

# VERIFICATION REPORT FOR THE PROJECT FRESH BREEZE AFFORESTATION PROJECT

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**Summary:**

AENOR started the verification process in November 2015 when the project proponent submitted the Monitoring Report and supporting documents such as the calculation spreadsheets and the risk assessment of non-permanence. The field visit took place on November 23-28, 2015 in which the auditors visited the plantations, interviewed key stakeholders, staff and other related experts, and also reviewed the PD, and other supporting documents. The purpose of the visit assessment was to determine the conformance of the project with respect to the VCS Version 3.5 Standard, the validated Monitoring Plan and the validated PD. The scope of the verification is to assess the conformance of validated project, once implemented, with the VCS requirements and requirements in the validated P.D.

The auditor submitted to the PP a final verification report version 1 in which 6 CARs and 4 CLs were reported (see verification protocol in appendix 2 of the verification report). However, all these issues raised during the verification process were appropriately closed by means of corrections, more clear explanations and more evidence.

Thus, once all issues detected were appropriately solved, 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 net GHG emissions reductions or removals, 245,652 CO<sub>2</sub> equivalent, over the monitoring period, July 1, 2009 to December 22, 2014 has been quantified in accordance with VCS rules.

**Table of Contents**

1 Introduction ..... 4

    1.1 Objective ..... 4

    1.2 Scope and Criteria ..... 4

    1.3 Level of Assurance..... 4

    1.4 Summary Description of the Project ..... 5

2 Verification Process ..... 5

    2.1 Method and Criteria..... 5

    2.2 Document Review ..... 5

    2.3 Interviews ..... 6

    2.4 Site Inspections ..... 7

    2.5 Resolution of Findings..... 7

        2.5.1 Forward Action Requests ..... 7

    2.6 Eligibility for Validation Activities ..... 7

3 Validation Findings..... 7

    3.1 Participation under Other GHG Programs ..... 7

    3.2 Methodology Deviations ..... 7

    3.3 Project Description Deviations ..... 7

    3.4 Grouped Project ..... 10

4 Verification Findings..... 10

    4.1 Project Implementation Status ..... 10

    4.2 Accuracy of GHG Emission Reduction and Removal Calculations ..... 12

    4.3 Quality of Evidence to Determine GHG Emission Reductions and Removals ..... 17

    4.4 Non-Permanence Risk Analysis..... 18

5 Verification conclusion ..... 27

APPENDIX 1: List of Evidence..... 29

APPENDIX 2: Verification protocol ..... 29

## 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, including the monitoring plan.
- The extent to which GHG emission reductions and removals reported in the monitoring report are materially accurate.

### 1.2 Scope and Criteria

**Verification Scope:** The scope of the verification audit is to verify the removals of project activity in Mexico against the Verified Carbon Standard, the identified methodology and the validated PD throughout the monitoring period from July 1 2009 to December 22 2014.

The objectives of this audit included a verification of the projects calculated removals 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.

**Standard criteria:** Criteria from the following documents were used to assess this project:

- Verified Carbon Standard Program Guide v.3.5
- Verified Carbon Standard v.3.5
- Verified Carbon Standard Agriculture, Forestry and Other Land Use (AFOLU) Requirements v.3.4
- Verified Carbon Standard AFOLU Non-Permanence Risk Tool v.3.2
- CDM Methodology AR-ACM0003 v1.0

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 assertion is materially correct and is a fair representation of the GHG data and information.

All the revisions of the verification report before being submitted to the client were subjected to an independent internal technical review 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 CDM/VCS validation and verification.

Name	Position in the team
José Luis Fuentes	Lead verifier
Manuel García Rosell	Verifier
Alfonso Medrano	Technical reviewer

## 1.4 Summary Description of the Project

The Fresh Breeze afforestation grouped project covered at validation 4,269.82, hectares of land traditionally dedicated to cattle on which forest plantations for obtaining high-value, long-lived timber products and for sequestering large amounts of carbon dioxide from the atmosphere will be established. The project activity is established in the states of Tabasco, Nayarit and Chiapas, Mexico. For this monitoring period the area represents 3,958.67 hectares according to GIS information and reports of plantations. No new instances were added to the project.

The project considers plantations of *Tectona grandis* in 9 strata. These strata were defined based on plantation’s year and seed quality. For this monitoring period the GHG removals generated by the project activity are equal to 245,652 tons of CO<sub>2</sub>-eq (after risk tool).

The verification of this monitoring period was requested by PROTEAK. The audit of the Monitoring Report, supporting documentation, field visit, and interviews has provided AENOR with the evidence to determine conformance to the VCS standard with a reasonable assurance.

## 2 VERIFICATION PROCESS

### 2.1 Method and Criteria

The verification was performed through a combination of document review, interviews and communications with relevant personnel and on-site inspections. The project was assessed for conformance to the criteria described in Section 1.2 of this report. As discussed in this report, findings were issued to ensure that the project was in full conformance to all requirements.

### 2.2 Document Review

The monitoring report, project description, and supporting documentation were carefully reviewed for conformance to the verification criteria and consistency with the Project Description. The audit team examined plot data sheets; spreadsheets used to enter and compile the plot data and reproduced the removal spreadsheet calculations to obtain same results than those appearing in the Monitoring report. The Non-Permanence Risk Report for this monitoring period was assessed, as well.

Appendix 1 to this report details the list of documents provided by PPs and reviewed by AENOR during the process.

## 2.3 Interviews

The list of the interviewed people is following detailed. The people interviewed were those directly affected or involved in the project activity, and in some cases were just indirectly affected.

Name	Title
Gastón Mauvezin	General Manager PROTEAK UNO S.A.B de C.V
Kristina Díaz	Social Responsibility and Environmental Manager PROTEAK UNO S.A.B de C.V
Jurgen Stock	Forestry Manager PROTEAK UNO S.A.B de C.V
Ingrid Cerwinka	Planning and Institutional Relationships Manager PROTEAK UNO S.A.B de C.V
Raul Rodriguez	Teak Manager PROTEAK UNO S.A.B de C.V
Ramon Aguilar	Research Manager PROTEAK UNO S.A.B de C.V
Frank Mario Falco	Forestry audits and planning Manager PROTEAK UNO S.A.B de C.V
Moises González	La Estrella Manager PROTEAK UNO S.A.B de C.V
Alejandro Araizaga	CO2 Solutions
Raymundo López	Technician by PROTEAK UNO S.A.B de C.V

## 2.4 Site Inspections

Site inspections were conducted on November 23-28, 2015. The objectives of the site visit were to assess the accuracy of the Monitoring Report including project implementation status, to assess conformance to the monitoring plan, to assess whether project activities are being implemented according to the project description, and to assess the quality of field data collection techniques.

## 2.5 Resolution of Findings

A total number of 6 CARs and 4 CLs were raised during this verification process.

All findings issued by the AENOR audit team during the verification process have been closed. In accordance with Section 5.3.6 of the VCS Standard, all findings issued during the verification process, and the inputs for their closure, are described in Appendix 2.

### 2.5.1 Forward Action Requests

No Forward Action Requests were raised to the PPs during this verification process.

## 2.6 Eligibility for Validation Activities

AENOR has not undertaken validation activities as part of the verification of this project as no new instances were added to the project during the monitoring period. However, AENOR holds accreditation for validation for the relevant sectoral scope 14 under which this project activity is classified.

## 3 VALIDATION FINDINGS

### 3.1 Participation under Other GHG Programs

The project was not validated under another GHG program; therefore there are no Gap Validation findings to report.

The Project Description was subject to validation under VCS Standard and was found to conform to the VCS requirements.

As the monitoring report states in its section 2.1, all discrete areas under the project boundary of the registered P.D were eligible to participate under the VCS program as an ARR project activity.

### 3.2 Methodology Deviations

No deviations were detected during this monitoring period.

### 3.3 Project Description Deviations

Project description deviations are detailed in an appropriate way in section 2.2 of the monitoring report.

AENOR carried out a deep review of them in order to assess their validity and compliance with the VCS requirements. The AENOR assessment is described below.

**The first deviation** is related to the way to obtain the height of trees. AENOR verified during site inspections that the previous method consisted in direct measurements during field inventory. Results were imprecise with high uncertainties due to the low precision method. In order to improve the accuracy of data and taking into account the straight relationship between the DBH and Height demonstrated by a technical report by the Chapingo University in Mexico provided by Proteak, PP used a data base to develop a regression equation and achieve heights from DBH measured values.

PPs has provided to AENOR with the procedure "Valuation of biological assets". This document contains the 3000 data set and calculations to develop the regression equation. Data package is from similar Teak's plantations in Mexico owned by Proteak. PP has followed the tool to demonstrate the appropriateness of allometric equations for estimation of the AGB in AR/CDM project activities. This tool requires to use at least 30 sample trees which is well covered by the 3000 data set used by Proteak and a coefficient of determination (R<sup>2</sup>) no less than 0.85, in this case, the R<sup>2</sup>=0.86, then, correct and acceptable.

