corrected. Also, the section has been updated and is deemed corrected.

Therefore, the CAR 03 is closed.

CAR ID:	04	Date: 22/10/2021
Description of CAR		
For the excel spreadsheet, correct the following: - In the sheet “4_tree GHGs removals”, the area planted, column x, does not coincide with the data of, column DI, surface considered ha, for the 3 excels, Cauca, CFP, Narino. - In the sheet “4_tree GHGs removals” the data from column DT it is not considered in the calculation when the model is not 1 for the 3 excels, Cauca, CFP, Narino. - The sheet “4_tree GHG removal” the sum of the column NK is 2484, but in the sheet “5_summary per category” column d, the sum is D7, the same issue happens for the sum of column D8. - In accordance with the VERRA standard the conservative principle shall be used, for the sheet “4_tree GHG removal” for instance the cauca spreadsheet, the column KN the data is 1,37, but the results is round up to 2, in the column NM the results 0,51 but the calculation is made with 1. - For the section baseline emissions 5.2 and section 5.3, Quantify project emissions and/or removals providing sufficient information to allow the reader to reproduce the calculation, the formula of column EB, sheet “4_tree GHG removal” it is not explained. - For the sheet “biomass inventories 2021_MAI estimations”, the sheet carbon calculation, column d, the hectares are not the same as section 1.1. of the MR.		
Country participant response		Date: 24/11/2021
-1. In the sheet “4_tree GHGs removals”, the area planted, column x, does not coincide the data of, column DI, surface considered ha, for the 3 excels, Cauca, CFP, Narino. <i>Surface considered is a calculated value using the planted area data for model 2, 3 and 4 and using the “distance planted” in case of model 1. In case of model 1 the distance planted is converted into area equivalent using an assumption of a line width of 5m.</i>		

*The formula used for this calculated data is available in spreadsheet "2_Project database" in column DI: =IFERROR(IF(\$E7="Model 1";(\$X7*5)/10000;\$W7);"n.a.")*

-2. In the sheet "4_tree GHGs removals" the data from column DT it is not considered in the calculation when the model is not 1 for the 3 excels, Cauca, CFP, Narino.

Indeed, column DT is used in the calculation only for model 2, 3 and 4, through the use of column DV "surface considered" (see explanation above). When model 1 column DS is used instead.

-6. For the sheet "biomass inventories 2021_MAI estimations", the sheet carbon calculation, column d, the hectares are not the same as section 1.1. of the MR.

The gap is due to the treatment of Models 2B in the calculation. Model 2B is composed of a model 2A (intra-parcelar planting) and a model 1 line planting on the perimeter of the parcel. Models 2B have been integrated in section 1.1 of MR with the total area of the parcel, but in the excel calculation by strata M2B parcels are accounted twice: once as a model 2A (surface of the parcel), and once as a model 1 (surface equivalent of the lines planted on the perimeter).

This split of M2B into M2A + M1 was done because biomass inventory protocol is not the same for lines VS surface planted.

Documentation provided by the Country Participant

VCS_MR_PUR_Colombia_3.0_Vsent01022022.docx

PURSD28_allometric above 5cm

PURSD29_allometric below 5cm

VVB Assessment

Date: 14/12/2021

The explanation for the calculation of model 2b, that is split into model M2A and M1, it is correct.

CAR 4 is therefore closed.

CAR ID:

05

Date: 22/10/2021

Description of CAR

Some errors have been found in the header 5, <i>quantification of GHG emissions reductions and removals</i>: 1. It is stated within section 5.2, that baselines emissions are described in the PDD. After this statement a table is shown in the MR but that table does not appear in the PDD. 2. In this section, but also in the rest of the document, the quality of some of the tables is not proper. 3. Within section 5.5 it is stated that the number of VCUs to be issued before the buffer is 54.728, but VCUs are the unit issued after the buffer discount. Also, in this section the buffer pool allocation does not have units.	
Country participant response	Date: 24/11/2021
1. <i>The table does not appear in the PDD because it was not available at validation. We just say we calculated this table using the stratification method validated in the PDD. Wording was precise in the new version of MR in order to avoid misunderstanding.</i> 2. <i>The quality of the tables in the MR was improved.</i> 3. <i>OK. We rephrased the MR section accordingly.</i>	
Documentation provided by the Country Participant	
VCS_MR_PUR_Colombia_5.0.docx	
VVB Assessment	Date: 08/07/2022
1. The information provided is deemed clear and correct, the section has been modified and it is deemed corrected. Therefore CAR 05 is closed	

CAR ID:	06	Date: 22/10/2021
Description of CAR		
Regarding the NPRR report, the following issues shall be corrected: - The template instructions have not been deleted. - Within Natural Risks, in the section of risk of pest and disease, the box of significance is not filled out properly.		

- Correct in the spreadsheet of Risk Report Calculation Tool, the total natural risk and the overall risk rating are calculated wrong and the total number of credits to be deposited in the AFOLU pooled are not correct.	
Country participant response	Date: DD/MM/YYYY
- <i>OK, template instructions have been deleted</i> - <i>OK, The box of significance have been filled properly in the section of risk of pest and disease</i> - <i>OK, The spreadsheet of Risk Calculation have been corrected</i>	
Documentation provided by the Country Participant	
VCS_nonpermanencerisk_report_PUR_Colombia_2.0_tbsent	
VVB Assessment	Date: 14/12/2021
1. The template instructions have been deleted and it is deemed corrected. 2. The section has been updated and it is considered corrected. 3. Please, provide the updated risk report calculation. 4. New issue: the index of the non-permanence risk report document is wrong. Therefore, the CAR 06 is not closed	
Country participant response	Date: 20/01/2022
1. OK 2. OK 3. OK, the risk report calculation have been provided 4. OK, the index has been actualized	
Documentation provided by the Country Participant	
VCS_nonpermanencerisk_calculation_PUR_Colombia_1.0	
VCS_nonpermanencerisk_report_PUR_Colombia_3.0	
VVB Assessment	Date: 22/02/2022

The correct information has been provided, CAR 6 is closed.