The determined equation is the following:

$$y=-0,0077x^2+0,8971x+0,2663; R^2 = 0,8602 , \text{ where } x=\text{DBH}$$

Moreover, project participant validated the new equation through the assessment from three different people: the General Manager, the Corporate Controller and the internal audit department and they concluded to approve the equation. This is an important issue for the company because Proteak is a Company listed in the Mexican Stock Exchange, then, it is searching quality and reliability to convey trust to the investors.

AENOR considers this change improves accuracy and exhaustiveness in order to reduce bias, variability and uncertainties as 2006 IPCC GL recommends, then, it is accepted.

This deviation is well explained in the monitoring report and supported by appropriate evidence. Proteak assessed the impact of this change in the applicability of the methodology, additionality and the appropriateness of the baseline scenario. Proteak concluded that neither additionality nor baseline scenario and applicability of methodology are impacted.

**The second deviation** is related to the plot size. For the validation the PP considered plot sizes of 0.1 ha. This size was established considering the examples in the methodology because PP did not have another better criterion. However, the PP has developed a procedure for a better valuation of biological assets. This procedure gathers a new plot size, but using another criterion. The size is defined using circle plots with a radio of 10 m, which means that the area per plot is 0.0314 ha.

This new size plot has been applied in field inventory. Data set provided to AENOR from inventories confirms this issue, but also it was confirmed during inspections in site visit. The results of inventories show that number of plots measured has been higher than number of plots required to measure biomass stocks due to the changes in the plot size and the intensity criterion.

AENOR deems this deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario.

**The third deviation** refers to the first thinning scheduled. According to the PDD, Proteak established the first thinning would happen in the year 7, however, AENOR detected in calculations and other documents provided that some plantations made the first thinning during the third year.

As a result of an issue raised to Proteak, PP included this deviation in the M.R and justified it. According to the Forestry Department of Proteak which submitted to AENOR the forestry management Manual for *Tectona grandis*, this forestry practice is used in order to improve the growth of better trees avoiding the competence with others. These first harvests are considered a “liberation thinning”, focus in the optimum growth of trees instead of harvesting wood, in fact, the wood has no commercial value due to its diameter.

AENOR deems this deviation does not impact the applicability conditions of the methodology (harvested wood are appropriately discounted in biomass stocks), additionality (the additionality of the project was demonstrated base on common practice analysis) or appropriateness of baseline scenario.

**The last deviation** refers to minor changes in the plantation area of some instances, changes in the schedule plantation of Pocito and Tintal instances and adjusts to the actual project implementation status as a result of verifications by the AENOR team. Affected instances are the following:

- Don Justi: Planted 60.25 ha instead 67.00 ha
- El Milagro: Planted 93.34 ha instead 96.00 ha
- El Rincon: Planted 74.96 ha instead 75.00 ha
- La Estrella 2011: Planted 86.28 ha instead 86.29 ha
- Piedra Santa: Planted 73.86 ha instead 73.98 ha.
- Pocito (La Reforma) described as one plantation of 528.29 ha in the year 2009, the plantation program was rescheduling for the following: Pocito (La Reforma) 2009 (377.35 ha), Pocito (La Reforma) 2010 (42.24 ha) and Pocito (La Reforma) 2011 (80.41 ha).
- San Agustin 2011: Planted 54.19 ha instead 54.86 ha.
- San Juan: Planted 74.04 ha instead 89.11 ha.
- San Pablo 2010: Planted 168.90 ha instead 168.94 ha.
- Santa Rosa: Planted 69.17 ha instead 93.00 ha.
- Tintal described as one plantation of 347.13 ha in the year 2009, the plantation program was rescheduling for the following: Tintal 2009 (70.00 ha), and Tintal 2010 (264.80 ha).
- Asterisco: Planted 71.18 ha instead 81.00 ha.
- El Diamante 2012: Planted 18.87 ha instead 22.00 ha.
- El Establo: Planted 33.13 ha instead 35.00 ha
- Capri: Planted 11.50 ha instead 13.50 ha.
- Piedra Santa 2013: 0 ha planted instead 160 ha.
- Capitan 2009: 0 ha planted instead 19.42 ha.
- Empeño 8: 0 ha planted instead 13.03 ha.
- Victoria 7: 0 ha planted instead 11.06 ha.

AENOR verified that changes in areas are consistent with supporting documents such as emission reductions calculations, GIS information and monitoring reports presented by Proteak to SEMARNAT.

According to explanation by Proteak, the main reason for the minor measurements settings is that some areas were rejected by the Proteak forestry team due to their low suitability for the optimum growth of Teak. Regarding to the re-schedule in Pocitos and Tintal, they were caused due to internal adjustments of the project proponents and finally, the plantations in Piedra Santa 2013, Capitán 2009, Empeño 8 2009, and Victoria 7 2009 were ruled out due to the lack of credible evidence to demonstrate their implementation.

AENOR required to the PP to re-calculate the Long Term Average determined at validation. Accordingly, this average value has changed from 5,814,537 tn CO<sub>2</sub> to 5,383,752 tn CO<sub>2</sub>.

AENOR deems this deviation does not impact the applicability conditions of the methodology, additionality or appropriateness of baseline scenario.

For validating all these deviation, AENOR required to Proteak justifications and the assessment of potential impacts over the project. This was done by the PP. AENOR deems information is enough and consistent with documents provided. AENOR deems no one of deviations impact the methodology, additionality and baseline scenario as VCS requires. Nevertheless, in opinion of AENOR these changes either improving the accuracy and exhaustiveness in order to reduce bias, variability and uncertainties as 2006 IPCC GL recommends, or improving the forestry management of the project, then, they are accepted by AENOR.

### **3.4 Grouped Project**

The project is grouped, however for this monitoring period new instances have not be included.

AENOR requested confirmation to the PP in this regard for planning de site inspections in Mexico. Proteak was clear and new instances were not added to the project boundary as M.R details. In fact, the project area planted is even lower than the registered area due to some reasons as explained above.

AENOR checked that instances verified in this monitoring period are the same than ones validated.

## **4 VERIFICATION FINDINGS**

### **4.1 Project Implementation Status**

During this verification event, AENOR has not detected project changes in the project title, its purposes and objectives. As such, the project activity accurately reflects its propose which mainly consists of promoting sustainable development through the establishment of teak plantations under the VCS requirements for ARR project. The AENOR verification team ratifies this main goal based on interviews with the key staff of Proteak and other inputs of the project design such as project longevity, management of social policies, etc.

The project is categorized as grouped though there are not new instances for the present monitoring period. No changes in the number of instances validated occurred in this verification event. No changes in ownership of the project area have been documented. This was confirmed during site visit. Nevertheless, it is important to highlight that monitoring measurements of plantation areas confirmed some differences between the area at validation (4269.82 ha) and the real area planted (3,958.67 ha). Section 2.1 of the monitoring report provides all instances with the area registered at validation and area planted. The PP used the lowest area to calculate the removals from biomass stock, then, conservative and accepted by AENOR.

The PD established at validation for the instances Pocito and Tintal, plantations in 2009 for the whole registered area, i.e, 528.29 ha and 347.13 ha, respectively, however, this schedule changed and works occurred as follows:

Pocito: Plantation in 2009 of 377.35 ha, 42.24 ha in 2010 and 80.41 ha in 2011.

Tintal: plantation in 2009 of 71.23 ha and 275.20 ha in 2010.

The PP updated the calculation of LTA initially estimated as a result of these changes.

The project keeps the same nine strata in the project scenario. AENOR deems that stratification is correctly applied in compliance with the applicable methodology and registered PD, and that the intended stratification was implemented in support of the VCS principles of Conservativeness and Accuracy. This opinion is based on the desk review of the Monitoring Report, checks of the spreadsheet calculations, inventory data sheets, management plantations' reports and others.

There is no evidence of double counting or that the project is participating or intends to participate under another emissions trading program. Though the project is certified under FSC, this scheme does not generate carbon credits.

Related to the compliance with the Monitoring Plan, the PP made a new procedure for valuating its assets. Both, calculations and monitoring report show that plots measured per strata are higher than required by the methodology and associated tools (tool to calculate the number of sample plots for measurements within A/R CDM project activities) for the precision level required and standard deviation of biomass stocks determined.

For the following instances belonging to strata 9: Piedra Santa; El Abuelo; Zombie; El Establo and Capri, the PP did sample nothing for the present monitoring period, then, removals from AGB and BGB biomass were not claimed in these cases.

Regarding leakage, they remain to be zero. No agriculture activities were registered in the baseline scenario.

Thus, AENOR deems that project has been implemented as described in the project description document except for the deviations commented and analyzed.

## 4.2 Accuracy of GHG Emission Reduction and Removal Calculations

### 4.2.1 Calculation of baseline removals.

Section 4.1 of the monitoring report provides information on baseline removals.

The extensive cattle grazing with no pasture improvement was identified as baseline scenario for the proposed project activity.

The continuation of this situation without changes for more than 20 years was identified and allows in accordance with IPCC Good Practice Guidance for Land Use, Land Use Change and Forestry (2003) that net GHG removals by sinks in the baseline equals zero.

### 4.2.2 Calculation of project emissions.

The project area was stratified in 9 strata as the monitoring report details. The stratification is consistent with information validated and it was based on the plantation's year and the quality of seed.

To calculate the actual GHG removals by biomass stocks, Proteak used the equation,  $\Delta C_{ACTUAL,t} = \Delta C_{P,t} - GHG_{E,t}$ . AENOR verified that this calculation is in compliance with the applicable methodology AR-ACM0003 v1.0.0, where:

$\Delta C_{ACTUAL,t}$  = Actual net GHG removals by sinks, in year t; tCO<sub>2-e</sub>

$\Delta C_{P,t}$  = Change in the carbon stocks in project, occurring in the selected carbon pools, in year t; tCO<sub>2-e</sub>

$GHG_{E,t}$  = Increase in non-CO<sub>2</sub> GHG emissions within the project boundary as a result of the implementation of the A/R project activity, in year t, as estimated in the tool "Estimation of non-CO<sub>2</sub> GHG emissions resulting from burning of biomass attributable to an A/R CDM project activity"; tCO<sub>2-e</sub>

The biomass burning is not used in the land preparation activities then  $GHG_{E,t} = 0$ . This approach is based on the forestry management plan approved by the project proponent to manage the project.

Changes in the carbon stocks in project, occurring in the selected carbon pools in year  $t$  are calculated by Proteak according to the following equation from the applicable methodology.

$$\Delta C_{P,t} = \Delta C_{TREE\_PROJ,t} + \Delta C_{SHRUB\_PROJ,t} + \Delta C_{DW\_PROJ,t} + \Delta C_{LI\_PROJ,t} + \Delta SOC_{AL,t}$$

Where:

$\Delta C_{P,t}$  = Change in the carbon stocks in project, occurring in the selected carbon pools, in year  $t$ ;  $tCO_{2-e}$

$\Delta C_{TREE\_PROJ,t}$  = Change in carbon stock in tree biomass in project in year  $t$ , as estimated in the tool “Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities”;  $tCO_{2-e}$

$\Delta C_{SHRUB\_PROJ,t}$  = Change in carbon stock in shrub biomass in project in year  $t$ , as estimated in the tool “Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities”;  $tCO_{2-e}$

$\Delta C_{DW\_PROJ,t}$  = Change in carbon stock in dead wood in project in year  $t$ , as estimated in the tool “Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities”;  $tCO_{2-e}$

$\Delta C_{LI\_PROJ,t}$  = Change in carbon stock in litter in project in year  $t$ , as estimated in the tool “Estimation of carbon stocks due to the implementation of A/R CDM project activities”, as estimated in the same tool;  $tCO_{2-e}$

$\Delta SOC_{AL,t}$  = Change in carbon stock in SOC in project, in year  $t$ , in areas of land meeting the applicability conditions of the tool “Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities”, as estimated in the same tool;  $tCO_{2-e}$ .

From the above equation, the applied carbon pools to the project are:  $\Delta C_{TREE\_PROJ,t}$  and  $\Delta SOC_{AL,t}$ . This criterion applied in calculations is consistent with documents validated.

On the other hand, AENOR verified that carbon stock in tree biomass were just calculated for instances with field inventories for the specific monitoring period. This meant that plantations in 2013 of Piedra Santa, El Establo, Zombie, Abuelo, and Capri were not accounted to claim VCU for this specific period.

To calculate the  $\Delta C_{TREE\_PROJ,t}$  the tool “Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities” is applied as the methodology required. When project was validated the BEF technique and stock change method were selected to calculate the biomass stocks. AENOR verified these criteria have been used in the same way for verification activities. Thereby, the following formula has been applied:

$$B_{TREE,j,p,i,t} = V_{TREE,j,p,i,t} \times D_j \times BEF_{2,j} \times (1 + R_j)$$

Where,

$B_{TREE,j,p,i,t}$  = Biomass of trees of species  $j$  in sample plot  $p$  of stratum  $i$  at a point of time in year  $t$ ,  $t$  dry matter (d.m.)

$V_{TREE,j,p,i,t}$  = Stem volume of trees species  $j$  in sample plot  $p$  of stratum  $i$  at a point of time in year  $t$ , estimated by using the tree dimension(s) as entry data into a volume table or volume equation;  $m^3$

$D_j$  = Density (overbark) of tree species  $j$ ;  $t.d.m. m^{-3}$

$BEF_{2,j}$  = Biomass expansion factor for conversion of stem biomass to above-ground tree biomass, for tree species  $j$ ; dimensionless

$R_j$  = Root-shoot ratio for tree species  $j$ ; dimensionless

$j = 1,2,3, \dots$  Tree species in plot  $p$

$p = 1,2,3, \dots$  Sample plots in stratum  $i$

$i = 1,2,3, \dots$  Tree biomass estimation strata within the project boundary

t = 1,2,3, .... Years counted from the start of the project activity

AENOR has verified that data and parameters fixed at validation were appropriately used at verification in both the monitoring report and calculation. They are list in section 3.1 of the monitoring report and below..

Likewise, Proteak used the Petmark and Sahunalu equations to calculate the biomass volume as validated during the validation process of the project. AENOR reproduced the calculation to reach the same results. The equations are:

For Stem biomass (WS) :  $\text{Log WS} = 0.9797 \log (\text{D2H}) - 1.6902$ ;  $r^2 = 0.9930$   
 For Branch biomass (WB) :  $\text{Log WB} = 1.0605 \log (\text{D2H}) - 2.6326$ ;  $r^2 = 0.9567$   
 For Leaf biomass (WL) :  $\text{Log WL} = 0.7088 \log (\text{D2H}) - 1.7383$ ;  $r^2 = 0.8523$

Carbon stocks in above-ground and below-ground biomass per hectare were estimated on the basis of field measurements in the 2938 sample plots used for this monitoring period. The sampling methods are described in the Monitoring report and were confirmed by AENOR in the field to be adequately followed. Excels provided by Proteak show in cells the BEF equation described above using as input the values of  $V_{\text{tree},j,p,i,t}$  determined with the equations by Petmark and Sahunalu. Proteak provided all data inventoried for each instance along with its biomass stock calculation. The density plantation of instances was updated according to field data and the LTA recalculated based on new area strata.

AENOR checked and reproduced calculations to validate this matter and deems the approaches followed correct and appropriate as they are consistent with monitoring plan, PDD validated and applicable methodology..

On field, AENOR team verified that monitoring crews took the diameter at breast height (DBH) at 1.3 m above the graft area of all trees in the sample plots. These heights are the inputs to calculate the heights by means of the new equation developed by Proteak:

$$y = -0,0077x^2 + 0,8971x + 0,2663, \text{ where } x = \text{DBH}$$

As explained in project deviation section of this report, AENOR considers this change improves accuracy and exhaustiveness in order to reduce bias, variability and uncertainties as 2006 IPCC GL recommends, then, it is accepted.

To calculate carbon stocks in soil, AENOR also verified that formulae applied were the same than those validated like the values of fixed parameters, then correct and appropriate. This information is provided in the monitoring report and it is also possible to reproduce the calculations in the spreadsheets provided.

To estimate the changes in tree biomass, PP measured 2938 sample plots to calculate carbon stocks. This number represents a 10.03% more than really needed (289 plots but rounded up to 293 sample plots) according to requirements of the tool to calculate the number of sample plots for measurements with AR-CDM project activities. This approach is an internal requirement of the

Proteak Staff because they seek to have the most accurate estimation of their assets due to the company is active in the Mexican Stock Exchange.

As a continuation of the above explanation, it is important to set out that plots required for the nine strata are 41, however they measured 19. The reason is that 41 plots were calculated considering all instances in the strata 9, however only two instances were inventoried for the present monitoring period, then, the 19 sample plots selected were over these two instances inventoried not the completed strata, therefore, the number is enough for the instances included in calculations.

AENOR has reproduced calculations and verified that equations and . assumptions are deemed correct and appropriate.

The above ground biomass is converted to below ground biomass using a default value of 0.31 which is also referenced in the monitoring report and already validated.

Total biomass is summed and converted to the carbon fraction of dry matter using a default factor of 0.47 which is appropriate and already validated.

Project participants have provided spreadsheets of the changes in carbon stocks for all farms, by year plantation and clone type. These excel sheets contain data collected from the field inventory activities carried outs in all plots.

**4.2.3 Calculation of Leakage**

the applicable methodology considers the Leakage due to the displacement of agricultural activities estimated in the tool “Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R project activity”; t CO<sub>2</sub>-e . However, all lands under the project boundary are grassland, no agriculture activities are located, then, leakage is zero. This scenario was validated for the present monitoring instances.

On the other hand, the AFOLU requirements state that the Methodologies shall establish procedures to quantify all significant sources of leakage. The three sources are: Market leakage, Activity-shifting leakage and Ecological leakage. The project was affected by none of them.

Then, reviewed the baseline emissions/removals, the project emissions/removals and leakage, the methodology determines the **Net Anthropogenic GHG Removals by Sinks** according to the equation:

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

Year	Baseline emissions or removals (tCO <sub>2</sub> e)	Project emissions or removals (tCO <sub>2</sub> e)	Leakage emissions (tCO <sub>2</sub> e)	Net GHG emission reductions or removals
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				(tCO <sub>2</sub> e)
2009	0	4,378	0	4,378
2010	0	26,962	0	26,962
2011	0	51,897	0	51,897
2012	0	67,155	0	67,155
2013	0	68,469	0	68,469
2014	0	66,781	0	66,781
<b>Total</b>	<b>0</b>	<b>285,642</b>	<b>0</b>	<b>285,642</b>

Considering the overall risk rating of 14% to be deposited as buffer, the resulting amount of VCUs to be issued is

Year	Net GHG emission reductions or removals (tCO <sub>2</sub> e) <b>after risk tool</b>	AFOLU pooled buffer account
2009	3,765	612,90
2010	23,187	3.774,64
2011	44,632	7.265,63
2012	57,753	9.401,66
2013	58,884	9.585,71
2014	57,432	9.349,35
<b>Total</b>	<b>245,652</b>	<b>39,990 (round up)</b>

The tool to calculate the carbon stocks in trees requires determining the maximum allowable relative error of the mean tree biomass. For the stock change method, this error is calculated as follows:

$$RE_{\max} = u_{bTREE,t}$$

Where:

RE<sub>max</sub> = Maximum relative error, %

U<sub>bTREE,t</sub> = Uncertainty of the mean tree carbon per hectare within the project boundary at time t; %.

T = 1, 2, 3 ... years counted from the start of the A/R CDM project activity

AENOR verified the error was calculated by Proteak and done correctly it. According to calculations the relative error is 0.03%, therefore, lower than 10%, thus, the deduction rate is 0%.

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 them directly from the data sources (field measurements). Formulae used are in compliance with monitoring plan, P.D and methodology like the default values used to determine the parameters. Thus, the net amount of VCUs to be issued is accurate and realistic. Assumptions used by PP at verification were appropriately cross-checked and assessed with requested evidence.. New approaches or assumptions used at verification are detailed in project deviation section. In opinion of AENOR they are appropriately treated by PP in the monitoring report. They are correct and fulfil with VCS requirements.

In order to calculate the above terms, the monitoring report details the data and parameters used during the verification process.

Data and parameters available at validation were: Dj (default value of 0.485 t.d.m/m<sup>3</sup>); BEF<sub>2</sub>=1.3; R<sub>j</sub>=0.31; SOC<sub>ref</sub>=44 t C/ha; Fin=1; fMG=0.7; fLU=1; volume equation. AENOR cross-checked with the validated PDD and spreadsheet calculations that these data values and parameters used in the monitoring report are correct and match with values determined at validation. They are appropriately used in equations.

Likewise, data and parameters monitored to calculate the VCUs to be issued were Ap,<sub>i</sub>; DBH; H; T and volume equations. These ones match with the PDD validated AENOR verified that data values detailed in the monitoring report for the monitoring parameters are correct and consistent with data in spreadsheet calculations, assumptions and approaches used by PP.

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

#### 4.3 Quality of Evidence to Determine GHG Emission Reductions and Removals

The actual GHG removals were calculated applying the methodology and associated tools as well as the procedure for the valuation of biological assets.

This procedure establishes two types of field inventory: intensive and less intensive. The first one is carried out for plantations with a first monitoring event at age of 3 years and selecting 1 plot per

ha. The less intensive measuring is used in plantations that suffering a second monitoring event at least at 5 years, selecting 1 plot per 5 ha.

AENOR checked during site visit that monitoring crew members were trained before the monitoring event. The implementation of the inventory techniques was part of the training sessions. For measuring the diameter at breast height, the monitoring crews used diametric tapes.

Apart from the tape, other equipment is used in the measuring activities, mainly the GPS. All crews have one GPS in which all the project boundaries and PSP location appears as reference. Training to use the GPS is given in order to provide the crew members with the tools to make decisions in the fields.

AENOR verified that Proteak monitoring crews implemented the monitoring plan as it is established in the validated P.D and internal procedures. AENOR also could evidence during on site visit that key workers are fully involved in monitoring events (training, measuring, archiving, reporting, quality control, etc).

In this regard, although new instances were not added for this monitoring period, AENOR established a sampling plan to verify the monitoring activities in the instances. The sampling was based on the equation used by the Forest Stewardship Council (FSC) in the Certification of the Forest Management Systems. This scheme uses the formula:  $0.8 \cdot (n)^{1/2}$ , being "n" the number of instances for the 9 strata accounting for this monitoring period, then  $n=45$  instances. Thus, 5 farms were selected by cost effective criteria, weather conditions (it was rainy season during site visit) and the 9 strata. The instances visited by the AENOR team were located in the Tabasco and Chiapas States and they were: Don Justi 2011, Pocitos 2009, 2010, 2011; La Estrella 2010, El Rincon 2010 and Las Caobas 2010. Some initially selected were ruled out in situ due to bad accessibility conditions.

The visits allowed to AENOR verify the skills of monitoring crews undertaking the monitoring activities like the inventories, to cross-check the field information taken by Proteak and to verify the information in maps and GPS.

Roles and responsibilities are clearly identified in the monitoring report. QA/QC procedures were developed by Proteak for maintaining consistency and quality of field inventories over time. Additionally, field inventory data collection sheets are reviewed for consistency and accuracy.

AENOR reviewed the procedure applied by Proteak for this monitoring event and its implementation, AENOR considers that information provided is sufficiency with appropriate quality to determine the GHG removals.

#### 4.4 Non-Permanence Risk Analysis

PP has elaborated the VCS Non permanence Risk Report for the verification process according to the AFOLU Non Permanence Risk Tool v.3.2.

Below, it is explained the assessment of the non permanence risk rating determined by the project participant in the report dated on 22 March 2016 version 2 and the issues raised by AENOR to them.

Risk factor	Risk Rating	Findings and mitigation activities	Corrective Actions/Clarifications
<b>Internal Risks</b>			
Project Management: It is assessed using table 1 of the VCS AFOLU Risk Tool.	0	<p>a) Specie planted <i>Tectona Grandis</i>, is non-native but is commonly planted in Mexico. In accordance with the evidence provided is proved that the Teak adapts very well to sites with the same conditions of the project lands. Furthermore, the soil study performed by a third party has confirmed the successful adaptation of Teak plantations in Mexican lands.</p> <p>Risk rating=0 is justified.</p> <p>b) The project will require ongoing enforcement.</p> <p>Risk rating=2 is justified.</p> <p>c) In accordance with the evidence provided, Proteak management team includes individuals with significant experience in sustainable forestry. The company has more than 11 years of experience in the forestry sector.</p> <p>Risk rating=0 is justified.</p> <p>d) Manager team maintain a presence in the country. The forest management team is located less than a day of travel from the project sites.</p> <p>This, rating =0 is justified.</p> <p>e) Proteak management team works alongside with CO2 Solutions, a carbon consulting firm with experience in managing VCS projects through validation, verification and issuance of GHG credits.</p> <p>Then, it is well justified the rating=-2.</p> <p>f) Adaptive management plan in place.</p> <p>Then, the rating = 0 is correct.</p>	No Corrective Actions Requests or Clarifications
Financial viability: It is assessed using table 2 of the VCS AFOLU Risk Tool.	0	a)-d) The project proponent provided the investment analysis of the project that shows that the breakeven point is reached in year 5 since the moment to assess the risk. In this year (2020) the project cash flow turns positive.	No Corrective Actions Requests or Clarifications

		<p>Thus, the rating chosen=2 is correct.</p> <p>e)- h) Project has secured 100% of the funding needed to cover the total cash out for the plantations establishments, these funds will be provided by Proteak sale of shares. The inform of the stock exchange has been provided to the audit team.</p> <p>Thus, the rating chosen=0 is correct.</p> <p>i) Incentives from CONAFOR (National Forestry Commission) are callable, also if necessary Proteak has the option to call for more resource from the stock exchange. The rating assigned (-2) is correct.</p>	
<p>Opportunity Cost: It is assessed using table 3 of the VCS AFOLU Risk Tool.</p>	-4	<p>a)-f) Agricultural option was compared to the project activity option. The comparison of the NPV of the both scenarios shows that the NPV of the project activity is more than the 50% compared to the most profitable alternative</p> <p>Then, rating chosen =-4 is correct.</p> <p>g) Not applicable.</p> <p>Then, rating chosen = 0 is correct.</p> <p>h) The project proponent has an FSC certificate which includes a legal commitment to continue with the sustainable management of the project activity during the length of the project activity. However, due the FSC Certificate doesn't include all the project plantations is not counted as mitigated option.</p> <p>Then, rating chosen = 0 is correct.</p> <p>i) No 100 year legally binding commitment has been demonstrated.</p> <p>Then, rating chosen = 0 is correct.</p>	<p>See CAR 4 in appendix 2.</p> <p>This CAR is closed.</p>
<p>Project Longevity: It is assessed using table 4 of the VCS AFOLU Risk Tool.</p>	13.2	<p>a)-b) The project longevity in the registered PP was estimated to be is 61 years.</p> <p>However at the moment to assess the risk and considering the plantations in place the project longevity would be 54. This approach is accepted by AENOR because represents a higher risk which is discounted from VCUS claimed.</p>	<p>See CAR 4 in appendix 2.</p> <p>This CAR is closed.</p>
<p>Total internal Risk=9.2</p>			
<p>External Risks</p>			

<p>Land Tenure and resources access/impact: It shall be assessed using table 6 of the Risk Tool.</p>	<p>0</p>	<p>a) Contracts demonstrating the land property are provided. This proves ownership and resource access/use rights are held by same entity.</p> <p>d) On the other hand, there is no evidence of land disputes in the project area.</p> <p>f) No mitigation activities are proposed,</p> <p>g) Not applicable.</p> <p>Then rating =0 is correct.</p>	<p>No Corrective Actions Requests or Clarifications</p>
<p>Community engagement: It shall be assessed using table 7 of the Risk Tool.</p>	<p>0</p>	<p>a) and b): Community engagement risk has been assessed as zero because no people live in the project area and the population living within 20km of the project is no reliant on the project area for food, fodder, fuel, medicine, or building materials. This fact was evidenced during the site visit.</p> <p>Thus, rating =0 for both a) and b) bullets is correct.</p> <p>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. Then the rating=-0 is correct.</p>	<p>No Corrective Actions Requests or Clarifications</p>
<p>Political Risks: It shall be assessed using table 8 of the Risk Tool.</p>	<p>0</p>	<p>a)-e) Mexico governance score is -0.1633. This is the mean of the six indicators obtained from the World Bank Institute's Worldwide Governance indicator.i.e, between -0.32 and 0.19, then rating=2 is correct.</p> <p>AENOR verified the value and reliability of source.</p> <p>f) Mitigation: Country is implementing REDD+ Readiness or other activities, as set out in this Section 2.3.3.</p> <p>Mexico is participating in the REDD program.Then, rating= -2 is correct.</p>	<p>No Corrective Actions Requests or Clarifications</p>
<p>Total external risks=0 (negative score is not allowed)</p>			

For the Natural Risk section assessment, each State is evaluated separately since some of the information found is different for each region involved in the project activity.

<p>Natural Risks - Tabasco</p>			
<p>Fire Risk: It shall be assessed</p>	<p>LS*M=0.5</p>	<p>Significance and likelihood (LS): Fire risk</p>	<p>See CAR 4 in appendix 2.</p>

<p>using table 10 of the Risk Tool.</p>		<p>is “insignificant” meaning it would impact less than 5% of carbon stocks or would be a transient impact. The likelihood to occur is around every 10 to less than 25 years.</p> <p>To support this classification, the PP has provided documents from CONAFOR and INEGI were provided to AENOR which confirm that natural forest fires are not common practice in these moist regions and even, more uncommon in rubber plantations that implement measures to reduce this risks such as (firebreaks, etc).</p> <p>Thus, rating LS=1 is correct.</p> <p>Mitigation (M) measures have been implemented by Proteak. In case of fires Proteak has makes “guardarrayas” to prevent fires and avoiding the spread to other areas. AENOR verified during the site visit, these measures. Thus, the ratio of 0.5 is correct.</p>	<p>This CAR is closed.</p>
<p>Pest and disease outbreaks: It shall be assessed using table 10 of the Risk tool.</p>	<p>LS*M=1</p>	<p>Significance and Likelihood (LS): Risk significance is considered “insignificant and likelihood less than 10 years. INEGI data provided confirms this value. Considering this, the significance of pests can be assessed as Insignificant (less than 5% of loss of carbon stock).</p> <p>Thus LS=2 is assigned.</p> <p>Mitigation (M) measures were provided in the risk report. Some of them were verified by AENOR during the on site visit. Thus, mitigation discount applied of 0.5 is correct.</p>	<p>See CAR 4 in appendix 2.</p> <p>This CAR is closed.</p>
<p>Extreme weather: It shall be assessed using table 10 of the Risk tool.</p>	<p>LS*M=2.5</p>	<p>Significance and Likelihood (LS).</p> <p>Extreme weather risks affecting this project area include rain induced flooding and drought. To verify information for flooding, documents from CENAPRED were provided to AENOR. Flooding was assessed to Estate scale. AENOR verified that information in report is consistent with data sources.</p> <p>According to reports provided the significance is less than 5% of losses in carbon stocks, then, minor, and likelihood less than 10 years, thus, LS= 5 is assigned.</p> <p>Mitigation (M) measures were provided in the risk report. Proteak makes road works and drainage to prevent floodings. Thus, mitigation discount applied of 0.5 is correct.</p>	<p>See CAR 4 in appendix 2.</p> <p>This CAR is closed.</p>
<p>Geological risks: It shall be</p>	<p>LS*M=0.5</p>	<p>Significant and Likelihood (LS).</p>	<p>See CAR 4 in appendix 2.</p>

<p>assessed using table 10 of the Risk Tool.</p>		<p>Geological risks in Tabasco include only earthquakes. Furthermore, earthquakes in this region are unlikely to result in a significant loss to projects carbon stocks due to its very low intensity. Earthquake intensity in Tabasco is low according to the map "Seismic zones and regions" of the National Risk Atlas of México. Likelihood frequency is every 10 to less than 25 years.</p> <p>Thus, it is reasonable the value LS=1 as a result of insignificance and Likelihood "every 10-25 years".</p> <p>Mitigation (M) measures were provided in the risk report. Thus, mitigation discount applied of 0.5 is correct.</p>	<p>This CAR is closed.</p>
<p>Total Natural Risks=4.5</p>			
<p>OVERALL RISK RATING: It shall be calculated according to table 11 of the Risk Tool.</p> <p><b>OVERALL RISK RATING=9.2+0+4.5= 13.7</b></p>			

<p>Natural Risks - Nayarit</p>			
<p>Fire Risk: It shall be assessed using table 10 of the Risk Tool.</p>	<p>LS*M=0.5</p>	<p>Significance and likelihood (LS).</p> <p>Significances is "insignificant" according to records provided by INEGI and annual reports from CONAFOR and likelihood to occur every 10 to less than 25 years.</p> <p>Thus, rating LS=1 is correct.</p> <p>Mitigation (M) measures were provided in the risk report. Some of them were verified by AENOR during the on site visit. Thus, mitigation discount applied of 0.5 is correct.</p>	<p>See CAR 4 in appendix 2.</p> <p>This CAR is closed.</p>
<p>Pest and disease outbreaks: It shall be assessed using table 10 of the Risk tool.</p>	<p>LS*M=1</p>	<p>Significance and Likelihood (LS): Risk significance is considered "insignificant" and likelihood less than 10 years. To verify information, documents from INEGI were provided to AENOR and appropriately detailed in the Risk Report. AENOR verified that information in report is consistent with data sources.</p> <p>Thus LS=2 is assigned.</p> <p>Mitigation (M) measures were provided in the risk report. Some of them were verified by AENOR during the on site visit. Thus, mitigation discount applied of 0.5 is correct.</p>	<p>See CAR 4 in appendix 2.</p> <p>This CAR is closed.</p>
<p>Extreme weather: It shall be assessed using table 10 of the Risk tool.</p>	<p>LS*M=2.5</p>	<p>Significance and Likelihood (LS).</p> <p>Extreme weather risks affecting this</p>	<p>See CAR 4 in appendix 2.</p> <p>This CAR is closed.</p>

		<p>project area include rain induced flooding and drought. To verify information for flooding, documents from CENAPRED were provided to AENOR. Flooding was assessed to Estate scale. AENOR verified that information in report is consistent with data sources.</p> <p>According to reports provided the significance is less than 5% of losses in carbon stocks, then, minor, and likelihood less than 10 years, thus, LS=5 is assigned.</p> <p>Mitigation (M) measures were provided in the risk report. Some of them were verified by AENOR during the on site visit. Thus, mitigation discount applied of 0.5 is correct.</p>	
Geological risks: It shall be assessed using table 10 of the Risk Tool.	LS*M=1	<p>Significant and Likelihood (LS). Geological risks in Nayarit include only earthquakes. Furthermore, earthquakes in this region are unlikely to result in a significant loss to projects carbon stocks due to its very low intensity. Earthquake intensity in Nayarit is between low and medium according to the map "Seismic zones and regions" of the National Risk Atlas of México. Likelihood frequency is less than every 10 years</p> <p>Thus, it is reasonable the value LS=2 as a result of significance "insignificant" and Likelihood "less than every 10 years".</p> <p>Mitigation (M) measures were provided in the risk report. Thus, mitigation discount applied of 0.5 is correct.</p>	<p>See CAR 4 in appendix 2.</p> <p>This CAR is closed.</p>
Total natural Risks=5			
<p>OVERALL RISK RATING: It shall be calculated according to table 11 of the Risk Tool.</p> <p><b>OVERALL RISK RATING=9.2+0+5= 14.2</b></p>			

Natural Risks - Chiapas			
Fire Risk: It shall be assessed using table 10 of the Risk Tool.	LS*M=0.5	<p>Significance and likelihood (LS). Fire risk significance is "insignificant" meaning it would impact less than 5% of carbon stocks or would be a transient impact with likelihood to occur every 10 to less than 25 years.</p> <p>To support this classification, the PP has provided documents from CONAFOR and INEGI were provided to AENOR which confirm that natural forest fires are not common practice in these moist regions and even, more uncommon in rubber plantations that implement measures to reduce this risks such as</p>	<p>See CAR 4 in appendix 2.</p> <p>This CAR is closed.</p>

		<p>(firebreaks, etc).</p> <p>Thus, rating LS=1 is correct.</p> <p>Mitigation (M) measures were provided in the risk report. Some of them were verified by AENOR during the on site visit. Thus, mitigation discount applied of 0.5 is correct.</p>	
<p>Pest and disease outbreaks: It shall be assessed using table 10 of the Risk tool.</p>	<p>LS*M=1</p>	<p>Significance and Likelihood (LS): Risk significance is considered "insignificant and likelihood less than 10 years. To verify information, documents from CONAFOR and INEGI were provided to AENOR and appropriately detailed in the Risk Report. Diseases were assessed to Estate scale. AENOR verified that information in report is consistent with data sources.</p> <p>Thus LS=2 is assigned.</p> <p>Mitigation (M) measures were provided in the risk report. Some of them were verified by AENOR during the on site visit. Thus, mitigation discount applied of 0.5 is correct.</p>	<p>See CAR 4 in appendix 2.</p> <p>This CAR is closed.</p>
<p>Extreme weather: It shall be assessed using table 10 of the Risk tool.</p>	<p>LS*M=2.5</p>	<p>Significance and Likelihood (LS).</p> <p>Extreme weather risks affecting this project area include rain induced flooding and drought. To verify information for flooding, documents from CENAPRED were provided to AENOR. Flooding was assessed to Estate scale. AENOR verified that information in report is consistent with data sources.</p> <p>According to reports provided the significance is less than 5% of losses in carbon stocks, then, minor, and likelihood less than 10 years, thus, LS= 5 is assigned.</p> <p>Mitigation (M). A score of 0.5 is assigned as prevention measures are gathered in management plans provided and implemented in place.</p>	<p>See CAR 4 in appendix 2.</p> <p>This CAR is closed.</p>
<p>Geological risks: It shall be assessed using table 10 of the Risk Tool.</p>	<p>LS*M=1</p>	<p>Significant and Likelihood (LS). Geological risks in Chiapas include only earthquakes and volcanoes. Furthermore, earthquakes in this region are unlikely to result in a significant loss to projects carbon stocks due to its very low intensity. Earthquake intensity in Chiapas is between low and medium according to the map "Seismic zones and regions" of the National Risk Atlas of México. The volcanoes are far away from plantations, then, they are not a risk. Likelihood frequency is less than every 10 years</p>	<p>See CAR 4 in appendix 2.</p> <p>This CAR is closed.</p>

		<p>Thus, it is reasonable the value LS=2 as a result of significance “insignificant” and Likelihood “less than every 10 years”.</p> <p>Mitigation (M) measures were provided in the risk report. Thus, mitigation discount applied of 0.5 is correct.</p>	
Total natural Risks=5			
<p>OVERALL RISK RATING: It shall be calculated according to table 11 of the Risk Tool.</p> <p><b>OVERALL RISK RATING=9.2+0+5=14.2</b></p>			

In order to obtain the overall risk for the project a weighted average considering the involved hectares per state is calculated:

	Overall risk
Tabasco	13.7
Nayarit	14.2
Chiapas	14.2
<b>Overall risk</b>	<b>14</b>

The non-permanence risk deduction to be applied for the project is 14%, conservative.

AENOR has checked that information provided in the Non Permanence Risk Report is consistent with documents to support the assessment. AENOR deems that information provided is reliable and appropriate, thus, the overall risk rating is credible and realistic.

## 5 VERIFICATION CONCLUSION

AENOR has verified that the project is in compliance with the Verified Carbon Standard version 3.5 without qualifications or limitations. The project is located in Mexico in the States of Nayarit, Tabasco and Chiapas. The plantation area verified by AENOR in this monitoring period covers an area of 3,958.67 ha out of 4,269.82 ha of the project boundary at validation.

The objective of the verification audit is to verify the implementation of the validated GHG project. The data and information supporting the GHG assertion are historic in nature. The verification assessment covered the monitoring period from July 1st 2009 to December 22nd 2014, and verified that calculated removals were achieved during the monitoring period with a reasonable level of assurance.

AENOR is able to issue a positive verification opinion for the 245,652 tonnes CO<sub>2</sub>e reported in the Monitoring Report dated on April 19 2016 for the reporting period July 1 2009 to December 22 2014. Likewise, the total number of credits to be deposited in the buffer account is 39,990 t CO<sub>2</sub>e.

Year	Baseline emissions or removals (tCO <sub>2</sub> e)	Project emissions or removals (tCO <sub>2</sub> e)	Leakage emissions (tCO <sub>2</sub> e)	Net GHG emission reductions or removals (tCO <sub>2</sub> e)
2009	0	4,378	0	4,378
2010	0	26,962	0	26,962
2011	0	51,897	0	51,897
2012	0	67,155	0	67,155
2013	0	68,469	0	68,469
2014	0	66,781	0	66,781
Total	0	285,642	0	285,642

Year	Net GHG emission reductions or removals (tCO <sub>2</sub> e) <b>after risk tool</b>	AFOLU pooled buffer account
2009	3,765	612,90
2010	23,187	3.774,64
2011	44,632	7.265,63
2012	57,753	9.401,66
2013	58,884	9.585,71
2014	57,432	9.349,35
<b>Total</b>	<b>245,652</b>	39,990 (round up)

The validity of this statement is contingent upon the project’s continued implementation of the VCS version 3.5 and as further defined in the AENOR verification report dated on July 22 2016.

Madrid, July 22 2016

Luis Robles Olmos

José Luis Fuentes Pérez

Authorized Person

Verification Team Leader




**6 APPENDIX 1: LIST OF EVIDENCE PROVIDED**

1. Final version of the P.D version 3 dated on April 19 2016
2. Final validation report dated on July 9 2014
3. Methodology AR-ACM0003 v.1.0.0
4. VCS Standard v.3.5
5. AFOLU requirements v.3.4
6. The FSC certification with the code SCS-FM/COC-004302.
7. KML files
8. Follow up reports to SEMARNAT
9. Proteak Forestry Management Plan
10. Management Program of plantations
11. Maps of inventories of each plantation
12. Spreadsheet calculations of biomass stocks of all plantations
13. Procedure for valuating the biologic assets
14. Statement for changes in measuring procedure
15. Evidence of the equation to determine the Height
16. Non- Permanence Risk Report
17. Calculation of the Non- Permanence Risk Report
18. Management of Teak Plantations Evidence
19. Environmental Impact Assessment
20. Definitive Prospectus
21. Economic Model of the Forestry Scenario
22. Evidence of the "Bolsa Mexicana de Valores"

23. Program of Development of Forestry Plantations
24. Economic Model Agriculture Scenario
25. FSC Certificate
26. Government Indicator of Mexico
27. Evidence that Mexico has REDD+
28. Fire Evidence in Mexico
29. Statistic Report by INEGI for Tabasco
30. Statistic Report by INEGI for Nayarit
31. Statistic Report by INEGI for Chiapas
32. "Indice de Competitividad Forestal Estatal"
33. Data by CENAPRED in Chiapas, Tabasco and Nayarit.
34. Data by CONAFOR for natural risks in Chiapas, Tabasco and Nayarit
35. Emission reduction calculations

7 APPENDIX 2: VERIFICATION PROTOCOL

PROJECT: “FRESH BREEZE AFFORESTATION PROJECT”

VCS REFERENCE NUMBER: 1141

MONITORING AND REPORTING PERIOD:

From July 1 2009 to December 22 2014

**1<sup>st</sup> Periodic Verification**

Verification Team: José Luis Fuentes Manuel García Rosell	
Version of this Verification Protocol: 02	Date: 2016/04/21

VCS Requirement	Ref	Comments	Draft conclusion	Final conclusion
1. Project Details				
1.1 Summary Description of Project				
Is a summary description of the project provided in the Monitoring Report (MR)? Is the project implementation in line with the Monitoring Plan (MP)?	D.R I	<p>A description of the project is provided in section 1 of the Monitoring Report.</p> <p><b>CAR 1</b></p> <p><b>Information regarding the inclusion or not of new instances shall be provided.</b></p> <p><b>The area of the project boundary in the M.R is not consistent. Area of the strata 7 and 9 are included and some other strata were not included. The inconsistency was detected after the site visit and information provided by PP in interviews.</b></p> <p><b>Likewise, The data and information in section 1.1 of the M.R and different sheets of excel VER002 is confused. Section 1.1 in M.R states 4201.36 ha, however this number does not match with the total plantation area in the sheets “emission reduction”, “PD PLOT” and “SOC” of the excel VER002. This confusion also happens between sheets “plantation”, “emission reduction”, “PD PLOT” and “SOC”.</b></p> <p><b>Second paragraph of section 1.1 in the monitoring report version 1 refers to a table with plantation, however, the table is not provided.</b></p> <p>This CAR 1 is closed. Information regarding new instances has been provided in section 2.3 of the monitoring report. After AENOR reviewed the information package provided for this monitoring event, AENOR concludes that no new instances were added which is consistent with the statement of PP in M.R.</p> <p>Related to the second issue, the project participant updated the information in sections affected of the M.R. All strata validated were included however some changes in plantation’s area were detected during monitoring activities by the monitoring crews. These changes</p>	CAR 1	OK

VCS Requirement	Ref	Comments	Draft conclusion	Final conclusion
		<p>have been detailed in the status section and project deviation section. AENOR checked that all information in all documents and excels is consistent.</p> <p>Finally, table related to plantations were deleted from section 1.1.</p>		
1.2 Sectoral Scope and Project Type				
Is the sectoral scope(s) applicable to the project, the AFOLU project category and activity type (if applicable) indicated? Is the project is a grouped project?	D.R I	The sectoral scope and project type are identified in section 1.2 of the monitoring report. The project is a grouped project. Nevertheless, there are no new instances for the present monitoring period.	OK	OK
1.3 Project Proponent				
Are contact information and roles/responsibilities for the project proponent(s) provided?	D.R I	Section 1.3 of the M.R states Proteak UNO SAB de CV as project proponent for the present project activity. Moreover, its responsibilities and roles are also detailed.	OK	OK
Are the PPs same as in the MP?	D.R I	PP in the monitoring report are the same as in the monitoring plan	OK	OK
1.4 Other Entities Involved in the Project				
Are contact information and roles/responsibilities for any other project participant(s) provide?	D.R I	Section 1.4 of the M.R gathers the contact information along with the roles and responsibilities of the other participants.	OK	OK
1.5 Project Start Date				
Is the project start date, specifying the day, month and year indicated? Is the start date in line with the MP?	D.R I	According to the validated P.D the effective start date is July 1 <sup>st</sup> 2009.	OK	OK
1.6 Project Crediting Period				
Is the project crediting period indicated and in line with MP? (specifying the day, month and year for the start and end dates and the total number of years)	D.R I	<p><b>CAR 2</b></p> <p><b>The project crediting period reported in monitoring period does not match with crediting period in the validated P.D.</b></p> <p>There is an update in the information of the crediting period in the section 1.6 of the monitoring report. The crediting period registered is</p>	<b>CAR 2</b>	OK

VCS Requirement	Ref	Comments	Draft conclusion	Final conclusion
		54 years running from July 1 2009 to June 30 2062.  This CAR 2 is closed because the M.R was updated.		
<b>1.7 Project Location</b>				
Is the project location and geographic included in the MR and in line with MP?	D.R I	<b>CAR 3</b> <b>GIS package shall be provided.</b>  This CAR is closed because the PP provided the package document P116_VER_066 with the files of each plantation (KMZ file and maps).	CAR 3	OK
Is the project area provided by the PP? Is the area of the project strata provided?	D.R I	The project area has been corrected for the present monitoring period. It is provided as well as the area for each project strata as AENOR could check during the desk review.	OK	OK
Is the monitoring of project boundary carried out in line with MP and methodology?	D.R I	The project area at validation was 4,269.82 ha. However, plantation area was reduced in this monitoring period to 3,958.67 ha. Reasons are detailed in the M.R. AENOR checked GIS information and follow up reports to the Forestry Authority (SEMARNAT) and confirm information in M.R.	OK	OK
<b>1.8 Title and Reference of Methodology</b>				
Is the title, reference and version number of the methodology(s) applied to the project included in the MR and in line with MP?	D.R I	The methodology used as section 1.8 of the monitoring reports states is AR-ACM0003 v.1.0.0 which matches with information in the P.D.	OK	OK
<b>2 IMPLEMENTATION STATUS</b>				
<b>2.1 Implementation Status of the Project Activity</b>				
Describe the implementation status of the project activity(s). Is the implementation in line with the MP? (regarding planting year and species composition) Provide information regarding the operation	D.R I	Section 2.1 of the monitoring report provides a table with all instances per strata and the area registered at validation and the real area planted and confirmed during monitoring activities. In any case, the lowest area was selected to calculate the removals from biomass	<b>CL 1</b>	OK

VCS Requirement	Ref	Comments	Draft conclusion	Final conclusion
<p>of the project activity(s) during this monitoring period, including any information on events that may impact the GHG emission reductions or removals and monitoring.</p> <p>Are project activities such as forest management activities and harvesting carried out in line with the MP?</p> <p>Are any project emissions described, in particular fire or any other events leading to GHG emission during the project activity?</p>		<p>stocks.</p> <p>AENOR detected some differences regarding the plantation and harvest schedule detailed in P.D after a deep review of documents.</p> <p>Accordingly, AENOR requested the <b>CL1</b></p> <p><b>To provide further information regarding the harvest schedule carried out during the operation of plantations and more clarified information in the monitoring report related to years of plantations and areas.</b></p> <p><b>To provide evidence demonstrating plantations in place for all plantations without inventory but requesting GHG removals due to Soil Carbon.</b></p> <p><b>To provide evidence showing the control over the total plantation area for plantations with higher area than one indicated in the PDD.</b></p> <p>The PP provided in section 2.1 of the M.R the harvest schedule of each instance. This issue has been considered and treated as a project deviation and assessed its impact on the project.</p> <p>Regarding plantation’s years and areas, the PP provided further and clear information for each instance about these two issues. AENOR checked that a conservative approach was used in estimating the removals (lowest area was used) and harvests were deducted from biomass stocks.</p> <p>Regarding the evidence requested, Proteak sent to AENOR the registry of SEMARNAT for each instance affected by changes in the plantation area. These records support that Proteak is owner of the area planted also in cases where this area is higher than area registered.</p> <p>To evidence the plantations without inventory during this monitoring event Proteak provided the required follow up reports to SEMARNAT. Some mistakes were detected by AENOR cross-checking this follow up reports, then, corrections were made in calculations and rest of documents. Thus, all issues were clarified and CL1 was closed.</p>		

VCS Requirement	Ref	Comments	Draft conclusion	Final conclusion
Are all relevant licences obtained? (e.g. Environmental licences)	D.R I	All relevant licenses were obtained.	OK	OK
Are land titles and carbon rights hold by the PP? In case not all land was under control at validation, is it ensured that 100% of the land is under control of the PP?	D.R I	The project activities were implemented on private lands controlled by Proteak.  Proteak has legal rights to all emission reduction credits produced by the project. Proteak will direct all project activities related to the generation of emission reduction credits.  Documents to verify property rights were provided to AENOR during validation.	OK	OK
Is a description of leakage provided? Are leakage monitoring parameters included as per MP and methodology requirement?	D.R I	A description of leakage is provided in section 4.3 of the Monitoring report. They account zero for the current verification period.	OK	OK
Is a description of the non-permanence risk factors included?	D.R I	Once the Non permanence report was provided for the present monitoring period the following issues were detected.  <b>CAR 4</b>  <b>The clarification from VCS for the Opportunity cost shall be taken into account. Results may be less than zero.</b>  <b>The project longevity risk has been calculated for 40 lifetime years, however the registered PDD considers 61.</b>  <b>For extreme weather risk assessment in Tabasco and Chiapas the significance was reduced from minor to insignificant comparing to registered PDD. Please, provide a consistent reason for valuating this way.</b>  <b>Inconsistencies were detected in the risk value determined in the risk report and the risk spreadsheet tool.</b>  <b>Evidence shall be provided to sustain natural risks values in the three States.</b>  This CAR 4 is closed. The errata for the O.C was considered and translated to results.  The project longevity was updated. The value considered was 54 years due to project status at the moment of assessment risk instead	<b>CAR 4</b>	OK

VCS Requirement	Ref	Comments	Draft conclusion	Final conclusion
		<p>61 as registered, but accepted by AENOR because is conservative.</p> <p>Related to the third issue, risks for Chiapas and Tabasco were corrected to Minor as registered PDD.</p> <p>The final value applied to the removals of the project is 14% which corresponds to the highest one of three States, then, conservative.</p> <p>Finally, the Non Permanence Risk Report was completed with more evidence used to determine the values of natural risks. These evidence are mostly from official sources such as CENAPRED, INEGI, CONAFOR.</p>		
<b>2.2 Project Description Deviations</b>				
Has any deviations from the monitoring plan (in the MP) occurred during the monitoring period?	D.R I	<p><b>CAR 5</b></p> <p><b>The project description deviation section does not provide all information required in item 3.6.1 of VCS Standard. For each deviation, the M.R shall include requirements from VCS Standard, section 3.6.1.</b></p> <p><b>Apart from deviations considered in the first version of the M.R changes in harvest schedule and changes in plantation schedule and area shall be also included and treated as project deviations.</b></p> <p>This CAR is closed. In opinion of AENOR all project design changes during this monitoring period have been gathered as deviations and assessed their impacts over the baseline scenario, additionality and applicability of methodology.</p> <p>Deviations were carried out in order to improve the accuracy and consistency of monitoring activities to achieve more credible and reliable results.</p>	CAR 5	OK
<b>2.3 Grouped Project</b>				

VCS Requirement	Ref	Comments	Draft conclusion	Final conclusion
For a grouped project, provide relevant information about new instances of the project activity(s) and demonstrate that each new instance of the project activity(s) meets the eligibility criteria set out in the project description.	D.R I	No new instances were added for the present monitoring period.	OK	OK
<b>3 DATA AND PARAMETERS</b>				
<b>3.1 Data and Parameters Available at Validation</b>				
Are all parameters “available at validation” listed as per MP and applied methodology?	D.R I	<b>CL 2</b> <b>Clarify the no inclusion of parameter fin,i in section 3.1 of the M.R</b>  This CL was closed, because the parameter was included.	CL 2	OK
Are all data and parameters “available at validation” described using the VCS table format?	D.R I	VCS Table format was correctly used in all data and parameters available at validation stage.	OK	OK
<b>3.2 Data and Parameters Monitored</b>				
Are all “monitoring” parameters listed as per MP and applied methodology?	D.R I	<b>CL 3</b> <b>Clarify because the monitoring of parameter H is not included in the M.R.</b>  This CL is closed because H was included in the M.R. Thus, all monitored parameters as listed in the monitoring plan were monitored.	CL 3	OK
Are all data and parameters “to be monitored” described using the VCS table format?	D.R I	VCS table format has been appropriately for monitoring parameters.	OK	OK
<b>3.3 Description of the Monitoring Plan</b>				
Is the monitoring plan described?	D.R I	<b>CL 4</b> <b>Some minor contradictions are detected in the number of sample plots between M.R and spreadsheet calculation.</b>  This clarification was closed. The PP reviewed both the M.R and calculations to take out the inconsistencies.	CL 4	OK

VCS Requirement	Ref	Comments	Draft conclusion	Final conclusion
Are organizational structure, responsibilities and competencies identified in the MR?	D.R I	Yes, organizational structure as well as responsibilities and competencies have been identified.	OK	OK
Are methods described for: Data generation (see also SOPs for each parameter)		Yes, the Proteak has developed different procedures and registers to implement the monitoring activities. In this regard, for the present monitoring period, the PP developed a new version to carry out the measurement of main parameters such as DBH and H and the way to make the field inventories.		
<ul style="list-style-type: none"> <li>Data handling, in particular transcribing field data to digital calculation sheets (see also SOPs for each parameter)</li> </ul>	D.R I	<p>Proteak has developed Operational Procedures for monitoring purposes.</p> <p>Description about organizational structure, responsibilities and competencies, methods for generating, recording and reporting data on monitored parameters is available in the Monitoring Plan and further described in internal procedures.</p> <p>Section 3.3.4 of the monitoring report describes how data are managed in monitoring activities.</p>	OK	OK
<ul style="list-style-type: none"> <li>Data storage, including back-up of the field sheets and digital data</li> </ul>	D.R I	Electronic copies of the data and report will be updated periodically or converted to a format that could be accessed by any future software application.	OK	OK
<ul style="list-style-type: none"> <li>QA/QC procedures (e.g. re-check of data measurement, data entry, etc – see also SOPs for each parameter))</li> </ul>	D.R	Section 3.3 of the monitoring report describes monitoring plan, but also provides explanation of the QA/QC performed during the monitoring activities.	OK	OK
<ul style="list-style-type: none"> <li>Are procedures described for handling internal auditing and non-conformities?</li> </ul>	D.R	Proteak has a procedure for internal inspections and to identify preventive and corrective action to close non conformities.	OK	OK
<b>Sample design</b>				
Are sample plots laid out as per Monitoring Plan in the MP?	D.R I	Section 3.3 of M.R describes the sampling carried out for monitoring purposes. In this regard, AENOR verified during site visit and reviewing calculations that PP has sampled much more plots than required. Comparison is provided in the M.R. The main reason to this practice is to reach the most accurate result of their forestry assets because the company has to comply with the requirements from the Official Mexican Markets.	OK	OK

VCS Requirement	Ref	Comments	Draft conclusion	Final conclusion
Are the location of the sample plot selected o an unbiased basis?	D.R I	The new procedure for valuating the forestry assets of Proteak describes the procedure for inventory. The selection of plots is randomly keeping a sampling intensity.	OK	OK
<b>Stratification</b>				
Is the ex-post stratification carried out in line with the MP (in the MP) and Methodology?	D.R I	The number of strata as identified in the validated PD was cross-checked. However, due to changes in the plantation year of instances and areas of some of them some strata changed and parameters affected such as LTA was recalculated. This is detailed in the M.R and the present verification report.  Changes in area of strata do not affect to the methodology. Likewise, these changes have been correctly considered in the monitoring activities according to the monitoring plan.	OK	OK
<b>Precision</b>				
Is the required precision level met (at the relevant Confidence Interval)? <i>(Usually 10% around the mean at 90 or 95% CI) (If relevant, check per strata)</i>	D.R I	The required level precision of 10% is detailed in the M.R and calculations.	OK	OK
<b>4. Quantification of GHG Emission Reductions and Removals</b>				
<b>4.1 Baseline GHG removals / emissions</b>				
Are baseline net GHG removals quantified correctly, and in line with the applied methodology and MP?	D.R I	The baseline removals account zero as determined in the validation.	OK	OK
<b>4.2 Project GHG removals / emissions</b>				
Are project net GHG removals quantified correctly, and in line with the applied methodology and MP?	D.R I	To quantify the project removals the following issues were raised to the PP.  <b>CAR 6</b>  <b>The measurements from field inventories carried out for the monitoring period (DBH and H) for each instance as well as the calculation of their biomass stocks shall be provided.</b>  <b>The uncertainty has not been calculated using the appropriate</b>	CAR 6	OK

VCS Requirement	Ref	Comments	Draft conclusion	Final conclusion
		<p>equation as required by the applicable methodology and associated tools.</p> <p>Spreadsheet calculations do not show the formulae applied in cells or the data source.</p> <p>Mistakes are detected in areas of some instances between the different sheets (plantation, PD plots, SOC, etc) in the project removal calculations. Likewise, mistakes are detected between the sheet source of biomass stocks and the sheet of project removals.</p> <p>The soil project removals calculated are not consistent with the monitoring period.</p> <p>The density plantation data observed during the site inspections do not match with data in calculations.</p> <p>The LTA shall be recalculated.</p> <p>This CAR is closed. Proteak provided all data inventoried for each instances as well as the biomass stock calculation. The uncertainty was corrected. All sheets were updated and linked between them or showing the data source. Mistakes were corrected in project areas or similar. The density plantation of instances was updated according to field data and the LTA recalculated based on new area strata.</p> <p>Finally, after all these issues were corrected, AENOR reproduced the calculations and reached the same results.</p>		
Is the required precision level met for net GHG removals?	D.R I	The precision level required is met. 10%.	OK	OK
Are project net GHG emission sources listed in line with the applied methodology and MP? Are these emission sources quantified correctly and in line with the applied methodology and MP?	D.R I	The net project GHG removals sources listed are in line with the applied methodology and MP. AGB, BGB and soil are the pools for removals. No project emissions from burning are considered.	OK	OK
<b>4.3 Leakage</b>				
Are sources of leakage listed in line with the applied methodology and MP?	D.R I	This project activity does not consider leakage as it was validated	OK	OK
Is leakage quantified correctly, and in line with the applied methodology and MP?	D.R I	Not applicable	OK	OK

VCS Requirement	Ref	Comments	Draft conclusion	Final conclusion
<b>4.4 Summary of GHG Emission Reductions and Removals</b>				
Are the net GHG emission reductions and removals quantified correctly and in line with the applied methodology and MP? Are net changes in carbon stocks included?	D.R I	The net GHG removals for the proposed project activity have been correctly quantified as AENOR verified. Calculations are in compliance with the methodology and monitoring plan.	OK	OK
Are the deductions of VCUs due to the buffer calculated correctly?	D.R I	The deductions of VCUs due to the buffer have been correctly calculated.	OK	OK
If applicable, is the release of VCUs from the buffer calculated correctly?	D.R I	n/a		
<b>5 ADDITIONAL INFORMATION</b>				
Are any additional relevant information listed?	D.R I	n/a	OK	OK

D.R: Desk review: I: Interview